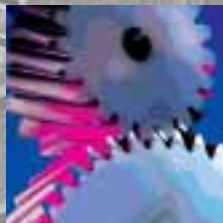


G motion motec

463 143

# Lenze



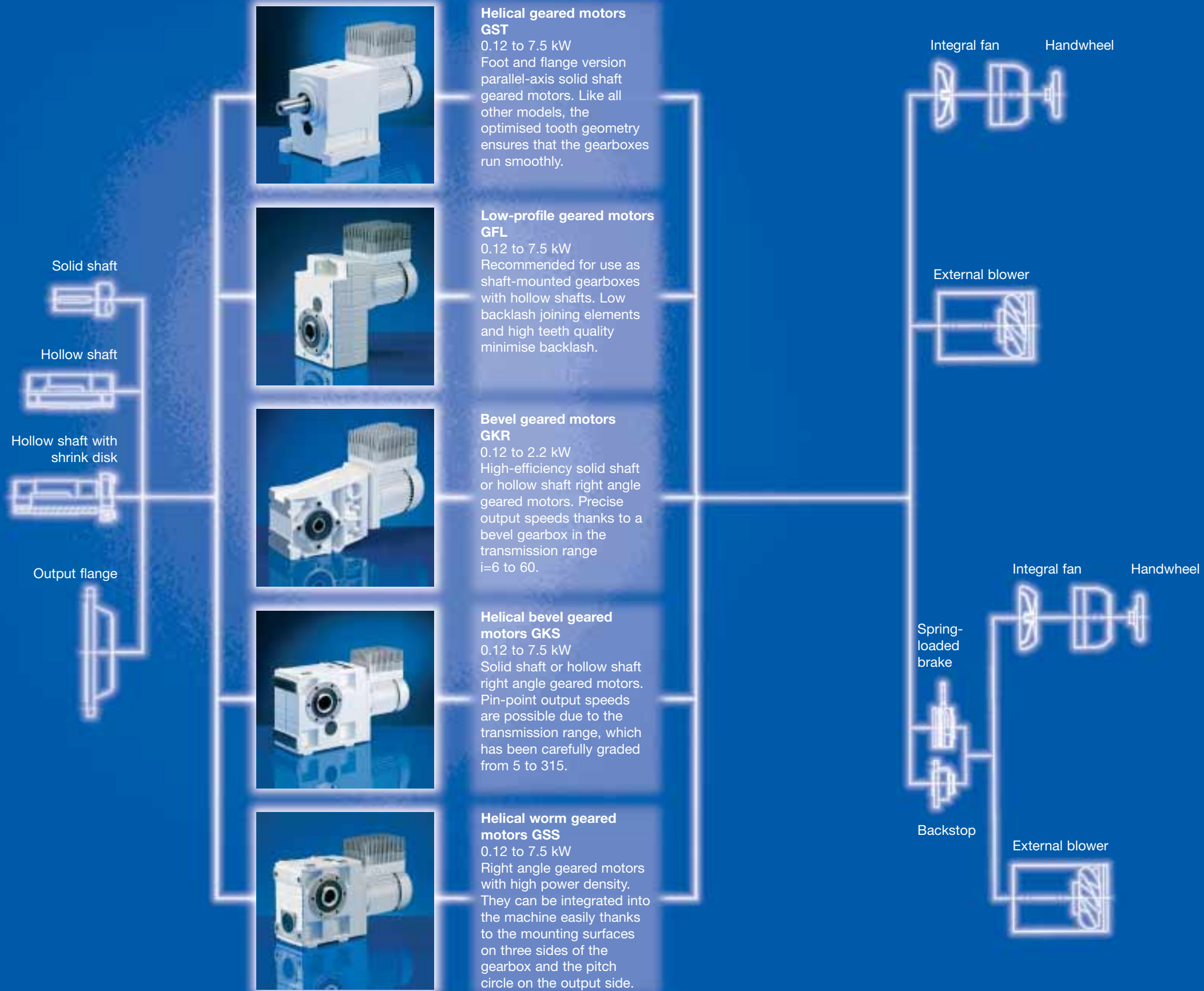
*Geared motors  
with integral  
frequency inverter*

Lenze

**G** motion  
motec

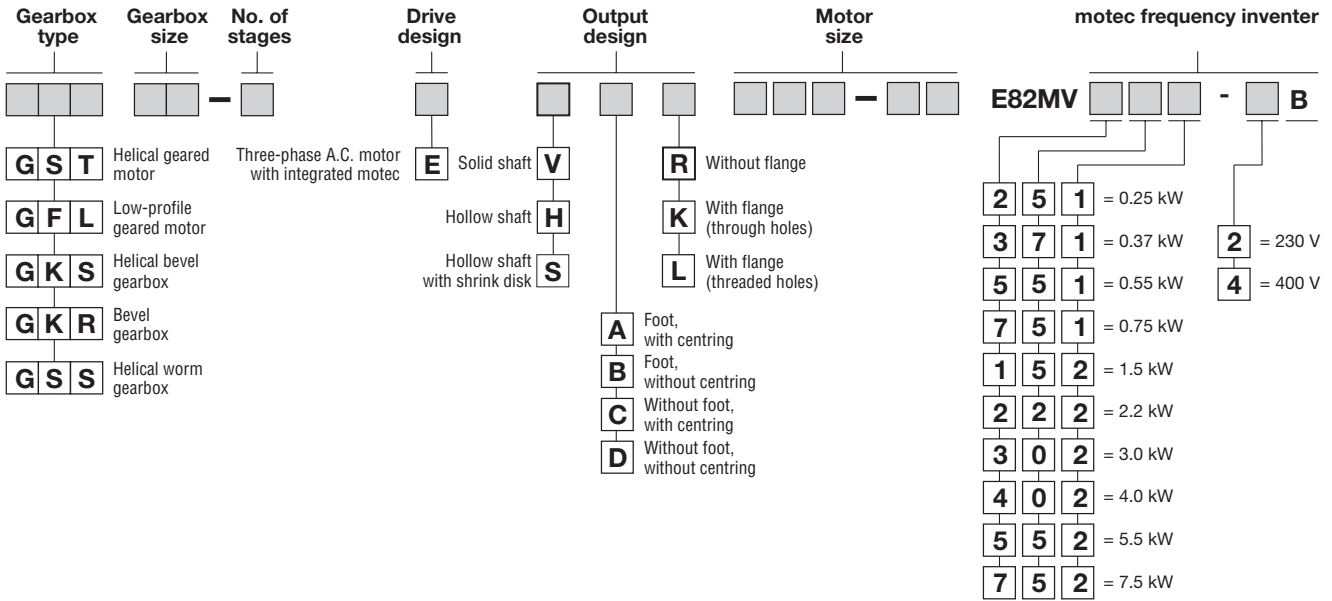
# G motion motec – The range

Geared motors with integrated frequency inverters for variable output speeds at high performance levels  
 Numerous gear-side variations and a wide variety of motor options

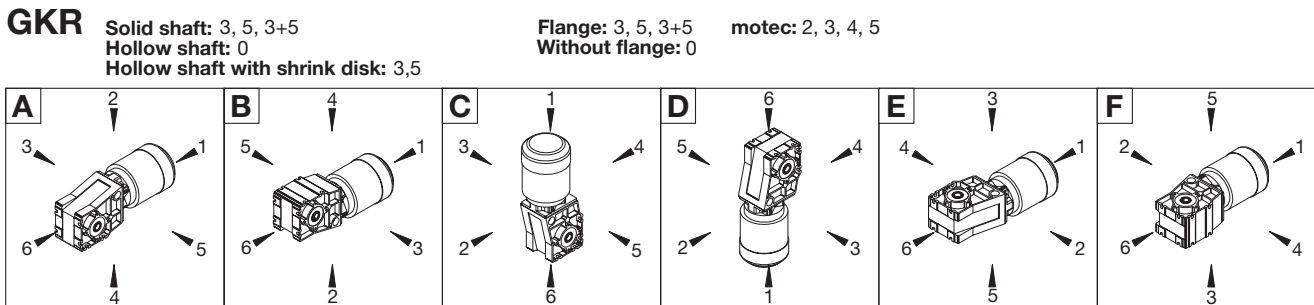
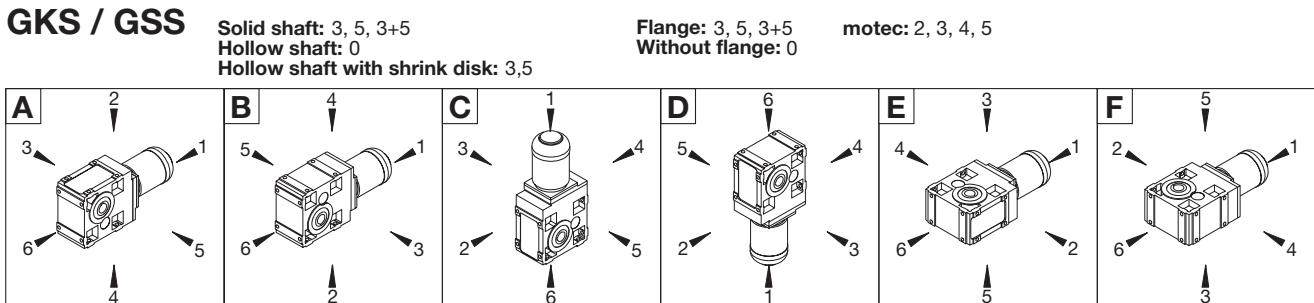
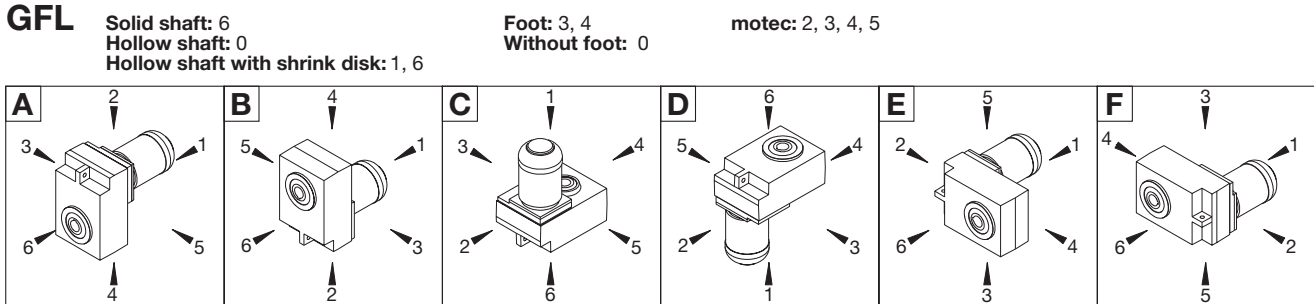
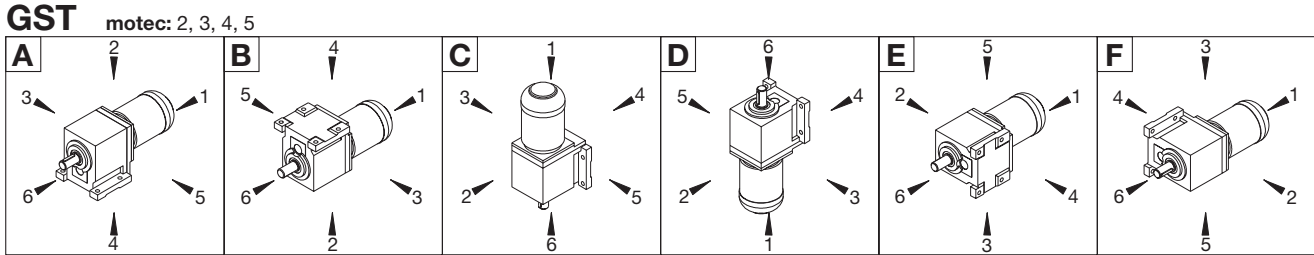


# Product key – geared motors with motec

## Type designation

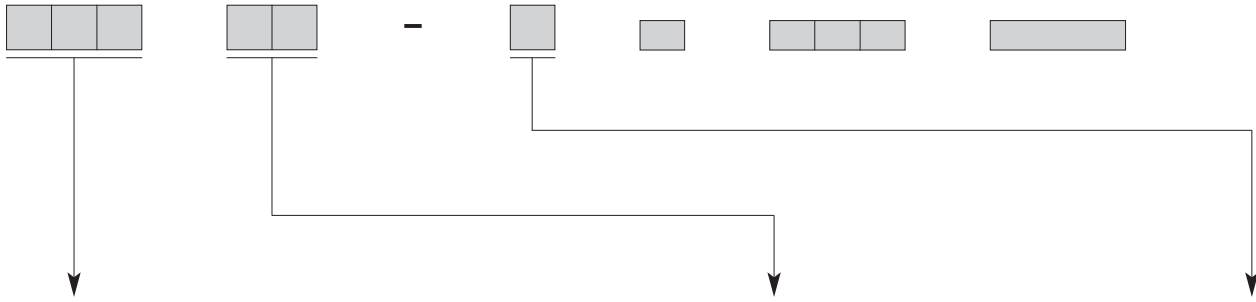



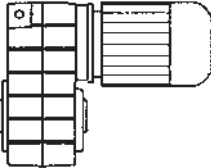
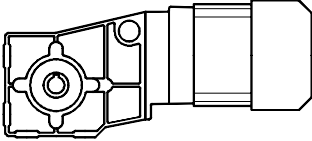
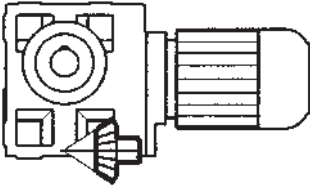
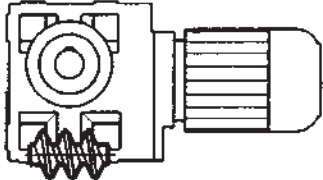
## Installation position (A - F) and position of system modules (1 - 6)



# Product key

## Type designation



Gearbox type	Gearbox size							No. of stages
	04	05	06	07	09	11	14	
<b>GST</b> 	•	•	•	•	•			1
	•	•	•	•	•	•	•	2
		•	•	•	•	•	•	3
<b>GFL</b> 	•	•	•	•	•	•	•	2
		•	•	•	•	•	•	3
<b>GKR</b> 	•							2
<b>GKS</b> 	•	•	•	•	•	•	•	3
		•	•	•	•	•	•	4
<b>GSS</b> 	•	•	•	•				2
		•	•	•				3



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# An introduction to Lenze

1

## Whatever drive system you require – we will turn your plans into reality

Our “one-stop shop” enables us to offer you a complete range of reliable, high-performance electronic and mechanical drive products. Our product range includes frequency inverters, power converters, variable speed drives, reduction gearboxes, as well as brakes and clutches.

This makes Lenze the ideal supplier for your applications - not only for individual components, but also for complete drive systems, from project planning to setup and commissioning.

In addition, our global service and distribution network provides local customer service as well as fast and comprehensive after sales service. Our quality assurance system for development, production, sales and service is certified to DIN ISO 9001 : 2000. Our environmental management system is also certified to DIN ISO 14001. Our customers measure the quality of our products. It is our responsibility to meet their requirements. Our company policy, which places the customer at the centre of our focus, means that quality is always our top priority.

Why not find out for yourself?





**G□□motion, motec:**

Geared motors with integrated frequency inverter.

**The new market trend:**

Complex systems are divided into distributed manageable subsystems.

Each subsystem requires a certain level of flexibility.

All subsystems need to communicate with one another.

**The Lenze concept:**

Lenze's modern variable speed drive has been designed to meet these requirements.

The result is an innovative product combining mechanical and electrical components, which offers the user a considerable number of benefit.

- Distributed intelligence  
Installation takes place on-site, in the process itself. Connection and wiring are reduced to a minimum.
- Wall mounting in the vicinity of the motor  
The compact geared motor becomes an integral part of the machine frame - its location reflects its role. The motec can be accessed easily – without being removed from the overall system of which it is an integral part.
- An autonomous system  
The frequency inverter is not cooled using the motor fan coolant flow. The inverter is a stand-alone robust unit.
- Distributed setting and monitoring options  
As the system is interfaced with a higher-level system, it can be integrated into automation concepts.
- Open modular system for the selection of application-specific components. You only pay for what you actually need.

---

The current edition of the **G□□motion, motec** catalogue contains geared motors and motors with the integrated 8200 motec frequency inverter. The motec is also available as a separate unit.

- Geared motors, 0.18 to 7.5 kW
- motec 0.25 to 7.5 kW

The geared motors can be selected from clear and comprehensive selection tables. To facilitate selection, the output speeds and torques are indicated both at the typical inverter edge frequency of 50 Hz and with specification of the minimum and maximum output values for an adjustment range of 1:6.



# List of abbreviations

## 1 Abbreviations used in this catalogue:

$\alpha$		Angle of action of radial force	$M_N$	[Nm]	Rated torque
<b>c</b>		Load capacity of gearboxes/geared motors	$M_A$	[Nm]	Motor starting torque
<b>d<sub>w</sub></b>	[mm]	Pitch circle diameter of transmission element	$M_B$	[Nm]	Holding torque, brake
<b>cos <math>\varphi</math></b>		Motor power factor	$M_{perm.}$	[Nm]	Permanent torque
<b>cos<math>\varphi_N</math></b>		Power factor, asynchronous motors	$M_{stall}$	[Nm]	Motor stall torque
<b>F<sub>a</sub></b>	[N]	Axial force applied	$M_I$		Maximum torque factor
<b>F<sub>a per.</sub></b>	[N]	Permissible axial force	$M_{max}$	[Nm]	Maximum torque
<b>F<sub>a Tab</sub></b>	[N]	Tabular value of axial force	$M_{per.}$	[Nm]	Permissible torque
<b>f<sub>ch</sub></b>	[kHz]	Operating frequency	$n_1$	[min <sup>-1</sup> ]	Drive speed
<b>f<sub>d</sub></b>	[Hz]	Field frequency	$n_2$	[min <sup>-1</sup> ]	Output speed
<b>F<sub>I</sub></b>		Mass acceleration factor	$n_N$	[min <sup>-1</sup> ]	Rated speed
<b>f<sub>max</sub></b>	[Hz]	Set maximum frequency	$n_{max}$	[min <sup>-1</sup> ]	Maximum speed
<b>f<sub>N</sub></b>	[Hz]	Rated frequency	<b>P<sub>1</sub></b>	[kW]	Drive power
<b>F<sub>r</sub></b>	[N]	Radial force applied	<b>P<sub>2</sub></b>	[kW]	Output power
<b>F<sub>r Tab</sub></b>	[N]	Tabular value of radial force	<b>P<sub>N</sub></b>	[kW]	Rated power
<b>F<sub>r per.</sub></b>	[N]	Permissible radial force	<b>P<sub>V</sub></b>	[kW]	Inverter power loss
<b>f<sub>w</sub></b>		Load position factor of radial force applied	<b>R</b>	[ $\Omega$ ]	Resistance
<b>f<sub><math>\alpha</math></sub></b>		Effective direction factor of radial force applied	<b>S<sub>N</sub></b>	[kW]	Inverter output power
<b>f<sub>z</sub></b>		Radial force coefficient of transmission element	<b>T<sub>U</sub></b>	[°C]	Ambient temperature during operation
<b>i</b>		Ratio	<b>U<sub>G</sub></b>	[V]	DC bus voltage
$\varphi$		Ratio step	<b>U<sub>N</sub></b>	[V]	Rated voltage
$\eta$		Mechanical efficiency	<b>U<sub>mains</sub></b>	[V]	Mains voltage
<b>I<sub>0</sub></b>	[A]	Continuous current at standstill	<b>IP</b>		International protection code
<b>I<sub>A</sub></b>	[A]	Motor starting current	<b>IEC</b>		International Electrotechnical Commission
<b>I<sub>max</sub></b>	[A]	Maximum output current	<b>DIN</b>		Deutsches Institut für Normung
<b>I<sub>N</sub></b>	[A]	Rated current	<b>VDE</b>		Verband deutscher Elektrotechniker
<b>I<sub>mains</sub></b>	[A]	Rated mains current	<b>USDA</b>		United States Department of Agriculture
<b>J<sub>ext</sub></b>	[kgm <sup>2</sup> ]	Mass moment of inertia of machine to be driven reduced to motor shaft	<b>NEMA</b>		National Electrical Manufacturers Association
<b>J<sub>load</sub></b>	[kgm <sup>2</sup> ]	Torque, load machine	<b>AC</b>		Alternating current/voltage
<b>J<sub>mot</sub></b>	[kgm <sup>2</sup> ]	Mass moment of inertia of motor	<b>DC</b>		Direct current/voltage
<b>J<sub>A</sub></b>	[kgm <sup>2</sup> ]	Mass moment of inertia of drive reduced to drive shaft	<b>EMV</b>		Electromagnetic compatibility
<b>J<sub>B</sub></b>	[kgm <sup>2</sup> ]	Mass moment of inertia of brake	<b>EN</b>		European standard
<b>k</b>		Operating factor (to DIN 3990)	<b>CE</b>		Communauté Européene
<b>L</b>	[mH]	Inductance	<b>IM</b>		International Mounting Code
<b>m</b>	[kg]	Weight	<b>GL</b>		Germanischer Lloyd
<b>M<sub>0</sub></b>	[Nm]	Continuous torque at standstill			
<b>M<sub>1</sub></b>	[Nm]	Drive torque			
<b>M<sub>2</sub></b>	[Nm]	Output torque			



### Power torque and speeds

The values for power, torque and rotational speed given in the catalogue are rounded values and apply to

- Running time/day = 8 h (100 % DT)
- Duty class I at 10 switching operations/h
- Mounting positions and models in this catalogue
- Standard lubricant
- $f_{\text{mains}} = 50$  Hz constant
- $T_U = 20$  °C for gearboxes  
40 °C for motors (to VDE 0530)

- Installation height  $\leq 1000$  m above sea level

The rated power specified for motors and geared motors applies to operating mode S1 in accordance with VDE 0530 Part 1/DIN 57530 Teil 1.

If your operating conditions differ the values that can be obtained may deviate from those specified.

If you are operating under extreme conditions, please contact your nearest Lenze representative.

### Load capacity c of gearboxes

Characteristic value for the load capacity of Lenze gearboxes and geared motors.

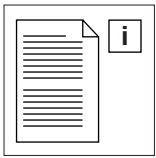
- c is the ratio of the permissible rated torque of the gearbox to the rated torque supplied by the drive components (e.g. the built-in Lenze motor).
- The value of c must always be greater than the value of the operating factor k calculated for the application.

### Operating factor k (to DIN 3990)

This factor takes into account the influence of actually existing and changing loads applied to gearboxes and geared motors over their running time.

k is determined by

- The type of load
- The load intensity
- Temporary factors



## Ordering data

**1** We want to be sure that you receive the correct products in good time. In order to help us to do this, please make sure you provide the following information:

- Your address and ordering data.
- Our product code for the individual products in this catalogue.
- Your delivery data, i.e. delivery date and delivery address.

### Order information

Please provide all necessary order data in the correct fields on the fax order form. It makes ordering your tailor-made drive extremely easy:

- Make a copy of the fax order form.  
See Section 5 of the catalogue.
- Enter the order data.
- Post or fax the fax order form to your Lenze sales office.  
A list of Lenze sales offices can be found at the back of this catalogue.

### Delivery

- All products are packed appropriately and of course checked prior to delivery.
- Orders are subject to the general terms of sale and delivery of Lenze Drive Systems GmbH:
  - Terms of delivery: Ex works according to the delivery method specified, excluding packaging.









The electronic variable speed geared motors consisting of a geared motor and a motec frequency inverter are designed for a rated point of 50 Hz and an adjustment range of 1:6, and are collated in the selection tables.

### Rated point ( $n_2$ , $M_2$ ) at 50 Hz

Main features:

- High starting torque and high maximum torque because of the overcurrent characteristic of the frequency inverter
- Operation in the armature adjustment range
- Adjustment range ( $T_{amb}=20^\circ\text{C}$ ):
  - $\leq 3.5$  without separate fan
  - $> 3.5 \dots 10$  with separate fan

### Adjustment range ( $n_{2min}$ , $n_{2max}$ , $M_{2min}$ , $M_{2max}$ ) of 1:6

Main features:

- Adjustment range of 1:6 without separate fan
- Sufficient maximum torque over the entire adjustment range despite field weakening operation
- High constant torque between 15 Hz and 50 Hz

Parameter setting of the frequency inverter:

- V/f cut-off frequency = 50 Hz (C0015 = -50-)
- Adjustment to the adjustment range 1:6: (C0010 = 14.5 Hz; C0011 = 87 Hz)
- Additional parameters are described in the operating instructions for the frequency inverter.

### Technical information

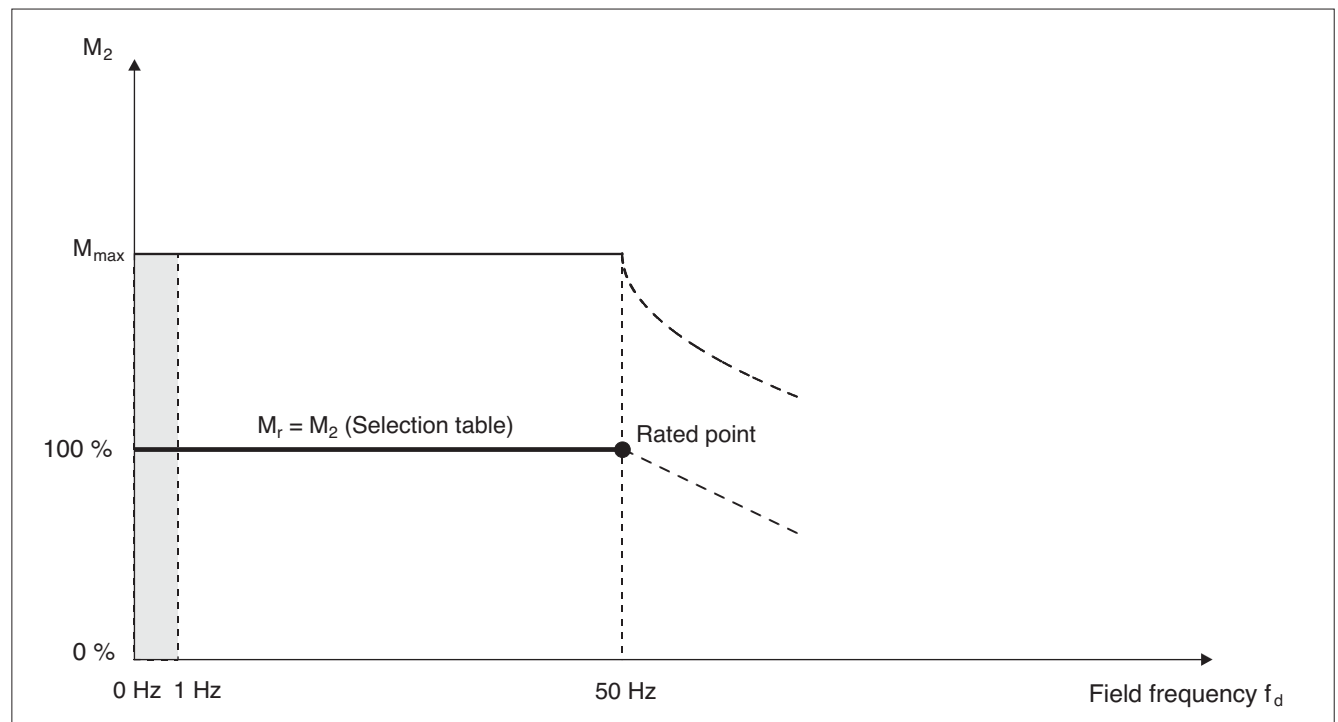
The maximum torque  $M_{max}$  is limited in time by the frequency inverter ( $1.8 \times M_r$  for 60 sec).

At field frequencies  $\geq 15$  Hz and under normal operating conditions, the motor can be operated without a separate fan.

At field frequencies  $\leq 20$  Hz, the thermal conditions in the motor need to be taken into account.

At field frequencies  $\leq 1$  Hz, the torque behaviour is governed by the slip of the motor. The slip compensation of the motec can be used to influence this behaviour.

### Torque characteristic (under ideal application conditions)





# Drive design

## Required load capacity

2

Determine the required output torque  $M_2$  and output speed  $n_2$

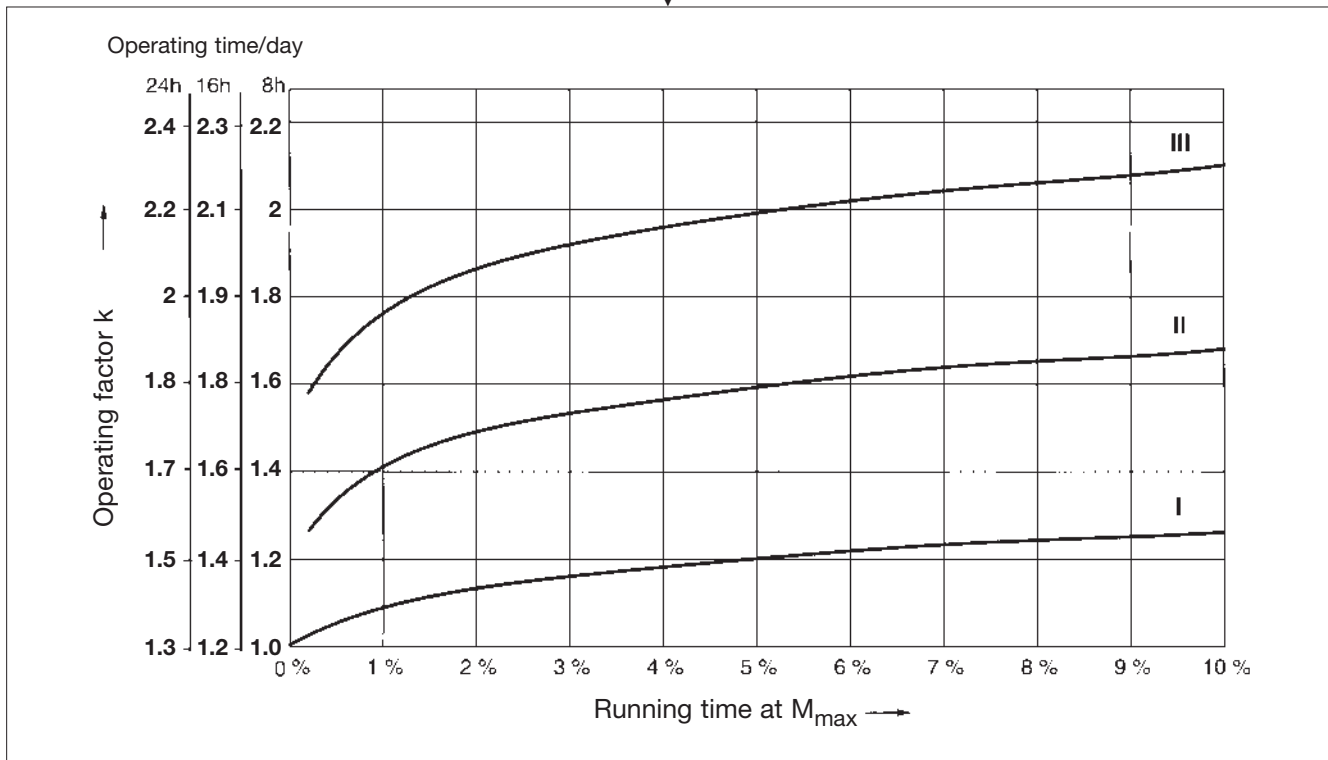
$$P_1 = \frac{M_2 \cdot n_2}{9550 \cdot \eta}$$

**Determine the load class:**

Load class	Load type	Intensity	$M_l = \frac{M_{max}}{M_r}$
I	Regular operation, virtually shock-free	$M_l \leq 1.5$	
II	Irregular operation, moderate shocks	$1.5 < M_l \leq 2$	
III	Irregular operation, strong shocks and/or changing loads	$2 < M_l \leq 2.5$	

**Determine temporary influences:** – Operating time/day, running time at  $M_{max}$  in %

**Determine the operating factor k of the machine from the diagram**



Requirement for geared motor:  $c$  (selection table)  $\geq k$



**Calculation of the existing axial and radial forces**  
 Rough calculation of radial forces:

$$F_r = \frac{2000 \cdot M_2 \cdot f_z}{d_w \text{ [mm]}}$$

$f_z$	Transmission element
1.12	Toothed wheels
1.25 ... 1.4	Chain wheels
1.5	Toothed belt pulleys
1.5 ... 2.0	Small V-belt pulleys depending on initial stress

**Requirement:**

- $F_{r \text{ per.}} \geq F_r$   
 ( $F_{r \text{ per.}}$  from gearbox-specific data)
- $F_{a \text{ per.}} \geq F_a$   
 ( $F_{a \text{ per.}}$  from gearbox-specific data)





# Geared motors with motec

## Technical data: Gearboxes

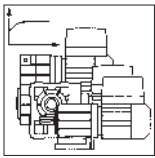
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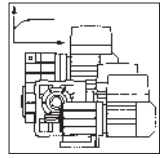
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## Technical data - gearboxes

### General data

		GST	GFL	GKR	GKS	GSS
<b>Housing</b>	Design	Rectangular design				
	Material	Aluminium/cast iron				
<b>Solid shaft</b>	Design	with featherkey to DIN 6885, sheet 1				
	Tolerance	k6 (d ≤ 50 mm) m6 (d > 50 mm)				
	Material	Tempering steel C45 or 42CrMo4				
<b>Hollow shaft</b>	Design	-	H: with keyway S: smooth			
	Tolerance	-	Bore H7			
	Material	-	Tempering steel C45			
<b>Toothed parts</b>	Design	Optimised tooth flanks and profile geometries Ground tooth flanks				
	Material	Case hardened steel 16MnCr5				
<b>Shaft-hub connection</b>		Stage 1/pre-stage/(helical-) bevel gearbox: friction locked Output stage (= stage 2, 3 or 4): friction locked or key connection				
<b>Shaft seals</b>	Design	With sealing lip				
	Material	NB/FP				
<b>Bearings</b>	Design	Ball bearings/taper roller bearings depending on size and design				
<b>Lubricants</b>	Design	to DIN 51502				
	Filling quantities	Depending on mounting position ⇨ Operating Instructions				
<b>Mechanical efficiency</b>	At rated torque	$0.95 \leq \eta \leq 0.97$	$0.95 \leq \eta \leq 0.97$	$\eta \approx 0.95$	$0.92 \leq \eta \leq 0.95$	$0.75 \leq \eta \leq 0.90$ - depends on transmission ratio - at $n_1 = 1400 \text{ min}^{-1}$ - Housing at operating temperature and teeth run in
<b>Noise levels</b>		Below the emission values specified in VDI guideline 2159				



The permissible continuous power of gearboxes is limited by

- the mechanical power, which depends on the material strength, or
- the thermal limit rating, which depends on the heat exchange.

The thermal limit rating may be below the mechanical power specified in the selection tables.

Please contact Lenze if:

- at input speeds  $n_1 > 1500 \text{ min}^{-1}$  the following combinations of gearbox design, gearbox size and transmission ratios are used:

Gearbox design	Gearbox sizes	Transmission ratios $i \leq$
Helical gearboxes GST	07, 09, 11, 14	10
Low-profile gearboxes GFL	09, 11, 14	16
Helical bevel gearboxes GKS	09, 11, 14	25

or

- if the specified input speeds  $n_1$  are exceeded:

		Drive size	
Input design	E	063-□□ ... 100-□□	112-□□ ... 132-□□
$n_1$ for mounting positions	A, B, E, F	4000 $\text{min}^{-1}$	3000 $\text{min}^{-1}$
$n_1$ for mounting positions	C, D	3000 $\text{min}^{-1}$	1500 $\text{min}^{-1}$

### Possible measures to extend the range of application

Measure	What to do
Increase the permissible temperature range of the gearbox by using	– synthetic lubricant (optional) – shaft seals made of FP material/Viton (optional)
Reduction of power loss	– synthetic lubricant (optional) – reduce lubricant quantities
Increased dissipation of heat	– air convection possible at the machine/system – fan cooling (e.g. air duct of the driving motor) – oil cooling

### Gearboxes with ventilation

#### Gearbox sizes 04 to 07

No ventilation is required for size 04 gearboxes. For gearbox sizes 05 to 07, in most cases there is no need for special ventilation measures.

In borderline cases, e.g. at input speeds  $> 2000 \text{ 1/min}$ , we recommend the use of ventilation units, which are available as an optional extra from Lenze.

#### Gearbox sizes 09 to 14

Ventilation units are always included on gearboxes in this size range.

#### Special measures in mounting position C (high-mounted motor)

We always recommend the use of an oil compensating tank when using a gearbox of size 09 to 14 in this mounting position.

Refer to page 3-26 for a diagram and details on dimensions. The oil compensating tank is available as an optional extra. The tank is not required at high transmission ratios or at low input speeds.

In these cases please contact us.



# Technical data: Gearboxes

## Gearbox configurations

### Frame sizes

Gearbox product range	Product code	Gearbox frame size							
		03	04	05	06	07	09	11	14
Helical gearbox	<b>GST</b>	•	•	•	•	•	•	•	•
Low-profile gearbox	<b>GFL</b>		•	•	•	•	•	•	•
Bevel gearbox	<b>GKR</b>	•	•	•					
Helical bevel gearbox	<b>GKS</b>		•	•	•	•	•	•	•
Helical worm gearbox	<b>GSS</b>		•	•	•	•			

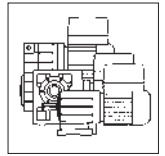
### Basic versions

3

		<b>GST - 1</b>	<b>GST - 2 GST - 3</b>	<b>GFL - 2 GFL - 3</b>	<b>GKR-2</b>	<b>GKS - 3 GKS - 4</b>	<b>GSS - 2 GSS - 3</b>	
<b>Input design</b>	<b>Product code</b>							
AC motor with motec	<b>E</b> [kW]	0.12...7.5	0.12...7.5	0.12...7.5	0.12...2.2	0.12...7.5	0.12...7.5	
<b>Output design</b>	<b>V</b>							
Shaft	Gearbox frame size	d x l [mm x mm]						
Solid shaft		03	-	14 x 28 20 x 40	-	20 x 40	-	-
		04	16 x 32	20 x 40	25 x 50	20 x 40	25 x 50	25 x 50
		05	20 x 40	25 x 50	30 x 60	30 x 60	30 x 60	30 x 60
		06	25 x 50	30 x 60	40 x 80	-	40 x 80	40 x 80
		07	30 x 60	40 x 80	50 x 100	-	50 x 100	50 x 100
		09	40 x 80	50 x 100	60 x 120	-	60 x 120	-
		11	-	60 x 120	80 x 160	-	80 x 160	-
		14	-	80 x 160	100 x 200	-	100 x 200	-
<b>Hollow shaft with keyway</b>	<b>H</b>							
(plugged on both sides)	Gearbox frame size	d [mm]						
		03	-	-	-	18 20	-	-
		04	-	-	25 30	20 25	25 30	25 30
		05	-	-	30 35	30 35	30 35	30 35
		06	-	-	40 45	-	40 45	40 45
		07	-	-	50 55	-	50 55	50 55
		09	-	-	60 70	-	60 70	-
		11	-	-	70 80	-	70 80	-
	14	-	-	100	-	100	-	
<b>Housing</b>								
Version with feet and pitch circle with centring	<b>A</b> <b>B</b>	-	-	-	Feet in pos. 4 and 6 Pitch circle in pos. 3 and 5	Feet in position 2, 4 and 6 Pitch circle in pos. 3 and 5		
Version with feet	<b>B</b>	•	•	-	-	-	-	
Version with pitch circle with centring	<b>C</b>	•	•	Pitch circle in pos. 6	-	-	-	
Version with pitch circle	<b>D</b>	-	-	Pitch circle in pos. 6	-	-	-	
<b>Output</b>								
Without additional flange	<b>R</b>	•	•	•	•	•	•	
<b>Colour</b>								
Paint finish	Not painted RAL 9018	-	GST03-2 only •	-	•	-	-	
Primer	Grey	•	•	•	•	•	•	
<b>Lubricant</b>	Mineral Synthetic	CLP 460 -	CLP 460 -	CLP 460 -	CLP 460 -	CLP 460 -	- CLP PG 680	
Ventilation unit size 09 ... 14		•	•	•	-	•	-	

# Technical data: Gearboxes

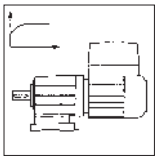
## Gearbox configurations



### Options

		GST - 1	GST - 2 GST - 3	GFL - 2 GFL - 3	GKR - 2	GKS - 3 GKS - 4	GSS - 2 GSS - 3
<b>Input design</b>	<b>Product code</b>	Motor options page 3 – 33					
AC motor with motec	<b>E</b>						
<b>Output design</b>							
Shaft							
Reinforced shaft bearing	<b>V</b>	-	Not GST03	F <sub>max</sub> drive on request	-	F <sub>max</sub> drive on request	F <sub>max</sub> drive on request
2. Solid shaft end	<b>V</b>	-	-	-	•	•	•
Hollow shaft with shrink disc	<b>S</b>	Gearbox size	d [mm]				
		03	-	-	-	20	-
		04	-	-	25 30	20	25 30
		05	-	-	35	35	30 35
		06	-	-	40	-	40
		07	-	-	50	-	50
		09	-	-	65	-	65
		11	-	-	80	-	80
		14	-	-	100	-	100
<b>Housing</b>							
Version with feet and pitch circle with centring	<b>A</b>	•	•	Feet in pos. 3 or 4 Pitch circle in pos. 6	-	-	-
Version with feet and pitch circle without centring	<b>B</b>	-	-	Feet in pos. 3 or 4 Pitch circle in pos. 6	-	-	-
<b>Output</b>		Housing design <b>C</b>	Housing design <b>C</b>	In position 3 and 5			
With additional flange	<b>K</b>	-	Housing design <b>A</b>	Only in position 6	-	-	-
With additional flange with tapped holes	<b>L</b>	-	Housing design <b>A</b>	-	-	-	-
Dimensions in [mm] for gearbox size		03	120 140 160	-	110 120	-	-
		04	120 140 160	160	120 160	160	160
		05	120 140 160 200	200	160 200	200	200
		06	160 200	200 only with <b>H</b> 250	-	200 only with <b>H</b> 250	200 only with <b>H</b> 250
		07	200 250	250 300	-	250 300	250 300
		09	250 300	350	-	350	-
		11	- 300 350	400 450	-	400 450	-
		14	- 350 400	450	-	450	-
<b>Colour</b>							
Special paint finish	Acc. to RAL number specification	•	•	•	•	•	•
<b>Lubricant</b>							
Synthetic	CLP HC 320	•	•	•	•	•	-
Food-compatible	CLP-H1 220	•	•	•	•	•	Torque reduction M2 <sub>per.</sub> = M2 <sub>per.</sub> · 0,8
<b>Additional options</b>							
Set of rubber stops for torque plate		-	-	•	Gearbox size 03/04	-	-
Torque plate on pitch circle		-	-	-	•	Gearbox size 04...07	Gearbox size 04...07
Torque plate on frame foot incl. set of rubber stops		-	-	-	Gearbox size 05	•	•
Protective cover for shrink disc		-	-	•	•	•	•
Jet-proof cover for hollow shaft		-	-	-	-	•	•
FP shaft seal (Viton)		•	•	•*	•*	•*	•*
Ventilation unit for gearbox sizes 05 to 07		•	•	•	-	•	•
Compensation reservoir for gearbox frame 09 to 14	-	•	•	-	•	-	-





# Technical data: Gearboxes

## Permissible radial and axial forces: Helical gearboxes

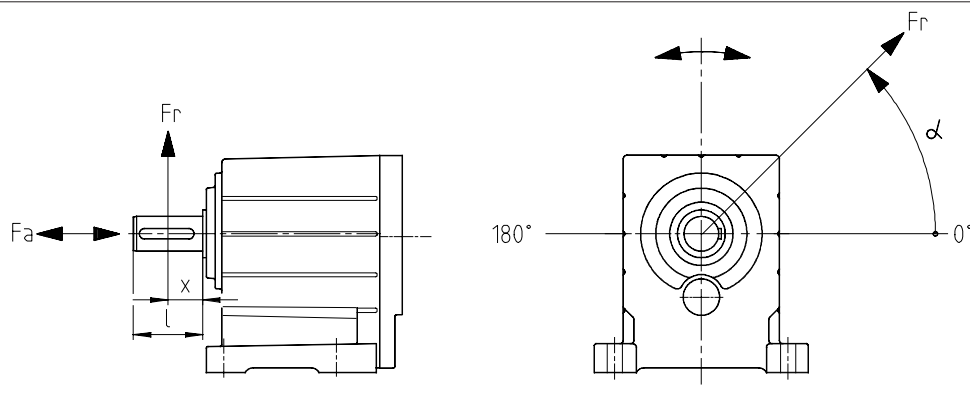
### - Permissible radial force

$$F_{r \text{ per.}} = f_w \cdot f_\alpha \cdot F_{r \text{ tab}} \leq f_w \cdot F_{r \text{ max}}$$

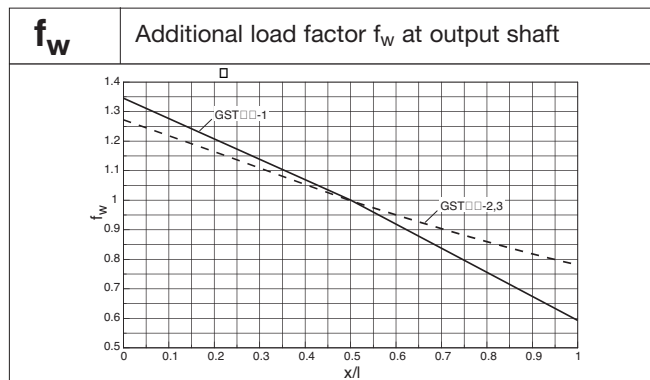
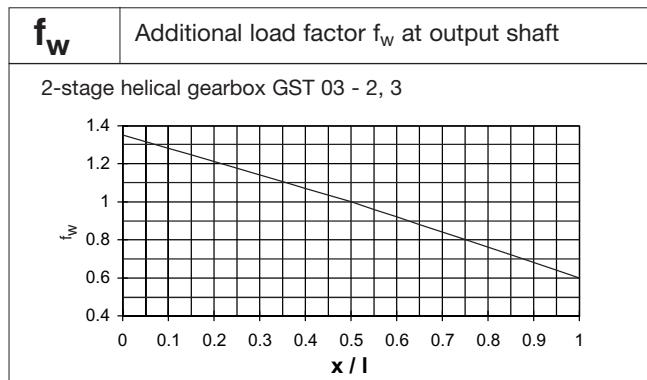
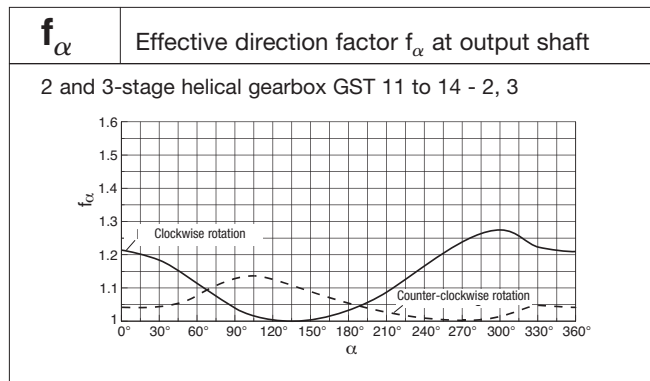
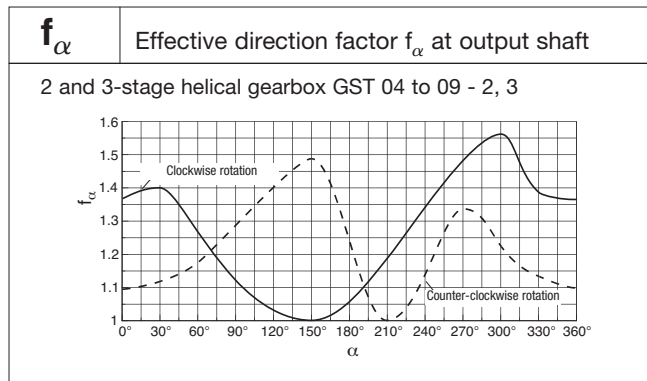
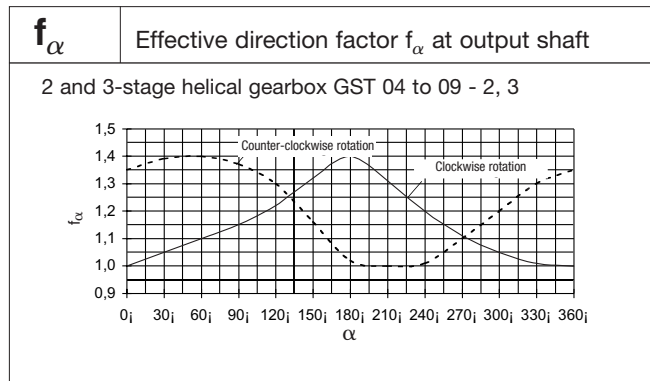
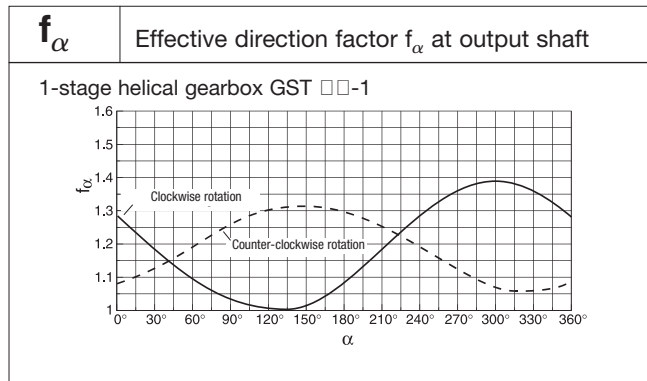
### - Permissible axial force

$$F_{a \text{ per.}} = F_{a \text{ Tab}} \quad \text{at } F_r = 0$$

Please contact the plant if  $F_r$  and  $F_a < 0$

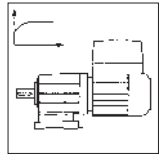


3



# Technical data: Gearboxes

## Permissible radial and axial forces: Helical gearboxes



### GST □□-1

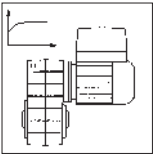
V □□		Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$									
		GST 04		GST 05		GST 06		GST 07		GST 09	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	
1000	440	1000	550	1400	800	1500	1200	2000	2500	4300	
600	600	1300	750	2000	800	2000	1300	2700	2500	5700	
400	850	1400	1400	2000	1100	2500	1900	3300	3500	6800	
200	1050	1400	2000	2000	2200	2500	3000	3700	6200	7000	
125	1050	1400	2300	2000	2900	2500	3900	3700	7900	7000	
80	1050	1400	2300	2000	3500	2500	4700	3700	9000	7000	
≤ 50	1050	1400	2300	2000	3500	2500	5300	3700	9500	7000	
$F_r$ max.	1050	-	2300	-	3500	-	5300	-	9500	-	

### GST □□-2, 3 with standard bearing

V □□		Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$															
		GST 03		GST 04		GST 05		GST 06		GST 07		GST 09		GST 11		GST 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	
400	630	600	1250	1100	1950	2000	2350	850	3400	1900	6800	2300	17000	9500	24000	15000	
250	710	700	1450	1300	2200	2300	2600	900	3800	2200	7600	2800	19000	10000	27000	16000	
160	800	800	1700	1650	2600	2650	3100	1250	4500	2900	9400	4000	21000	11000	31000	18000	
100	920	900	2100	2000	3000	3100	3600	1800	5400	3900	11500	5600	21000	14000	36000	20000	
63	1100	1000	2500	2000	3500	3600	4300	2600	6400	5300	11500	8900	21000	16000	39000	20000	
40	1400	1000	2650	2000	3800	3600	4350	3600	7600	7000	11500	11000	21000	16000	40000	20000	
25	1500	1000	2650	2000	3900	3600	4350	4800	9100	7000	11500	12000	21000	16000	40000	20000	
≤ 16	1500	1000	2650	2000	3900	3600	4350	4800	9500	7000	11500	12000	21000	16000	40000	20000	
$F_r$ max.	1500	-	2650	-	3900	-	4350	-	9500	-	11500	-	21000	-	40000	-	

### GST □□-2, 3 with reinforced bearing

V □□		Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$										
		GST 04		GST 05		GST 06		GST 07		GST 09		GST 11
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	The standard bearing is a reinforced bearing.	
400	2850	1700	4900	3600	6300	3500	8500	5500	16500	8000		
250	3150	1900	5400	3900	7000	3600	9500	6100	17000	9000		
160	3550	2200	5400	4300	7700	4200	10500	7100	17000	10500		
100	3750	2500	5400	4500	7700	4900	12500	8300	17000	12500		
63	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
40	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
25	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
≤ 16	3750	2500	5400	4500	7700	5700	13000	9000	17000	14000		
$F_r$ max.	3750	-	5400	-	7700	-	13000	-	17000	-		



# Technical data: Gearboxes

## Permissible radial and axial forces: Low-profile gearboxes

### - Permissible radial force

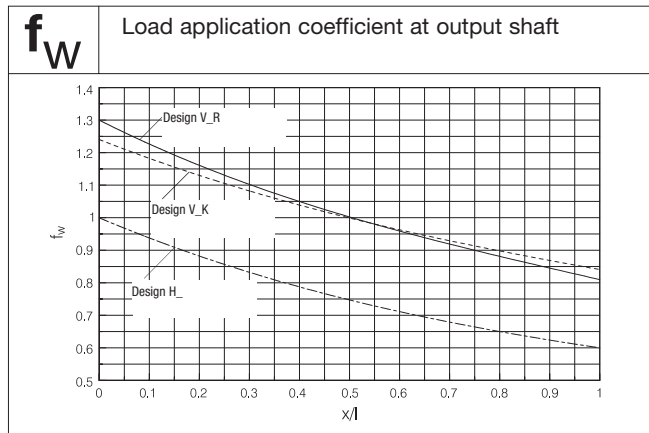
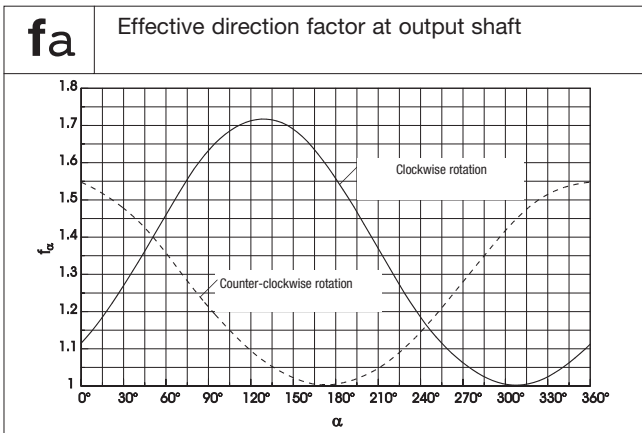
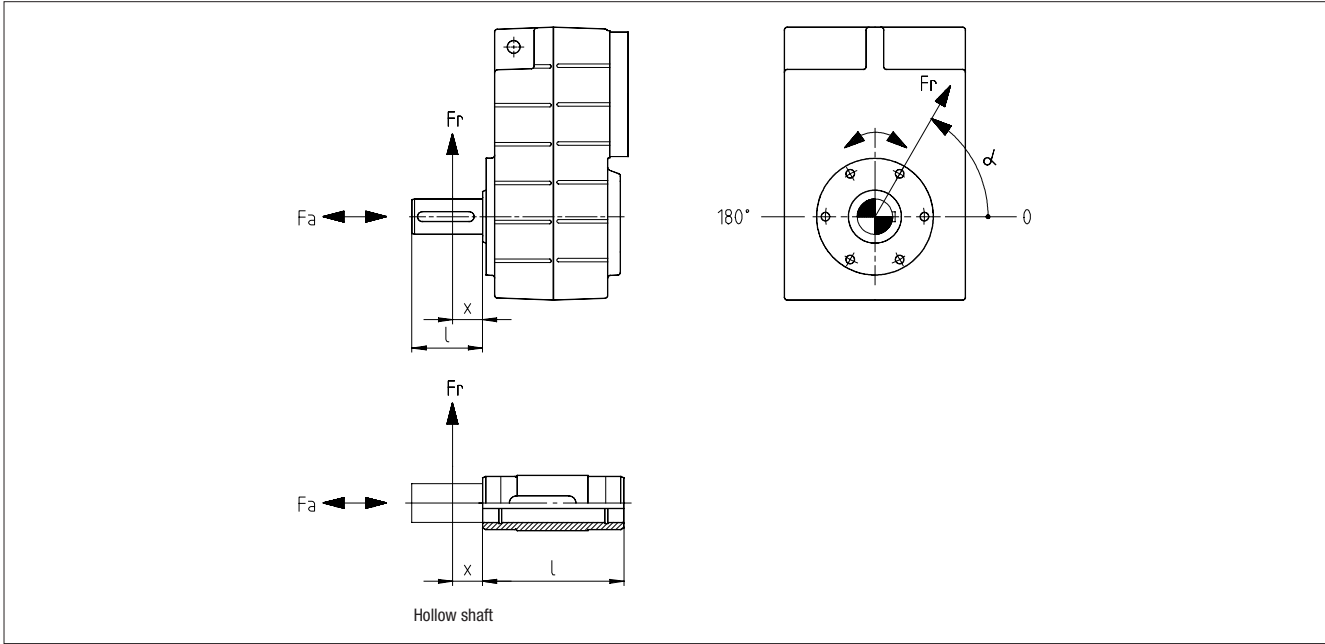
$$F_{r\text{ per.}} = f_w \cdot f_{\alpha} \cdot F_{r\text{ Tab}} \leq f_w \cdot F_{r\text{ max}}$$

### - Permissible axial force

$$F_{a\text{ per.}} = F_{a\text{ Tab}} \quad \text{at } F_r = 0$$

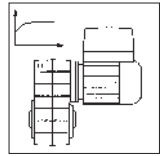
Please contact the plant if  $F_r$  and  $F_a \neq 0$

3



# Technical data: Gearboxes

## Permissible radial and axial forces: Low-profile gearboxes

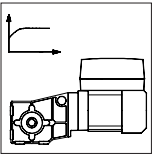


VCK	Solid shaft with flange													
	Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$													
	GFL 04		GFL 05		GFL 06		GFL 07		GFL 09		GFL 11		GFL 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3200	2200	4300	3100	6100	4300	6400	6100	7800	6100	12500	6800	18000	6000
250	3700	2600	5100	3900	7000	5500	7400	6500	9000	6500	14500	8500	20000	8000
160	4400	3200	5900	4800	7800	6500	8900	7000	10500	7000	17000	10500	23000	10000
100	4600	4200	6800	6400	9600	8500	10500	9500	14000	9500	21500	17000	27500	13000
63	4600	4400	7000	6600	10000	10000	12000	11500	15000	11500	26000	22000	32000	19000
40	4600	4400	7000	6600	10000	10000	13000	11500	15000	11500	30000	27000	38000	26000
25	4600	4400	7000	6600	10000	10000	14000	11500	15000	11500	30000	27000	43000	35000
≤ 16	4600	4400	7000	6600	10000	10000	14000	11500	15000	11500	30000	27000	43000	35000
$F_{r max}$	4600	-	7400	-	11000	-	16000	-	16000	-	32000	-	46000	-

V□R	Solid shaft without flange													
	Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$													
	GFL 04		GFL 05		GFL 06		GFL07		GFL 09*		GFL 11*		GFL 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	2300	2200	2400	2800	3200	4000	3200	3400	3800	3100	5500	4700	47000	25000
250	2700	2600	2700	3600	3600	5200	3600	4700	4400	4200	6300	6000	54000	27000
160	3200	3200	3200	4200	3900	6000	3900	6000	5500	5800	7300	7500	62000	29000
100	3600	4200	4000	5900	5100	8500	5100	8500	8000	10000	11200	14000	65000	32000
63	3600	5300	4800	6600	6500	10000	6500	12000	10000	13500	14500	19000	65000	35000
40	3600	5500	5800	6600	8400	10000	8400	14000	12000	17000	17400	25000	65000	35000
25	3600	5500	6200	6600	9000	10000	9000	14000	18000	21000	20500	27000	65000	35000
≤ 16	3600	5500	6200	6600	9000	10000	9000	14000	18000	21000	23000	27000	65000	35000
$F_{r max}$	3600	-	7000	-	11000	-	11000	-	22000	-	28000	-	65000	-

H□□ S□□	Hollow shaft and hollow shaft with shrink disc													
	Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$													
	GFL 04		GFL 05		GFL 06		GFL07		GFL 09		GFL 11		GFL 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	2800	2200	3000	2800	4300	4000	4500	3400	5000	3100	7300	4700	8000	4000
250	3200	2600	3400	3600	4700	5200	5100	4700	6000	4200	8700	6000	9000	5000
160	3800	3200	4100	4200	5000	6000	6400	6000	7200	5800	10000	7500	9500	6200
100	4600	4200	5000	5900	6600	8500	7900	8500	10500	10000	14200	14000	11500	7500
63	5500	5300	6000	6600	8500	10000	9300	12000	13000	13500	19000	19000	14000	11000
40	6300	5500	7100	6600	10800	10000	11500	14000	15000	17000	23000	25000	18000	17500
25	7000	5500	8000	6600	12000	10000	15000	14000	22000	21000	27000	27000	30000	31000
≤ 16	7000	5500	8000	6600	12000	10000	16000	14000	24000	21000	30000	27000	45000	35000
$F_{r max}$	7000	-	10000	-	15000	-	20000	-	30000	-	38000	-	56000	-

\* A reinforced output shaft bearing is available on request for V□R units.



# Technical data: Gearboxes

## Permissible radial and axial forces: Bevel gearboxes

### GKR □ □ bevel gearboxes

**- Permissible radial force**

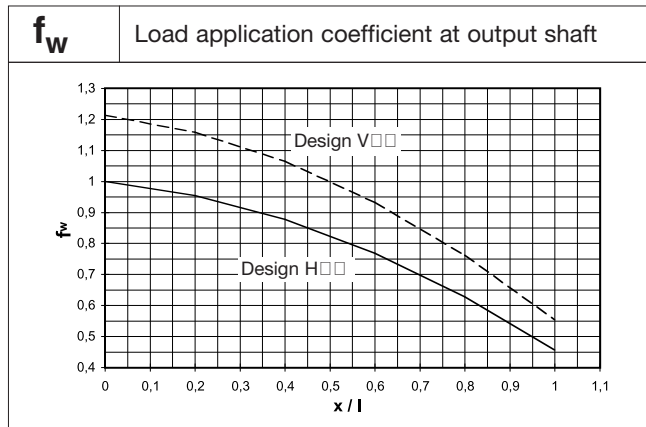
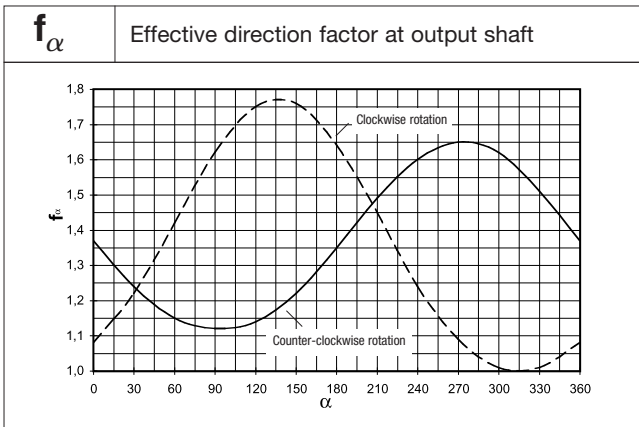
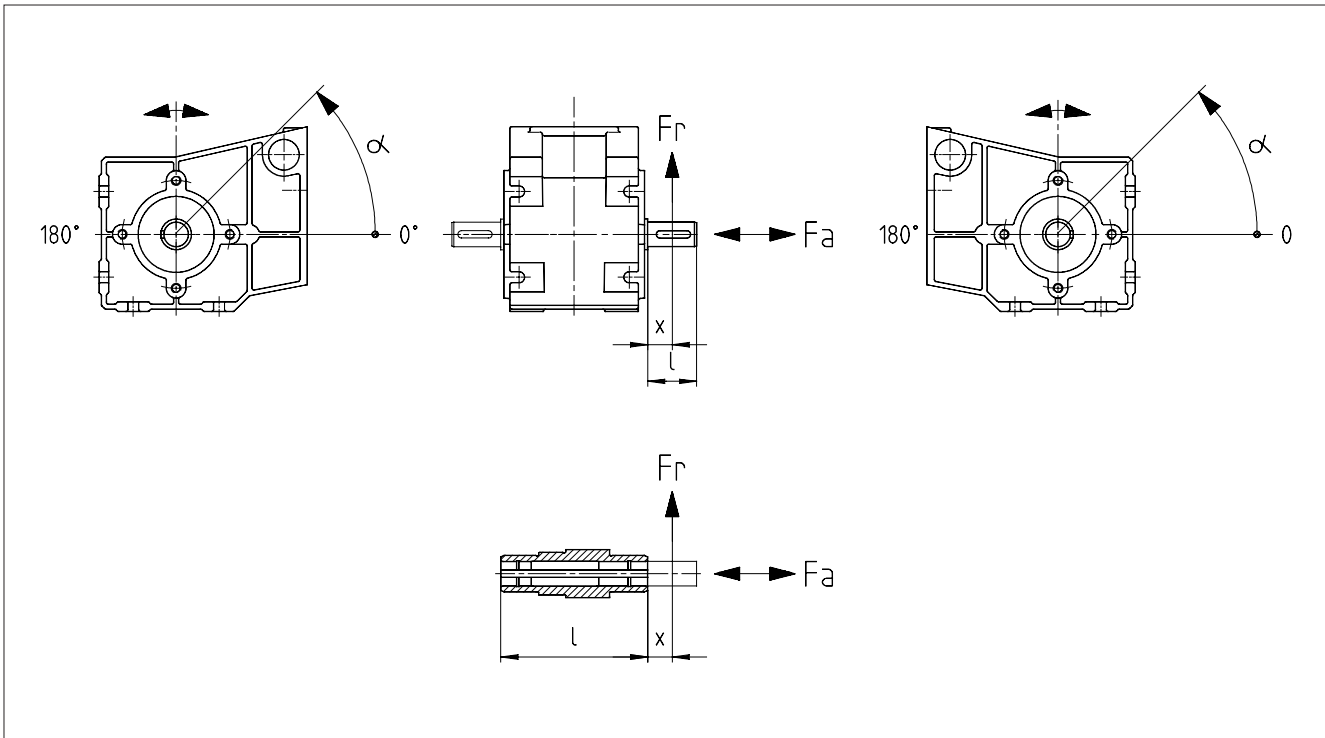
$$F_{r\text{ per.}} = f_w \cdot f_\alpha \cdot F_{r\text{ Tab}} \leq f_w \cdot F_{r\text{ max}}$$

**- Permissible axial force**

$$F_{a\text{ per.}} = F_{a\text{ Tab}} \quad \text{at } F_r = 0$$

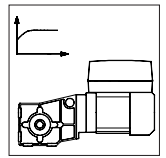
Please contact the plant if  $F_r$  and  $F_a < 0$

3



# Technical data: Gearboxes

## Permissible radial and axial forces: Bevel gearboxes

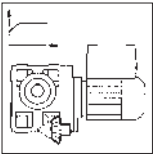


### GKR□□ bevel gearboxes

H□□ S□□	<b>Hollow shaft and hollow shaft with shrink disc</b> Application of force $F_r$ : at hollow shaft end face ( $x = 0$ ) $F_{a Tab}$ only valid for $F_r = 0$					
	GKR03		GKR04		GKR05	
$n_2$ [min <sup>-1</sup> ]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]
400	2200	1000	2550	1275	3800	1900
250	2500	1100	3000	1500	4500	2200
160	2800	1250	3300	1650	5100	2500
100	3000	1400	3600	1800	6200	3100
63	3000	1400	3600	1800	7400	3700
40	3000	1400	3600	1800	7800	3900
25	3000	1400	3600	1800	7800	3900
≤16	3000	1400	3600	1800	7800	3900
$F_{max}$	3000	-	3600	-	7800	-

V□R	<b>Solid shaft</b> Application of force $F_r$ : at hollow shaft end face ( $x = 1/2$ ) $F_{a Tab}$ only valid for $F_r = 0$					
	GKR03		GKR04		GKR05	
$n_2$ [min <sup>-1</sup> ]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]
400	1800	1000	2100	1275	3000	1900
250	2100	1100	2500	1500	3600	2200
160	2400	1250	2700	1650	4500	2500
100	2800	1400	3000	1800	5000	3100
63	3000	1400	3000	1800	6000	3700
40	3000	1400	3000	1800	6500	3900
25	3000	1400	3000	1800	6500	3900
≤16	3000	1400	3000	1800	6500	3900
$F_{max}$	3000	-	3000	-	6500	-

VAK	<b>Solid shaft</b> Application of force $F_r$ : at hollow shaft end face ( $x = 1/2$ ) $F_{a Tab}$ only valid for $F_r = 0$					
	GKR03		GKR04		GKR05	
$n_2$ [min <sup>-1</sup> ]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]	$F_{r Tab}$ [N]	$F_{a Tab}$ [N]
400	1800	1000	2100	1275	5200	1900
250	2100	1100	2500	1500	6000	2200
160	2400	1250	2700	1650	6500	2500
100	2800	1400	3000	1800	6500	3100
63	3000	1400	3000	1800	6500	3700
40	3000	1400	3000	1800	6500	3900
25	3000	1400	3000	1800	6500	3900
≤16	3000	1400	3000	1800	6500	3900
$F_{max}$	3000	-	3000	-	6500	3900



# Technical data: Gearboxes

## Permissible radial and axial forces: Helical bevel gearboxes

### GKS helical bevel gearboxes

**- Permissible radial force**

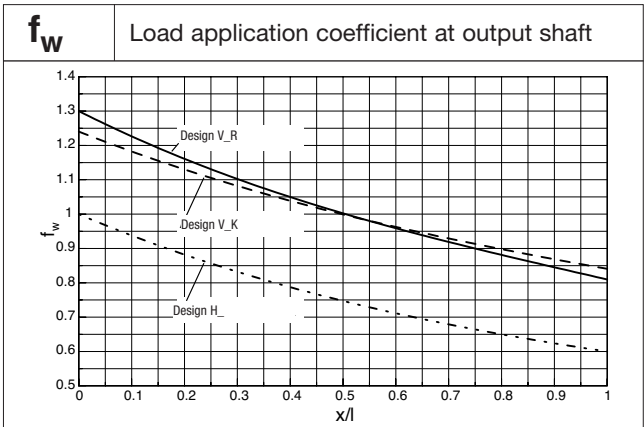
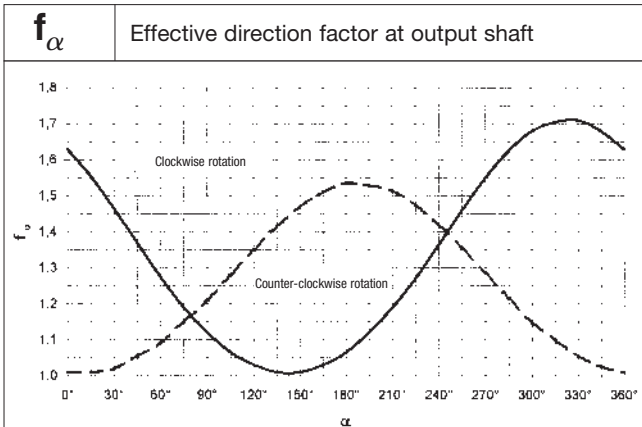
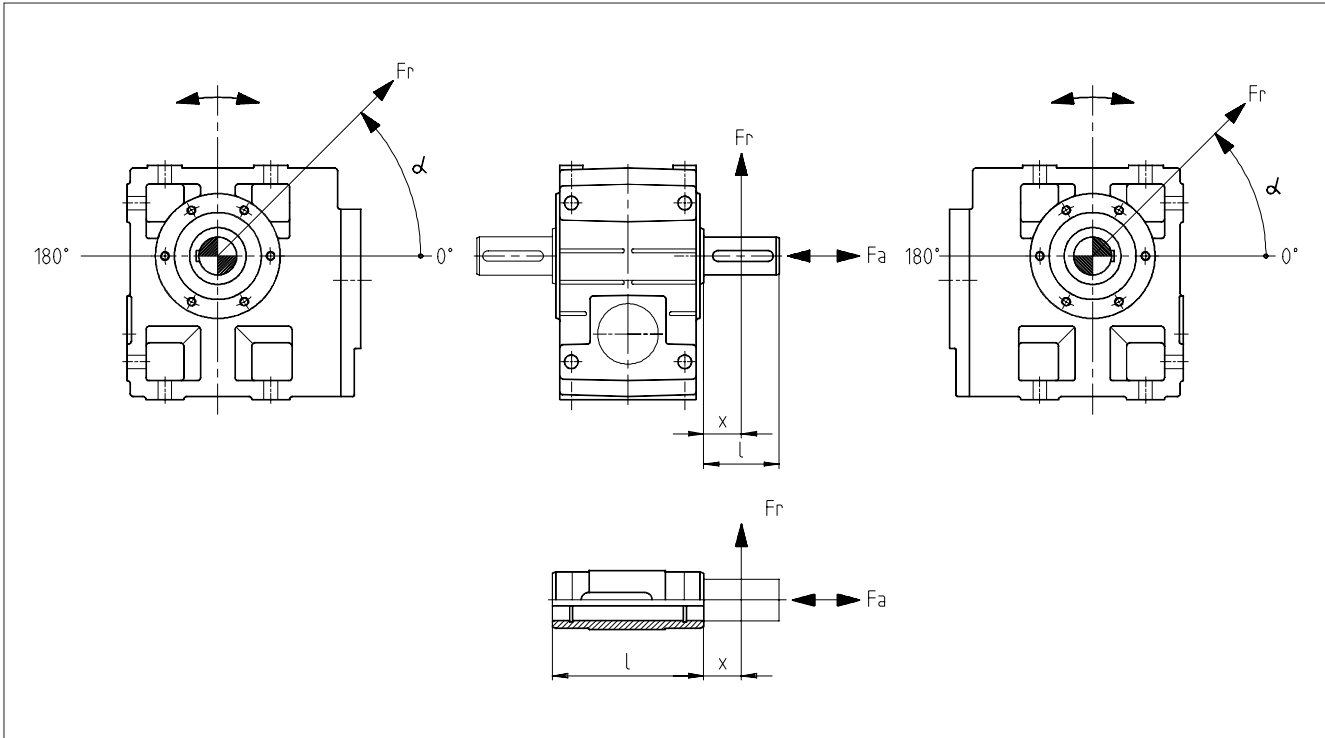
$$F_{r\text{ per.}} = f_w \cdot f_\alpha \cdot F_{r\text{ Tab}} \leq f_w \cdot F_{r\text{ max}}$$

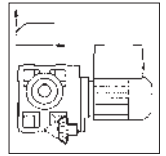
**- Permissible axial force**

$$F_{a\text{ per.}} = F_{a\text{ Tab}} \quad \text{at } F_r = 0$$

Please contact the plant if  $F_r$  and  $F_a \neq 0$

3





### GKS□□ helical bevel gearboxes

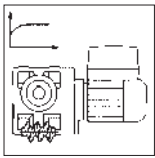
VAK	Solid shaft with flange Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3800	4200	4640	3630	6400	4660	7000	5700	9900	6000	14500	7000	20500	8400
250	4300	4400	5420	4440	7500	5880	8250	7000	10500	6600	16000	7500	23700	10000
160	4600	4400	6280	5420	8800	7320	9630	8500	12000	7600	17600	8500	27200	11500
100	4600	4400	7000	6600	9800	9230	11000	10400	14000	10000	21000	10500	31300	13000
63	4600	4400	7000	6600	10000	10000	13000	11500	15000	12000	24500	13000	35000	15000
40	4600	4400	7000	6600	10000	10000	14000	11500	15000	15000	28000	17500	41000	19000
25	4600	4400	7000	6600	10000	10000	14000	11500	15000	17000	30000	27000	43000	28000
≤ 16	4600	4400	7000	6600	10000	10000	14000	11500	15000	17000	30000	27000	43000	35000
$F_{r max}$	4600	-	7000	-	10000	-	14000	-	15000	-	30000	-	43000	-

V□R	Solid shaft without flange Application of force $F_{rTab}$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09*		GKS 11*		GKS 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3000	4200	2800	3500	3700	4440	4000	4900	6200	6500	7100	7000	57900	35000
250	3400	5000	3200	4240	4300	5580	4900	6230	6400	7400	7500	8000	61000	35000
160	3600	5500	3600	5090	4900	6930	5800	7820	7100	8000	8200	9200	64100	35000
100	3600	5500	4100	6160	5300	8710	6600	9940	8400	10500	10000	12000	65000	35000
63	3600	5500	4900	6600	6200	10000	8000	12600	9500	13000	11200	14500	65000	35000
40	3600	5500	5800	6600	7900	10000	9600	14000	11800	17000	13000	18500	65000	35000
25	3600	5500	5800	6600	9000	10000	12000	14000	16000	21000	19000	27000	65000	35000
≤ 16	3600	5500	5800	6600	9000	10000	12000	14000	18000	21000	23000	27000	65000	35000
$F_{r max}$	3600	-	5800	-	9000	-	12000	-	18000	-	23000	-	65000	-

H□□ S□□	Hollow shaft and hollow shaft with shrink disc Application of force $F_{rTab}$ : at hollow shaft end face ( $x = 0$ ) $F_{aTab}$ only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
400	3900	4200	3500	3500	4600	4440	5400	4900	7500	6500	9000	7000	15000	6000
250	4500	5000	4200	4240	5600	5580	6300	6230	8200	7400	10000	8000	15500	8000
160	5100	5500	4630	5090	6400	6930	7400	7820	9400	8000	11000	9200	16500	10000
100	5900	5500	5000	6160	7000	8710	8700	9940	10600	10500	14000	12000	17500	13000
63	6800	5500	6200	6600	8200	10000	10500	12600	12200	13000	16000	14500	18500	16000
40	7000	5500	7300	6600	10400	10000	12500	14000	15500	17000	18500	18500	21000	20000
25	7000	5500	7300	6600	12000	10000	15100	14000	21000	21000	25000	27000	28000	28000
≤ 16	7000	5500	7300	6600	12000	10000	16000	14000	24000	21000	30000	27000	40000	35000
$F_{r max}$	7000	-	7300	-	12000	-	16000	-	24000	-	30000	-	45000	-

\*A reinforced output shaft bearing is available on request for V□R units.





# Technical data: Gearboxes

## Permissible radial and axial forces: Helical worm gearboxes

### - Permissible radial force

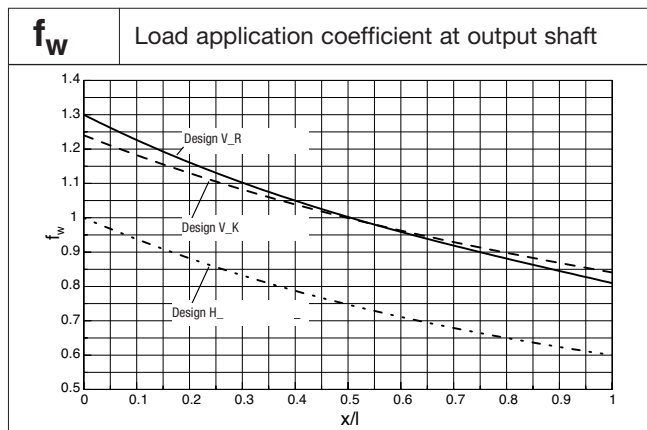
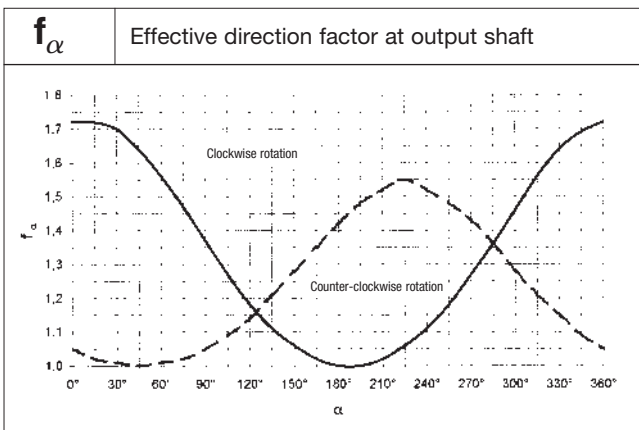
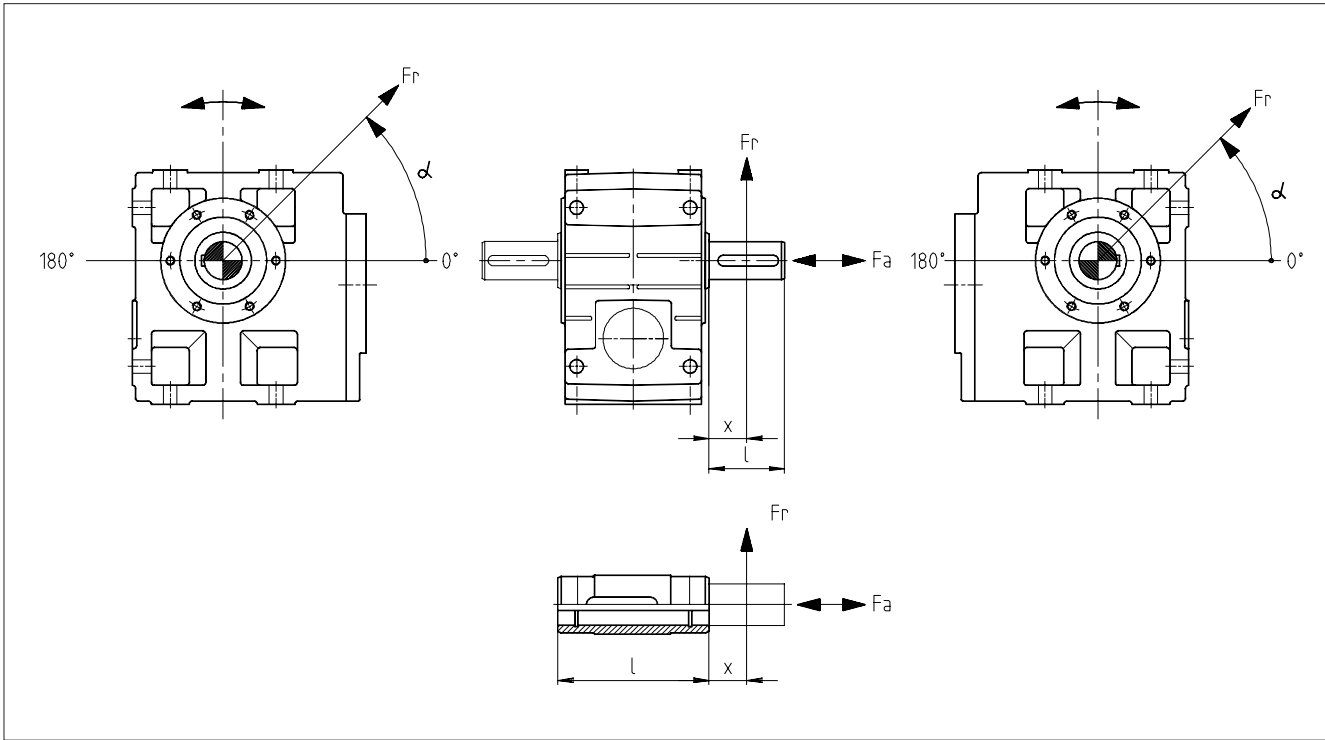
$$F_{r\text{ per.}} = f_w \cdot f_\alpha \cdot F_{r\text{ Tab}} \leq f_w \cdot F_{r\text{ max}}$$

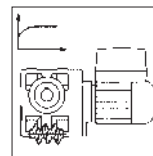
### - Permissible axial force

$$F_{a\text{ per.}} = F_{a\text{ Tab}} \quad \text{at } F_r = 0$$

Please contact the plant if  $F_r$  and  $F_a \neq 0$

3

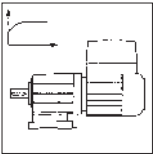




VAK	Solid shaft with flange Application of force $F_r$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
250	4100	3500	4900	2500	7000	2800	7900	2400
160	4400	4000	4900	3100	8100	3500	9100	3200
100	4700	4200	4900	4000	9400	4500	10600	4300
63	4700	4200	4900	4900	9400	5700	12400	5900
40	4700	4200	4900	5500	9400	7300	14000	8000
25	4700	4200	4900	5500	9400	8800	14000	10000
≤ 16	4700	4200	4900	5500	9400	8800	14000	10000
$F_{rmax}$	4700	–	4900	–	9400	–	14000	–

V□R	Solid shaft without flange Application of force $F_r$ : centre of tapped end shaft ( $x = l/2$ ) $F_{aTab}$ only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
250	3000	3700	2900	2800	3600	3200	4200	3100
160	3500	4200	3400	3500	4200	4100	5100	4100
100	4100	4900	4000	4400	5000	5200	6300	5500
63	4200	5500	4300	5500	5900	6500	7700	7200
40	4200	5500	4300	6000	6900	8200	9300	9500
25	4200	5500	4300	6000	8200	9000	11300	12500
≤ 16	4200	5500	4300	6000	8500	9000	12000	12500
$F_{rmax}$	4200	–	4300	–	8500	–	12000	–

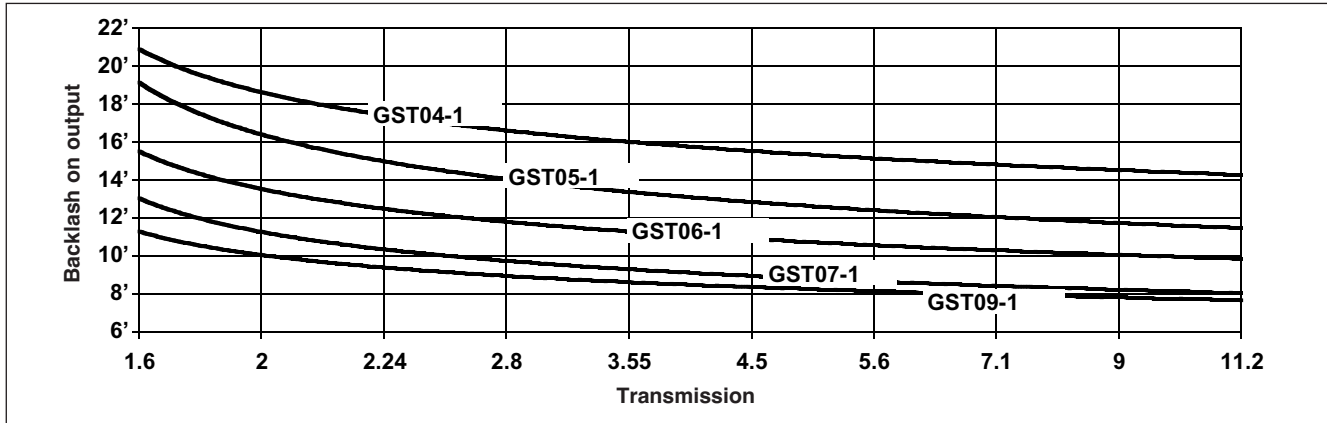
HS□□ S□□□	Hollow shaft and hollow shaft with shrink disc Application of force $F_{rTab}$ : at hollow shaft end face ( $x = 0$ ) $F_{aTab}$ only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
$n_2$ [min <sup>-1</sup> ]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]	$F_{rTab}$ [N]	$F_{aTab}$ [N]
250	3800	3700	3600	2800	4800	3200	5600	3100
160	4500	4200	4300	3500	5600	4100	6700	4100
100	5300	4900	5100	4400	6600	5200	8200	5500
63	6000	5500	6000	5500	7700	6500	10000	7200
40	6000	5500	7000	6000	9100	8200	12100	9500
25	6000	5500	7500	6000	10700	9000	14800	12500
≤ 16	6000	5500	7500	6000	11500	9000	16000	12500
$F_{rmax}$	6000	–	7500	–	11500	–	16000	–



# Technical data: Gearboxes

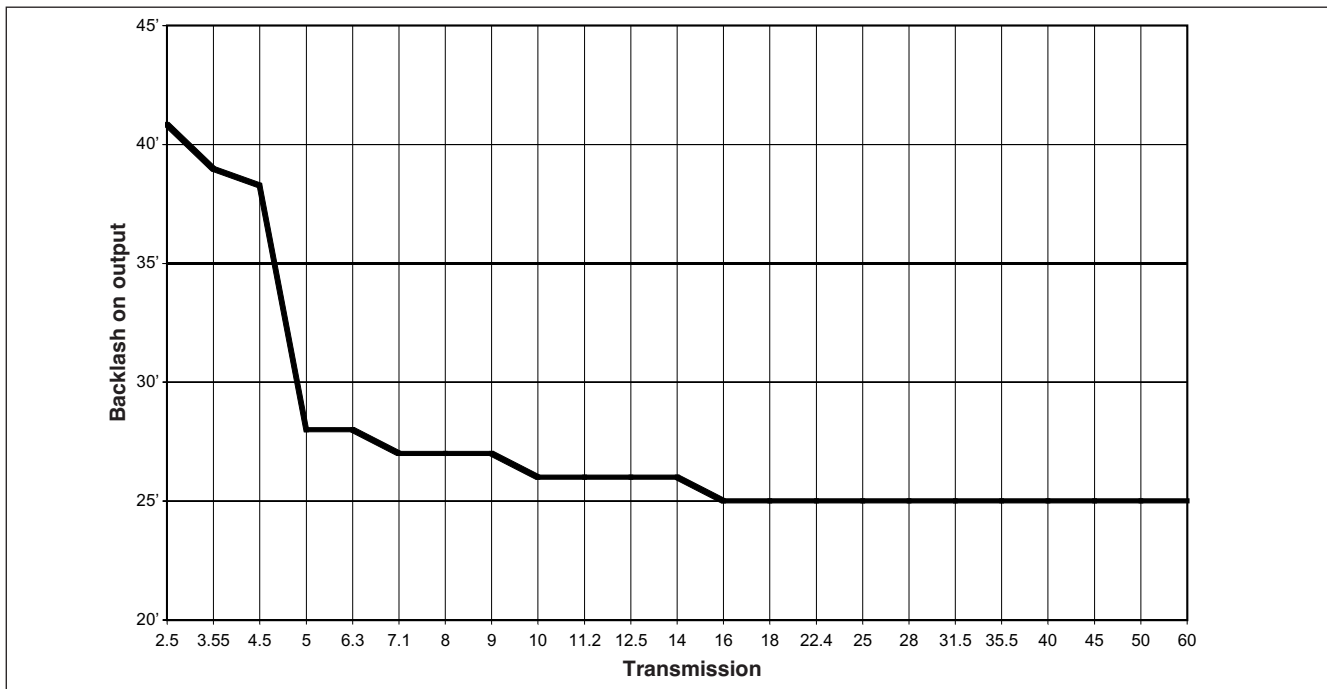
## Backlash: Helical gearboxes

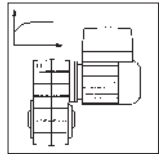
GST □□-1



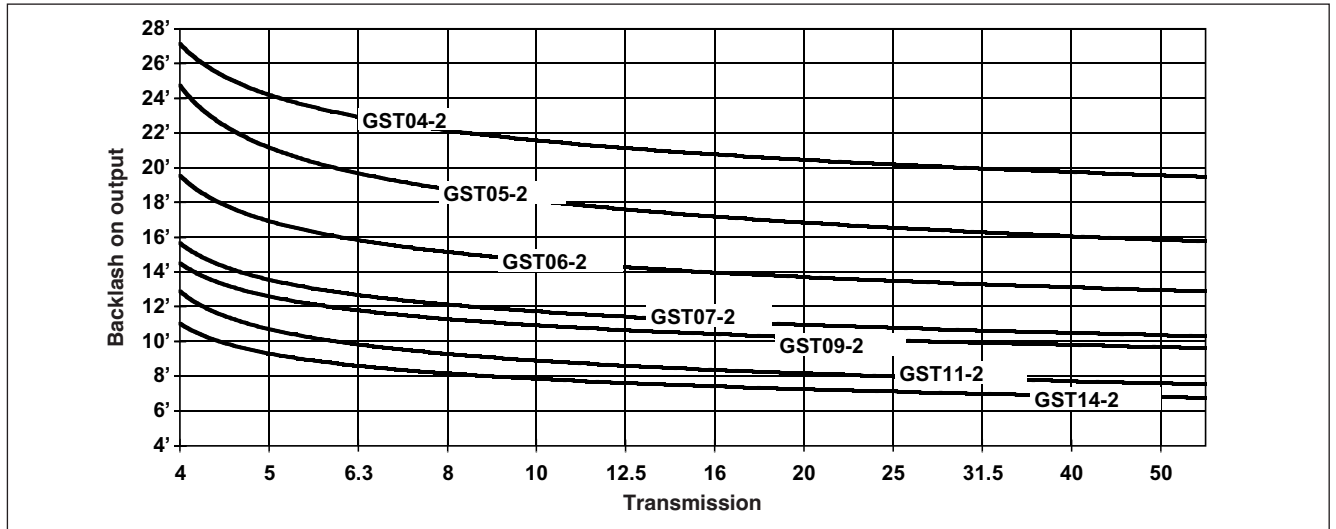
3

GST 03 - 2



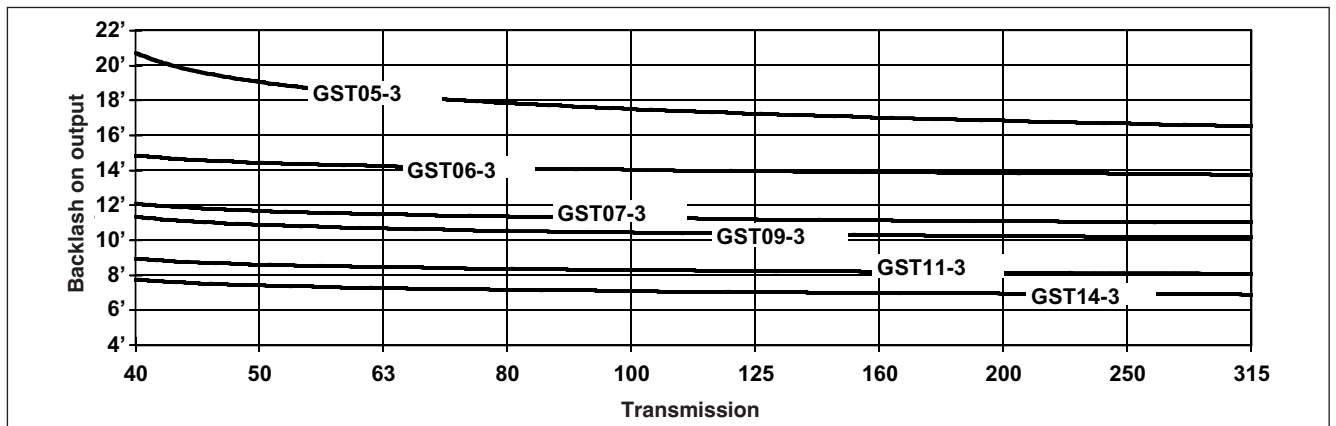


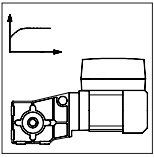
**GST 04...14-2**



3

**GST □□-3**

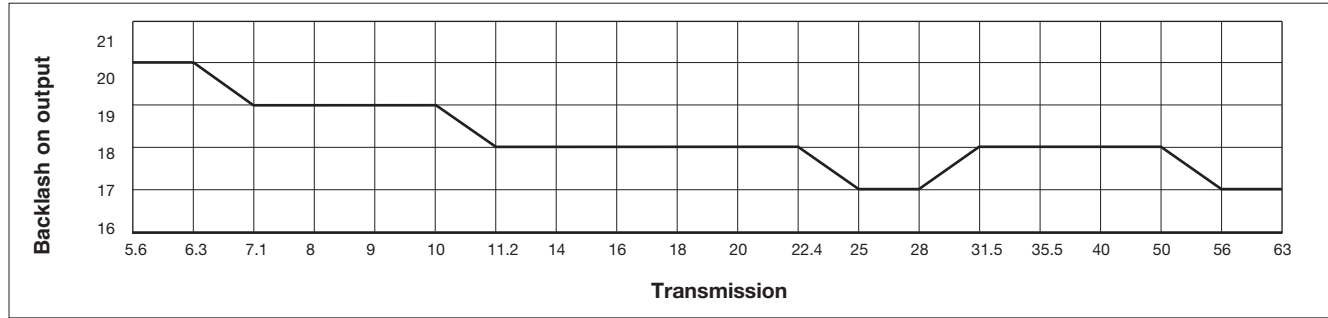




## Technical data: Gearboxes

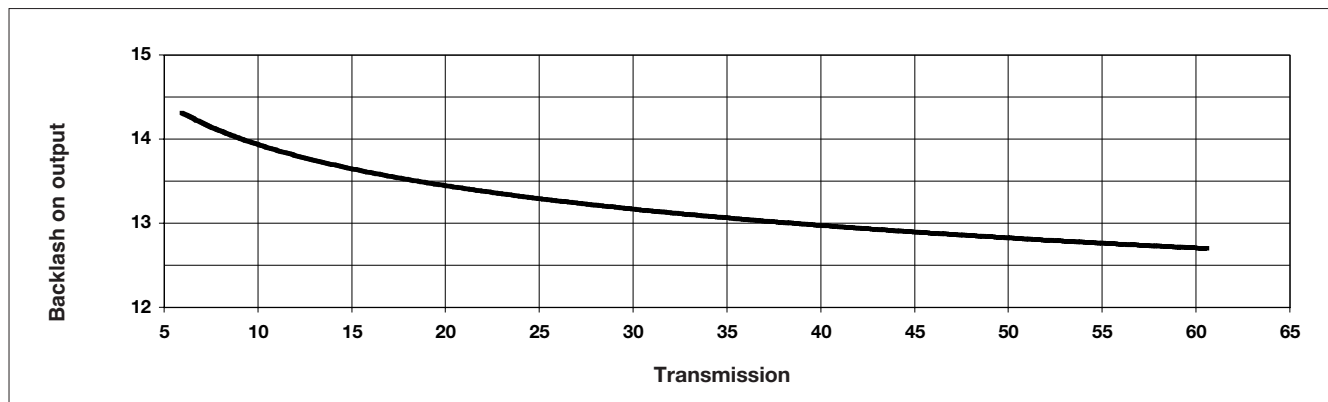
### Backlash: Bevel gearboxes

#### GKR 03-2

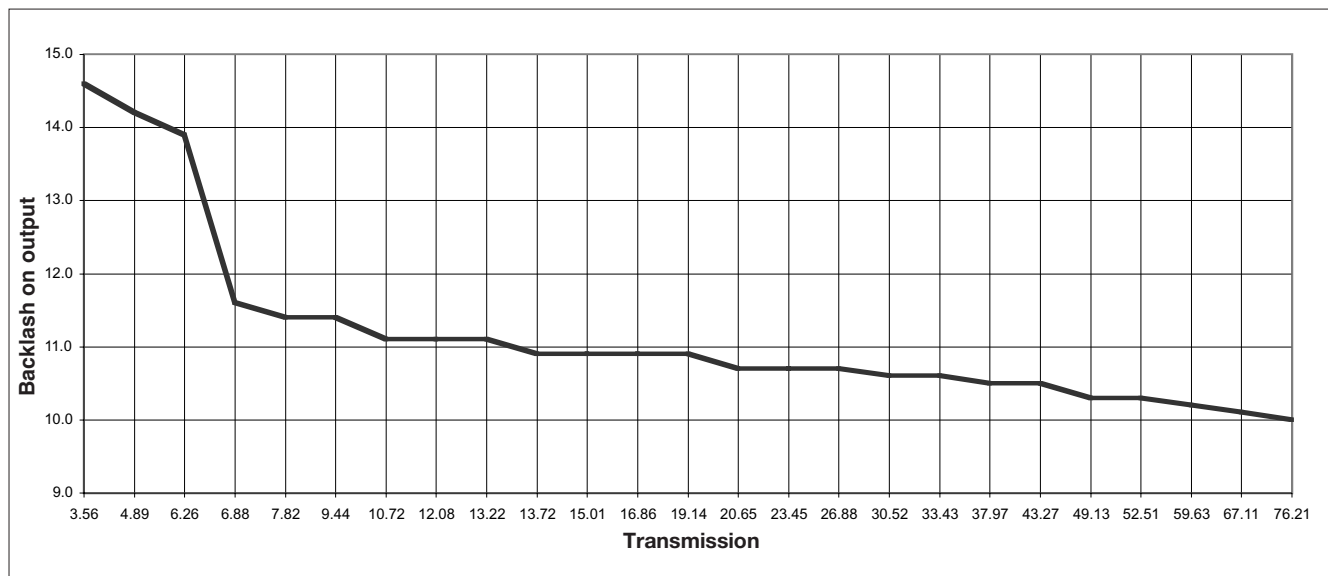


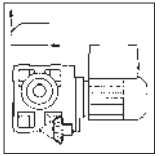
3

#### GKR 04-2

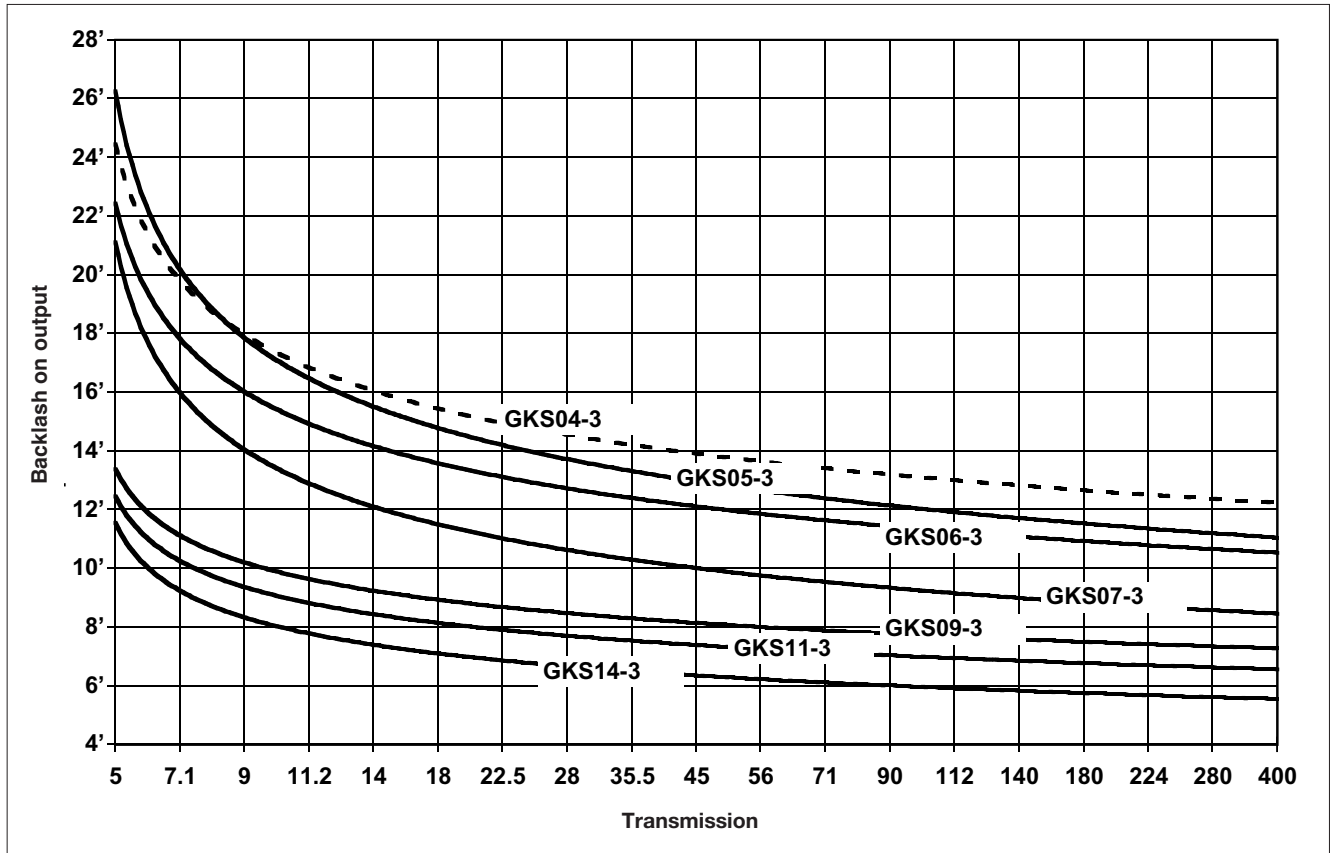


#### GKR 05-2



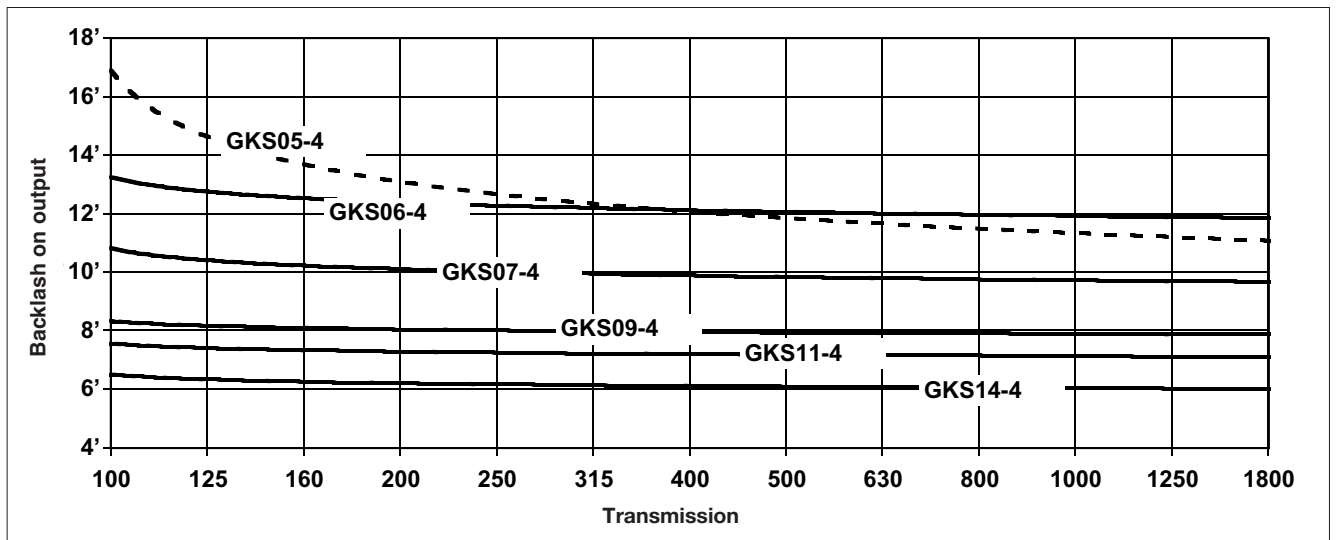


### GKS □□-3

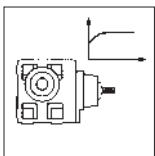


3

### GKS □□-4



Backlash in angular minutes



## Technical data: Gearboxes

### Start-up efficiency: Helical worm gearboxes

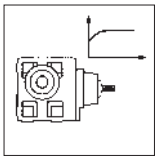
The start-up efficiency  $\eta_A$  of a helical worm gearbox is lower than its operative efficiency  $\eta$  at rated speed.

**This means that the start-up efficiency  $\eta_A$  should be monitored constantly during start-up under load.**

The start-up efficiency is determined by the oil temperature and the degree to which the tooth faces have been run in. The values given in the tables are theoretical values and are valid with a tolerance of  $\pm 10\%$ .

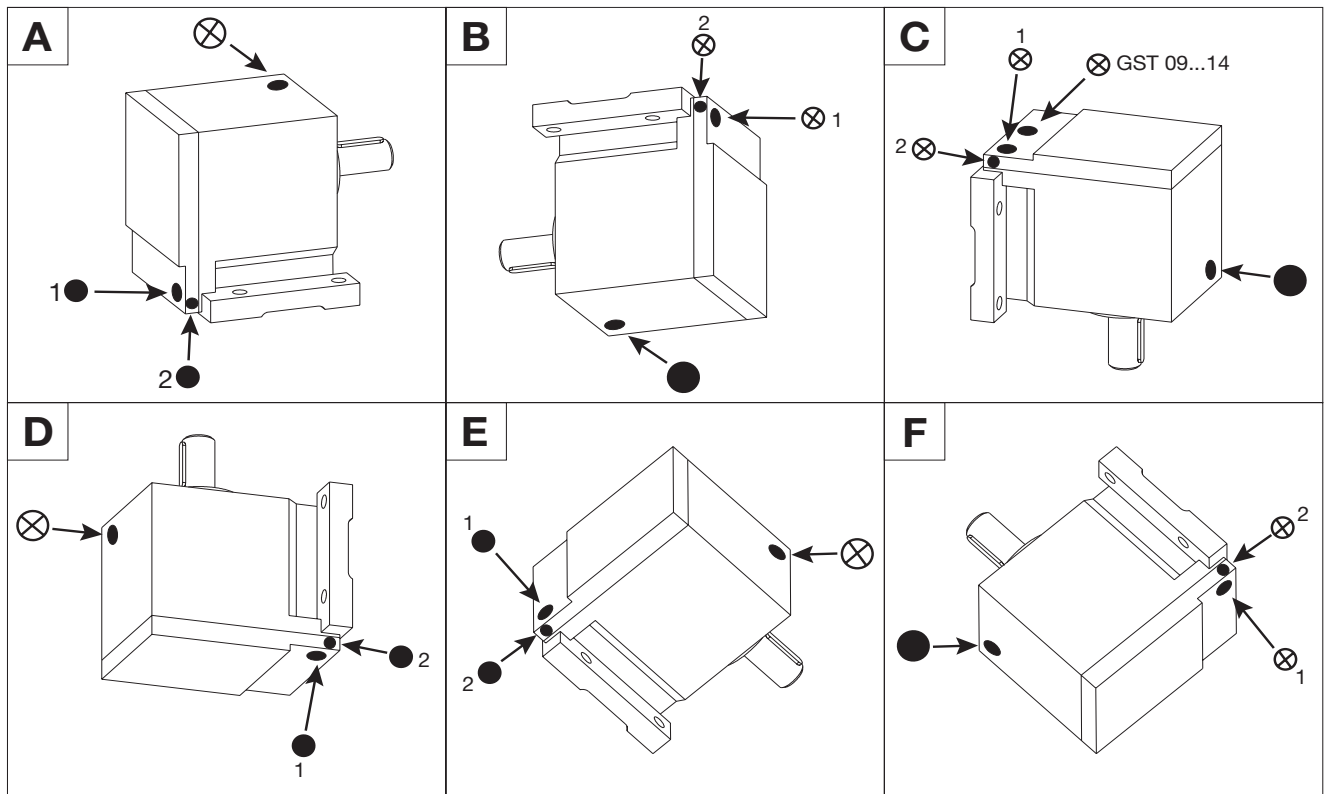
Transmission ratio $i_{\text{rated}}$	Start-up efficiency $\eta_A$
5.6	0.71
8	0.71
9	0.67
10	0.71
11.2	0.71
12.5	0.67
14	0.71
16	0.67
18	0.67
20	0.55
22.4	0.67
25	0.55
28	0.67
31.5	0.55
35.5	0.67

Transmission ratio $i_{\text{rated}}$	Start-up efficiency $\eta_A$
40	0.55
45	0.67
50	0.55
56	0.55
63	0.55
71	0.55
80	0.55
90	0.55
100	0.55
112	0.55
125	0.55
140	0.55
160	0.55
180	0.55
200	0.55



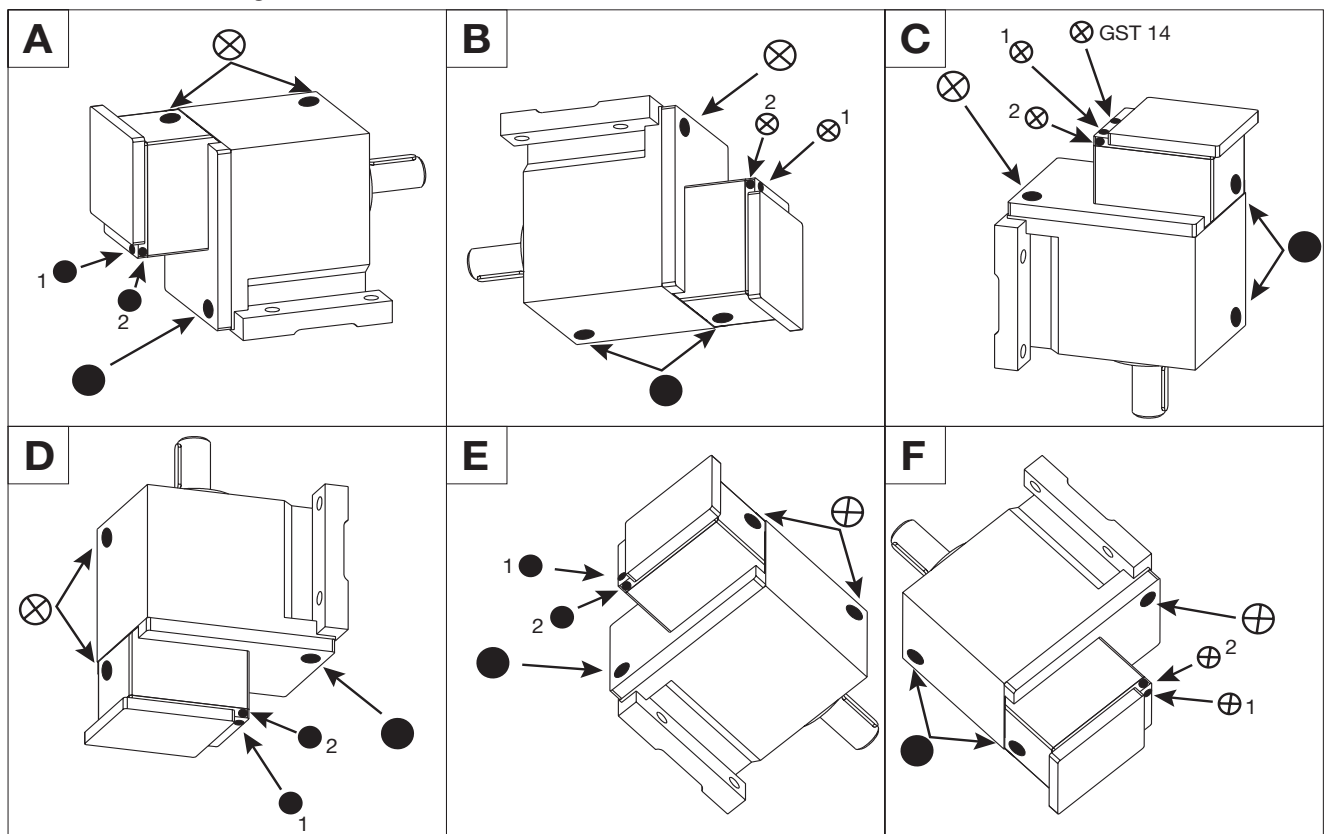
### Position of ventilation, oil filler plug and oil drain plug

GST 05...09-1 and GST 05...14-2 helical gearboxes



3

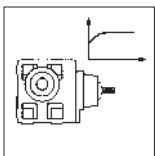
### GST 05...14-3 helical gearboxes



(A...F) Mounting position    ⊗ Ventilation/oil filler plug    ● Oil drain plug

Pos. 1 or 2 depending on version (see table on page 3-25).

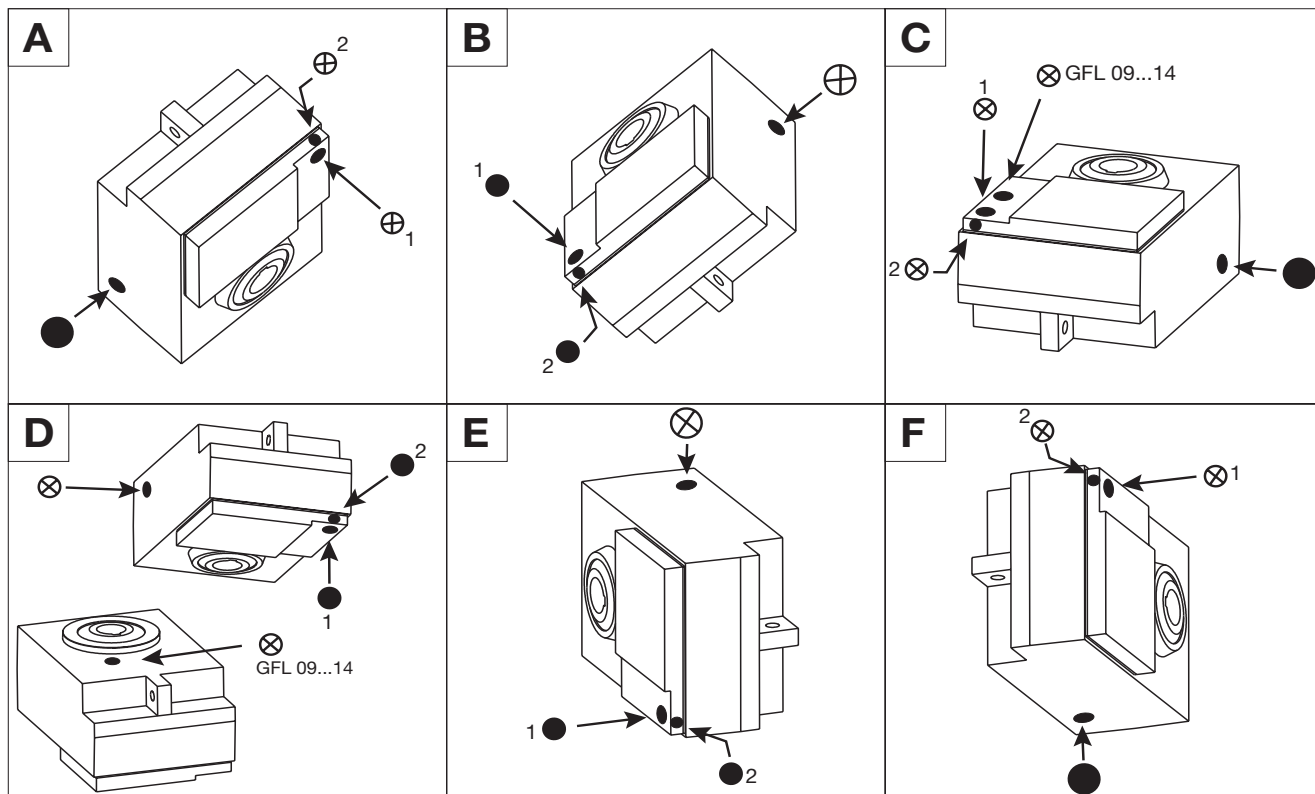




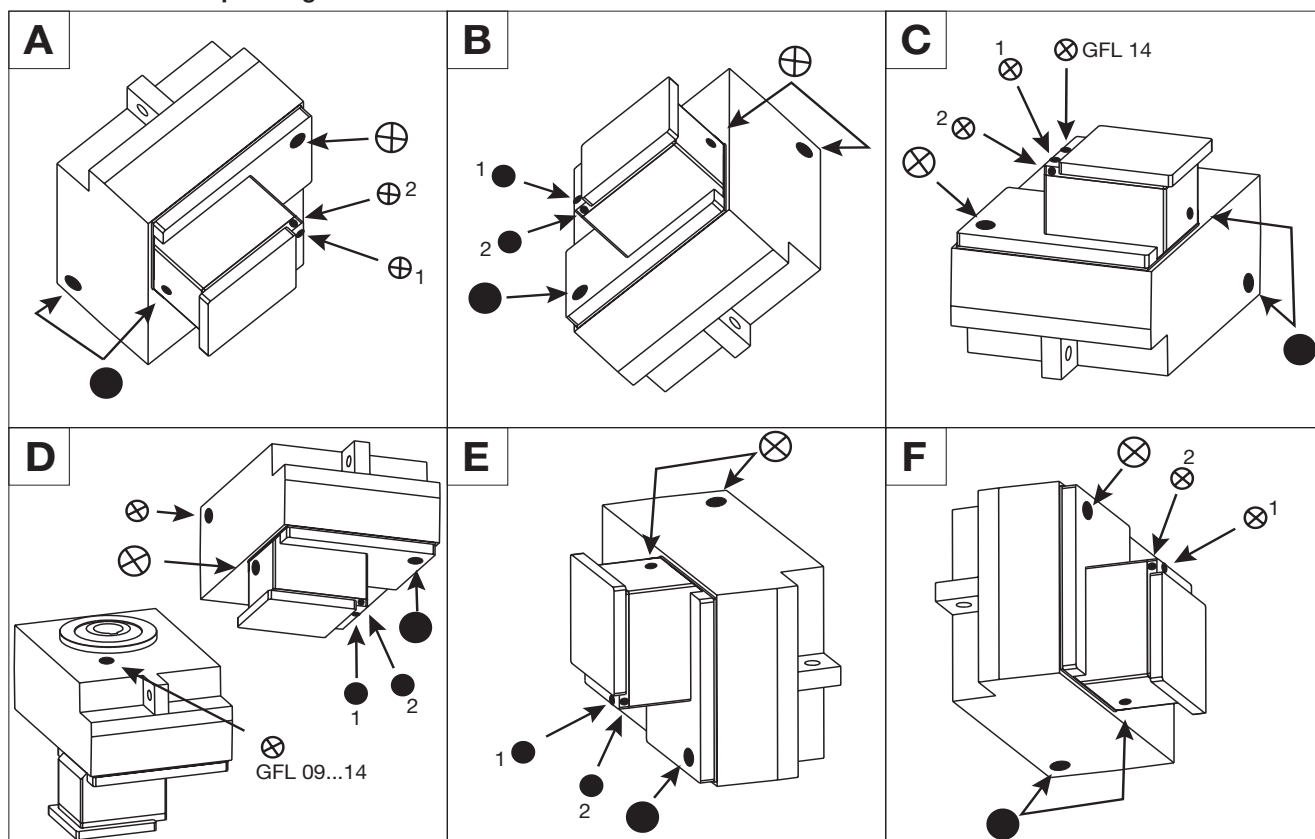
# Technical data: Gearboxes

## Gearbox with ventilation

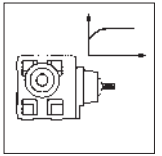
### Position of ventilation, oil filler plug and oil drain plug GFL 05...14-2 low-profile gearboxes



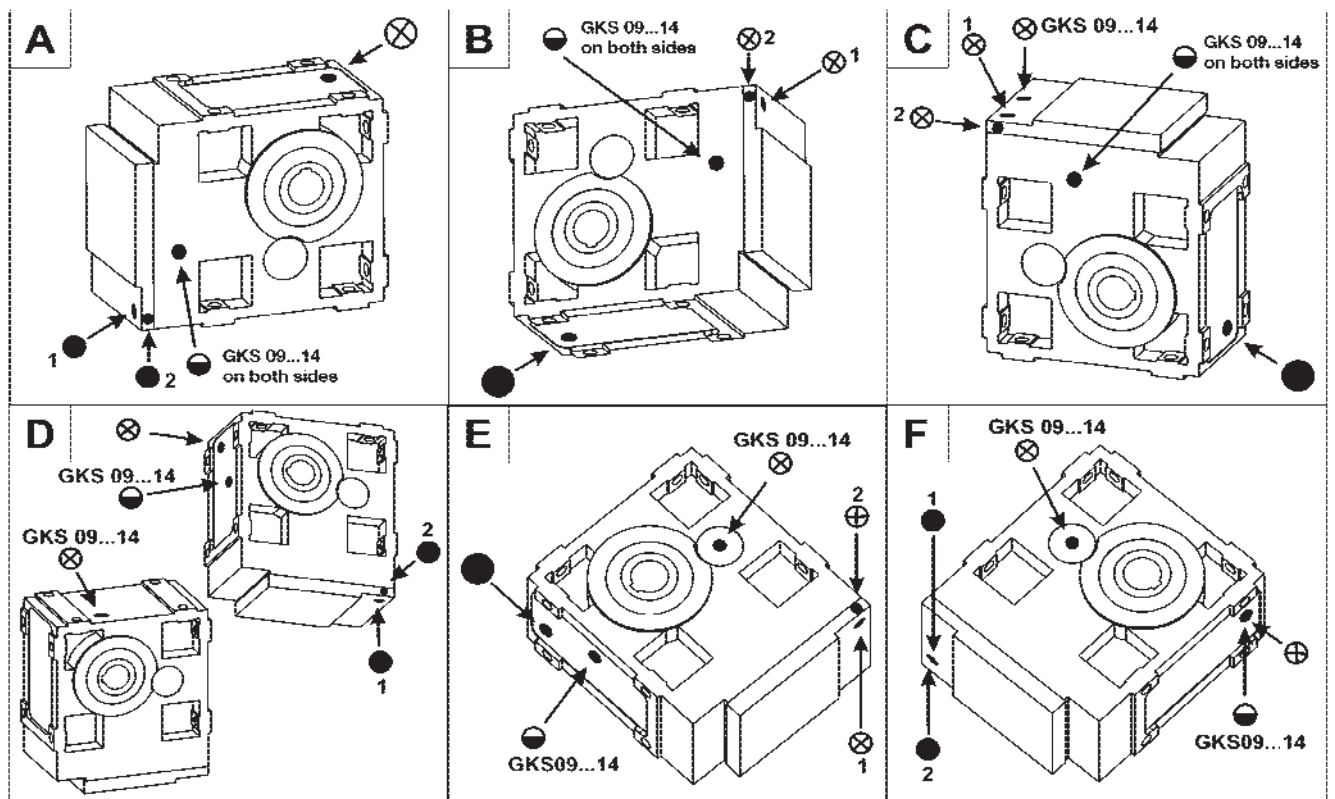
### GFL 05...14-3 low-profile gearboxes



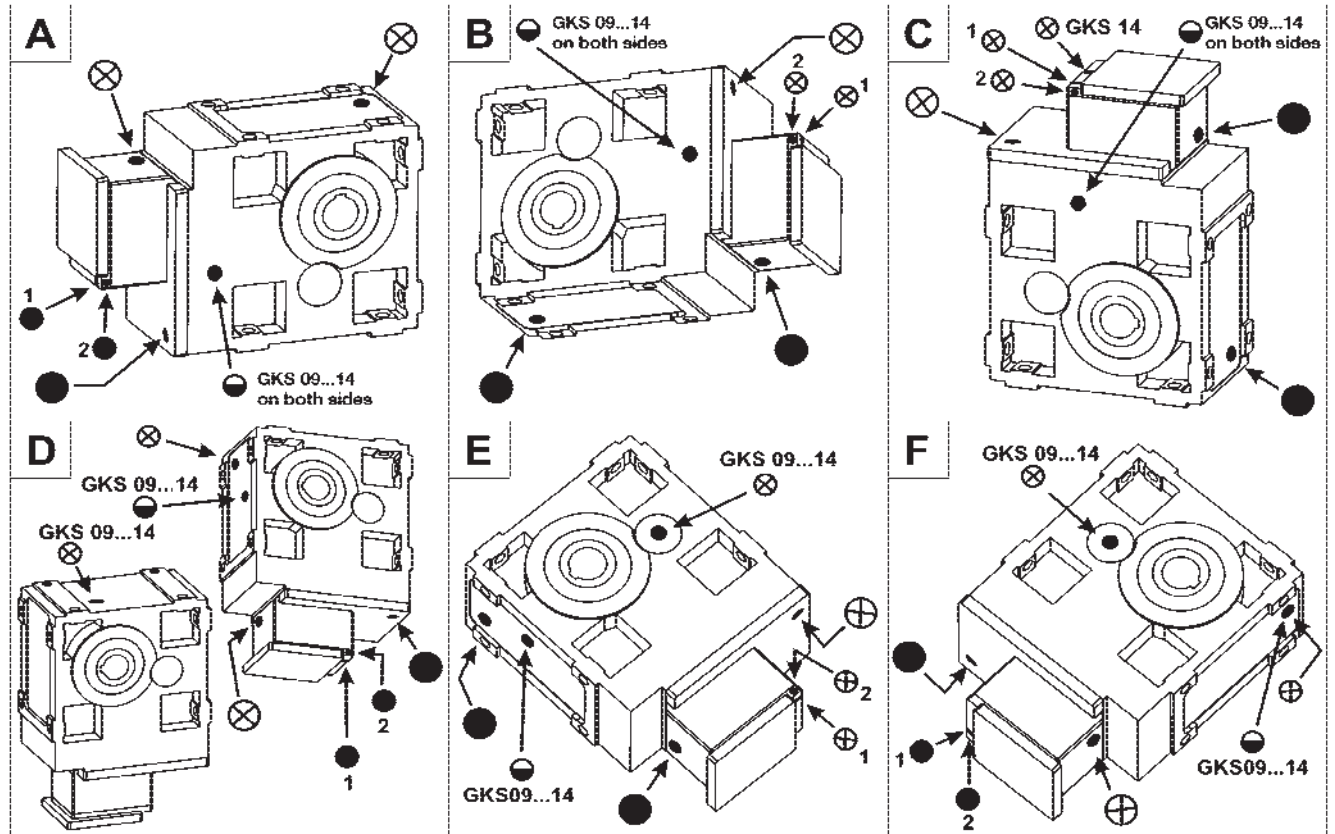
(A...F) Mounting position    ⊗ Ventilation/oil filler plug    ● Oil drain plug    Pos. 1 or 2 depending on version (see table on page 3-25).



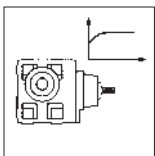
### Position of ventilation, oil filler plug and oil drain plug GKS 05...14-3 helical bevel gearboxes



### GKS 05...14-4 helical bevel gearboxes



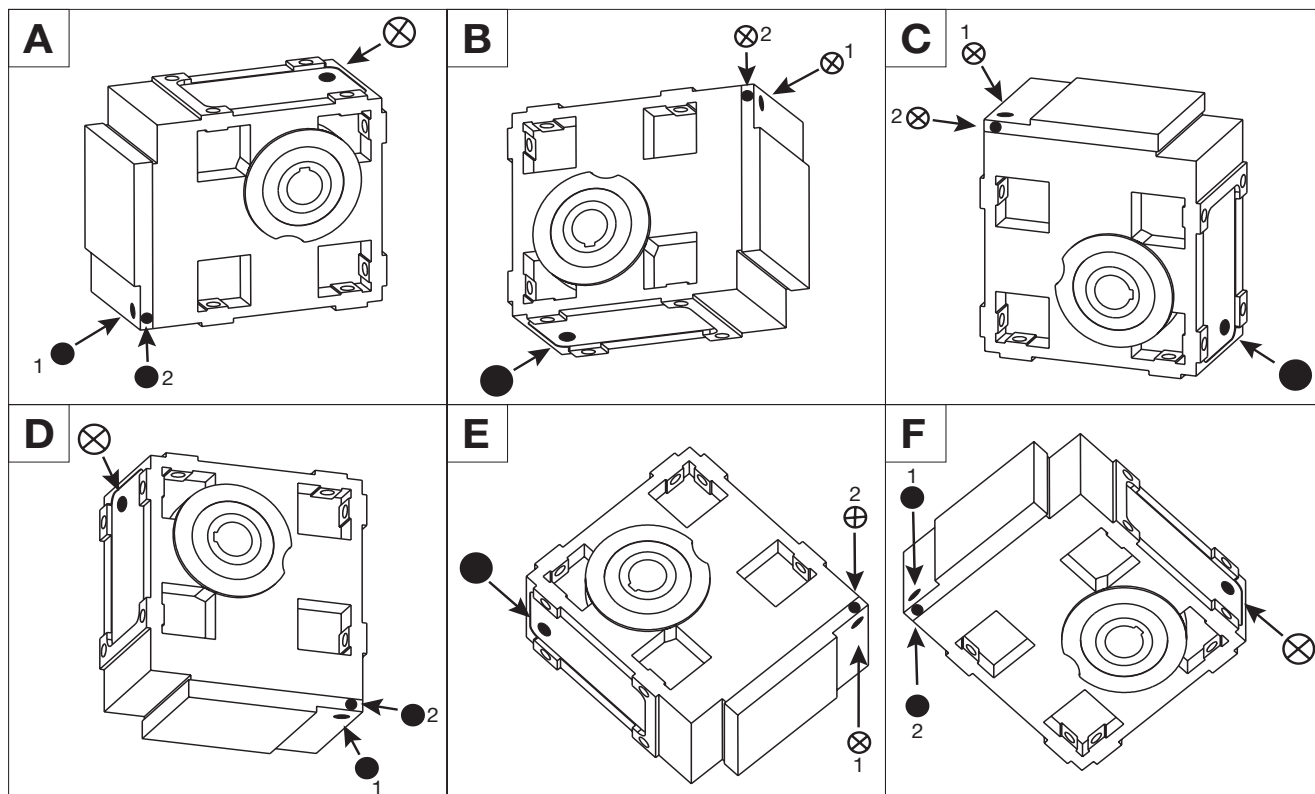
(A...F) Mounting position    ⊗ Ventilation/oil filler plug    ● Oil control plug  
 ● Oil drain plug    Pos. 1 or 2 depending on version  
 (see table on page 3-25).



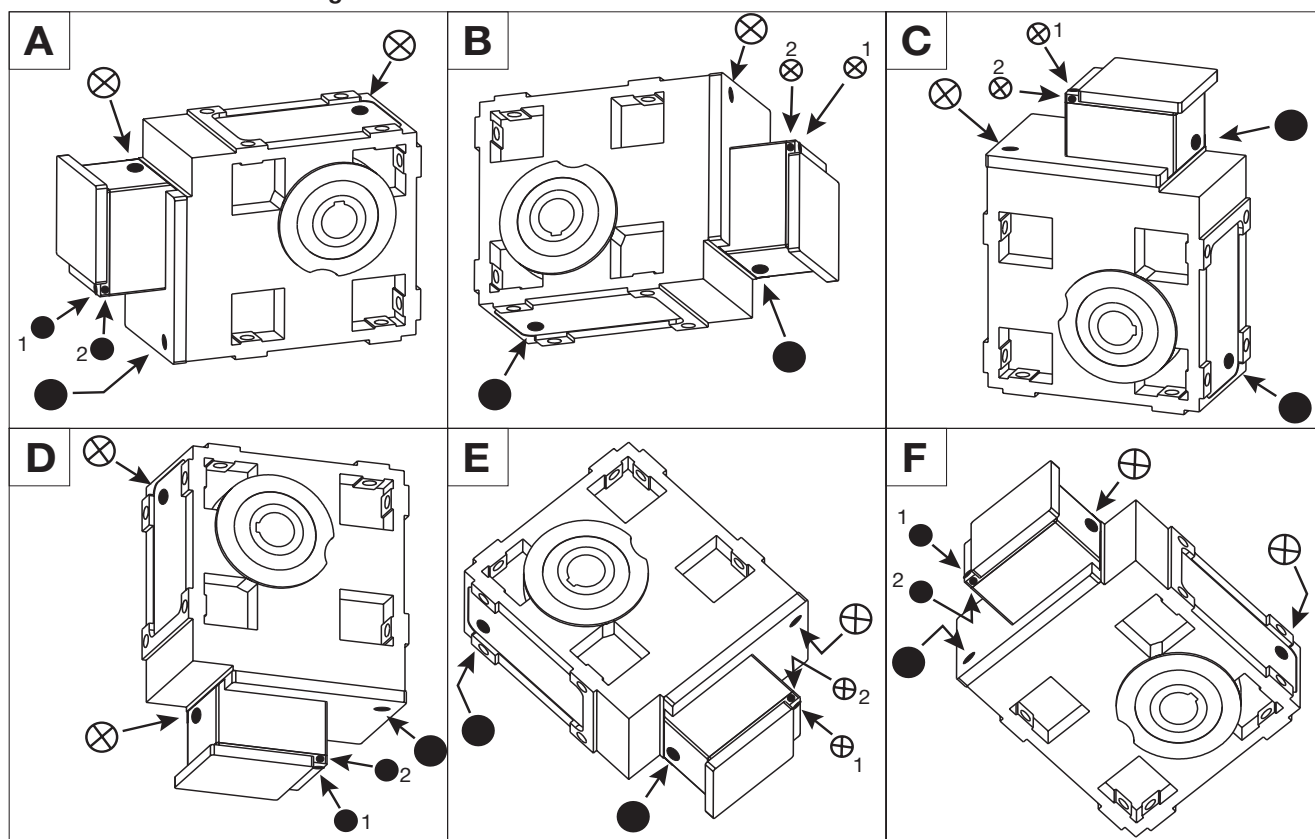
## Technical data: Gearboxes

### Gearbox with ventilation

Position of ventilation, oil filler plug and oil drain plug  
GSS 05...07-2 helical worm gearboxes

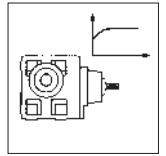


GSS 05...07-3 helical worm gearboxes



(A...F) Mounting position    ⊗ Ventilation/oil filler plug    ● Oil drain plug

Pos. 1 or 2 depending on version  
(see table on page 3-25).



On the **versions listed** in the tables, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.

On the **versions not listed**, they are in **position 1**.

### Helical gearboxes

GST	05	-1	E	□□□	090-□□ 100-□□
		-2	E	□□□	090-□□ 100-□□
	06	-2	E	□□□	112-□□
	07	-3	E	□□□	090-□□ 100-□□
	09	-3	E	□□□	112-□□

### Low-profile gearboxes

GFL	05	-2	E	□□□	090-□□ 100-□□
	06	-2	E	□□□	112-□□
	07	-3	E	□□□	090-□□ 100-□□

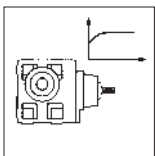
3

### Helical bevel gearboxes

GKS	05	-3	E	□□□	090-□□ 100-□□
	06	-3	E	□□□	112-□□
	07	-4	E	□□□	090-□□ 100-□□
	09	-4	E	□□□	112-□□

### Helical-worm gearboxes

GSS	05	-2	E	□□□	090-□□ 100-□□
	06	-2	E	□□□	112-□□
	07	-3	E	□□□	090-□□ 100-□□

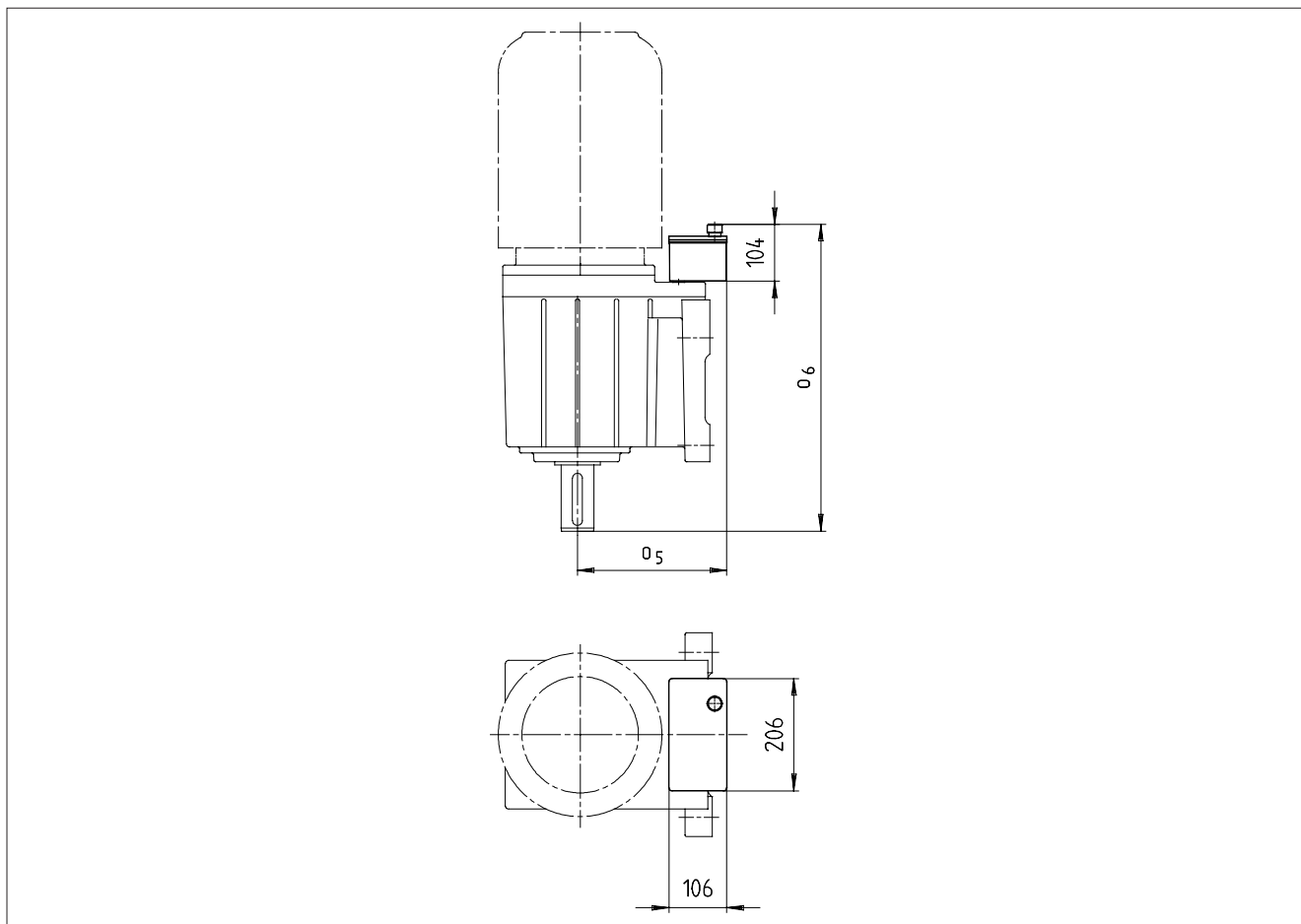


## Technical data: Gearboxes

### Gearbox with compensation reservoir

#### GST helical gearboxes

3

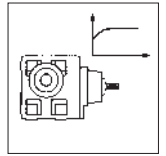


Helical gearboxes GST □□ - 2 E		Motor frame size/drive size		
		090 / 100	112	132
09	o <sub>5</sub>	208	230	251
	o <sub>6</sub>	473	473	473
11	o <sub>5</sub>	210	232	256
	o <sub>6</sub>	532	536	536
14	o <sub>5</sub>		254	284
	o <sub>6</sub>		636	636

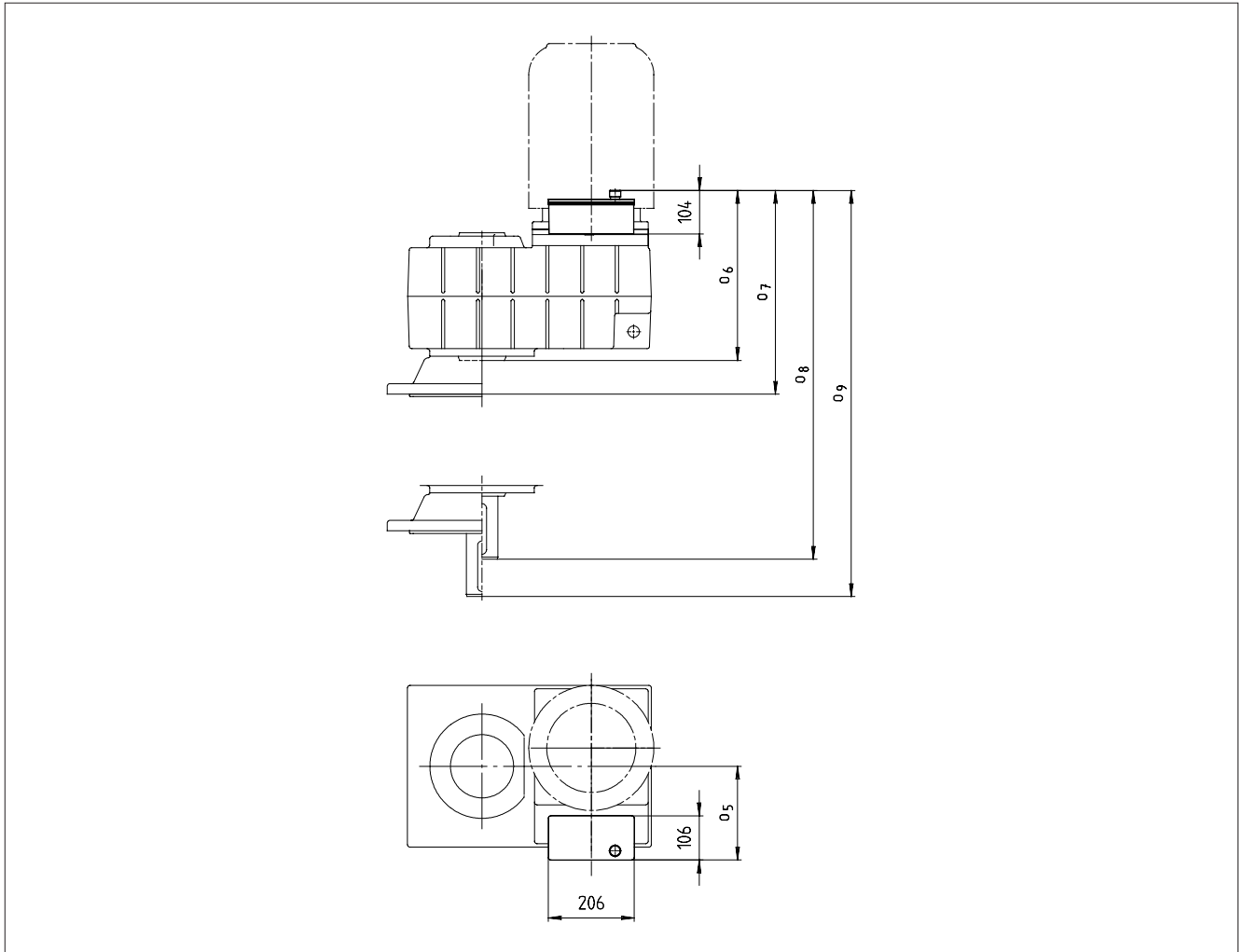
Motec not permitted in position 4.

# Technical data: Gearboxes

## Gearbox with compensation reservoir



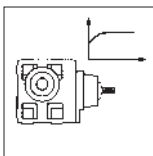
### GFL low-profile gearboxes



3

Low-profile gearboxes GFL □□ - 2 E		Motor frame size/drive size		
		090 / 100	112	132
09	o <sub>5</sub>	166	188	209
	o <sub>6</sub>	340	340	340
	o <sub>7</sub>	400	400	400
	o <sub>8</sub>	456	456	456
	o <sub>9</sub>	516	516	516
11	o <sub>5</sub>	156	178	202
	o <sub>6</sub>	382	386	386
	o <sub>7</sub>	442	446	446
	o <sub>8</sub>	537	541	541
	o <sub>9</sub>	597	601	601
14	o <sub>5</sub>		183	213
	o <sub>6</sub>		440	440
	o <sub>7</sub>		500	500
	o <sub>8</sub>		595	595
	o <sub>9</sub>		655	655

Motec not permitted in position 3.

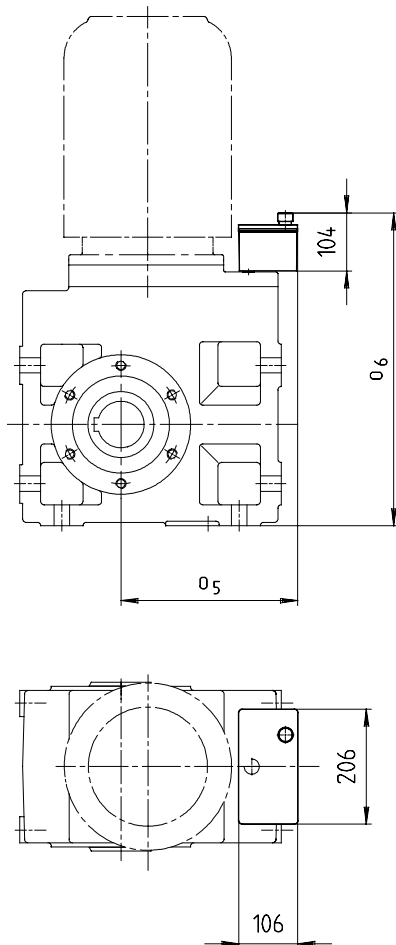


## Technical data: Gearboxes

### Gearbox with compensation reservoir

#### GST helical bevel gearboxes

3

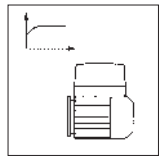


Helical bevel gearboxes GKS □□ - 3 E		Motor frame size/drive size		
		090 / 100	112	132
09	o <sub>5</sub>	245	267	288
	o <sub>6</sub>	529	529	529
11	o <sub>5</sub>	260	282	306
	o <sub>6</sub>	622	626	626
14	o <sub>5</sub>		315	345
	o <sub>6</sub>		735	735

Motec not permitted in position 4.

# Technical data: Motors

## General data / Operating conditions



<b>Standards</b>	The motors meet the requirements of applicable DIN and IEC standards. CE conformance with the low voltage directive CSA/UL optional
<b>Operating mode</b>	Dimensioned for operating mode S1 (continuous operation with constant load at rated power)
<b>Degree of protection</b>	IP 55 (self-ventilated)
<b>Temperature class (VDE 0530)</b>	Insulation system to temperature class F Utilization to temperature class B
<b>Insulation strength</b>	Maximum voltage amplitude $\hat{U} = 1.5 \text{ kV}$ Maximum rate of voltage rise $du/dt = 5 \text{ kV}/\mu\text{s}$
<b>Temperature monitoring</b>	Thermal sensor (NC contact)
<b>Temperature range</b>	-20 to +40°C, no power derating
<b>Installation height</b>	Up to 1000 m above sea level, no power derating
<b>Terminal box</b>	Motor connection to terminal board, built-on accessories on terminal block, built-in brake rectifier in terminal box
<b>Bearing</b>	Deep-groove ball bearing with high-heat-resistant grease, 2 cover plates

### Power derating

#### Effect of the installation height

Effect of the installation height above sea level on the rated power				
H [m]	= 1000	2000	3000	4000
$\frac{P_h}{P_N}$	1	0.95	0.90	0.85

#### Effect of the ambient operating temperature

Effect of the ambient operating temperature $T_u$ on the rated power					
$T_u$ [°C]	= 40	45	50	55	60
$\frac{P_\vartheta}{P_N}$	1	0.95	0.90	0.85	0.80

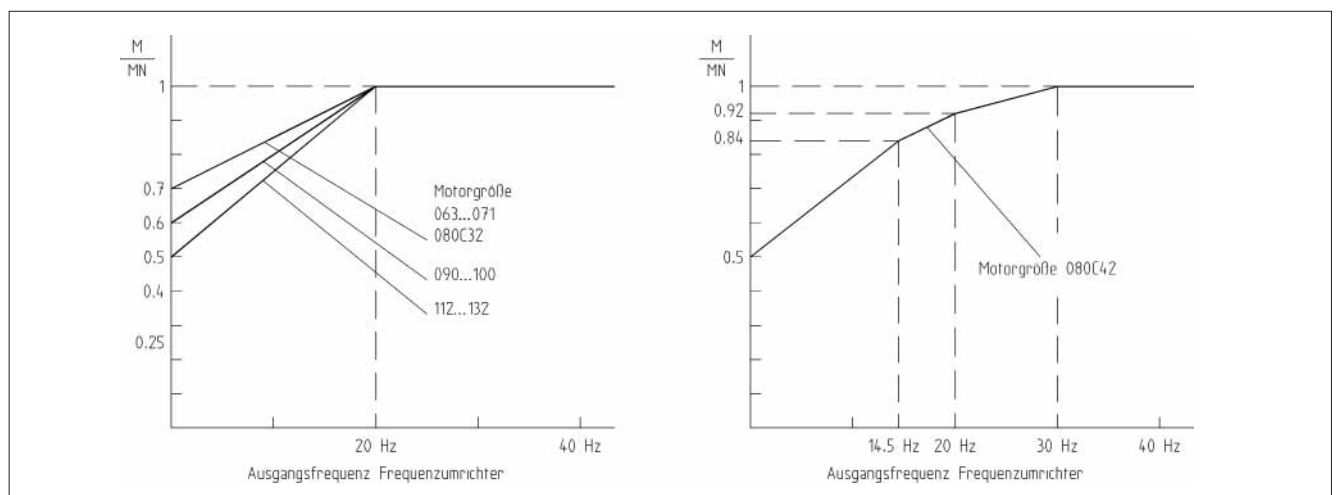
#### Calculation for the power derating $P_{red}$

$$P_{red} = \frac{P_h}{P_N} \cdot \frac{P_\vartheta}{P_N} \cdot P_N$$

### Torque reduction

On motors with **integral fans**, cooling is determined by the shaft speed, as the integral fan is connected to the motor shaft. When used in conjunction with the 8200 motec frequency inverter, the motors can travel through a variable speed or frequency range. If the output frequency of the 8200 motec is low, the air flow of the integral fan is not

sufficient to dissipate the heat loss occurring in the motor at the rated torque ( $M_N$ ). Therefore, the torque (M) that can be drawn from the motor should be reduced to less than 20 Hz. The following dependence applies to the various motor frame sizes:



Note: You should also refer to the technical data and ratings for the 8200 motec frequency inverters (see page 4-12 ff.).





## Technical data: Motors

### Ratings

#### Rating, 50 Hz

Number of pairs of poles 2 (4-pole)

Motor frame size	P <sub>N</sub> [kW]	n <sub>N</sub> [min <sup>-1</sup> ]	I [A] Y / Δ	I <sub>A</sub> / I <sub>N</sub> [A]	U [V] Y / Δ	f <sub>N</sub> [Hz]	cos φ	η [%]	M <sub>N</sub> [Nm]	M <sub>K</sub> [Nm]	M <sub>A</sub> [Nm]	J [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
063C12	0.12	1425	0.49/0.85	3.1	400/230	50	0.56	63	0.80	2.64	2.5	0.33	4.1
063C32	0.18	1365	0.58/1.0	2.7	400/230	50	0.70	64	1.26	2.61	2.5	0.33	4.1
063C42	0.25	1370	0.82/1.4	2.9	400/230	50	0.67	66	1.74	4.10	3.8	0.37	4.4
071C32	0.37	1410	0.95/1.6	3.3	400/230	50	0.77	73	2.51	5.81	4.8	1.07	5.8
071C42	0.55	1405	1.4/2.4	3.5	400/230	50	0.77	74	3.74	9.12	7.9	1.28	6.4
080C32	0.75	1410	1.9 / 3.3	4.6	400 / 230	50	0.80	74	5.10	12.1	11.0	2.6	11
080C42	1.1	1390	2.8 / 4.8	4.4	400 / 230	50	0.80	77	7.50	18.4	16.5	2.6	11
090C32	1.5	1395	3.6 / 6.3	4.8	400 / 230	50	0.79	79	10.3	27.1	23.7	3.5	17
100-12	2.2	1400	5.6 / 9.7	6.2	400 / 230	50	0.78	83	15.0	54.0	46.5	4.75	20
100-32	3	1400	7.3 / 12.6	6.2	400 / 230	50	0.81	83	20.5	64.6	62.6	5.88	24
112-22	4	1430	8.5 / 14.8	7.4	400 / 230	50	0.85	86	26.7	84.8	71.6	20.1	35
112-32	5.5	1440	12.5 / 21.7 - / 12.5	8.0	400 / 230 - / 400 *	50	0.78	89	36.5	139	106	22.8	41
132-22	7.5	1460	16.8 / 29.2 - / 16.8	7.7	400 / 230 - / 400 *	50	0.77	87	49.1	170	135	52.9	63

#### Data for operation at 87 Hz

Number of pairs of poles 2 (4-pole)

Motor frame size	P <sub>N</sub> [kW]	n <sub>N</sub> [min <sup>-1</sup> ]	I [A]	U [V] Δ	f <sub>N</sub> [Hz]	cos φ	M <sub>N</sub> [Nm]	M <sub>K</sub> [Nm]	J [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
063C12	0.21	2535	0.85	400	87	0.52	0.80	2.64	0.33	4.1
063C32	0.33	2475	1.0	400	87	0.65	1.26	2.61	0.33	4.1
063C42	0.45	2480	1.4	400	87	0.63	1.74	4.10	0.37	4.4
071C32	0.66	2520	1.6	400	87	0.72	2.51	5.81	1.07	5.8
071C42	1.0	2515	2.4	400	87	0.74	3.74	9.12	1.28	6.4
080C32	1.4	2520	3.3	400	87	0.80	5.10	12.1	2.6	11
080C42	2.0	2500	4.8	400	87	0.80	7.50	18.4	2.6	11
090C32	2.7	2505	6.3	400	87	0.79	10.3	27.1	3.5	17
100-12	3.9	2510	9.7	400	87	0.81	15.0	54.0	4.75	20
100-32	5.4	2510	12.7	400	87	0.85	20.5	64.6	5.88	24
112-22	7.1	2540	14.8	400	87	0.78	26.7	84.8	20.1	35
112-32	9.7	2550	21.7	400	87	0.78	36.5	139	22.8	41
132-22	13.2	2570	29.2	400	87	0.77	49.1	170	52.9	63

Guide values only



### Basic version

Versions	Motor frame size	063	071	080	090	100	112	132
	4-pole		063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100-12 100-32	112-22 112-32
	Mech. integrated into Lenze gearbox	●	●	●	●	●	●	●
<b>Cooling</b>								
	Integral fan	●	●	●	●	●	●	●
	Self-cooled							
<b>Degree of protection</b>								
	IP 55	●	●	●	●	●	●	●
<b>Motor protection</b>								
	Temperature class F (insulation system H)	●	●	●	●	●	●	●
	Thermal sensor: Thermal contact (NC contact)	●	●	●	●	●	●	●

3

### Options (note combined options!)

<b>Cooling</b>								
External blower	●	●	●	●	●	●	●	●
<b>Motor protection</b>								
Thermal sensor (PTC thermistor)	PTC	PTC	PTC	PTC	PTC	PTC	PTC	PTC
<b>Holding systems</b>								
Spring-loaded brake								
Mains or 24 V DC connection	●	●	●	●	●	●	●	●
Backstop					●	●	●	●
<b>Additional options</b>								
Handwheel		●	●	●	●	●	●	●
Condensate drain	●	●	●	●	●	●	●	●
Canopy for integral fan		●	●	●	●	●	●	●
Canopy for external blower	●	●	●	●	●	●	●	●
2nd shaft end (acc. to definition)		●	●	●	●	●	●	●



## Technical data: Motors

### Versions

#### Combination options

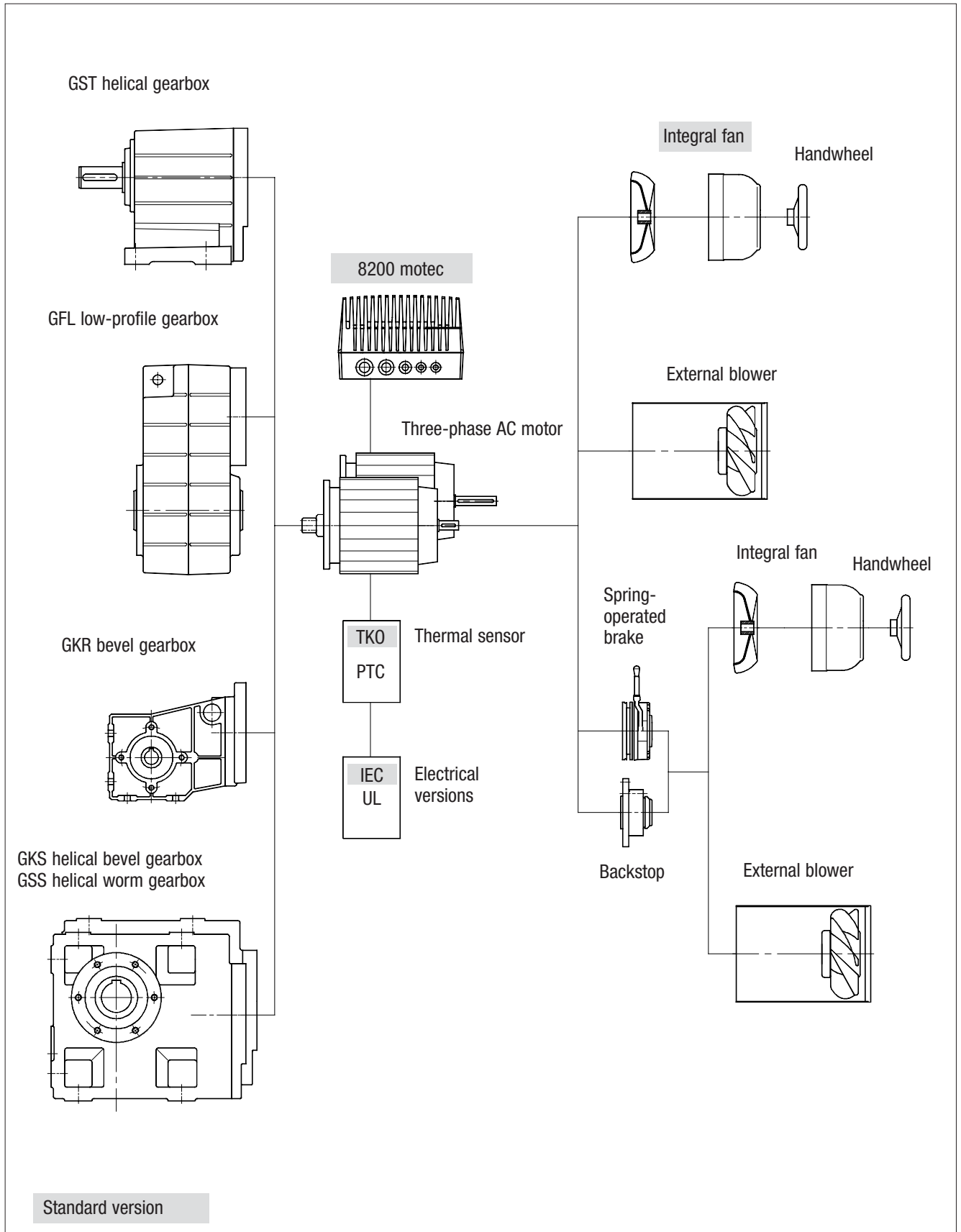
Combination options	Motor frame size	063C12	071C32	080C32	090C32	100-12	112-22	132-22
		063C32	071C42	080C42		100-32	112-32	
External blower		●	●	●	●	●	●	●
Brake + integral fan		●	●	●	●	●	●	●
Brake + external blower		●	●	●	●	●	●	●
Brake + integral fan + handwheel/ 2nd shaft end			●	●	●	●	●	●
Backstop + integral fan					●	●	●	
Backstop + integral fan + handwheel/ 2. shaft end						●	●	●
Backstop + external blower						●	●	●
Integral fans + handwheel/ 2. shaft end		●	●	●	●	●	●	

#### Project planning assistance

Option	Function	Possible areas of application
<b>Cooling</b> External blower	Operation at rated torque at low speeds	- Wide operating range at rated torque
<b>Motor protection</b>	Thermal contact NC contact	- Monitoring of motor winding temperature
	Thermal sensor Thermistor/PTC	- PTCs operating in connection with a control unit - Unlike the thermal contact, can be reset quickly
<b>Holding systems</b>	Spring-operated brake	- Slowing down loads - Stopping loads - Braking torque available at zero current
	Backstop	- Pump motors with back-pressure stop in relation to the pumping medium - Conveying system with reverse run locked
<b>Additional options</b>	Condensate drain	- Operation in extreme climatic ambient conditions - Outdoor installation
	Canopy	- Protects the air inlet opening against foreign matter if the drive is installed vertically with the motor shaft downwards



**Combination options**





## Technical data: Motors

### Motor protection option

The thermal sensors are built into the windings.

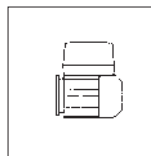
#### Thermal contact

Motor frame size	Function	Release temperature [°C]	Reset temperature [°C]	Current carrying capacity [A]	Permissible voltage carrying capacity [V] AC
All	NC contact	150 ± 5	90-135	2,5	250

#### PTC thermistor

Motor frame size	Function	Release temperature [°C]	Resistance at		Standards
			155°C [Ω]	-20...+140° [Ω]	
All	Abrupt change in resistance	150 ± 5	550	30 to 250	DIN 44080 VDE 0660 Part 303

3



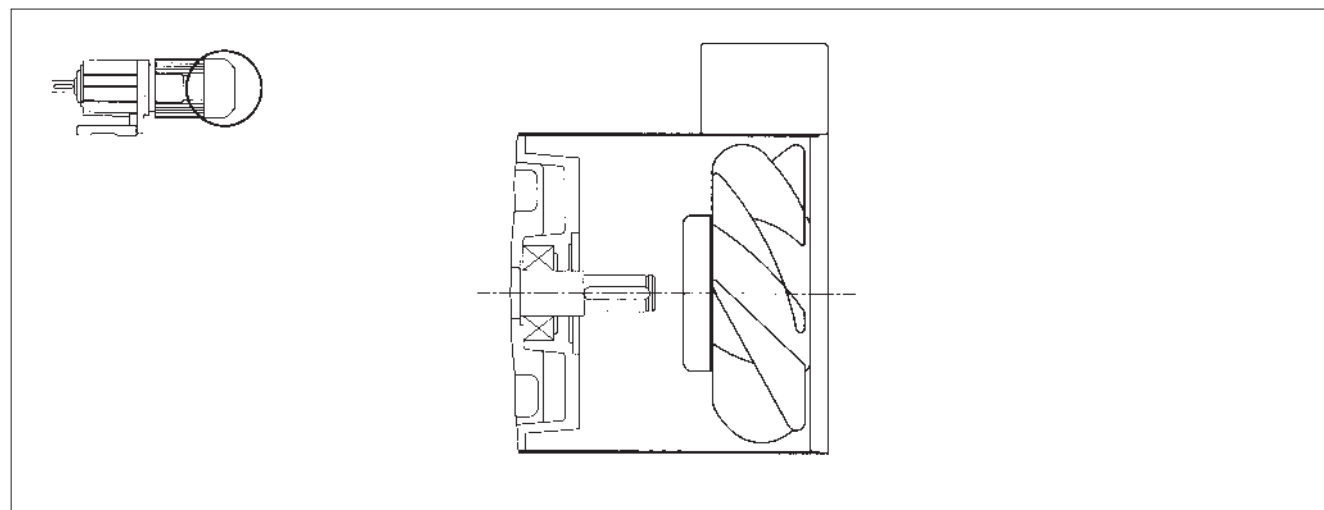
Geared motors and geared brake motors can be fitted with an external axial blower. The blower is assembled in an extended motor fan cover with a separate terminal box.

### General data

Number of poles	4-pole	
Motor frame size	063 ... 090	100 ... 132
Version	1~ or 3~	1~ or 3~
Degree of protection	IP 66	IP 55
Temperature class	F	F
Operating mode	S1	S1

3

Motor frame size	Version	Connection	$U_N$ [V]	$f_N$ [Hz]	$I_N$ [A]	$P_N$ [W]	Weight m [kg]
063C12 063C32 063C42	1~	Ω Y	230-277	50 (60)	0.10	27	2.2
	3~		220-290		0.10	27	
	3~		380-500		0.05	29	
071C32 071C42	1~	Ω Y	230-277	50 (60)	0.10	28	2.4
	3~		220-290		0.10	30	
	3~		380-500		0.05	30	
080C32 080C42	1~	Ω Y	230-277	50 (60)	0.11	29	2.3
	3~		220-290		0.10	29	
	3~		380-500		0.05	29	
090C32	1~	Ω Y	230-277	50 (60)	0.26	72	3.1
	3~		220-290		0.28	86	
	3~		380-500		0.16	82	
100-12 100-32	1~	Y Ω	210-240	50 (60)	0.16	30	3.5
	3~		360-530		0.08	34	
	3~		210-305		0.14	34	
112-22 112-32	1~	Y Ω	210-240	50 (60)	0.30	80	3.9
	3~		360-530		0.14	61	
	3~		210-305		0.24	61	
132-22	1~	Y Ω	210-240	50 (60)	0.55	125	5.3
	3~		360-530		0.26	132	
	3~		210-305		0.45	132	





## Technical data: Motors

### Holding system option

#### Spring-operated brake

Braking motors are fitted with Lenze spring-operated brakes. The rectifier required for mains operation is located in the terminal box and is included in the scope of supply. A basic diagram of the brake appears on page 3-37. The brakes are active once the power supply has been disconnected (closed-circuit current principle).

The braking torques specified apply for quasi-static configuration with the brake operating as a holding brake in low-wear mode. The air gap is factory-set and can be adjusted according to the level of wear.

#### General data

<b>Version</b>	Single-disc spring-operated brakes
<b>Operating principle</b>	Braking torque at zero current
<b>Degree of protection</b>	IP 54
<b>Temperature class</b>	F
<b>Friction linings</b>	Asbestos-free
<b>Option</b>	<ul style="list-style-type: none"> <li>• Hand release</li> <li>• Low-noise</li> </ul>

#### Rating

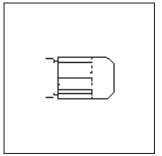
Frame size	P <sub>20°</sub> [W]	M <sub>B</sub> [Nm]	J <sub>B</sub> [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]	Connecting voltage	Assigned brake voltage
06	20	4.0	0.015	0.9	24 V DC t 220...240 V AC t 380..0.420 V AC t	24 V DC 205 V DC 180 V DC
08	25	8.0	0.061	1.5		
10	30	16.0	0.20	2.6		
12	40	32.0	0.45	4.2		
14	50	60	0.63	5.8		
16	55	80	1.5	8.7		

#### Combination options

Frame size	Brake					
	06	08	10	12	14	16
<b>Motor frame size</b>						
063	●					
071	●					
080		● <sup>1)</sup>				
080C42		● <sup>1)</sup>	●			
090		●	●			
100			●	● <sup>2)</sup>		
112				●	● <sup>2)</sup>	
132					●	●

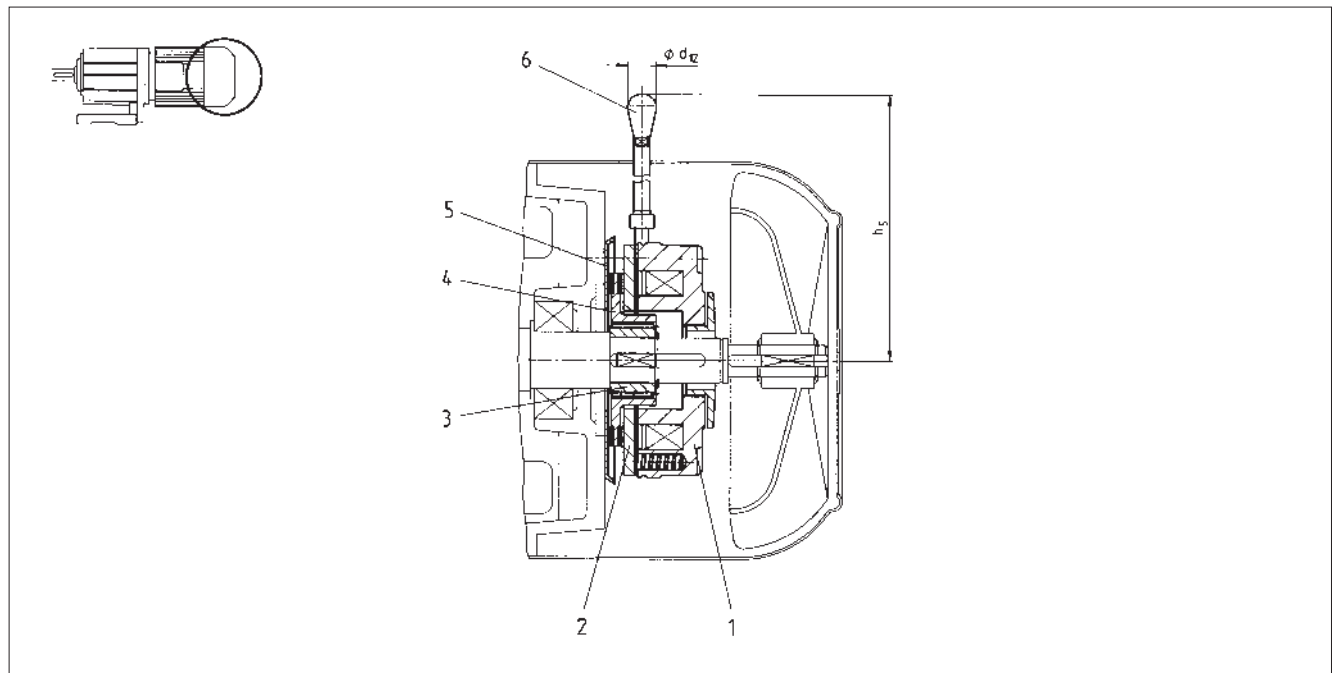
<sup>1)</sup> As standard for handwheel or 2nd shaft end only possible without an adjustment ring.

<sup>2)</sup> As standard with resolver or pulse generator only possible without an adjustment ring.



**Spring-operated brake**

Position	Designation
1	Stator
2	Armature plate
3	Hub
4	Rotor
5	Friction plate
6	Hand release (option)



Spring-operated brake frame size	d12	h5
06	13	107
08	13	116
10	13	132
12	13	161
14	24	195
16	24	240





## Technical data: Motors

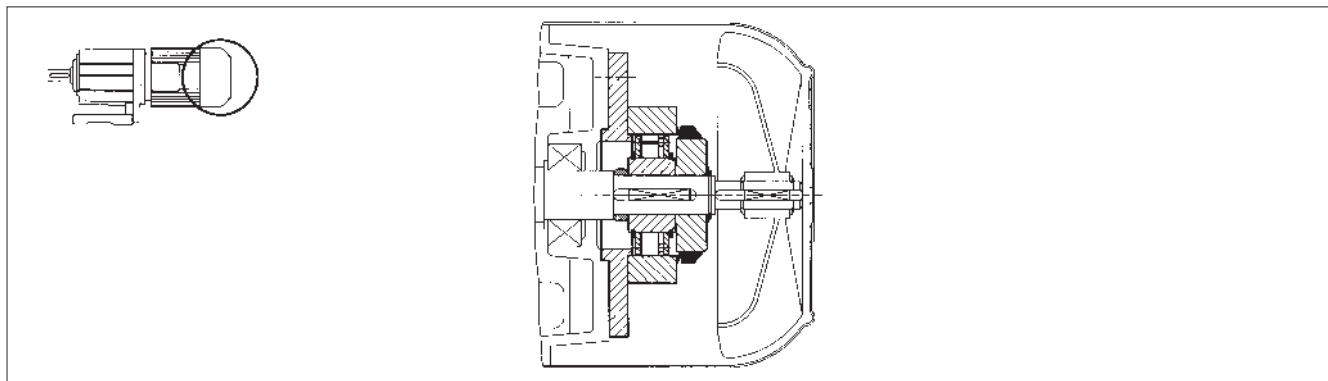
### Holding system option

#### Backstop

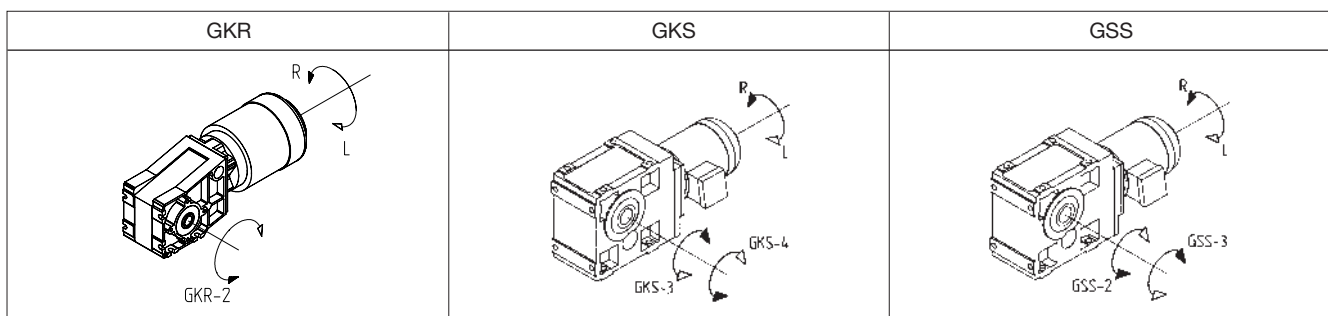
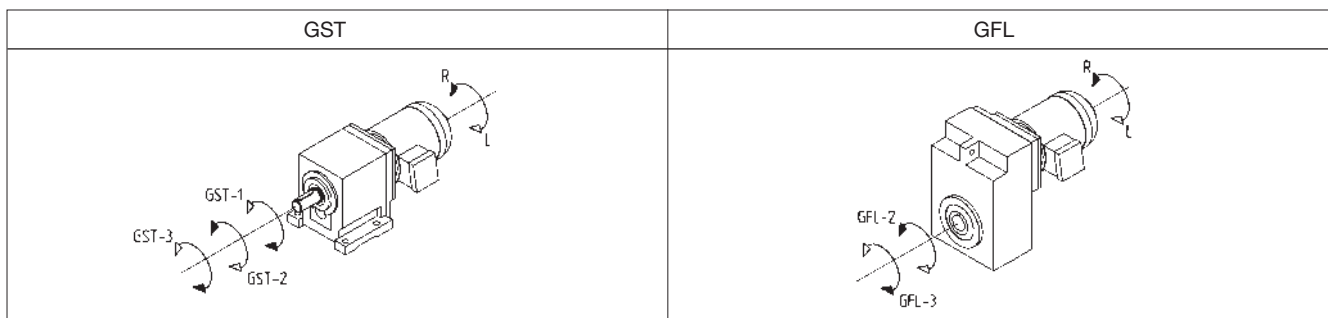
Version	Centrifugal-releasing body
Operating principle	Mechanical lockout opposite direction of operation
Degree of protection	IP 55
Technical information	<ul style="list-style-type: none"> <li>- Operation below the disengaging speed is only permissible for short periods of time</li> <li>- When placing your order, enter the direction of the motor shaft with regard to the fan cover</li> <li>- Motor start-up with reversed biasing not permitted!</li> </ul>

3

Motor frame size	Locking torque (static) [Nm]	Backstop	
		Disengaging speed (body) [1/min]	m [kg]
100	156	700	2.4
112	156	700	2.4
132	300	850	2.9



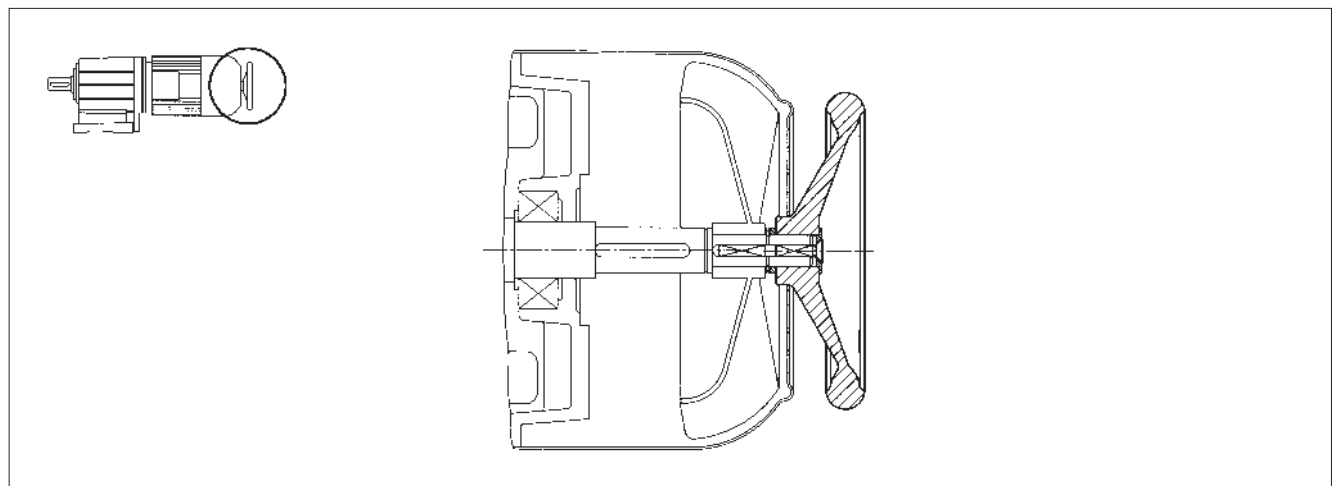
#### Direction of rotation

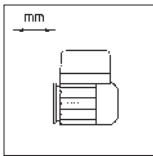




<b>Version</b>	Handwheel made from light metal, smooth wheel surface
<b>Function</b>	Manual operation: <ul style="list-style-type: none"> <li>• Emergency operation</li> <li>• Setting-up operation for machines/systems</li> </ul>
<b>Technical information</b>	The increased mass moment of inertia should be taken into account during configuration! For frequent switching operations, in particular if the direction of rotation changes: Please contact Lenze

Motor frame size	Diameter d [mm]	Handwheel	
		Additional mass moment of inertia [10 <sup>-3</sup> kgm <sup>2</sup> ]	m [kg]
071	160	1.6	0.6
080	160	1.6	0.6
090	160	1.6	0.6
100	160	1.6	0.6
112	160	1.6	0.6
132	250	13.9	1.8

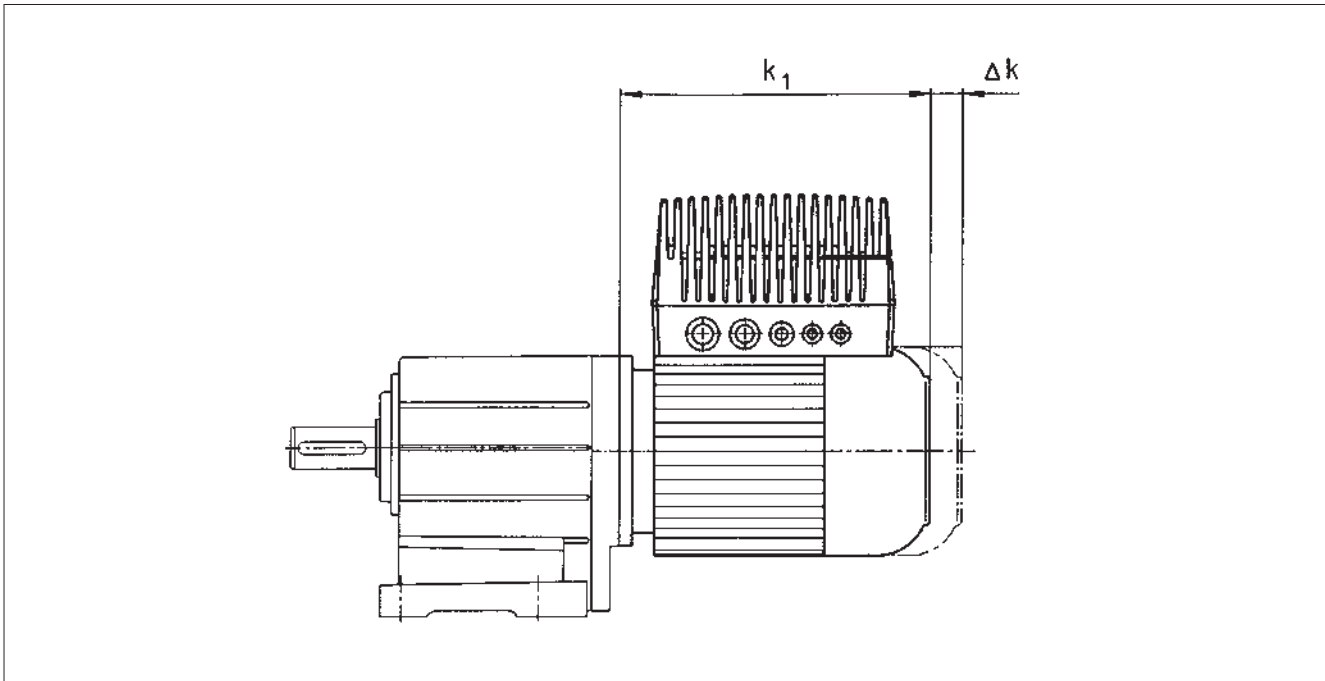




## Technical data: Motors

### Dimensions with integral fan

3

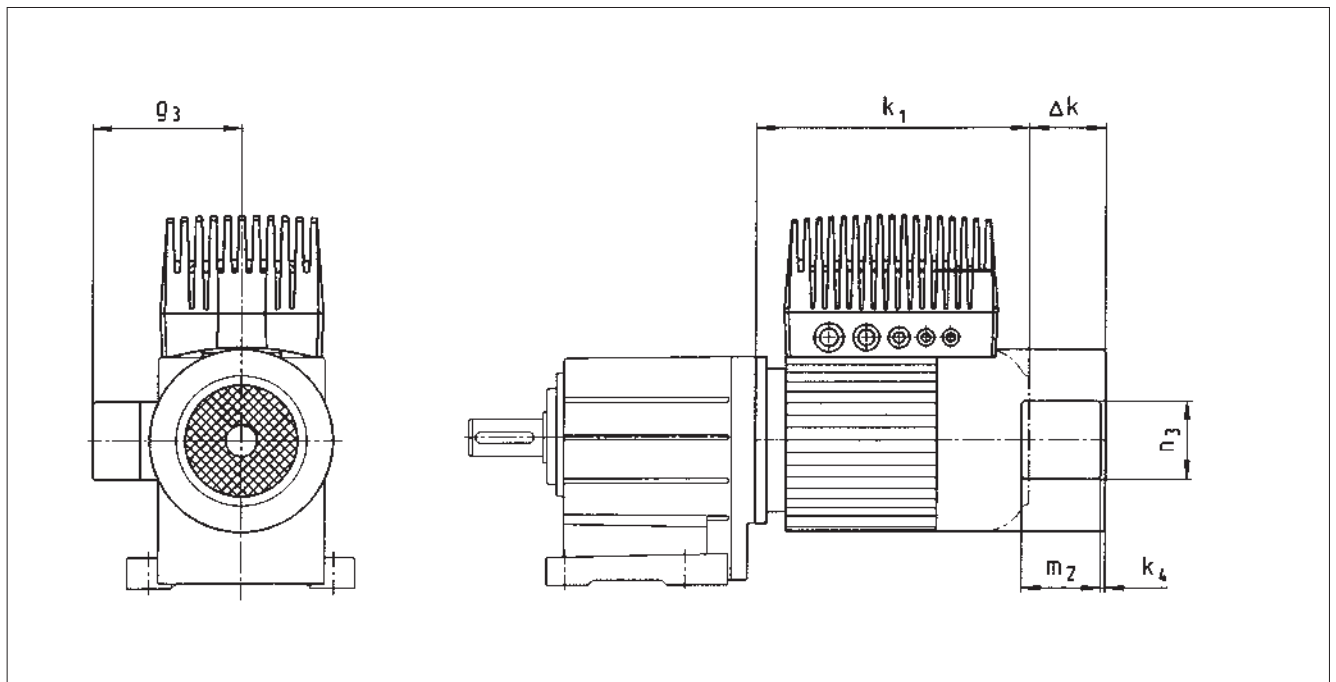
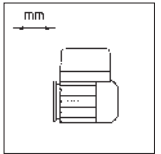


Geared motor	Motor frame size								
	063C12 063C32	071C32 071C42 063C42	080C32 080C42	090C32	100-12	100-32	112-22	112-32	132-22
Motor length without options <b>k1</b>	188	207	225	276	280	310	323	343	409
Built-on accessories	Δ k								
Fan	0	0	0	0	0	0	0	0	0
Brake + fan	40	52	73	70	94	94	101	101	127
Backstop + fan	-	-	-	-	94	94	101	101	127

Dimensions in [mm]

## Technical data: Motors

### Dimensions with external blower



3

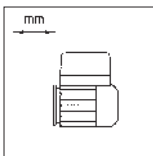
Geared motor		Motor frame size								
4-pole		063C12	071C32	080C32	090C32	100-12	100-32	112-22	112-32	132-22
		063C32	071C42	080C42						
External blower	<b>g3</b>	115	122	131	141	159		173		193
	<b>k4</b>	12	12	12	22	5		5		5
	<b>m2</b>	95	95	95	95	85		85		85
	<b>n3</b>	105	105	105	105	85		85		85
Cable glands	<b>Position 4</b>	1x M16x1.5	1xM16x1.5	1xM16x1.5	1xM16x1.5	1xM16x1.5		1xM16x1.5		1xM16x1.5
Motor length without options	<b>k1</b>	188	207	225	276	280	310	323	343	409
<b>Built-on accessories</b>		<b>Δ k</b>								
External blower		129	127	128	126	97		95		104
Brake	+ external blower	169	164	184	179	169		183		218
Backstop	+ external blower	-	-	-	-	169		183		218

Dimensions in [mm]

Position of PG-glands in relation to terminal box in position 5

#### Position of external blower unit in relation to the motec

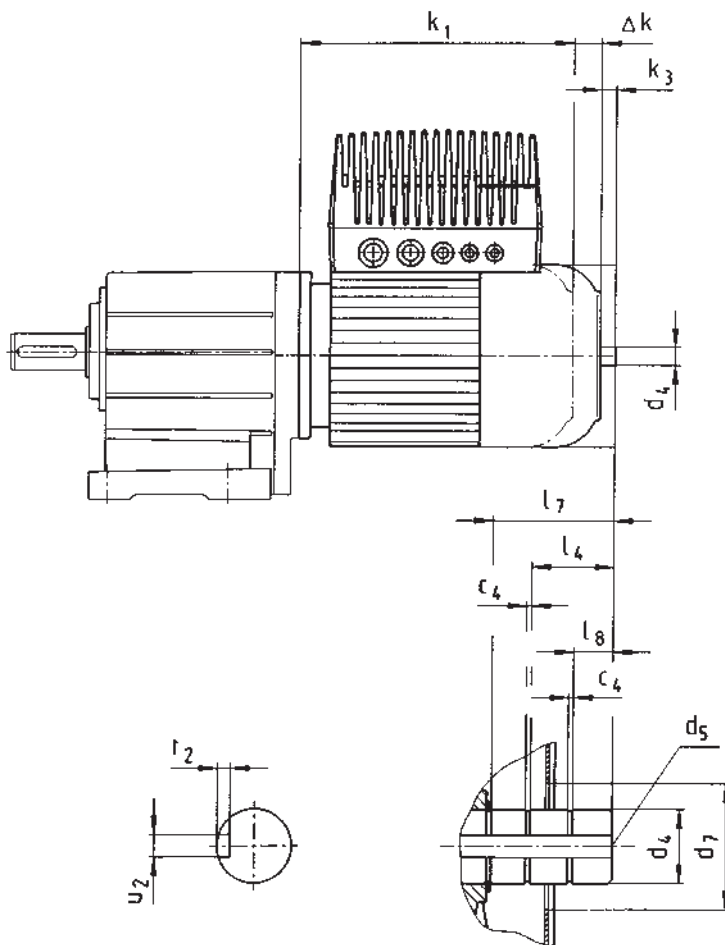
Position motec	External blower unit
2	5
3	2
4	5
5	2



## Technical data: Motors

### Dimensions with 2nd shaft end

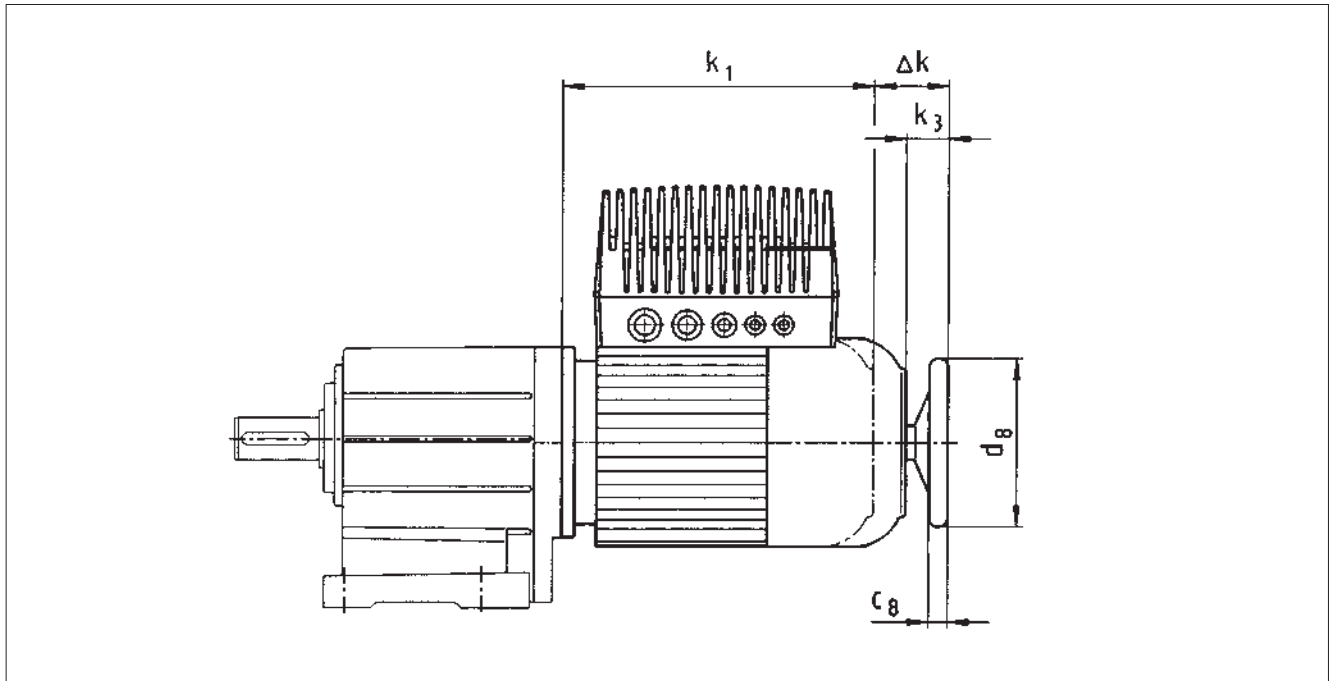
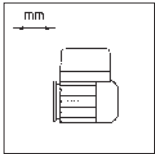
3



Geared motor		Motor frame size							
4-pole		071C32 071C42	080C32 080C42	090C32	100-12	100-32	112-22	112-32	132-22
Motor	k1 <sup>1)</sup>	207	225	276	280	310	323	343	409
	k3	11	9	9	17		16		24
Shaft end	c4	1.1	1.1	1.1	1.3		1.3		1.6
	d4	14 h6	14 h6	14 h6	20 j6		20 j6		30 j6
	d5	M5	M5	M5	M6		M6		M10
	d7 <sup>2)</sup>	32	32	32	32		32		46
	l4	-	-	-	17		17		24
	l7	19	19	19	32.5		30.5		46
	l8	3	4.5	5	10.5		7.6		12.5
	u2	5	5	5	6		6		8
	t2	3	3	3	3.5		3.5		4
<b>Built-on accessories</b>		<b>Δ k</b>							
Fan		47	68	56	85		93		118
Brake + fan					85		93		118
Backstop + integral fan					85		93		118

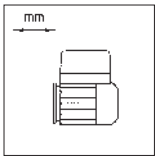
1) Motor length without options

2) During operation, appropriate means should be used to seal the fan cover opening.



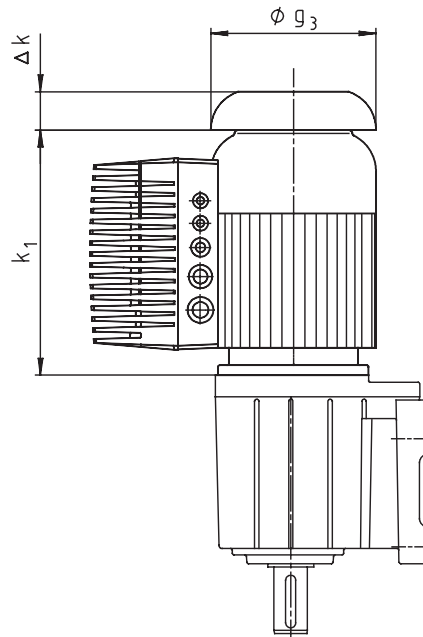
Geared motor		Motor frame size							
4-pole		071C32	080C32	090C32	100-12	100-32	112-22	112-32	132-22
		071C42	080C42						
Motor	$k_1$ <sup>1)</sup>	207	225	276	280	310	323	343	409
	$k_3$	34	32	32	40		39		50
Handwheel	$d_8$	160	160	160	160		160		250
	$c_8$	18	18	18	18		18		26
Built-on accessories		$\Delta k$							
Fan									
Brake + fan		70	90	79	108		116		144
Backstop + integral fan					108		116		144

<sup>1)</sup> Motor length without options  
Dimensions in [mm]



## Technical data: Motors

### Dimensions with canopy

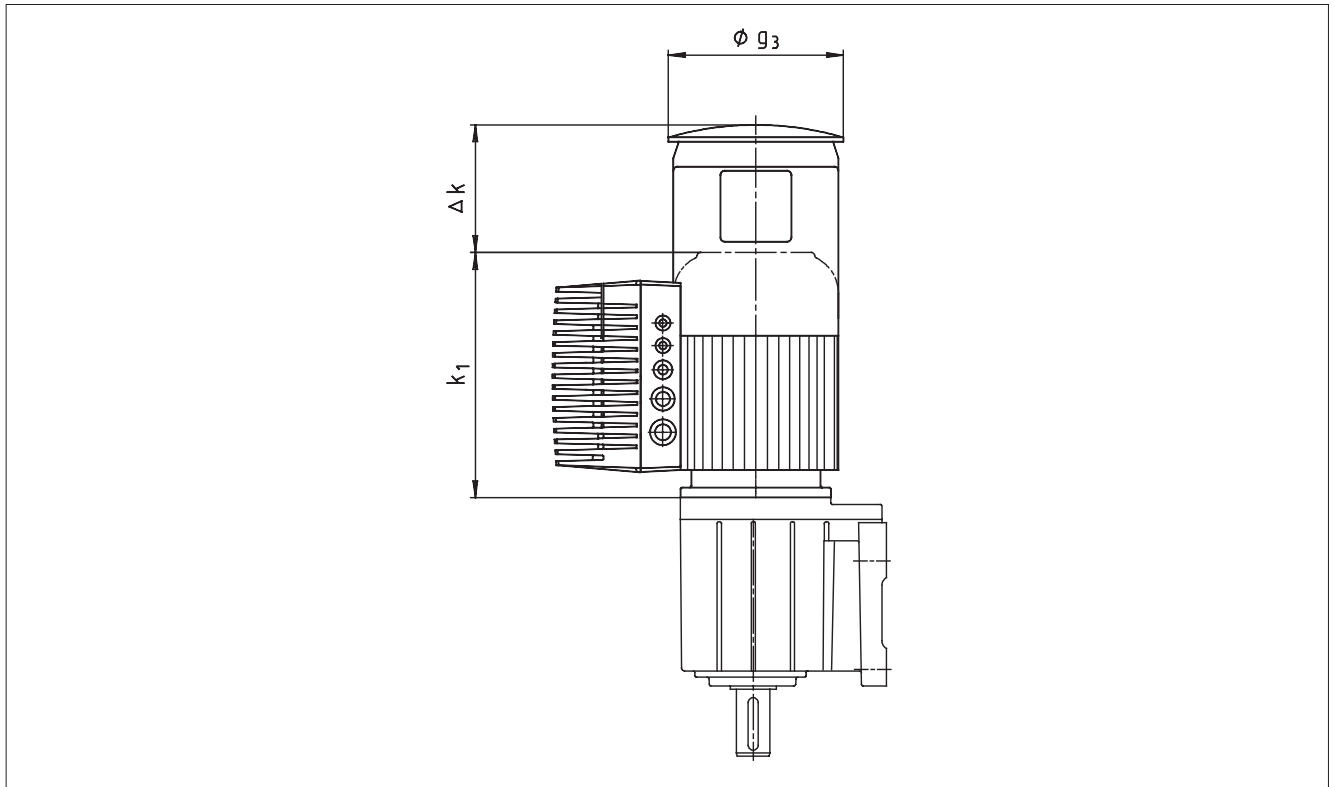
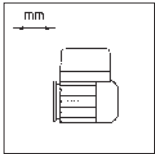


3

Geared motor		Motor frame size							
4-pole		071C32 071C42	080C32 080C42	090C32	100-12	100-32	112-22	112-32	132-22
<b>Motor</b>	<b>g3</b>	138	156	176	194		218		257
	<b>k1<sup>1)</sup></b>	207	225	276	280	310	323	343	409
<b>Built-on accessories</b>		<b>Δ k</b>							
Fan		13	17	16	18		18		21
Brake	+ fan	65	90	86	112		119		148
Backstop	+ fan	-	90	86	112		119		148

Dimensions in [mm]

<sup>1)</sup> Dimensions without options

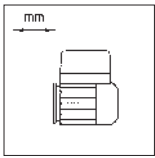


Geared motor		Motor frame size								
4-pole		063C12	071C32	080C32	090C32	100-12	100-32	112-22	112-32	132-22
		063C32	071C42	080C42						
		063C42								
Motor	g3	133	150	170	188	210		249		300
	k1 <sup>1)</sup>	188	207	225	276	280	310	323	323	409
Built-on accessories		Δ k								
External blower		186	164	188	186	147		149		158
Brake + external blower		208	201	244	239	219		237		272
Backstop + external blower		-	-	-	-	219		237		272

Dimensions in [mm]

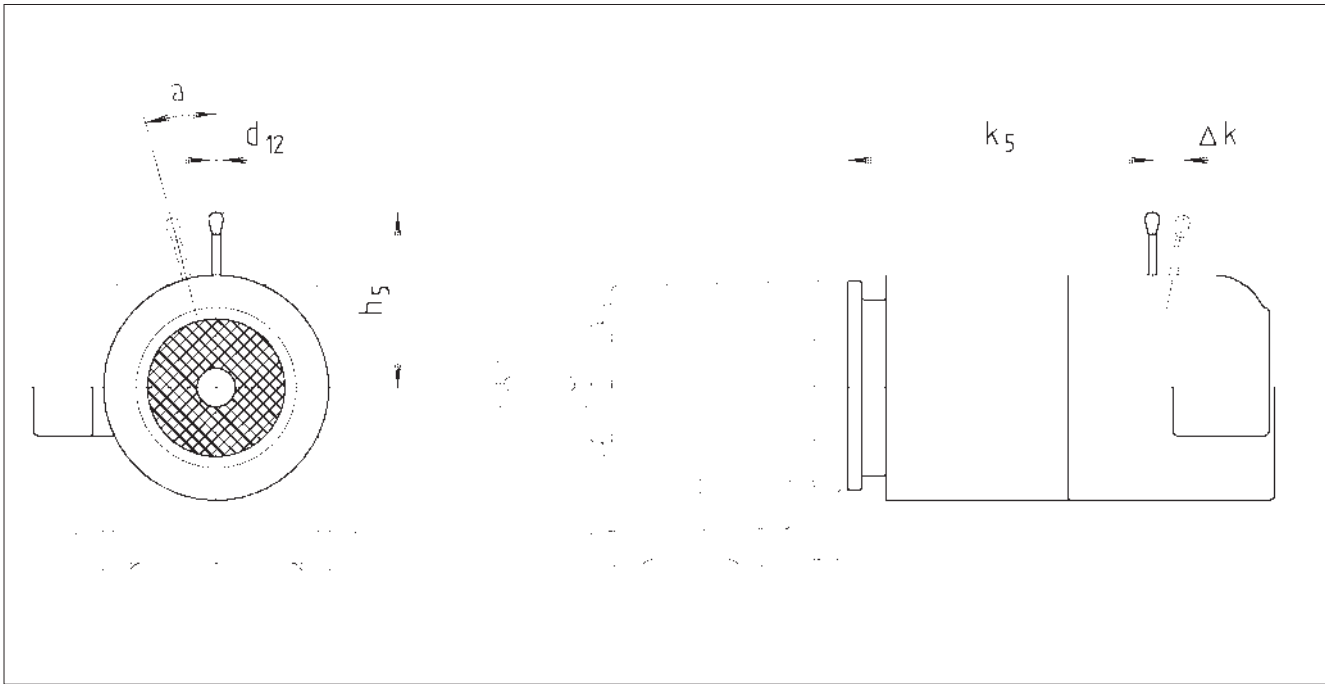
<sup>1)</sup> Dimensions without options





## Technical data: Motors

### Dimensions with hand release lever

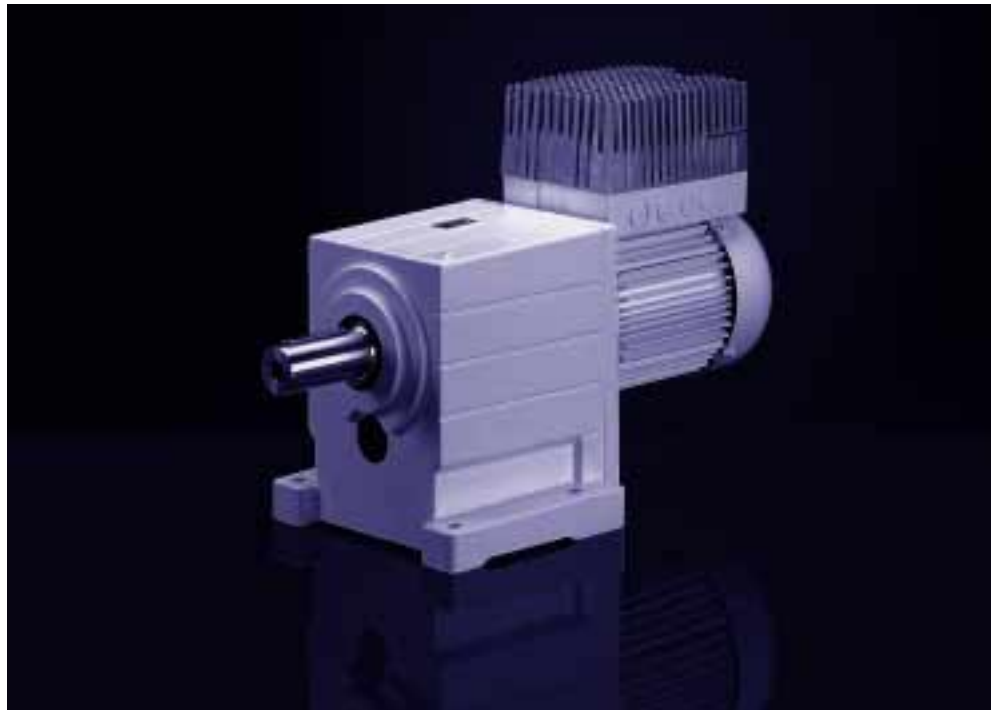
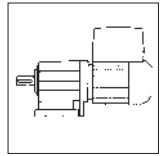


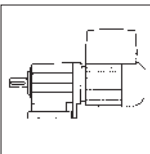
3

Geared motors				Motor frame size								
4-pole				063C12	071C32	080C32	090C32	100-12	100-32	112-22	112-32	132-22
				071C32	071C42	080C42						
				063C42								
a				0°	15°	15°	0°	0°	0°	0°	0°	0°
Brake size	d <sub>12</sub>	h <sub>5</sub>	? k	k <sub>5</sub>								
06	13	107	23	173	186							
08	13	116	21			207	245					
10	13	132	21			218	256	268	298			
12	13	161	29					270	300	303	323	
14	24	195	31							307	327	393
16	24	240	42									396

Dimensions in [mm]

Attention: The hand release lever and the motec may only be in the same position if the motor frame size = 100.





# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.12 kW</b>							<b>GST □□ - 1E</b>		3-72
	636	2	5.4	2.240	184 - 1107	1.6 - 1.0	GST04 - 1E □□□ 063C12	E82MV 251_2B	
	499	2	5.0	2.857	145 - 868	2.0 - 1.3	GST04 - 1E □□□ 063C12	E82MV 251_2B	
	324	4	5.5	4.400	94 - 564	3.1 - 2.0	GST04 - 1E □□□ 063C12	E82MV 251_2B	
	252	5	4.6	5.667	73 - 438	4.0 - 2.6	GST04 - 1E □□□ 063C12	E82MV 251_2B	
	198	6	4.0	7.182	58 - 345	5.1 - 3.3	GST04 - 1E □□□ 063C12	E82MV 251_2B	
	158	7	3.3	9.000	46 - 276	6.3 - 4.1	GST04 - 1E □□□ 063C12	E82MV 251_2B	
	120	9	1.7	11.857	35 - 209	8.4 - 5.4	GST04 - 1E □□□ 063C12	E82MV 251_2B	
							<b>GST□□ - 2E</b>		
	223	5	5.4	6.400	65 - 387	4.4 - 2.9	GST04 - 2E □□□ 063C12	E82MV 251_2B	
	204	5	5.4	6.982	59 - 355	4.8 - 3.1	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	182	6	5.2	7.840	53 - 316	5.4 - 3.5	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	160	7	4.7	8.935	46 - 278	6.2 - 4.0	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	142	8	4.4	10.033	41 - 247	7.0 - 4.5	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	125	9	4.0	11.429	36 - 217	7.9 - 5.1	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	111	10	3.8	12.833	32 - 193	8.9 - 5.8	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	96	12	3.4	14.836	28 - 167	10.3 - 6.7	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	86	13	3.2	16.660	25 - 149	11.6 - 7.5	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	75	15	2.8	19.013	22 - 130	13.2 - 8.5	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	67	17	2.7	21.350	19 - 116	14.8 - 9.6	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	58	19	2.4	24.595	17 - 101	17 - 11	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	52	22	2.1	27.618	15 - 90	19 - 12	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	45	25	1.8	32.000	13 - 77	22 - 14	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	45	25	2.9	31.600	13 - 78	22 - 14	GST04 - 2E □□□ 063C12	E82MV 251_2B	
	40	28	1.6	35.933	12 - 69	25 - 16	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	40	28	2.3	35.909	12 - 69	25 - 16	GST04 - 2E □□□ 063C12	E82MV 251_2B	
	34	32	1.4	41.455	10.0 - 60	29 - 19	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	36	31	2.4	39.600	10 - 63	27 - 18	GST04 - 2E □□□ 063C12	E82MV 251_2B	
	31	36	1.2	46.550	8.9 - 53	32 - 21	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	32	35	1.9	45.000	9.2 - 55	31 - 20	GST04 - 2E □□□ 063C12	E82MV 251_2B	
	27	41	1.1	52.909	7.8 - 47	37 - 24	GST03 - 2E □□□ 063C12	E82MV 251_2B	
	27	41	1.7	52.171	7.9 - 48	36 - 23	GST04 - 2E □□□ 063C12	E82MV 251_2B	
	24	46	1.4	59.286	7.0 - 42	41 - 27	GST04 - 2E □□□ 063C12	E82MV 251_2B	
24	46	1.0	59.412	7.0 - 42	41 - 27	GST03 - 2E □□□ 063C12	E82MV 251_2B		
						<b>GST □□ - 3E</b>		3-78	
23	49	3.0	63.467	6.5 - 39	43 - 28	GST05 - 3E □□□ 063C12	E82MV 251_2B		
20	55	3.1	71.238	5.8 - 35	49 - 31	GST05 - 3E □□□ 063C12	E82MV 251_2B		
18	62	2.4	80.952	5.1 - 31	55 - 36	GST05 - 3E □□□ 063C12	E82MV 251_2B		
16	71	2.4	91.746	4.5 - 27	63 - 41	GST05 - 3E □□□ 063C12	E82MV 251_2B		
12	89	1.9	116.277	3.6 - 21	80 - 51	GST05 - 3E □□□ 063C12	E82MV 251_2B		
11	96	1.6	124.667	3.3 - 20	85 - 55	GST05 - 3E □□□ 063C12	E82MV 251_2B		
9.8	112	1.5	145.714	2.8 - 17	100 - 64	GST05 - 3E □□□ 063C12	E82MV 251_2B		
8.9	123	1.2	160.556	2.6 - 15	110 - 71	GST05 - 3E □□□ 063C12	E82MV 251_2B		
8.9	123	2.8	160.556	2.6 - 15	110 - 71	GST06 - 3E □□□ 063C12	E82MV 251_2B		

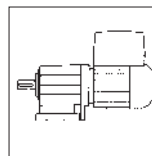
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical geared motors with motec

## Selection tables

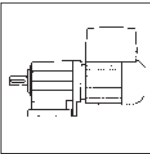


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.12 kW</b>							<b>GST □□ - 3E</b>		3-78	
	8.0	138	1.2	179.067	2.3 - 14	122 - 79	GST05 - 3E □□□ 063C12	E82MV 251_2B		
	8.0	138	2.7	179.067	2.3 - 14	122 - 79	GST06 - 3E □□□ 063C12	E82MV 251_2B		
	7.4	148	1.2	191.973	2.2 - 13	131 - 85	GST05 - 3E □□□ 063C12	E82MV 251_2B		
	7.0	156	2.2	203.485	2.0 - 12	139 - 90	GST06 - 3E □□□ 063C12	E82MV 251_2B		
	6.4	173	1.0	224.400	1.8 - 11	153 - 99	GST05 - 3E □□□ 063C12	E82MV 251_2B		
	6.2	178	2.1	231.733	1.8 - 11	158 - 102	GST06 - 3E □□□ 063C12	E82MV 251_2B		
	5.6	196	1.8	255.000	1.6 - 10	174 - 113	GST06 - 3E □□□ 063C12	E82MV 251_2B		
	4.9	223	1.7	290.400	1.4 - 9	199 - 128	GST06 - 3E □□□ 063C12	E82MV 251_2B		
	4.3	254	1.4	330.000	1.3 - 8	226 - 146	GST06 - 3E □□□ 063C12	E82MV 251_2B		
	3.7	294	1.3	382.590	1.1 - 6	262 - 169	GST06 - 3E □□□ 063C12	E82MV 251_2B		
	3.3	334	1.1	434.762	1.0 - 6	297 - 192	GST06 - 3E □□□ 063C12	E82MV 251_2B		
<b>0.18 kW</b>							<b>GST □□ - 1E</b>		3-72	
	609	3	3.4	2.240	177 - 1060	2.5 - 1.6	GST04 - 1E □□□ 063C32	E82MV 251_2B		
	478	4	3.2	2.857	139 - 831	3.2 - 2.0	GST04 - 1E □□□ 063C32	E82MV 251_2B		
	310	6	3.5	4.400	90 - 540	4.9 - 3.1	GST04 - 1E □□□ 063C32	E82MV 251_2B		
	241	7	2.9	5.667	70 - 419	6.3 - 4.0	GST04 - 1E □□□ 063C32	E82MV 251_2B		
	190	9	2.6	7.182	55 - 331	7.9 - 5.1	GST04 - 1E □□□ 063C32	E82MV 251_2B		
	152	11	2.1	9.000	44 - 264	9.9 - 6.4	GST04 - 1E □□□ 063C32	E82MV 251_2B		
	115	15	1.1	11.857	33 - 200	13.1 - 8.5	GST04 - 1E □□□ 063C32	E82MV 251_2B		
							<b>GST □□ - 2E</b>			3-75
	526	3	5.7	2.597	152 - 915	2.8 - 1.8	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	400	4	4.6	3.413	116 - 696	3.7 - 2.4	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	313	5	3.9	4.368	91 - 544	4.7 - 3.1	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	257	7	4.1	5.312	75 - 447	5.8 - 3.7	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	229	7	3.9	5.965	66 - 398	6.5 - 4.2	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	196	9	3.5	6.982	57 - 340	7.6 - 4.9	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	174	10	3.3	7.840	50 - 303	8.5 - 5.5	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	153	11	3.0	8.935	44 - 266	9.7 - 6.3	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	136	12	2.8	10.033	39 - 237	10.9 - 7.0	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	119	14	2.5	11.429	35 - 208	12.4 - 8.0	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	106	16	2.4	12.833	31 - 185	14.0 - 9.0	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	92	18	2.2	14.836	27 - 160	16 - 10	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	82	20	2.0	16.660	24 - 143	18 - 12	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	72	23	1.8	19.013	21 - 125	21 - 13	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	71	24	3.0	19.360	20 - 123	21 - 14	GST04 - 2E □□□ 063C32	E82MV 251_2B		
	64	26	1.7	21.350	19 - 111	23 - 15	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	62	27	2.3	22.000	18 - 108	24 - 15	GST04 - 2E □□□ 063C32	E82MV 251_2B		
	56	30	1.5	24.595	16 - 97	27 - 17	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	55	31	2.3	24.933	16 - 95	27 - 18	GST04 - 2E □□□ 063C32	E82MV 251_2B		
	49	34	1.3	27.618	14 - 86	30 - 19	GST03 - 2E □□□ 063C32	E82MV 251_2B		
	48	35	1.8	28.333	14 - 84	31 - 20	GST04 - 2E □□□ 063C32	E82MV 251_2B		
43	39	1.2	32.000	12 - 74	35 - 22	GST03 - 2E □□□ 063C32	E82MV 251_2B			
43	39	1.9	31.600	13 - 75	34 - 22	GST04 - 2E □□□ 063C32	E82MV 251_2B			
38	44	1.0	35.933	11 - 66	39 - 25	GST03 - 2E □□□ 063C32	E82MV 251_2B			
38	44	1.5	35.909	11 - 66	39 - 25	GST04 - 2E □□□ 063C32	E82MV 251_2B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.18 kW</b>							<b>GST □□ - 2E</b>		3-75
	33	51	0.9	41.455	9.5 - 57	45 - 29	GST03 - 2E □□□ 063C32	E82MV 251_2B	
	35	48	1.5	39.600	10.0 - 60	43 - 28	GST04 - 2E □□□ 063C32	E82MV 251_2B	
	30	55	1.2	45.000	8.8 - 53	49 - 32	GST04 - 2E □□□ 063C32	E82MV 251_2B	
	26	64	1.1	52.171	7.6 - 46	57 - 37	GST04 - 2E □□□ 063C32	E82MV 251_2B	
	23	72	0.9	59.286	6.7 - 40	64 - 42	GST04 - 2E □□□ 063C32	E82MV 251_2B	
							<b>GST □□ - 3E</b>		3-78
	22	76	1.9	63.467	6.2 - 37	68 - 44	GST05 - 3E □□□ 063C32	E82MV 251_2B	
	19	86	2.0	71.238	5.6 - 33	76 - 49	GST05 - 3E □□□ 063C32	E82MV 251_2B	
	17	97	1.5	80.952	4.9 - 29	87 - 56	GST05 - 3E □□□ 063C32	E82MV 251_2B	
	17	97	3.2	80.952	4.9 - 29	87 - 56	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	15	110	1.5	91.746	4.3 - 26	98 - 63	GST05 - 3E □□□ 063C32	E82MV 251_2B	
	12	140	1.2	116.277	3.4 - 20	125 - 80	GST05 - 3E □□□ 063C32	E82MV 251_2B	
	12	132	2.8	109.707	3.6 - 22	118 - 76	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	11	150	1.0	124.667	3.2 - 19	134 - 86	GST05 - 3E □□□ 063C32	E82MV 251_2B	
	11	150	2.3	124.667	3.2 - 19	134 - 86	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	9.4	175	1.0	145.714	2.7 - 16	156 - 101	GST05 - 3E □□□ 063C32	E82MV 251_2B	
	9.7	170	2.2	141.289	2.8 - 17	151 - 98	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	8.5	193	1.8	160.556	2.5 - 15	172 - 111	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	7.6	216	1.7	179.067	2.2 - 13	192 - 124	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	6.7	245	1.4	203.485	1.9 - 12	218 - 141	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	5.9	279	1.3	231.733	1.7 - 10	248 - 160	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	5.4	307	1.1	255.000	1.6 - 9	273 - 176	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	4.7	350	1.1	290.400	1.4 - 8	311 - 201	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	4.1	397	0.9	330.000	1.2 - 7	353 - 228	GST06 - 3E □□□ 063C32	E82MV 251_2B	
	3.6	460	0.8	382.590	1.0 - 6	410 - 265	GST06 - 3E □□□ 063C32	E82MV 251_2B	
<b>0.25 kW</b>							<b>GST □□ - 1E</b>		3-72
	856	3	4.6	1.600	248 - 1490	2.4 - 1.6	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	669	4	5.2	2.048	194 - 1164	3.1 - 2.0	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	612	4	4.6	2.240	177 - 1064	3.4 - 2.2	GST05 - 1E □□□ 063C42	E82MV 251_2B	
	480	5	4.8	2.857	139 - 834	4.4 - 2.8	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	391	6	4.2	3.500	114 - 681	5.3 - 3.5	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	311	8	3.3	4.400	90 - 542	6.7 - 4.3	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	242	10	2.6	5.667	70 - 421	8.7 - 5.6	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	191	12	2.0	7.182	55 - 332	11.0 - 7.1	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	152	15	1.2	9.000	44 - 265	13.7 - 8.9	GST04 - 1E □□□ 063C42	E82MV 251_2B	
	154	15	2.8	8.900	45 - 268	13.6 - 8.8	GST05 - 1E □□□ 063C42	E82MV 251_2B	
	120	20	1.4	11.375	35 - 210	17 - 11	GST05 - 1E □□□ 063C42	E82MV 251_2B	
	122	19	2.6	11.250	35 - 212	17 - 11	GST06 - 1E □□□ 063C42	E82MV 251_2B	
							<b>GST □□ - 2E</b>		3-75
	528	4	4.1	2.597	153 - 918	3.9 - 2.5	GST03 - 2E □□□ 063C42	E82MV 251_2B	
	401	6	3.3	3.413	116 - 698	5.1 - 3.3	GST03 - 2E □□□ 063C42	E82MV 251_2B	
	314	7	2.8	4.368	91 - 546	6.6 - 4.2	GST03 - 2E □□□ 063C42	E82MV 251_2B	
	258	9	3.0	5.312	75 - 449	8.0 - 5.2	GST03 - 2E □□□ 063C42	E82MV 251_2B	
	230	10	2.8	5.965	67 - 400	9.0 - 5.8	GST03 - 2E □□□ 063C42	E82MV 251_2B	

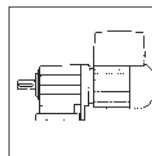
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical geared motors with motec

## Selection tables

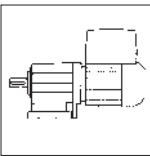


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.25 kW</b>							<b>GST □□ - 2E</b>		3-75	
	196	12	2.5	6.982	57 - 341	10.5 - 6.8	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	175	13	2.4	7.840	51 - 304	11.8 - 7.6	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	153	15	2.2	8.935	44 - 267	13.4 - 8.7	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	137	17	2.0	10.033	40 - 238	15.1 - 9.7	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	120	19	1.8	11.429	35 - 209	17 - 11	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	107	22	1.7	12.833	31 - 186	19 - 12	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	109	21	3.3	12.571	32 - 190	19 - 12	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	92	25	1.6	14.836	27 - 161	22 - 14	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	96	24	2.5	14.286	28 - 167	21 - 14	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	82	28	1.5	16.660	24 - 143	25 - 16	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	89	26	2.7	15.400	26 - 155	23 - 15	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	72	32	1.3	19.013	21 - 125	29 - 18	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	78	30	2.1	17.500	23 - 136	26 - 17	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	71	33	2.2	19.360	21 - 123	29 - 19	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	64	36	1.2	21.350	19 - 112	32 - 21	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	62	37	1.7	22.000	18 - 108	33 - 21	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	56	42	1.1	24.595	16 - 97	37 - 24	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	55	42	1.7	24.933	16 - 96	38 - 24	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	50	47	1.0	27.618	14 - 86	42 - 27	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	48	48	1.3	28.333	14 - 84	43 - 28	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	48	48	3.1	28.333	14 - 84	43 - 28	GST05 - 2E □□□ 063C42	E82MV 251_2B		
	43	54	0.8	32.000	12 - 74	48 - 31	GST03 - 2E □□□ 063C42	E82MV 251_2B		
	43	53	1.4	31.600	13 - 75	48 - 31	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	43	55	3.0	32.267	12 - 74	49 - 31	GST05 - 2E □□□ 063C42	E82MV 251_2B		
	38	61	1.1	35.909	11 - 66	54 - 35	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	37	62	2.4	36.667	11 - 65	55 - 36	GST05 - 2E □□□ 063C42	E82MV 251_2B		
	35	67	1.1	39.600	10 - 60	60 - 38	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	35	66	2.5	39.160	10 - 61	59 - 38	GST05 - 2E □□□ 063C42	E82MV 251_2B		
	30	76	0.9	45.000	8.8 - 53	68 - 44	GST04 - 2E □□□ 063C42	E82MV 251_2B		
	31	75	2.0	44.500	8.9 - 54	67 - 43	GST05 - 2E □□□ 063C42	E82MV 251_2B		
	27	85	1.4	50.050	7.9 - 48	75 - 49	GST05 - 2E □□□ 063C42	E82MV 251_2B		
	28	84	2.6	49.500	8.0 - 48	74 - 48	GST06 - 2E □□□ 063C42	E82MV 251_2B		
	24	96	1.4	56.875	7.0 - 42	86 - 55	GST05 - 2E □□□ 063C42	E82MV 251_2B		
	24	95	2.6	56.250	7.1 - 42	85 - 55	GST06 - 2E □□□ 063C42	E82MV 251_2B		
							<b>GST □□ - 3E</b>			3-78
	22	106	1.4	63.467	6.3 - 38	94 - 61	GST05 - 3E □□□ 063C42	E82MV 251_2B		
	20	113	3.2	67.760	5.9 - 35	100 - 65	GST06 - 3E □□□ 063C42	E82MV 251_2B		
	19	119	1.4	71.238	5.6 - 33	106 - 68	GST05 - 3E □□□ 063C42	E82MV 251_2B		
	20	117	3.1	70.156	5.7 - 34	104 - 67	GST06 - 3E □□□ 063C42	E82MV 251_2B		
	17	135	1.1	80.952	4.9 - 29	120 - 77	GST05 - 3E □□□ 063C42	E82MV 251_2B		
	17	135	2.5	80.952	4.9 - 29	120 - 77	GST06 - 3E □□□ 063C42	E82MV 251_2B		
	15	153	1.1	91.746	4.3 - 26	136 - 88	GST05 - 3E □□□ 063C42	E82MV 251_2B		
	16	145	2.5	87.267	4.6 - 27	129 - 84	GST06 - 3E □□□ 063C42	E82MV 251_2B		
	14	165	0.9	99.167	4.0 - 24	147 - 95	GST05 - 3E □□□ 063C42	E82MV 251_2B		
	14	165	2.0	99.167	4.0 - 24	147 - 95	GST06 - 3E □□□ 063C42	E82MV 251_2B		
	12	194	0.9	116.277	3.4 - 21	172 - 111	GST05 - 3E □□□ 063C42	E82MV 251_2B		
	13	183	2.1	109.707	3.6 - 22	163 - 105	GST06 - 3E □□□ 063C42	E82MV 251_2B		
11	208	1.6	124.667	3.2 - 19	185 - 119	GST06 - 3E □□□ 063C42	E82MV 251_2B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

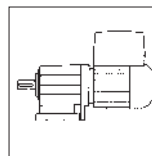
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.25 kW</b>							<b>GST □□ - 3E</b>		3-78		
	9.7	235	1.6	141.289	2.8 - 17	209 - 135	GST06 - 3E □□□ 063C42	E82MV 251_2B			
	9.8	232	3.0	139.211	2.9 - 17	206 - 133	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	8.5	267	1.3	160.556	2.5 - 15	238 - 154	GST06 - 3E □□□ 063C42	E82MV 251_2B			
	8.7	263	2.7	158.194	2.5 - 15	234 - 151	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	7.7	298	1.3	179.067	2.2 - 13	265 - 171	GST06 - 3E □□□ 063C42	E82MV 251_2B			
	7.6	300	2.4	180.156	2.2 - 13	267 - 172	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	6.7	339	1.0	203.485	2.0 - 12	302 - 195	GST06 - 3E □□□ 063C42	E82MV 251_2B			
	6.7	341	2.1	204.722	1.9 - 12	303 - 196	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	5.9	386	1.0	231.733	1.7 - 10	343 - 222	GST06 - 3E □□□ 063C42	E82MV 251_2B			
	5.8	394	1.8	236.622	1.7 - 10	351 - 226	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	5.4	425	0.8	255.000	1.6 - 9	378 - 244	GST06 - 3E □□□ 063C42	E82MV 251_2B			
	5.5	414	1.7	248.458	1.6 - 10	368 - 238	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	5.4	420	3.2	252.167	1.6 - 9	374 - 241	GST09 - 3E □□□ 063C42	E82MV 251_2B			
	5.1	448	1.6	268.889	1.5 - 9	399 - 257	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	4.2	544	1.3	326.333	1.2 - 7	484 - 312	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	4.2	544	3.0	326.333	1.2 - 7	484 - 312	GST09 - 3E □□□ 063C42	E82MV 251_2B			
	3.7	611	1.2	367.033	1.1 - 6	544 - 351	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	3.8	605	2.6	363.000	1.1 - 7	538 - 347	GST09 - 3E □□□ 063C42	E82MV 251_2B			
	3.3	695	1.0	417.083	1.0 - 6	618 - 399	GST07 - 3E □□□ 063C42	E82MV 251_2B			
	3.3	687	2.4	412.500	1.0 - 6	611 - 395	GST09 - 3E □□□ 063C42	E82MV 251_2B			
	<b>0.37 kW</b>							<b>GST □□ - 1E</b>			3-72
		881	4	4.0	1.600	256 - 1533	3.5 - 2.0	GST04 - 1E □□□ 071C32		E82MV 371_2B	
689		5	4.5	2.048	200 - 1198	4.5 - 2.5	GST04 - 1E □□□ 071C32	E82MV 371_2B			
630		6	4.0	2.240	183 - 1095	4.9 - 2.7	GST05 - 1E □□□ 071C32	E82MV 371_2B			
494		7	3.6	2.857	143 - 859	6.3 - 3.5	GST04 - 1E □□□ 071C32	E82MV 371_2B			
403		9	2.9	3.500	117 - 701	7.7 - 4.3	GST04 - 1E □□□ 071C32	E82MV 371_2B			
321		11	2.3	4.400	93 - 558	9.7 - 5.4	GST04 - 1E □□□ 071C32	E82MV 371_2B			
249		14	1.8	5.667	72 - 433	12.4 - 6.9	GST04 - 1E □□□ 071C32	E82MV 371_2B			
249		14	3.2	5.667	72 - 433	12.4 - 6.9	GST05 - 1E □□□ 071C32	E82MV 371_2B			
196		18	1.4	7.182	57 - 342	15.8 - 8.8	GST04 - 1E □□□ 071C32	E82MV 371_2B			
192		18	2.6	7.333	56 - 335	16.1 - 8.9	GST05 - 1E □□□ 071C32	E82MV 371_2B			
157		22	1.1	9.000	45 - 273	20 - 11	GST04 - 1E □□□ 071C32	E82MV 371_2B			
158		22	1.9	8.900	46 - 276	20 - 11	GST05 - 1E □□□ 071C32	E82MV 371_2B			
158		22	2.8	8.900	46 - 276	20 - 11	GST06 - 1E □□□ 071C32	E82MV 371_2B			
124		28	1.1	11.375	36 - 216	25 - 14	GST05 - 1E □□□ 071C32	E82MV 371_2B			
125		28	2.2	11.250	36 - 218	25 - 14	GST06 - 1E □□□ 071C32	E82MV 371_2B			
						<b>GST □□ - 2E</b>		3-75			
543		6	2.9	2.597	157 - 945	5.6 - 3.1	GST03 - 2E □□□ 071C32		E82MV 371_2B		
413		8	2.3	3.413	120 - 719	7.4 - 4.1	GST03 - 2E □□□ 071C32		E82MV 371_2B		
323		11	2.0	4.368	94 - 562	9.5 - 5.2	GST03 - 2E □□□ 071C32		E82MV 371_2B		
265		13	2.1	5.312	77 - 462	11.5 - 6.4	GST03 - 2E □□□ 071C32		E82MV 371_2B		
236		15	2.0	5.965	69 - 411	12.9 - 7.2	GST03 - 2E □□□ 071C32		E82MV 371_2B		
202		17	1.8	6.982	59 - 351	15.1 - 8.4	GST03 - 2E □□□ 071C32		E82MV 371_2B		
200	17	3.3	7.040	58 - 348	15.2 - 8.5	GST04 - 2E □□□ 071C32	E82MV 371_2B				
180	19	1.7	7.840	52 - 313	17.0 - 9.4	GST03 - 2E □□□ 071C32	E82MV 371_2B				
176	19	3.0	8.000	51 - 307	17.3 - 9.6	GST04 - 2E □□□ 071C32	E82MV 371_2B				

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





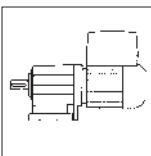
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.37 kW</b>	<b>GST □□ - 2E</b>									
	158	22	1.5	8.935	46 - 275	19 - 11	GST03 - 2E □□□ 071C32	E82MV 371_2B	3-75	
	157	22	2.9	9.010	45 - 272	19 - 11	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	141	24	1.4	10.033	41 - 245	22 - 12	GST03 - 2E □□□ 071C32	E82MV 371_2B		
	143	24	2.7	9.856	41 - 249	21 - 12	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	123	28	1.3	11.429	36 - 215	25 - 14	GST03 - 2E □□□ 071C32	E82MV 371_2B		
	126	27	2.2	11.200	37 - 219	24 - 13	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	110	31	1.2	12.833	32 - 191	28 - 15	GST03 - 2E □□□ 071C32	E82MV 371_2B		
	112	31	2.3	12.571	33 - 195	27 - 15	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	95	36	1.1	14.836	28 - 165	32 - 18	GST03 - 2E □□□ 071C32	E82MV 371_2B		
	99	35	1.8	14.286	29 - 172	31 - 17	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	98	35	3.2	14.356	28 - 171	31 - 17	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	85	41	1.0	16.660	25 - 147	36 - 20	GST03 - 2E □□□ 071C32	E82MV 371_2B		
	92	37	1.9	15.400	27 - 159	33 - 19	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	87	39	3.2	16.190	25 - 152	35 - 19	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	74	46	0.9	19.013	22 - 129	41 - 23	GST03 - 2E □□□ 071C32	E82MV 371_2B		
	81	43	1.5	17.500	23 - 140	38 - 21	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	73	47	1.5	19.360	21 - 127	42 - 23	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	66	52	0.9	21.350	19 - 115	46 - 26	GST03 - 2E □□□ 071C32	E82MV 371_2B		
	64	54	1.2	22.000	19 - 112	48 - 26	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	62	55	2.6	22.778	18 - 108	49 - 27	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	57	61	1.2	24.933	16 - 98	54 - 30	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	57	61	2.7	24.933	16 - 98	54 - 30	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	50	69	0.9	28.333	14 - 87	61 - 34	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	50	69	2.1	28.333	14 - 87	61 - 34	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	45	77	0.9	31.600	13 - 78	68 - 38	GST04 - 2E □□□ 071C32	E82MV 371_2B		
	44	78	2.1	32.267	13 - 76	70 - 39	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	44	78	3.2	32.267	13 - 76	70 - 39	GST06 - 2E □□□ 071C32	E82MV 371_2B		
	39	89	1.7	36.667	11 - 67	79 - 44	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	39	89	3.2	36.667	11 - 67	79 - 44	GST06 - 2E □□□ 071C32	E82MV 371_2B		
	36	95	1.7	39.160	10 - 63	85 - 47	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	36	95	2.8	39.160	10 - 63	85 - 47	GST06 - 2E □□□ 071C32	E82MV 371_2B		
	32	108	1.4	44.500	9.2 - 55	96 - 53	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	32	108	2.8	44.500	9.2 - 55	96 - 53	GST06 - 2E □□□ 071C32	E82MV 371_2B		
	28	122	1.1	50.050	8.2 - 49	108 - 60	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	29	120	2.2	49.500	8.3 - 50	107 - 59	GST06 - 2E □□□ 071C32	E82MV 371_2B		
	25	138	1.1	56.875	7.2 - 43	123 - 68	GST05 - 2E □□□ 071C32	E82MV 371_2B		
	25	137	2.2	56.250	7.3 - 44	122 - 68	GST06 - 2E □□□ 071C32	E82MV 371_2B		
	<b>GST □□ - 3E</b>									
	22	152	1.0	63.467	6.4 - 39	135 - 75	GST05 - 3E □□□ 071C32	E82MV 371_2B		3-78
21	162	2.3	67.760	6.0 - 36	144 - 80	GST06 - 3E □□□ 071C32	E82MV 371_2B			
20	171	1.0	71.238	5.7 - 34	152 - 84	GST05 - 3E □□□ 071C32	E82MV 371_2B			
20	168	2.1	70.156	5.8 - 35	150 - 83	GST06 - 3E □□□ 071C32	E82MV 371_2B			
17	194	1.7	80.952	5.1 - 30	173 - 96	GST06 - 3E □□□ 071C32	E82MV 371_2B			
16	209	1.8	87.267	4.7 - 28	186 - 103	GST06 - 3E □□□ 071C32	E82MV 371_2B			
14	238	1.4	99.167	4.1 - 25	211 - 117	GST06 - 3E □□□ 071C32	E82MV 371_2B			
13	263	1.4	109.707	3.7 - 22	234 - 130	GST06 - 3E □□□ 071C32	E82MV 371_2B			
13	268	2.6	111.915	3.7 - 22	239 - 132	GST07 - 3E □□□ 071C32	E82MV 371_2B			
11	299	1.1	124.667	3.3 - 20	266 - 148	GST06 - 3E □□□ 071C32	E82MV 371_2B			
11	305	2.3	127.176	3.2 - 19	271 - 151	GST07 - 3E □□□ 071C32	E82MV 371_2B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Helical geared motors with motec

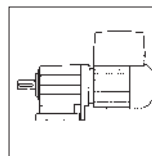
## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.37 kW</b>							<b>GST □□ - 3E</b>		3-78		
	10	338	1.1	141.289	2.9 - 17	301 - 167	GST06 - 3E □□□ 071C32	E82MV 371_2B			
	10	333	2.1	139.211	2.9 - 18	297 - 165	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	8.8	385	0.9	160.556	2.5 - 15	342 - 190	GST06 - 3E □□□ 071C32	E82MV 371_2B			
	8.9	379	1.9	158.194	2.6 - 16	337 - 187	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	7.9	429	0.9	179.067	2.3 - 14	382 - 212	GST06 - 3E □□□ 071C32	E82MV 371_2B			
	7.8	431	1.6	180.156	2.3 - 14	384 - 213	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	7.7	438	3.2	182.844	2.2 - 13	390 - 216	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	6.9	490	1.5	204.722	2.0 - 12	436 - 242	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	6.8	498	3.2	207.778	2.0 - 12	443 - 246	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	6.0	567	1.3	236.622	1.7 - 10	504 - 280	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	6.0	567	2.9	236.622	1.7 - 10	504 - 280	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	5.7	595	1.2	248.458	1.6 - 10	530 - 294	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	5.6	604	2.7	252.167	1.6 - 10	537 - 298	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	5.2	644	1.1	268.889	1.5 - 9	573 - 318	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	5.2	644	2.5	268.889	1.5 - 9	573 - 318	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	4.3	782	0.9	326.333	1.3 - 8	696 - 386	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	4.3	782	2.1	326.333	1.3 - 8	696 - 386	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	3.8	879	0.8	367.033	1.1 - 7	782 - 434	GST07 - 3E □□□ 071C32	E82MV 371_2B			
	3.9	869	1.9	363.000	1.1 - 7	774 - 430	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	3.4	988	1.6	412.500	1.0 - 6	879 - 488	GST09 - 3E □□□ 071C32	E82MV 371_2B			
	<b>0.55 kW</b>							<b>GST □□ - 1E</b>			3-72
		878	6	3.3	1.600	255 - 1528	5.2 - 3.4	GST04 - 1E □□□ 071C42		E82MV 551_4B	
		686	8	3.0	2.048	199 - 1194	6.7 - 4.3	GST04 - 1E □□□ 071C42		E82MV 551_4B	
		627	8	3.0	2.240	182 - 1091	7.3 - 4.7	GST04 - 1E □□□ 071C42		E82MV 551_4B	
		492	11	2.4	2.857	143 - 856	9.4 - 6.0	GST04 - 1E □□□ 071C42		E82MV 551_4B	
401		13	1.9	3.500	116 - 698	11.5 - 7.4	GST04 - 1E □□□ 071C42	E82MV 551_4B			
319		16	1.5	4.400	93 - 556	14.4 - 9.3	GST04 - 1E □□□ 071C42	E82MV 551_4B			
308		17	3.2	4.556	89 - 537	14.9 - 9.6	GST05 - 1E □□□ 071C42	E82MV 551_4B			
248		21	1.2	5.667	72 - 431	19 - 12	GST04 - 1E □□□ 071C42	E82MV 551_4B			
248		21	2.6	5.667	72 - 431	19 - 12	GST05 - 1E □□□ 071C42	E82MV 551_4B			
192		27	1.7	7.333	56 - 333	24 - 16	GST05 - 1E □□□ 071C42	E82MV 551_4B			
192		27	2.9	7.333	56 - 333	24 - 16	GST06 - 1E □□□ 071C42	E82MV 551_4B			
158		33	1.3	8.900	46 - 275	29 - 19	GST05 - 1E □□□ 071C42	E82MV 551_4B			
158		33	2.4	8.900	46 - 275	29 - 19	GST06 - 1E □□□ 071C42	E82MV 551_4B			
125		41	1.4	11.250	36 - 217	37 - 24	GST06 - 1E □□□ 071C42	E82MV 551_4B			
						<b>GST □□ - 2E</b>		3-75			
541		9	1.9	2.597	157 - 941	8.4 - 5.4	GST03 - 2E □□□ 071C42		E82MV 551_4B		
412		12	1.6	3.413	119 - 716	11.0 - 7.1	GST03 - 2E □□□ 071C42		E82MV 551_4B		
422		12	3.5	3.333	122 - 733	10.8 - 6.9	GST04 - 2E □□□ 071C42		E82MV 551_4B		
322		16	1.3	4.368	93 - 560	14.1 - 9.1	GST03 - 2E □□□ 071C42		E82MV 551_4B		
307		17	2.9	4.571	89 - 535	14.8 - 9.5	GST04 - 2E □□□ 071C42		E82MV 551_4B		
265		19	1.4	5.312	77 - 460	17 - 11	GST03 - 2E □□□ 071C42		E82MV 551_4B		
271		19	2.7	5.187	79 - 471	17 - 11	GST04 - 2E □□□ 071C42		E82MV 551_4B		
240		21	2.5	5.850	70 - 418	19 - 12	GST04 - 2E □□□ 071C42		E82MV 551_4B		
236		22	1.3	5.965	68 - 410	19 - 12	GST03 - 2E □□□ 071C42		E82MV 551_4B		
220		23	2.4	6.400	64 - 382	21 - 13	GST04 - 2E □□□ 071C42	E82MV 551_4B			
201	25	1.2	6.982	58 - 350	23 - 15	GST03 - 2E □□□ 071C42	E82MV 551_4B				
200	26	2.2	7.040	58 - 347	23 - 15	GST04 - 2E □□□ 071C42	E82MV 551_4B				

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

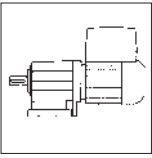


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.55 kW</b>							<b>GST □□ - 2E</b>		3-75	
	179	28	1.1	7.840	52 - 312	25 - 16	GST03 - 2E □□□ 071C42	E82MV 551_4B		
	176	29	2.0	8.000	51 - 306	26 - 17	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	157	32	1.0	8.935	46 - 274	29 - 19	GST03 - 2E □□□ 071C42	E82MV 551_4B		
	156	33	1.9	9.010	45 - 271	29 - 19	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	140	36	1.0	10.033	41 - 244	32 - 21	GST03 - 2E □□□ 071C42	E82MV 551_4B		
	143	36	1.8	9.856	41 - 248	32 - 21	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	123	41	0.9	11.429	36 - 214	37 - 24	GST03 - 2E □□□ 071C42	E82MV 551_4B		
	125	41	1.5	11.200	36 - 218	36 - 23	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	125	41	3.1	11.200	36 - 218	36 - 23	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	110	47	0.8	12.833	32 - 190	41 - 27	GST03 - 2E □□□ 071C42	E82MV 551_4B		
	112	46	1.5	12.571	32 - 194	41 - 26	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	108	47	2.9	13.016	31 - 188	42 - 27	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	98	52	1.2	14.286	29 - 171	46 - 30	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	98	52	2.7	14.356	28 - 170	46 - 30	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	91	56	1.3	15.400	26 - 159	50 - 32	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	87	59	2.5	16.190	25 - 151	52 - 34	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	80	64	1.0	17.500	23 - 140	56 - 36	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	80	64	2.2	17.500	23 - 140	56 - 36	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	73	70	1.0	19.360	21 - 126	62 - 40	GST04 - 2E □□□ 071C42	E82MV 551_4B		
	70	73	2.2	20.044	20 - 122	65 - 42	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	62	83	1.7	22.778	18 - 107	74 - 47	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	56	90	1.8	24.933	16 - 98	80 - 52	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	56	90	3.2	24.933	16 - 98	80 - 52	GST06 - 2E □□□ 071C42	E82MV 551_4B		
	50	103	1.4	28.333	14 - 86	91 - 59	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	50	103	3.1	28.333	14 - 86	91 - 59	GST06 - 2E □□□ 071C42	E82MV 551_4B		
	44	117	1.4	32.267	13 - 76	104 - 67	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	44	117	2.9	32.267	13 - 76	104 - 67	GST06 - 2E □□□ 071C42	E82MV 551_4B		
	38	133	1.1	36.667	11 - 67	118 - 76	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	38	133	2.4	36.667	11 - 67	118 - 76	GST06 - 2E □□□ 071C42	E82MV 551_4B		
	36	142	1.2	39.160	10 - 62	126 - 82	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	36	142	2.4	39.160	10 - 62	126 - 82	GST06 - 2E □□□ 071C42	E82MV 551_4B		
	32	161	0.9	44.500	9.2 - 55	144 - 93	GST05 - 2E □□□ 071C42	E82MV 551_4B		
	32	161	2.0	44.500	9.2 - 55	144 - 93	GST06 - 2E □□□ 071C42	E82MV 551_4B		
	28	180	1.4	49.500	8.2 - 49	160 - 103	GST06 - 2E □□□ 071C42	E82MV 551_4B		
	25	204	1.4	56.250	7.2 - 43	182 - 117	GST06 - 2E □□□ 071C42	E82MV 551_4B		
							<b>GST □□ - 3E</b>			3-78
	21	242	1.5	67.760	6.0 - 36	215 - 139	GST06 - 3E □□□ 071C42	E82MV 551_4B		
	22	233	3.0	65.079	6.3 - 38	207 - 134	GST07 - 3E □□□ 071C42	E82MV 551_4B		
	20	251	1.4	70.156	5.8 - 35	223 - 144	GST06 - 3E □□□ 071C42	E82MV 551_4B		
	20	251	2.8	70.156	5.8 - 35	223 - 144	GST07 - 3E □□□ 071C42	E82MV 551_4B		
	17	289	1.2	80.952	5.0 - 30	257 - 166	GST06 - 3E □□□ 071C42	E82MV 551_4B		
	18	285	2.5	79.762	5.1 - 31	254 - 164	GST07 - 3E □□□ 071C42	E82MV 551_4B		
	16	312	1.2	87.267	4.7 - 28	277 - 179	GST06 - 3E □□□ 071C42	E82MV 551_4B		
	16	307	2.3	85.983	4.7 - 28	273 - 177	GST07 - 3E □□□ 071C42	E82MV 551_4B		
	14	354	1.0	99.167	4.1 - 25	315 - 204	GST06 - 3E □□□ 071C42	E82MV 551_4B		
	14	349	2.0	97.708	4.2 - 25	311 - 201	GST07 - 3E □□□ 071C42	E82MV 551_4B		
	13	392	1.0	109.707	3.7 - 22	349 - 225	GST06 - 3E □□□ 071C42	E82MV 551_4B		
13	400	1.8	111.915	3.6 - 22	356 - 230	GST07 - 3E □□□ 071C42	E82MV 551_4B			
11	454	1.6	127.176	3.2 - 19	404 - 261	GST07 - 3E □□□ 071C42	E82MV 551_4B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.55 kW</b>							<b>GST □□ - 3E</b>		3-78		
	10	497	1.4	139.211	2.9 - 18	443 - 286	GST07 - 3E □□□ 071C42	E82MV 551_4B			
	9.9	505	3.2	141.289	2.9 - 17	449 - 290	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	8.9	565	1.3	158.194	2.6 - 15	503 - 325	GST07 - 3E □□□ 071C42	E82MV 551_4B			
	8.8	574	2.8	160.556	2.5 - 15	510 - 330	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	7.8	644	1.1	180.156	2.3 - 14	573 - 370	GST07 - 3E □□□ 071C42	E82MV 551_4B			
	7.7	653	2.5	182.844	2.2 - 13	581 - 375	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	6.9	731	1.0	204.722	2.0 - 12	651 - 420	GST07 - 3E □□□ 071C42	E82MV 551_4B			
	6.8	742	2.2	207.778	2.0 - 12	661 - 427	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	5.9	845	0.8	236.622	1.7 - 10	752 - 486	GST07 - 3E □□□ 071C42	E82MV 551_4B			
	5.9	845	1.9	236.622	1.7 - 10	752 - 486	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	5.6	901	1.8	252.167	1.6 - 10	802 - 518	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	5.2	961	1.7	268.889	1.5 - 9	855 - 552	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	4.3	1166	1.4	326.333	1.2 - 7	1038 - 670	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	3.9	1297	1.2	363.000	1.1 - 7	1154 - 745	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	3.4	1474	1.1	412.500	1.0 - 6	1312 - 847	GST09 - 3E □□□ 071C42	E82MV 551_4B			
	<b>0.75 kW</b>							<b>GST □□ - 1E</b>			3-72
		881	8	2.4	1.600	256 - 1533	7.1 - 4.6	GST04 - 1E □□□ 080C32		E82MV 751_4B	
689		10	2.2	2.048	200 - 1198	9.1 - 5.9	GST04 - 1E □□□ 080C32	E82MV 751_4B			
630		11	2.2	2.240	183 - 1095	10.0 - 6.4	GST04 - 1E □□□ 080C32	E82MV 751_4B			
494		14	1.8	2.857	143 - 859	12.7 - 8.2	GST04 - 1E □□□ 080C32	E82MV 751_4B			
403		18	1.4	3.500	117 - 701	16 - 10	GST04 - 1E □□□ 080C32	E82MV 751_4B			
403		18	3.1	3.500	117 - 701	16 - 10	GST05 - 1E □□□ 080C32	E82MV 751_4B			
321		22	1.1	4.400	93 - 558	20 - 13	GST04 - 1E □□□ 080C32	E82MV 751_4B			
310		23	2.4	4.556	90 - 539	20 - 13	GST05 - 1E □□□ 080C32	E82MV 751_4B			
249		28	0.9	5.667	72 - 433	25 - 16	GST04 - 1E □□□ 080C32	E82MV 751_4B			
249		28	1.9	5.667	72 - 433	25 - 16	GST05 - 1E □□□ 080C32	E82MV 751_4B			
249		28	2.9	5.667	72 - 433	25 - 16	GST06 - 1E □□□ 080C32	E82MV 751_4B			
192		37	1.3	7.333	56 - 335	33 - 21	GST05 - 1E □□□ 080C32	E82MV 751_4B			
192		37	2.6	7.333	56 - 335	33 - 21	GST06 - 1E □□□ 080C32	E82MV 751_4B			
158		45	1.0	8.900	46 - 276	40 - 26	GST05 - 1E □□□ 080C32	E82MV 751_4B			
158		45	1.9	8.900	46 - 276	40 - 26	GST06 - 1E □□□ 080C32	E82MV 751_4B			
158		45	2.5	8.900	46 - 276	40 - 26	GST07 - 1E □□□ 080C32	E82MV 751_4B			
125		56	1.1	11.250	36 - 218	50 - 32	GST06 - 1E □□□ 080C32	E82MV 751_4B			
125		56	2.0	11.250	36 - 218	50 - 32	GST07 - 1E □□□ 080C32	E82MV 751_4B			
						<b>GST □□ - 2E</b>		3-75			
477		15	2.7	2.956	138 - 830	13.0 - 8.4	GST04 - 2E □□□ 080C32		E82MV 751_4B		
423		16	2.5	3.333	123 - 736	14.6 - 9.4	GST04 - 2E □□□ 080C32		E82MV 751_4B		
348		20	2.3	4.053	101 - 605	18 - 11	GST04 - 2E □□□ 080C32		E82MV 751_4B		
308		23	2.1	4.571	89 - 537	20 - 13	GST04 - 2E □□□ 080C32		E82MV 751_4B		
272		26	2.0	5.187	79 - 473	23 - 15	GST04 - 2E □□□ 080C32		E82MV 751_4B		
241		29	1.9	5.850	70 - 419	26 - 17	GST04 - 2E □□□ 080C32		E82MV 751_4B		
220		32	1.8	6.400	64 - 383	28 - 18	GST04 - 2E □□□ 080C32		E82MV 751_4B		
200		35	1.6	7.040	58 - 348	31 - 20	GST04 - 2E □□□ 080C32		E82MV 751_4B		
195		36	3.0	7.238	56 - 339	32 - 21	GST05 - 2E □□□ 080C32		E82MV 751_4B		
176		39	1.5	8.000	51 - 307	35 - 23	GST04 - 2E □□□ 080C32		E82MV 751_4B		
173	40	2.9	8.163	50 - 301	36 - 23	GST05 - 2E □□□ 080C32	E82MV 751_4B				

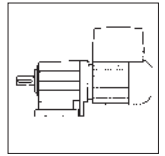
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical geared motors with motec

## Selection tables

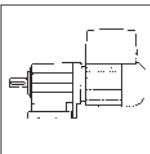


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
0.75 kW	<b>GST □□ - 2E</b>									
	157	44	1.4	9.010	45 - 272	40 - 26	GST04 - 2E □□□ 080C32	E82MV 751_4B	3-75	
	157	44	2.7	9.010	45 - 272	40 - 26	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	143	49	1.3	9.856	41 - 249	43 - 28	GST04 - 2E □□□ 080C32	E82MV 751_4B		
	141	49	2.5	10.000	41 - 245	44 - 28	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	126	55	1.1	11.200	37 - 219	49 - 32	GST04 - 2E □□□ 080C32	E82MV 751_4B		
	126	55	2.3	11.200	37 - 219	49 - 32	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	112	62	1.1	12.571	33 - 195	55 - 36	GST04 - 2E □□□ 080C32	E82MV 751_4B		
	108	64	2.1	13.016	31 - 188	57 - 37	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	99	70	0.9	14.286	29 - 172	63 - 40	GST04 - 2E □□□ 080C32	E82MV 751_4B		
	98	71	2.0	14.356	28 - 171	63 - 41	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	92	76	0.9	15.400	27 - 159	68 - 44	GST04 - 2E □□□ 080C32	E82MV 751_4B		
	87	80	1.9	16.190	25 - 152	71 - 46	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	81	86	1.7	17.500	23 - 140	77 - 50	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	70	99	1.6	20.044	20 - 122	88 - 57	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	62	112	1.3	22.778	18 - 108	100 - 65	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	62	112	2.8	22.778	18 - 108	100 - 65	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	57	123	1.3	24.933	16 - 98	109 - 71	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	57	123	2.9	24.933	16 - 98	109 - 71	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	50	140	1.1	28.333	14 - 87	124 - 80	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	50	140	2.3	28.333	14 - 87	124 - 80	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	44	159	1.0	32.267	13 - 76	142 - 91	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	44	159	2.3	32.267	13 - 76	142 - 91	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	39	181	0.8	36.667	11 - 67	161 - 104	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	39	181	1.8	36.667	11 - 67	161 - 104	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	39	181	2.9	36.667	11 - 67	161 - 104	GST07 - 2E □□□ 080C32	E82MV 751_4B		
	36	193	0.9	39.160	10 - 63	172 - 111	GST05 - 2E □□□ 080C32	E82MV 751_4B		
	36	193	1.9	39.160	10 - 63	172 - 111	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	36	193	2.5	39.160	10 - 63	172 - 111	GST07 - 2E □□□ 080C32	E82MV 751_4B		
	32	219	1.5	44.500	9.2 - 55	195 - 126	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	32	219	2.5	44.500	9.2 - 55	195 - 126	GST07 - 2E □□□ 080C32	E82MV 751_4B		
	29	244	1.1	49.500	8.3 - 50	217 - 140	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	29	244	2.0	49.500	8.3 - 50	217 - 140	GST07 - 2E □□□ 080C32	E82MV 751_4B		
	25	277	1.1	56.250	7.3 - 44	247 - 159	GST06 - 2E □□□ 080C32	E82MV 751_4B		
	25	277	2.0	56.250	7.3 - 44	247 - 159	GST07 - 2E □□□ 080C32	E82MV 751_4B		
	<b>GST □□ - 3E</b>									
	21	329	1.1	67.760	6.0 - 36	293 - 189	GST06 - 3E □□□ 080C32	E82MV 751_4B		3-78
	22	316	2.2	65.079	6.3 - 38	281 - 182	GST07 - 3E □□□ 080C32	E82MV 751_4B		
	20	341	1.1	70.156	5.8 - 35	303 - 196	GST06 - 3E □□□ 080C32	E82MV 751_4B		
	20	341	2.1	70.156	5.8 - 35	303 - 196	GST07 - 3E □□□ 080C32	E82MV 751_4B		
	17	393	0.9	80.952	5.1 - 30	350 - 226	GST06 - 3E □□□ 080C32	E82MV 751_4B		
	18	387	1.8	79.762	5.1 - 31	345 - 223	GST07 - 3E □□□ 080C32	E82MV 751_4B		
	16	424	0.9	87.267	4.7 - 28	377 - 243	GST06 - 3E □□□ 080C32	E82MV 751_4B		
	16	417	1.7	85.983	4.8 - 29	371 - 240	GST07 - 3E □□□ 080C32	E82MV 751_4B		
	14	474	1.5	97.708	4.2 - 25	422 - 273	GST07 - 3E □□□ 080C32	E82MV 751_4B		
	13	543	1.3	111.915	3.7 - 22	484 - 312	GST07 - 3E □□□ 080C32	E82MV 751_4B		
12	551	2.9	113.585	3.6 - 22	491 - 317	GST09 - 3E □□□ 080C32	E82MV 751_4B			
11	617	1.2	127.176	3.2 - 19	549 - 355	GST07 - 3E □□□ 080C32	E82MV 751_4B			
11	627	2.6	129.074	3.2 - 19	558 - 360	GST09 - 3E □□□ 080C32	E82MV 751_4B			
10	676	1.0	139.211	2.9 - 18	601 - 388	GST07 - 3E □□□ 080C32	E82MV 751_4B			
10	686	2.4	141.289	2.9 - 17	610 - 394	GST09 - 3E □□□ 080C32	E82MV 751_4B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

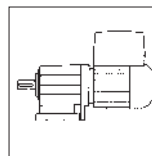
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.75 kW</b>							<b>GST □□ - 3E</b>		3-78
	8.9	768	0.9	158.194	2.6 - 16	683 - 441	GST07 - 3E □□□ 080C32	E82MV 751_4B	
	8.8	779	2.1	160.556	2.5 - 15	694 - 448	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	7.8	875	0.8	180.156	2.3 - 14	778 - 503	GST07 - 3E □□□ 080C32	E82MV 751_4B	
	7.7	888	1.8	182.844	2.2 - 13	790 - 510	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	6.8	1009	1.6	207.778	2.0 - 12	898 - 580	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	6.8	1009	2.8	207.778	2.0 - 12	898 - 580	GST11 - 3E □□□ 080C32	E82MV 751_4B	
	6.0	1149	1.4	236.622	1.7 - 10	1022 - 660	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	6.0	1149	2.4	236.622	1.7 - 10	1022 - 660	GST11 - 3E □□□ 080C32	E82MV 751_4B	
	5.6	1224	1.3	252.167	1.6 - 10	1089 - 703	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	5.6	1224	2.3	252.167	1.6 - 10	1089 - 703	GST11 - 3E □□□ 080C32	E82MV 751_4B	
	5.2	1305	1.2	268.889	1.5 - 9	1162 - 750	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	5.2	1305	2.2	268.889	1.5 - 9	1162 - 750	GST11 - 3E □□□ 080C32	E82MV 751_4B	
	4.3	1584	1.0	326.333	1.3 - 8	1410 - 910	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	4.3	1584	1.8	326.333	1.3 - 8	1410 - 910	GST11 - 3E □□□ 080C32	E82MV 751_4B	
	3.9	1762	0.9	363.000	1.1 - 7	1568 - 1013	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	3.9	1762	1.5	363.000	1.1 - 7	1568 - 1013	GST11 - 3E □□□ 080C32	E82MV 751_4B	
	3.4	2002	0.8	412.500	1.0 - 6	1782 - 1151	GST09 - 3E □□□ 080C32	E82MV 751_4B	
	3.4	2002	1.4	412.500	1.0 - 6	1782 - 1151	GST11 - 3E □□□ 080C32	E82MV 751_4B	
	<b>1.1 kW</b>							<b>GST □□ - 1E</b>	
869		12	1.6	1.600	252 - 1512	10.0 - 6.8	GST04 - 1E □□□ 080C42	E82MV 152_4B	
679		15	1.5	2.048	197 - 1181	12.8 - 8.8	GST04 - 1E □□□ 080C42	E82MV 152_4B	
621		17	1.5	2.240	180 - 1080	14.0 - 9.6	GST04 - 1E □□□ 080C42	E82MV 152_4B	
621		17	3.2	2.240	180 - 1080	14.0 - 9.6	GST05 - 1E □□□ 080C42	E82MV 152_4B	
487		21	1.2	2.857	141 - 847	18 - 12	GST04 - 1E □□□ 080C42	E82MV 152_4B	
487		21	2.5	2.857	141 - 847	18 - 12	GST05 - 1E □□□ 080C42	E82MV 152_4B	
397		26	1.0	3.500	115 - 691	22 - 15	GST04 - 1E □□□ 080C42	E82MV 152_4B	
397		26	2.1	3.500	115 - 691	22 - 15	GST05 - 1E □□□ 080C42	E82MV 152_4B	
305		34	1.6	4.556	88 - 531	28 - 19	GST05 - 1E □□□ 080C42	E82MV 152_4B	
305		34	3.1	4.556	88 - 531	28 - 19	GST06 - 1E □□□ 080C42	E82MV 152_4B	
245		42	1.3	5.667	71 - 427	35 - 24	GST05 - 1E □□□ 080C42	E82MV 152_4B	
245		42	2.5	5.667	71 - 427	35 - 24	GST06 - 1E □□□ 080C42	E82MV 152_4B	
190		55	1.8	7.333	55 - 330	46 - 31	GST06 - 1E □□□ 080C42	E82MV 152_4B	
190		55	2.9	7.333	55 - 330	46 - 31	GST07 - 1E □□□ 080C42	E82MV 152_4B	
156		66	1.3	8.900	45 - 272	56 - 38	GST06 - 1E □□□ 080C42	E82MV 152_4B	
156		66	2.3	8.900	45 - 272	56 - 38	GST07 - 1E □□□ 080C42	E82MV 152_4B	
124		84	1.4	11.250	36 - 215	70 - 48	GST07 - 1E □□□ 080C42	E82MV 152_4B	
						<b>GST □□ - 2E</b>		3-75	
470		22	1.8	2.956	136 - 818	18 - 12	GST04 - 2E □□□ 080C42		E82MV 152_4B
470		22	2.9	2.956	136 - 818	18 - 12	GST05 - 2E □□□ 080C42		E82MV 152_4B
417		24	1.7	3.333	121 - 726	21 - 14	GST04 - 2E □□□ 080C42		E82MV 152_4B
417		24	3.2	3.333	121 - 726	21 - 14	GST05 - 2E □□□ 080C42		E82MV 152_4B
343		30	1.5	4.053	99 - 597	25 - 17	GST04 - 2E □□□ 080C42		E82MV 152_4B
343		30	2.7	4.053	99 - 597	25 - 17	GST05 - 2E □□□ 080C42		E82MV 152_4B
304		34	1.4	4.571	88 - 529	28 - 19	GST04 - 2E □□□ 080C42		E82MV 152_4B
304		34	2.7	4.571	88 - 529	28 - 19	GST05 - 2E □□□ 080C42		E82MV 152_4B
268		38	1.3	5.187	78 - 466	32 - 22	GST04 - 2E □□□ 080C42		E82MV 152_4B
268	38	2.4	5.187	78 - 466	32 - 22	GST05 - 2E □□□ 080C42	E82MV 152_4B		
238	43	1.2	5.850	69 - 413	36 - 25	GST04 - 2E □□□ 080C42	E82MV 152_4B		
238	43	2.4	5.850	69 - 413	36 - 25	GST05 - 2E □□□ 080C42	E82MV 152_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



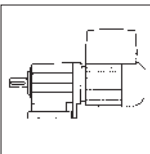


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>1.1 kW</b>	<b>GST □□ - 2E</b>									
	217	47	1.2	6.400	63 - 378	39 - 27	GST04 - 2E □□□ 080C42	E82MV 152_4B	3-75	
	217	47	2.2	6.400	63 - 378	39 - 27	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	197	52	1.1	7.040	57 - 344	43 - 30	GST04 - 2E □□□ 080C42	E82MV 152_4B		
	192	53	2.0	7.238	56 - 334	45 - 30	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	174	59	1.0	8.000	50 - 302	49 - 34	GST04 - 2E □□□ 080C42	E82MV 152_4B		
	170	60	1.9	8.163	49 - 296	50 - 34	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	154	66	1.0	9.010	45 - 268	55 - 38	GST04 - 2E □□□ 080C42	E82MV 152_4B		
	154	66	1.8	9.010	45 - 268	55 - 38	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	141	72	0.9	9.856	41 - 245	61 - 42	GST04 - 2E □□□ 080C42	E82MV 152_4B		
	139	73	1.7	10.000	40 - 242	62 - 42	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	124	82	1.6	11.200	36 - 216	69 - 47	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	107	95	1.4	13.016	31 - 186	80 - 55	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	111	92	3.2	12.571	32 - 192	77 - 53	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	97	105	1.3	14.356	28 - 168	88 - 60	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	97	105	2.9	14.286	28 - 169	88 - 60	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	86	119	1.3	16.190	25 - 149	100 - 68	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	90	113	2.8	15.400	26 - 157	95 - 65	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	79	128	1.1	17.500	23 - 138	108 - 74	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	79	128	2.4	17.500	23 - 138	108 - 74	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	69	147	1.1	20.044	20 - 121	123 - 84	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	69	147	2.4	20.044	20 - 121	123 - 84	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	61	167	0.9	22.778	18 - 106	140 - 96	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	61	167	1.9	22.778	18 - 106	140 - 96	GST06 - 2E □□□ 80C42	E82MV 152_4B		
	56	183	0.9	24.933	16 - 97	154 - 105	GST05 - 2E □□□ 080C42	E82MV 152_4B		
	56	183	2.0	24.933	16 - 97	154 - 105	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	49	208	1.5	28.333	14 - 85	175 - 119	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	50	205	3.1	27.917	14 - 87	172 - 118	GST07 - 2E □□□ 080C42	E82MV 152_4B		
	43	237	1.5	32.267	12 - 75	199 - 136	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	43	237	2.9	32.267	12 - 75	199 - 136	GST07 - 2E □□□ 080C42	E82MV 152_4B		
	38	269	1.2	36.667	11 - 66	226 - 155	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	38	269	2.6	36.667	11 - 66	226 - 155	GST07 - 2E □□□ 080C42	E82MV 152_4B		
	36	287	1.3	39.160	10 - 62	241 - 165	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	36	287	2.3	39.160	10 - 62	241 - 165	GST07 - 2E □□□ 080C42	E82MV 152_4B		
	31	326	1.0	44.500	9.1 - 54	274 - 188	GST06 - 2E □□□ 080C42	E82MV 152_4B		
	31	326	2.2	44.500	9.1 - 54	274 - 188	GST07 - 2E □□□ 080C42	E82MV 152_4B		
	28	363	1.4	49.500	8.1 - 49	305 - 209	GST07 - 2E □□□ 080C42	E82MV 152_4B		
	25	412	1.4	56.250	7.2 - 43	346 - 237	GST07 - 2E □□□ 080C42	E82MV 152_4B		
	<b>GST □□ - 3E</b>									
	21	470	1.5	65.079	6.2 - 37	395 - 270	GST07 - 3E □□□ 080C42	E82MV 152_4B		3-78
20	507	1.4	70.156	5.7 - 34	426 - 291	GST07 - 3E □□□ 080C42	E82MV 152_4B			
19	519	2.9	71.867	5.6 - 34	436 - 298	GST09 - 3E □□□ 080C42	E82MV 152_4B			
17	576	1.2	79.762	5.1 - 30	484 - 331	GST07 - 3E □□□ 080C42	E82MV 152_4B			
17	590	2.7	81.667	4.9 - 30	495 - 339	GST09 - 3E □□□ 080C42	E82MV 152_4B			
16	621	1.1	85.983	4.7 - 28	522 - 357	GST07 - 3E □□□ 080C42	E82MV 152_4B			
15	676	2.4	93.541	4.3 - 26	567 - 388	GST09 - 3E □□□ 080C42	E82MV 152_4B			
14	706	1.0	97.708	4.1 - 25	593 - 406	GST07 - 3E □□□ 080C42	E82MV 152_4B			
14	716	2.2	99.167	4.1 - 24	602 - 412	GST09 - 3E □□□ 080C42	E82MV 152_4B			
12	808	0.9	111.915	3.6 - 22	679 - 465	GST07 - 3E □□□ 080C42	E82MV 152_4B			
12	820	2.0	113.585	3.5 - 21	689 - 471	GST09 - 3E □□□ 080C42	E82MV 152_4B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.1 kW</b>							<b>GST □□ - 3E</b>		3-78
	11	932	1.7	129.074	3.1 - 19	783 - 536	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	11	932	3.0	129.074	3.1 - 19	783 - 536	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	9.8	1020	1.6	141.289	2.9 - 17	857 - 586	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	9.5	1062	2.5	146.993	2.7 - 16	892 - 610	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	8.7	1160	1.4	160.556	2.5 - 15	974 - 666	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	8.8	1143	2.5	158.194	2.5 - 15	960 - 657	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	7.6	1321	1.2	182.844	2.2 - 13	1109 - 759	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	7.7	1301	2.1	180.156	2.2 - 13	1093 - 748	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	6.7	1501	1.1	207.778	1.9 - 12	1260 - 862	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	6.7	1501	1.9	207.778	1.9 - 12	1260 - 862	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	5.9	1709	0.9	236.622	1.7 - 10	1435 - 982	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	5.9	1709	1.6	236.622	1.7 - 10	1435 - 982	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	5.5	1821	0.9	252.167	1.6 - 10	1530 - 1047	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	5.5	1821	1.5	252.167	1.6 - 10	1530 - 1047	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	5.2	1942	0.8	268.889	1.5 - 9	1631 - 1116	GST09 - 3E □□□ 080C42	E82MV 152_4B	
	5.2	1942	1.5	268.889	1.5 - 9	1631 - 1116	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	4.3	2357	1.2	326.333	1.2 - 7	1980 - 1354	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	3.8	2622	1.0	363.000	1.1 - 7	2202 - 1507	GST11 - 3E □□□ 080C42	E82MV 152_4B	
	3.4	2979	1.0	412.500	1.0 - 6	2502 - 1712	GST11 - 3E □□□ 080C42	E82MV 152_4B	
<b>1.5 kW</b>							<b>GST □□ - 1E</b>		3-72
	869	16	1.2	1.600	252 - 1512	14.5 - 9.3	GST04 - 1E □□□ 090C32	E82MV 152_4B	
	869	16	2.8	1.600	252 - 1512	14.5 - 9.3	GST05 - 1E □□□ 090C32	E82MV 152_4B	
	679	21	1.1	2.048	197 - 1181	18 - 12	GST04 - 1E □□□ 090C32	E82MV 152_4B	
	679	21	2.5	2.048	197 - 1181	18 - 12	GST05 - 1E □□□ 090C32	E82MV 152_4B	
	621	23	1.1	2.240	180 - 1080	20 - 13	GST04 - 1E □□□ 090C32	E82MV 152_4B	
	621	23	2.3	2.240	180 - 1080	20 - 13	GST05 - 1E □□□ 090C32	E82MV 152_4B	
	487	29	0.9	2.857	141 - 847	26 - 17	GST04 - 1E □□□ 090C32	E82MV 152_4B	
	487	29	1.8	2.857	141 - 847	26 - 17	GST05 - 1E □□□ 090C32	E82MV 152_4B	
	487	29	3.2	2.857	141 - 847	26 - 17	GST06 - 1E □□□ 090C32	E82MV 152_4B	
	397	36	1.5	3.500	115 - 691	32 - 20	GST05 - 1E □□□ 090C32	E82MV 152_4B	
	397	36	3.0	3.500	115 - 691	32 - 20	GST06 - 1E □□□ 090C32	E82MV 152_4B	
	305	46	1.2	4.556	88 - 531	41 - 27	GST05 - 1E □□□ 090C32	E82MV 152_4B	
	305	46	2.3	4.556	88 - 531	41 - 27	GST06 - 1E □□□ 090C32	E82MV 152_4B	
	245	58	0.9	5.667	71 - 427	51 - 33	GST05 - 1E □□□ 090C32	E82MV 152_4B	
	245	58	1.8	5.667	71 - 427	51 - 33	GST06 - 1E □□□ 090C32	E82MV 152_4B	
	249	57	2.8	5.583	72 - 433	50 - 33	GST07 - 1E □□□ 090C32	E82MV 152_4B	
	190	74	1.4	7.333	55 - 330	66 - 43	GST06 - 1E □□□ 090C32	E82MV 152_4B	
	190	74	2.4	7.333	55 - 330	66 - 43	GST07 - 1E □□□ 090C32	E82MV 152_4B	
	156	90	0.9	8.900	45 - 272	80 - 52	GST06 - 1E □□□ 090C32	E82MV 152_4B	
	156	90	2.0	8.900	45 - 272	80 - 52	GST07 - 1E □□□ 090C32	E82MV 152_4B	
	124	114	1.2	11.250	36 - 215	102 - 66	GST07 - 1E □□□ 090C32	E82MV 152_4B	
	124	114	1.9	11.250	36 - 215	102 - 66	GST09 - 1E □□□ 090C32	E82MV 152_4B	
							<b>GST □□ - 2E</b>		
	470	30	1.3	2.956	136 - 818	26 - 17	GST04 - 2E □□□ 090C32	E82MV 152_4B	
	470	30	2.1	2.956	136 - 818	26 - 17	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	417	33	1.3	3.333	121 - 726	30 - 19	GST04 - 2E □□□ 090C32	E82MV 152_4B	
	417	33	2.3	3.333	121 - 726	30 - 19	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	343	41	1.1	4.053	99 - 597	36 - 23	GST04 - 2E □□□ 090C32	E82MV 152_4B	
	343	41	2.0	4.053	99 - 597	36 - 23	GST05 - 2E □□□ 090C32	E82MV 152_4B	

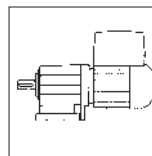
Thermal limit rating not taken into account (see Note on page 3-3).

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# Helical geared motors with motec

## Selection tables



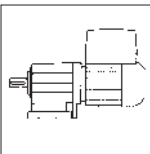
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.5 kW</b>	<b>GST □□ - 2E</b>								
	304	46	1.1	4.571	88 - 529	41 - 26	GST04 - 2E □□□ 090C32	E82MV 152_4B	3-75
	304	46	2.0	4.571	88 - 529	41 - 26	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	268	52	1.0	5.187	78 - 466	46 - 30	GST04 - 2E □□□ 090C32	E82MV 152_4B	
	268	52	1.7	5.187	78 - 466	46 - 30	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	238	59	0.9	5.850	69 - 413	52 - 34	GST04 - 2E □□□ 090C32	E82MV 152_4B	
	238	59	1.7	5.850	69 - 413	52 - 34	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	217	64	0.9	6.400	63 - 378	57 - 37	GST04 - 2E □□□ 090C32	E82MV 152_4B	
	217	64	1.6	6.400	63 - 378	57 - 37	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	197	70	0.8	7.040	57 - 344	63 - 40	GST04 - 2E □□□ 090C32	E82MV 152_4B	
	192	72	1.5	7.238	56 - 334	64 - 42	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	170	82	1.4	8.163	49 - 296	73 - 47	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	170	82	3.1	8.163	49 - 296	73 - 47	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	154	90	1.3	9.010	45 - 268	80 - 52	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	154	90	2.9	9.010	45 - 268	80 - 52	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	139	100	1.2	10.000	40 - 242	89 - 57	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	139	100	2.7	10.000	40 - 242	89 - 57	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	124	112	1.1	11.200	36 - 216	100 - 64	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	124	112	2.5	11.200	36 - 216	100 - 64	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	107	130	1.1	13.016	31 - 186	116 - 75	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	111	126	2.4	12.571	32 - 192	112 - 72	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	97	144	1.0	14.356	28 - 168	128 - 82	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	97	143	2.2	14.286	28 - 169	127 - 82	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	86	162	0.9	16.190	25 - 149	144 - 93	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	90	154	2.1	15.400	26 - 157	137 - 88	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	79	175	0.8	17.500	23 - 138	156 - 101	GST05 - 2E □□□ 090C32	E82MV 152_4B	
	79	175	1.8	17.500	23 - 138	156 - 101	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	69	200	1.8	20.044	20 - 121	178 - 115	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	61	228	1.4	22.778	18 - 106	203 - 131	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	61	228	3.0	22.778	18 - 106	203 - 131	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	56	249	1.4	24.933	16 - 97	222 - 143	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	57	246	2.8	24.567	16 - 98	219 - 141	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	49	283	1.1	28.333	14 - 85	252 - 163	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	50	279	2.5	27.917	14 - 87	248 - 160	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	43	323	1.1	32.267	12 - 75	287 - 185	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	43	323	2.2	32.267	12 - 75	287 - 185	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	38	367	0.9	36.667	11 - 66	326 - 211	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	38	367	1.9	36.667	11 - 66	326 - 211	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	38	367	2.8	36.667	11 - 66	326 - 211	GST09 - 2E □□□ 090C32	E82MV 152_4B	
	36	392	0.9	39.160	10 - 62	348 - 225	GST06 - 2E □□□ 090C32	E82MV 152_4B	
	36	392	1.8	39.160	10 - 62	348 - 225	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	36	392	2.5	39.160	10 - 62	348 - 225	GST09 - 2E □□□ 090C32	E82MV 152_4B	
	31	445	1.6	44.500	9.1 - 54	396 - 256	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	31	445	2.5	44.500	9.1 - 54	396 - 256	GST09 - 2E □□□ 090C32	E82MV 152_4B	
	28	495	1.2	49.500	8.1 - 49	440 - 284	GST07 - 2E □□□ 090C32	E82MV 152_4B	
	28	495	1.9	49.500	8.1 - 49	440 - 284	GST09 - 2E □□□ 090C32	E82MV 152_4B	
25	562	1.2	56.250	7.2 - 43	501 - 323	GST07 - 2E □□□ 090C32	E82MV 152_4B		
25	562	1.9	56.250	7.2 - 43	501 - 323	GST09 - 2E □□□ 090C32	E82MV 152_4B		
<b>GST □□ - 3E</b>									
21	641	1.1	65.079	6.2 - 37	570 - 368	GST07 - 3E □□□ 090C32	E82MV 152_4B	3-78	
23	594	2.6	60.278	6.7 - 40	528 - 341	GST09 - 3E □□□ 090C32	E82MV 152_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>1.5 kW</b>							<b>GST □□ - 3E</b>		3-78	
	20	691	1.0	70.156	5.7 - 34	615 - 397	GST07 - 3E □□□ 090C32	E82MV 152_4B		
	19	708	2.1	71.867	5.6 - 34	630 - 407	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	17	786	0.9	79.762	5.1 - 30	699 - 451	GST07 - 3E □□□ 090C32	E82MV 152_4B		
	17	804	2.0	81.667	4.9 - 30	716 - 462	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	16	847	0.8	85.983	4.7 - 28	754 - 487	GST07 - 3E □□□ 090C32	E82MV 152_4B		
	15	921	1.8	93.541	4.3 - 26	820 - 529	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	14	977	1.6	99.167	4.1 - 24	869 - 561	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	12	1119	1.4	113.585	3.5 - 21	996 - 643	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	11	1271	1.3	129.074	3.1 - 19	1131 - 731	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	11	1271	2.2	129.074	3.1 - 19	1131 - 731	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	9.8	1391	1.2	141.289	2.9 - 17	1238 - 800	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	9.5	1448	1.9	146.993	2.7 - 16	1288 - 832	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	8.7	1581	1.0	160.556	2.5 - 15	1407 - 909	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	8.8	1558	1.8	158.194	2.5 - 15	1387 - 895	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	7.6	1801	0.9	182.844	2.2 - 13	1603 - 1035	GST09 - 3E □□□ 090C32	E82MV 152_4B		
	7.7	1774	1.5	180.156	2.2 - 13	1579 - 1020	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	6.7	2046	1.4	207.778	1.9 - 12	1821 - 1176	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	6.8	2016	2.8	204.722	2.0 - 12	1794 - 1159	GST14 - 3E □□□ 090C32	E82MV 152_4B		
	5.9	2330	1.2	236.622	1.7 - 10	2074 - 1339	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	5.9	2330	2.5	236.622	1.7 - 10	2074 - 1339	GST14 - 3E □□□ 090C32	E82MV 152_4B		
	5.5	2483	1.1	252.167	1.6 - 10	2210 - 1427	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	5.6	2447	2.4	248.458	1.6 - 10	2178 - 1406	GST14 - 3E □□□ 090C32	E82MV 152_4B		
	5.2	2648	1.1	268.889	1.5 - 9	2357 - 1522	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	5.2	2648	2.2	268.889	1.5 - 9	2357 - 1522	GST14 - 3E □□□ 090C32	E82MV 152_4B		
	4.3	3214	0.9	326.333	1.2 - 7	2860 - 1847	GST11 - 3E □□□ 090C32	E82MV 152_4B		
	4.3	3214	1.8	326.333	1.2 - 7	2860 - 1847	GST14 - 3E □□□ 090C32	E82MV 152_4B		
	3.8	3575	1.6	363.000	1.1 - 7	3182 - 2055	GST14 - 3E □□□ 090C32	E82MV 152_4B		
	3.4	4062	1.5	412.500	1.0 - 6	3616 - 2335	GST14 - 3E □□□ 090C32	E82MV 152_4B		
	<b>2.2 kW</b>							<b>GST □□ - 1E</b>		
875		24	1.9	1.600	254 - 1523	21 - 14	GST05 - 1E □□□ 100-12	E82MV 222_4B		
875		24	2.6	1.600	254 - 1523	21 - 14	GST06 - 1E □□□ 100-12	E82MV 222_4B		
684		30	1.7	2.048	198 - 1190	27 - 17	GST05 - 1E □□□ 100-12	E82MV 222_4B		
684		30	2.4	2.048	198 - 1190	27 - 17	GST06 - 1E □□□ 100-12	E82MV 222_4B		
625		33	1.6	2.240	181 - 1088	29 - 19	GST05 - 1E □□□ 100-12	E82MV 222_4B		
625		33	2.4	2.240	181 - 1088	29 - 19	GST06 - 1E □□□ 100-12	E82MV 222_4B		
490		42	1.3	2.857	142 - 853	38 - 24	GST05 - 1E □□□ 100-12	E82MV 222_4B		
490		42	2.2	2.857	142 - 853	38 - 24	GST06 - 1E □□□ 100-12	E82MV 222_4B		
400		52	1.0	3.500	116 - 696	46 - 30	GST05 - 1E □□□ 100-12	E82MV 222_4B		
400		52	2.0	3.500	116 - 696	46 - 30	GST06 - 1E □□□ 100-12	E82MV 222_4B		
307		67	1.6	4.556	89 - 535	60 - 39	GST06 - 1E □□□ 100-12	E82MV 222_4B		
307		67	2.8	4.556	89 - 535	60 - 39	GST07 - 1E □□□ 100-12	E82MV 222_4B		
247		84	1.3	5.667	72 - 430	75 - 48	GST06 - 1E □□□ 100-12	E82MV 222_4B		
251		83	2.4	5.583	73 - 436	73 - 47	GST07 - 1E □□□ 100-12	E82MV 222_4B		
191		108	1.8	7.333	55 - 332	96 - 62	GST07 - 1E □□□ 100-12	E82MV 222_4B		
191		108	2.7	7.333	55 - 332	96 - 62	GST09 - 1E □□□ 100-12	E82MV 222_4B		
157		132	1.4	8.900	46 - 274	117 - 76	GST07 - 1E □□□ 100-12	E82MV 222_4B		
157		132	2.3	8.900	46 - 274	117 - 76	GST09 - 1E □□□ 100-12	E82MV 222_4B		
124		166	1.8	11.250	36 - 217	148 - 96	GST09 - 1E □□□ 100-12	E82MV 222_4B		
						<b>GST □□ - 2E</b>		3-75		
474		43	1.5	2.956	137 - 824	38 - 25	GST05 - 2E □□□ 100-12		E82MV 222_4B	

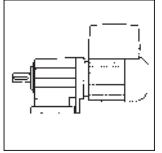
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical geared motors with motec

## Selection tables

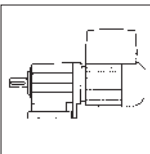


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>2.2 kW</b>							<b>GST □□ - 2E</b>		3-75
	420	49	1.6	3.333	122 - 731	43 - 28	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	345	59	1.4	4.053	100 - 601	53 - 34	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	337	61	3.2	4.160	98 - 586	54 - 35	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	306	67	1.4	4.571	89 - 533	59 - 38	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	306	67	3.0	4.571	89 - 533	59 - 38	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	270	76	1.2	5.187	78 - 470	67 - 43	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	263	78	2.7	5.324	76 - 458	69 - 45	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	239	85	1.2	5.850	69 - 416	76 - 49	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	239	85	2.6	5.850	69 - 416	76 - 49	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	219	93	1.1	6.400	63 - 381	83 - 54	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	219	93	2.5	6.400	63 - 381	83 - 54	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	193	105	1.0	7.238	56 - 337	94 - 61	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	199	103	2.3	7.040	58 - 346	91 - 59	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	172	119	1.0	8.163	50 - 298	106 - 68	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	172	119	2.1	8.163	50 - 298	106 - 68	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	155	131	0.9	9.010	45 - 270	117 - 75	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	155	131	2.0	9.010	45 - 270	117 - 75	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	140	146	0.9	10.000	41 - 244	130 - 84	GST05 - 2E □□□ 100-12	E82MV 222_4B	
	140	146	1.9	10.000	41 - 244	130 - 84	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	125	163	1.7	11.200	36 - 218	145 - 94	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	111	183	1.6	12.571	32 - 194	163 - 105	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	98	208	1.5	14.286	28 - 171	185 - 120	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	98	208	3.1	14.286	28 - 171	185 - 120	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	91	224	1.4	15.400	26 - 158	200 - 129	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	91	224	2.9	15.400	26 - 158	200 - 129	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	80	255	1.2	17.500	23 - 139	227 - 146	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	80	255	2.7	17.500	23 - 139	227 - 146	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	70	292	1.2	20.044	20 - 122	260 - 168	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	70	292	2.4	20.044	20 - 122	260 - 168	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	62	332	1.0	22.778	18 - 107	295 - 191	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	62	332	2.1	22.778	18 - 107	295 - 191	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	56	363	1.0	24.933	16 - 98	323 - 209	GST06 - 2E □□□ 100-12	E82MV 222_4B	
	57	358	2.0	24.567	17 - 99	318 - 206	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	50	406	1.7	27.917	15 - 87	362 - 234	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	43	470	1.5	32.267	13 - 75	418 - 270	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	43	470	2.7	32.267	13 - 75	418 - 270	GST09 - 2E □□□ 100-12	E82MV 222_4B	
	38	534	1.3	36.667	11 - 66	475 - 307	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	38	534	2.7	36.667	11 - 66	475 - 307	GST09 - 2E □□□ 100-12	E82MV 222_4B	
	36	570	1.2	39.160	10 - 62	507 - 328	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	36	570	2.3	39.160	10 - 62	507 - 328	GST09 - 2E □□□ 100-12	E82MV 222_4B	
	32	648	1.1	44.500	9.1 - 55	577 - 372	GST07 - 2E □□□ 100-12	E82MV 222_4B	
	32	648	2.3	44.500	9.1 - 55	577 - 372	GST09 - 2E □□□ 100-12	E82MV 222_4B	
	28	721	1.8	49.500	8.2 - 49	641 - 414	GST09 - 2E □□□ 100-12	E82MV 222_4B	
	28	721	2.3	49.500	8.2 - 49	641 - 414	GST11 - 2E □□□ 100-12	E82MV 222_4B	
	25	819	1.8	56.250	7.2 - 43	729 - 471	GST09 - 2E □□□ 100-12	E82MV 222_4B	
	25	819	2.3	56.250	7.2 - 43	729 - 471	GST11 - 2E □□□ 100-12	E82MV 222_4B	
								<b>GST □□ - 3E</b>	
23	864	1.8	60.278	6.7 - 40	769 - 497	GST09 - 3E □□□ 100-12	E82MV 222_4B		
23	878	3.1	61.250	6.6 - 40	782 - 505	GST11 - 3E □□□ 100-12	E82MV 222_4B		
20	1031	1.4	71.867	5.6 - 34	917 - 592	GST09 - 3E □□□ 100-12	E82MV 222_4B		
20	1018	2.6	71.011	5.7 - 34	906 - 585	GST11 - 3E □□□ 100-12	E82MV 222_4B		
17	1171	1.4	81.667	5.0 - 30	1042 - 673	GST09 - 3E □□□ 100-12	E82MV 222_4B		
17	1157	2.4	80.694	5.0 - 30	1030 - 665	GST11 - 3E □□□ 100-12	E82MV 222_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>2.2 kW</b>							<b>GST □□ - 3E</b>		3-78		
	15	1342	1.2	93.541	4.3 - 26	1194 - 771	GST09 - 3E □□□ 100-12	E82MV 222_4B			
	16	1252	2.1	87.267	4.7 - 28	1114 - 719	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	14	1422	1.1	99.167	4.1 - 25	1266 - 817	GST09 - 3E □□□ 100-12	E82MV 222_4B			
	14	1422	2.0	99.167	4.1 - 25	1266 - 817	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	12	1629	1.0	113.585	3.6 - 21	1450 - 936	GST09 - 3E □□□ 100-12	E82MV 222_4B			
	12	1620	1.7	112.933	3.6 - 22	1441 - 931	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	11	1851	0.9	129.074	3.1 - 19	1647 - 1064	GST09 - 3E □□□ 100-12	E82MV 222_4B			
	11	1851	1.5	129.074	3.1 - 19	1647 - 1064	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	11	1868	3.2	130.278	3.1 - 19	1663 - 1074	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	9.5	2108	1.3	146.993	2.8 - 17	1876 - 1211	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	10	1996	2.9	139.211	2.9 - 17	1777 - 1147	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	8.9	2269	1.2	158.194	2.6 - 15	2019 - 1304	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	8.9	2269	2.6	158.194	2.6 - 15	2019 - 1304	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	7.8	2584	1.0	180.156	2.3 - 14	2299 - 1485	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	8.2	2454	2.4	171.111	2.4 - 14	2184 - 1410	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	6.7	2980	0.9	207.778	2.0 - 12	2652 - 1712	GST11 - 3E □□□ 100-12	E82MV 222_4B			
	6.8	2936	2.0	204.722	2.0 - 12	2613 - 1687	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	5.9	3393	1.7	236.622	1.7 - 10	3020 - 1950	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	5.6	3563	1.7	248.458	1.6 - 10	3171 - 2048	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	5.2	3856	1.5	268.889	1.5 - 9	3432 - 2216	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	4.3	4680	1.3	326.333	1.2 - 7	4165 - 2690	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	3.9	5206	1.1	363.000	1.1 - 7	4633 - 2992	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	3.4	5916	1.0	412.500	1.0 - 6	5265 - 3400	GST14 - 3E □□□ 100-12	E82MV 222_4B			
	<b>3 kW</b>							<b>GST □□ - 1E</b>			3-72
		875	32	1.4	1.600	254 - 1523	29 - 19	GST05 - 1E □□□ 100-32		E82MV 302_4B	
875		32	1.9	1.600	254 - 1523	29 - 19	GST06 - 1E □□□ 100-32	E82MV 302_4B			
684		41	1.3	2.048	198 - 1190	37 - 24	GST05 - 1E □□□ 100-32	E82MV 302_4B			
684		41	1.8	2.048	198 - 1190	37 - 24	GST06 - 1E □□□ 100-32	E82MV 302_4B			
700		40	3.1	2.000	203 - 1218	36 - 23	GST07 - 1E □□□ 100-32	E82MV 302_4B			
625		45	1.2	2.240	181 - 1088	40 - 26	GST05 - 1E □□□ 100-32	E82MV 302_4B			
625		45	1.7	2.240	181 - 1088	40 - 26	GST06 - 1E □□□ 100-32	E82MV 302_4B			
625		45	3.0	2.240	181 - 1088	40 - 26	GST07 - 1E □□□ 100-32	E82MV 302_4B			
490		58	0.9	2.857	142 - 853	51 - 33	GST05 - 1E □□□ 100-32	E82MV 302_4B			
490		58	1.6	2.857	142 - 853	51 - 33	GST06 - 1E □□□ 100-32	E82MV 302_4B			
490		58	2.8	2.857	142 - 853	51 - 33	GST07 - 1E □□□ 100-32	E82MV 302_4B			
400		71	1.5	3.500	116 - 696	63 - 41	GST06 - 1E □□□ 100-32	E82MV 302_4B			
400		71	2.4	3.500	116 - 696	63 - 41	GST07 - 1E □□□ 100-32	E82MV 302_4B			
307		92	1.1	4.556	89 - 535	82 - 53	GST06 - 1E □□□ 100-32	E82MV 302_4B			
307		92	2.0	4.556	89 - 535	82 - 53	GST07 - 1E □□□ 100-32	E82MV 302_4B			
247		114	0.9	5.667	72 - 430	102 - 66	GST06 - 1E □□□ 100-32	E82MV 302_4B			
251		113	1.7	5.583	73 - 436	100 - 65	GST07 - 1E □□□ 100-32	E82MV 302_4B			
247		114	2.5	5.667	72 - 430	102 - 66	GST09 - 1E □□□ 100-32	E82MV 302_4B			
191		148	1.3	7.333	55 - 332	132 - 85	GST07 - 1E □□□ 100-32	E82MV 302_4B			
191		148	2.0	7.333	55 - 332	132 - 85	GST09 - 1E □□□ 100-32	E82MV 302_4B			
157		179	1.0	8.900	46 - 274	160 - 103	GST07 - 1E □□□ 100-32	E82MV 302_4B			
157		179	1.7	8.900	46 - 274	160 - 103	GST09 - 1E □□□ 100-32	E82MV 302_4B			
124		227	1.3	11.250	36 - 217	202 - 130	GST09 - 1E □□□ 100-32	E82MV 302_4B			
						<b>GST □□ - 2E</b>		3-75			
474		59	1.1	2.956	137 - 824	52 - 34	GST05 - 2E □□□ 100-32		E82MV 302_4B		
462		60	2.8	3.033	134 - 803	54 - 35	GST06 - 2E □□□ 100-32		E82MV 302_4B		
420		66	1.2	3.333	122 - 731	59 - 38	GST05 - 2E □□□ 100-32		E82MV 302_4B		
420		66	2.6	3.333	122 - 731	59 - 38	GST06 - 2E □□□ 100-32	E82MV 302_4B			

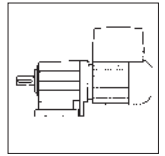
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical geared motors with motec

## Selection tables

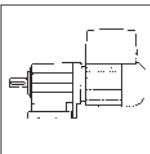


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>3 kW</b>	345	81	1.0	4.053	100 - 601	72 - 46	GST05 - 2E □□□ 100-32	E82MV 302_4B	3-75
	337	83	2.3	4.160	98 - 586	74 - 47	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	306	91	1.0	4.571	89 - 533	81 - 52	GST05 - 2E □□□ 100-32	E82MV 302_4B	
	306	91	2.2	4.571	89 - 533	81 - 52	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	270	103	0.9	5.187	78 - 470	92 - 59	GST05 - 2E □□□ 100-32	E82MV 302_4B	
	263	106	2.0	5.324	76 - 458	94 - 61	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	239	116	0.9	5.850	69 - 416	103 - 67	GST05 - 2E □□□ 100-32	E82MV 302_4B	
	239	116	1.9	5.850	69 - 416	103 - 67	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	245	113	4.0	5.714	71 - 426	101 - 65	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	219	127	0.8	6.400	63 - 381	113 - 73	GST05 - 2E □□□ 100-32	E82MV 302_4B	
	219	127	1.8	6.400	63 - 381	113 - 73	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	219	127	3.6	6.400	63 - 381	113 - 73	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	199	140	1.7	7.040	58 - 346	124 - 80	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	192	145	4.1	7.305	56 - 333	129 - 83	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	172	162	1.6	8.163	50 - 298	144 - 93	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	174	159	4.1	8.027	51 - 303	142 - 92	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	155	179	1.5	9.010	45 - 270	159 - 103	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	159	175	3.0	8.800	46 - 277	155 - 100	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	140	199	1.4	10.000	41 - 244	177 - 114	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	142	196	2.8	9.856	41 - 247	174 - 112	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	125	222	1.3	11.200	36 - 218	198 - 128	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	125	222	2.7	11.200	36 - 218	198 - 128	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	111	250	1.2	12.571	32 - 194	222 - 143	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	111	250	2.4	12.571	32 - 194	222 - 143	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	98	284	1.1	14.286	28 - 171	252 - 163	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	98	284	2.3	14.286	28 - 171	252 - 163	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	91	306	1.0	15.400	26 - 158	272 - 176	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	91	306	2.1	15.400	26 - 158	272 - 176	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	80	347	0.9	17.500	23 - 139	309 - 200	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	80	347	2.0	17.500	23 - 139	309 - 200	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	70	398	0.9	20.044	20 - 122	354 - 229	GST06 - 2E □□□ 100-32	E82MV 302_4B	
	70	398	1.7	20.044	20 - 122	354 - 229	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	68	408	2.9	20.533	20 - 119	363 - 234	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	62	452	1.5	22.778	18 - 107	402 - 260	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	60	463	2.9	23.333	17 - 104	412 - 266	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	57	488	1.5	24.567	17 - 99	434 - 280	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	56	495	2.5	24.933	16 - 98	441 - 284	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	50	554	1.3	27.917	15 - 87	493 - 319	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	49	563	2.5	28.333	14 - 86	501 - 323	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	43	641	1.1	32.267	13 - 75	570 - 368	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	43	641	2.0	32.267	13 - 75	570 - 368	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	38	728	1.0	36.667	11 - 66	648 - 418	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	38	728	2.0	36.667	11 - 66	648 - 418	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	36	778	0.9	39.160	10 - 62	692 - 447	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	36	778	1.7	39.160	10 - 62	692 - 447	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	36	778	2.1	39.160	10 - 62	692 - 447	GST11 - 2E □□□ 100-32	E82MV 302_4B	
	32	884	0.8	44.500	9.1 - 55	786 - 508	GST07 - 2E □□□ 100-32	E82MV 302_4B	
	32	884	1.7	44.500	9.1 - 55	786 - 508	GST09 - 2E □□□ 100-32	E82MV 302_4B	
	32	884	2.1	44.500	9.1 - 55	786 - 508	GST11 - 2E □□□ 100-32	E82MV 302_4B	
	28	983	1.3	49.500	8.2 - 49	875 - 565	GST09 - 2E □□□ 100-32	E82MV 302_4B	
28	983	1.7	49.500	8.2 - 49	875 - 565	GST11 - 2E □□□ 100-32	E82MV 302_4B		
25	1117	1.3	56.250	7.2 - 43	994 - 642	GST09 - 2E □□□ 100-32	E82MV 302_4B		
25	1117	1.7	56.250	7.2 - 43	994 - 642	GST11 - 2E □□□ 100-32	E82MV 302_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>3 kW</b>							<b>GST □□ - 3E</b>		3-78	
	23	1179	1.3	60.278	6.7 - 40	1049 - 677	GST09 - 3E □□□ 100-32	E82MV 302_4B		
	23	1198	2.3	61.250	6.6 - 40	1066 - 688	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	20	1405	1.1	71.867	5.6 - 34	1251 - 808	GST09 - 3E □□□ 100-32	E82MV 302_4B		
	20	1389	1.9	71.011	5.7 - 34	1236 - 798	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	17	1597	1.0	81.667	5.0 - 30	1421 - 918	GST09 - 3E □□□ 100-32	E82MV 302_4B		
	17	1578	1.8	80.694	5.0 - 30	1404 - 907	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	15	1829	0.9	93.541	4.3 - 26	1628 - 1051	GST09 - 3E □□□ 100-32	E82MV 302_4B		
	16	1707	1.6	87.267	4.7 - 28	1519 - 981	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	15	1829	2.9	93.541	4.3 - 26	1628 - 1051	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	14	1939	0.8	99.167	4.1 - 25	1726 - 1115	GST09 - 3E □□□ 100-32	E82MV 302_4B		
	14	1939	1.5	99.167	4.1 - 25	1726 - 1115	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	12	2209	1.2	112.933	3.6 - 22	1966 - 1269	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	13	2079	2.9	106.296	3.8 - 23	1850 - 1195	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	11	2524	1.1	129.074	3.1 - 19	2246 - 1451	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	11	2548	2.3	130.278	3.1 - 19	2267 - 1464	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	9.5	2875	0.9	146.993	2.8 - 17	2558 - 1652	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	10	2722	2.1	139.211	2.9 - 17	2423 - 1565	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	8.9	3094	0.9	158.194	2.6 - 15	2753 - 1778	GST11 - 3E □□□ 100-32	E82MV 302_4B		
	8.9	3094	1.9	158.194	2.6 - 15	2753 - 1778	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	8.2	3346	1.8	171.111	2.4 - 14	2978 - 1923	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	6.8	4004	1.5	204.722	2.0 - 12	3563 - 2301	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	5.9	4627	1.3	236.622	1.7 - 10	4118 - 2659	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	5.6	4859	1.2	248.458	1.6 - 10	4324 - 2792	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	5.2	5258	1.1	268.889	1.5 - 9	4680 - 3022	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	4.3	6382	0.9	326.333	1.2 - 7	5680 - 3668	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	3.9	7099	0.8	363.000	1.1 - 7	6318 - 4080	GST14 - 3E □□□ 100-32	E82MV 302_4B		
	<b>4 kW</b>							<b>GST □□ - 1E</b>		
894		42	1.5	1.600	259 - 1555	37 - 24	GST06 - 1E □□□ 112-22	E82MV 402_4B		
880		43	2.5	1.625	255 - 1531	38 - 25	GST07 - 1E □□□ 112-22	E82MV 402_4B		
698		54	1.3	2.048	203 - 1215	48 - 31	GST06 - 1E □□□ 112-22	E82MV 402_4B		
715		53	2.4	2.000	207 - 1244	47 - 30	GST07 - 1E □□□ 112-22	E82MV 402_4B		
638		59	1.3	2.240	185 - 1111	52 - 34	GST06 - 1E □□□ 112-22	E82MV 402_4B		
638		59	2.3	2.240	185 - 1111	52 - 34	GST07 - 1E □□□ 112-22	E82MV 402_4B		
501		75	1.2	2.857	145 - 871	67 - 43	GST06 - 1E □□□ 112-22	E82MV 402_4B		
501		75	2.1	2.857	145 - 871	67 - 43	GST07 - 1E □□□ 112-22	E82MV 402_4B		
409		92	1.1	3.500	118 - 711	82 - 53	GST06 - 1E □□□ 112-22	E82MV 402_4B		
409		92	1.9	3.500	118 - 711	82 - 53	GST07 - 1E □□□ 112-22	E82MV 402_4B		
415		91	3.2	3.444	120 - 722	81 - 52	GST09 - 1E □□□ 112-22	E82MV 402_4B		
314		120	1.6	4.556	91 - 546	107 - 69	GST07 - 1E □□□ 112-22	E82MV 402_4B		
306		123	2.5	4.667	89 - 533	109 - 71	GST09 - 1E □□□ 112-22	E82MV 402_4B		
256		147	1.3	5.583	74 - 446	131 - 84	GST07 - 1E □□□ 112-22	E82MV 402_4B		
252		149	2.2	5.667	73 - 439	133 - 86	GST09 - 1E □□□ 112-22	E82MV 402_4B		
195		193	1.7	7.333	57 - 339	172 - 111	GST09 - 1E □□□ 112-22	E82MV 402_4B		
161		234	1.4	8.900	47 - 280	208 - 135	GST09 - 1E □□□ 112-22	E82MV 402_4B		
						<b>GST □□ - 2E</b>		3-75		
471		79	2.1	3.033	137 - 820	70 - 45	GST06 - 2E □□□ 112-22		E82MV 402_4B	
429		86	2.0	3.333	124 - 746	77 - 50	GST06 - 2E □□□ 112-22	E82MV 402_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

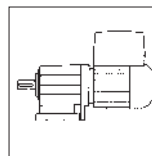
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# Helical geared motors with motec

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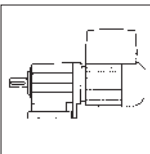


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>4 kW</b>	344	108	1.8	4.160	100 - 598	96 - 62	GST06 - 2E □□□ 112-22	E82MV 402_4B	3-75
	339	110	3.6	4.225	98 - 589	97 - 63	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	313	119	1.7	4.571	91 - 544	105 - 68	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	308	120	3.4	4.643	89 - 536	107 - 69	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	269	138	1.5	5.324	78 - 467	123 - 79	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	275	135	3.2	5.200	80 - 479	120 - 77	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	244	152	1.5	5.850	71 - 425	135 - 87	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	250	148	3.0	5.714	73 - 435	132 - 85	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	223	166	1.4	6.400	65 - 389	148 - 95	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	223	166	2.8	6.400	65 - 389	148 - 95	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	203	182	1.3	7.040	59 - 353	162 - 105	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	200	185	2.6	7.150	58 - 348	165 - 106	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	175	212	1.2	8.163	51 - 305	188 - 122	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	176	211	2.6	8.125	51 - 306	187 - 121	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	159	234	1.1	9.010	46 - 276	208 - 134	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	163	228	2.3	8.800	47 - 283	203 - 131	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	143	259	1.0	10.000	41 - 249	231 - 149	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	145	255	2.2	9.856	42 - 252	227 - 147	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	128	290	1.0	11.200	37 - 222	258 - 167	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	128	290	2.1	11.200	37 - 222	258 - 167	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	114	326	0.9	12.571	33 - 198	290 - 187	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	114	326	1.8	12.571	33 - 198	290 - 187	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	116	320	3.8	12.362	34 - 201	285 - 184	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	100	370	0.8	14.286	29 - 174	330 - 213	GST06 - 2E □□□ 112-22	E82MV 402_4B	
	100	370	1.7	14.286	29 - 174	330 - 213	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	102	364	3.5	14.048	30 - 177	324 - 209	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	93	399	1.6	15.400	27 - 162	355 - 229	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	94	393	3.2	15.156	27 - 164	350 - 226	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	82	454	1.5	17.500	24 - 142	404 - 261	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	83	446	3.1	17.222	24 - 144	397 - 257	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	71	520	1.3	20.044	21 - 124	462 - 299	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	70	532	2.5	20.533	20 - 121	474 - 306	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	63	590	1.2	22.778	18 - 109	525 - 339	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	61	605	2.5	23.333	18 - 107	538 - 348	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	58	637	1.1	24.567	17 - 101	567 - 366	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	57	646	2.2	24.933	17 - 100	575 - 371	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	51	724	1.0	27.917	15 - 89	644 - 416	GST07 - 2E □□□ 112-22	E82MV 402_4B	
	51	734	2.1	28.333	15 - 88	654 - 422	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	44	836	1.7	32.267	13 - 77	744 - 481	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	44	836	2.2	32.267	13 - 77	744 - 481	GST11 - 2E □□□ 112-22	E82MV 402_4B	
	39	950	1.6	36.667	11 - 68	846 - 546	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	39	950	2.2	36.667	11 - 68	846 - 546	GST11 - 2E □□□ 112-22	E82MV 402_4B	
	37	1015	1.4	39.160	11 - 64	903 - 583	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	37	1015	1.8	39.160	11 - 64	903 - 583	GST11 - 2E □□□ 112-22	E82MV 402_4B	
	37	1015	2.2	39.160	11 - 64	903 - 583	GST14 - 2E □□□ 112-22	E82MV 402_4B	
	32	1153	1.3	44.500	9.3 - 56	1026 - 663	GST09 - 2E □□□ 112-22	E82MV 402_4B	
	32	1153	1.8	44.500	9.3 - 56	1026 - 663	GST11 - 2E □□□ 112-22	E82MV 402_4B	
	32	1153	2.2	44.500	9.3 - 56	1026 - 663	GST14 - 2E □□□ 112-22	E82MV 402_4B	
	29	1283	1.4	49.500	8.4 - 50	1142 - 737	GST11 - 2E □□□ 112-22	E82MV 402_4B	
	29	1283	1.8	49.500	8.4 - 50	1142 - 737	GST14 - 2E □□□ 112-22	E82MV 402_4B	
25	1458	1.4	56.250	7.4 - 44	1297 - 838	GST11 - 2E □□□ 112-22	E82MV 402_4B		
25	1458	1.8	56.250	7.4 - 44	1297 - 838	GST14 - 2E □□□ 112-22	E82MV 402_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>4 kW</b>							<b>GST □□ - 3E</b>		3-78		
	24	1539	1.0	60.278	6.9 - 41	1369 - 884	GST09 - 3E □□□ 112-22	E82MV 402_4B			
	23	1564	1.7	61.250	6.8 - 41	1392 - 899	GST11 - 3E □□□ 112-22	E82MV 402_4B			
	24	1514	3.2	59.321	7.0 - 42	1348 - 870	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	20	1835	0.8	71.867	5.8 - 35	1633 - 1054	GST09 - 3E □□□ 112-22	E82MV 402_4B			
	20	1813	1.5	71.011	5.8 - 35	1613 - 1042	GST11 - 3E □□□ 112-22	E82MV 402_4B			
	21	1763	2.8	69.042	6.0 - 36	1569 - 1013	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	18	2060	1.4	80.694	5.1 - 31	1833 - 1184	GST11 - 3E □□□ 112-22	E82MV 402_4B			
	18	2003	2.8	78.457	5.3 - 32	1782 - 1151	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	16	2228	1.2	87.267	4.8 - 29	1983 - 1280	GST11 - 3E □□□ 112-22	E82MV 402_4B			
	15	2388	2.3	93.541	4.4 - 27	2125 - 1372	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	14	2532	1.1	99.167	4.2 - 25	2253 - 1455	GST11 - 3E □□□ 112-22	E82MV 402_4B			
	15	2455	2.4	96.157	4.3 - 26	2185 - 1411	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	13	2883	0.9	112.933	3.7 - 22	2566 - 1657	GST11 - 3E □□□ 112-22	E82MV 402_4B			
	14	2714	2.2	106.296	3.9 - 23	2415 - 1559	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	11	3295	0.9	129.074	3.2 - 19	2932 - 1894	GST11 - 3E □□□ 112-22	E82MV 402_4B			
	11	3326	1.8	130.278	3.2 - 19	2960 - 1911	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	10	3554	1.6	139.211	3.0 - 18	3163 - 2042	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	9.0	4038	1.5	158.194	2.6 - 16	3594 - 2321	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	8.4	4368	1.4	171.111	2.4 - 15	3888 - 2510	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	7.0	5226	1.1	204.722	2.0 - 12	4651 - 3003	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	6.0	6040	1.0	236.622	1.8 - 11	5376 - 3471	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	5.8	6343	0.9	248.458	1.7 - 10	5645 - 3645	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	5.3	6864	0.9	268.889	1.5 - 9	6109 - 3945	GST14 - 3E □□□ 112-22	E82MV 402_4B			
	<b>5.5 kW</b>							<b>GST □□ - 1E</b>			3-72
		900	58	1.1	1.600	261 - 1566	51 - 33	GST06 - 1E □□□ 112-32		E82MV 552_4B	
886		58	1.8	1.625	257 - 1542	52 - 34	GST07 - 1E □□□ 112-32	E82MV 552_4B			
703		74	1.0	2.048	204 - 1224	65 - 42	GST06 - 1E □□□ 112-32	E82MV 552_4B			
720		72	1.7	2.000	209 - 1253	64 - 41	GST07 - 1E □□□ 112-32	E82MV 552_4B			
703		74	3.4	2.048	204 - 1224	65 - 42	GST09 - 1E □□□ 112-32	E82MV 552_4B			
643		81	1.0	2.240	186 - 1119	72 - 46	GST06 - 1E □□□ 112-32	E82MV 552_4B			
643		81	1.7	2.240	186 - 1119	72 - 46	GST07 - 1E □□□ 112-32	E82MV 552_4B			
617		84	3.1	2.333	179 - 1074	75 - 48	GST09 - 1E □□□ 112-32	E82MV 552_4B			
504		103	0.9	2.857	146 - 877	91 - 59	GST06 - 1E □□□ 112-32	E82MV 552_4B			
504		103	1.6	2.857	146 - 877	91 - 59	GST07 - 1E □□□ 112-32	E82MV 552_4B			
513		101	2.8	2.810	149 - 892	90 - 58	GST09 - 1E □□□ 112-32	E82MV 552_4B			
411		126	0.8	3.500	119 - 716	112 - 72	GST06 - 1E □□□ 112-32	E82MV 552_4B			
411		126	1.4	3.500	119 - 716	112 - 72	GST07 - 1E □□□ 112-32	E82MV 552_4B			
418		124	2.4	3.444	121 - 727	110 - 71	GST09 - 1E □□□ 112-32	E82MV 552_4B			
316		164	1.1	4.556	92 - 550	146 - 94	GST07 - 1E □□□ 112-32	E82MV 552_4B			
309		168	1.9	4.667	89 - 537	149 - 96	GST09 - 1E □□□ 112-32	E82MV 552_4B			
258		201	1.0	5.583	75 - 449	179 - 115	GST07 - 1E □□□ 112-32	E82MV 552_4B			
254		204	1.6	5.667	74 - 442	181 - 117	GST09 - 1E □□□ 112-32	E82MV 552_4B			
196		264	1.3	7.333	57 - 342	234 - 151	GST09 - 1E □□□ 112-32	E82MV 552_4B			
162		320	1.1	8.900	47 - 282	285 - 184	GST09 - 1E □□□ 112-32	E82MV 552_4B			
						<b>GST □□ - 2E</b>		3-75			
475		107	1.6	3.033	138 - 826	96 - 62	GST06 - 2E □□□ 112-32		E82MV 552_4B		
472		108	3.0	3.048	137 - 822	96 - 62	GST07 - 2E □□□ 112-32		E82MV 552_4B		
432		118	1.5	3.333	125 - 752	105 - 68	GST06 - 2E □□□ 112-32		E82MV 552_4B		
430		119	3.0	3.350	125 - 748	105 - 68	GST07 - 2E □□□ 112-32		E82MV 552_4B		
346	147	1.3	4.160	100 - 602	131 - 85	GST06 - 2E □□□ 112-32	E82MV 552_4B				
341	150	2.7	4.225	99 - 593	133 - 86	GST07 - 2E □□□ 112-32	E82MV 552_4B				

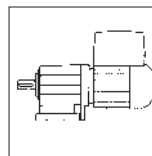
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical geared motors with motec

## Selection tables



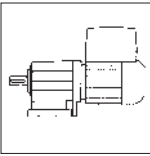
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>5.5 kW</b>	315	162	1.2	4.571	91 - 548	144 - 93	GST06 - 2E □□□ 112-32	E82MV 552_4B	3-75
	310	164	2.5	4.643	90 - 540	146 - 94	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	271	188	1.1	5.324	78 - 471	168 - 108	GST06 - 2E □□□ 112-32	E82MV 552_4B	
	277	184	2.3	5.200	80 - 482	164 - 106	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	246	207	1.1	5.850	71 - 428	184 - 119	GST06 - 2E □□□ 112-32	E82MV 552_4B	
	252	202	2.2	5.714	73 - 438	180 - 116	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	225	227	1.0	6.400	65 - 392	202 - 130	GST06 - 2E □□□ 112-32	E82MV 552_4B	
	225	227	2.0	6.400	65 - 392	202 - 130	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	205	249	1.0	7.040	59 - 356	222 - 143	GST06 - 2E □□□ 112-32	E82MV 552_4B	
	201	253	1.9	7.150	58 - 350	225 - 145	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	197	259	2.8	7.305	57 - 343	230 - 149	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	176	289	0.9	8.163	51 - 307	257 - 166	GST06 - 2E □□□ 112-32	E82MV 552_4B	
	177	288	1.9	8.125	51 - 308	256 - 165	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	179	284	2.8	8.027	52 - 312	253 - 163	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	160	319	0.8	9.010	46 - 278	284 - 183	GST06 - 2E □□□ 112-32	E82MV 552_4B	
	164	311	1.7	8.800	47 - 285	277 - 179	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	160	319	3.4	9.010	46 - 278	284 - 183	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	146	349	1.6	9.856	42 - 254	310 - 200	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	140	363	3.1	10.267	41 - 244	323 - 209	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	129	396	1.5	11.200	37 - 224	353 - 228	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	123	413	2.9	11.667	36 - 215	367 - 237	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	115	445	1.4	12.571	33 - 199	396 - 256	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	117	438	2.8	12.362	34 - 203	389 - 251	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	101	506	1.3	14.286	29 - 175	450 - 291	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	103	497	2.6	14.048	30 - 178	442 - 286	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	94	545	1.2	15.400	27 - 163	485 - 313	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	95	536	2.4	15.156	28 - 165	477 - 308	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	82	619	1.1	17.500	24 - 143	551 - 356	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	84	609	2.3	17.222	24 - 145	542 - 350	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	72	709	1.0	20.044	21 - 125	631 - 408	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	70	727	1.9	20.533	20 - 122	647 - 418	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	71	718	2.3	20.289	21 - 123	639 - 413	GST11 - 2E □□□ 112-32	E82MV 552_4B	
	63	806	0.9	22.778	18 - 110	717 - 463	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	62	826	1.8	23.333	18 - 107	735 - 475	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	63	816	2.3	23.056	18 - 109	726 - 469	GST11 - 2E □□□ 112-32	E82MV 552_4B	
	59	869	0.8	24.567	17 - 102	774 - 500	GST07 - 2E □□□ 112-32	E82MV 552_4B	
	58	882	1.6	24.933	17 - 100	785 - 507	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	58	882	2.0	24.933	17 - 100	785 - 507	GST11 - 2E □□□ 112-32	E82MV 552_4B	
	51	1003	1.5	28.333	15 - 88	892 - 576	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	51	1003	2.0	28.333	15 - 88	892 - 576	GST11 - 2E □□□ 112-32	E82MV 552_4B	
	45	1142	1.3	32.267	13 - 78	1016 - 656	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	45	1142	1.6	32.267	13 - 78	1016 - 656	GST11 - 2E □□□ 112-32	E82MV 552_4B	
	45	1142	2.0	32.267	13 - 78	1016 - 656	GST14 - 2E □□□ 112-32	E82MV 552_4B	
	39	1298	1.2	36.667	11 - 68	1155 - 746	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	39	1298	1.6	36.667	11 - 68	1155 - 746	GST11 - 2E □□□ 112-32	E82MV 552_4B	
	39	1298	2.0	36.667	11 - 68	1155 - 746	GST14 - 2E □□□ 112-32	E82MV 552_4B	
	37	1386	1.0	39.160	11 - 64	1233 - 796	GST09 - 2E □□□ 112-32	E82MV 552_4B	
	37	1386	1.3	39.160	11 - 64	1233 - 796	GST11 - 2E □□□ 112-32	E82MV 552_4B	
37	1386	1.6	39.160	11 - 64	1233 - 796	GST14 - 2E □□□ 112-32	E82MV 552_4B		
32	1575	1.0	44.500	9.4 - 56	1402 - 905	GST09 - 2E □□□ 112-32	E82MV 552_4B		
32	1575	1.3	44.500	9.4 - 56	1402 - 905	GST11 - 2E □□□ 112-32	E82MV 552_4B		
32	1575	1.6	44.500	9.4 - 56	1402 - 905	GST14 - 2E □□□ 112-32	E82MV 552_4B		
29	1752	1.1	49.500	8.4 - 51	1559 - 1007	GST11 - 2E □□□ 112-32	E82MV 552_4B		
29	1752	1.3	49.500	8.4 - 51	1559 - 1007	GST14 - 2E □□□ 112-32	E82MV 552_4B		
26	1991	1.1	56.250	7.4 - 45	1772 - 1144	GST11 - 2E □□□ 112-32	E82MV 552_4B		
26	1991	1.3	56.250	7.4 - 45	1772 - 1144	GST14 - 2E □□□ 112-32	E82MV 552_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

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# Helical geared motors with motec

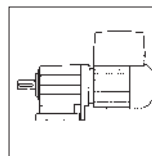
## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>5.5 kW</b>							<b>GST □□ - 3E</b>		3-78
	25	2021	1.3	57.968	7.2 - 43	1798 - 1161	GST11 - 3E □□□ 112-32	E82MV 552_4B	
	27	1853	2.6	53.148	7.9 - 47	1649 - 1065	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	24	2135	1.3	61.250	6.8 - 41	1900 - 1227	GST11 - 3E □□□ 112-32	E82MV 552_4B	
	24	2068	2.4	59.321	7.0 - 42	1840 - 1188	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	20	2475	1.1	71.011	5.9 - 35	2203 - 1423	GST11 - 3E □□□ 112-32	E82MV 552_4B	
	21	2407	2.0	69.042	6.0 - 36	2142 - 1383	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	18	2813	1.0	80.694	5.2 - 31	2503 - 1616	GST11 - 3E □□□ 112-32	E82MV 552_4B	
	18	2735	2.0	78.457	5.3 - 32	2434 - 1572	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	17	3042	0.9	87.267	4.8 - 29	2707 - 1748	GST11 - 3E □□□ 112-32	E82MV 552_4B	
	15	3261	1.7	93.541	4.5 - 27	2902 - 1874	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	15	3457	0.8	99.167	4.2 - 25	3076 - 1987	GST11 - 3E □□□ 112-32	E82MV 552_4B	
	15	3352	1.8	96.157	4.3 - 26	2983 - 1926	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	14	3705	1.6	106.296	3.9 - 24	3298 - 2129	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	11	4541	1.3	130.278	3.2 - 19	4041 - 2610	GST14 - 3E □□□ 112-32	E82MV 552_4B	
	10	4852	1.2	139.211	3.0 - 18	4319 - 2789	GST14 - 3E □□□ 112-32	E82MV 552_4B	
9.1	5514	1.1	158.194	2.6 - 16	4908 - 3169	GST14 - 3E □□□ 112-32	E82MV 552_4B		
8.4	5964	1.0	171.111	2.4 - 15	5308 - 3428	GST14 - 3E □□□ 112-32	E82MV 552_4B		
7.0	7136	0.8	204.722	2.0 - 12	6351 - 4101	GST14 - 3E □□□ 112-32	E82MV 552_4B		
<b>7.5 kW</b>							<b>GST □□ - 1E</b>		3-72
	899	79	1.4	1.625	261 - 1563	70 - 45	GST07 - 1E □□□ 132-22	E82MV 752_4B	
	936	75	3.7	1.560	271 - 1628	67 - 43	GST09 - 1E □□□ 132-22	E82MV 752_4B	
	730	97	1.3	2.000	212 - 1270	86 - 56	GST07 - 1E □□□ 132-22	E82MV 752_4B	
	713	99	3.4	2.048	207 - 1241	88 - 57	GST09 - 1E □□□ 132-22	E82MV 752_4B	
	652	108	1.2	2.240	189 - 1134	96 - 62	GST07 - 1E □□□ 132-22	E82MV 752_4B	
	626	113	3.3	2.333	181 - 1089	100 - 65	GST09 - 1E □□□ 132-22	E82MV 752_4B	
	511	138	1.2	2.857	148 - 889	123 - 79	GST07 - 1E □□□ 132-22	E82MV 752_4B	
	520	136	3.1	2.810	151 - 904	121 - 78	GST09 - 1E □□□ 132-22	E82MV 752_4B	
	417	169	1.0	3.500	121 - 726	151 - 97	GST07 - 1E □□□ 132-22	E82MV 752_4B	
	424	166	2.7	3.444	123 - 738	148 - 96	GST09 - 1E □□□ 132-22	E82MV 752_4B	
	313	226	1.7	4.667	91 - 544	201 - 130	GST09 - 1E □□□ 132-22	E82MV 752_4B	
	258	274	1.7	5.667	75 - 448	244 - 157	GST09 - 1E □□□ 132-22	E82MV 752_4B	
							<b>GST □□ - 2E</b>		3-75
	479	145	2.4	3.048	139 - 833	129 - 83	GST07 - 2E □□□ 132-22	E82MV 752_4B	
	436	159	2.3	3.350	126 - 758	142 - 92	GST07 - 2E □□□ 132-22	E82MV 752_4B	
	346	201	2.0	4.225	100 - 601	179 - 116	GST07 - 2E □□□ 132-22	E82MV 752_4B	
	315	221	1.9	4.643	91 - 547	197 - 127	GST07 - 2E □□□ 132-22	E82MV 752_4B	
	328	212	4.4	4.457	95 - 570	189 - 122	GST09 - 2E □□□ 132-22	E82MV 752_4B	
	281	248	1.7	5.200	81 - 489	220 - 142	GST07 - 2E □□□ 132-22	E82MV 752_4B	
	274	253	3.9	5.324	80 - 477	226 - 146	GST09 - 2E □□□ 132-22	E82MV 752_4B	
	256	272	1.7	5.714	74 - 445	242 - 156	GST07 - 2E □□□ 132-22	E82MV 752_4B	
	250	278	3.7	5.850	72 - 434	248 - 160	GST09 - 2E □□□ 132-22	E82MV 752_4B	
	228	305	1.5	6.400	66 - 397	271 - 175	GST07 - 2E □□□ 132-22	E82MV 752_4B	
219	317	3.4	6.667	64 - 381	282 - 182	GST09 - 2E □□□ 132-22	E82MV 752_4B		
204	340	1.4	7.150	59 - 355	303 - 196	GST07 - 2E □□□ 132-22	E82MV 752_4B		
200	348	3.2	7.305	58 - 348	309 - 200	GST09 - 2E □□□ 132-22	E82MV 752_4B		
180	387	1.4	8.125	52 - 313	344 - 222	GST07 - 2E □□□ 132-22	E82MV 752_4B		
182	382	3.0	8.027	53 - 316	340 - 220	GST09 - 2E □□□ 132-22	E82MV 752_4B		
166	419	1.3	8.800	48 - 289	373 - 241	GST07 - 2E □□□ 132-22	E82MV 752_4B		
162	429	2.6	9.010	47 - 282	382 - 246	GST09 - 2E □□□ 132-22	E82MV 752_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

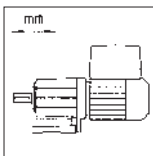


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>7.5 kW</b>	<b>GST □□ - 2E</b>									
	148	469	1.2	9.856	43 - 258	417 - 270	GST07 - 2E □□□ 132-22	E82MV 752_4B	3-75	
	142	489	2.4	10.267	41 - 247	435 - 281	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	130	533	1.1	11.200	38 - 227	474 - 306	GST07 - 2E □□□ 132-22	E82MV 752_4B		
	125	555	2.2	11.667	36 - 218	494 - 319	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	116	598	1.0	12.571	34 - 202	533 - 344	GST07 - 2E □□□ 132-22	E82MV 752_4B		
	118	588	2.1	12.362	34 - 206	524 - 338	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	102	680	0.9	14.286	30 - 178	605 - 391	GST07 - 2E □□□ 132-22	E82MV 752_4B		
	104	669	1.9	14.048	30 - 181	595 - 384	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	102	680	3.8	14.286	30 - 178	605 - 391	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	95	733	0.9	15.400	27 - 165	652 - 421	GST07 - 2E □□□ 132-22	E82MV 752_4B		
	96	721	1.9	15.156	28 - 168	642 - 415	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	95	733	3.7	15.400	27 - 165	652 - 421	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	83	833	0.8	17.500	24 - 145	741 - 479	GST07 - 2E □□□ 132-22	E82MV 752_4B		
	85	820	1.7	17.222	25 - 148	730 - 471	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	83	833	3.3	17.500	24 - 145	741 - 479	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	71	977	1.5	20.533	21 - 124	870 - 562	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	72	966	2.9	20.289	21 - 125	859 - 555	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	63	1111	1.4	23.333	18 - 109	988 - 638	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	63	1097	2.7	23.056	18 - 110	977 - 631	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	59	1187	1.3	24.933	17 - 102	1056 - 682	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	59	1187	2.3	24.933	17 - 102	1056 - 682	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	52	1349	1.1	28.333	15 - 90	1200 - 775	GST09 - 2E □□□ 132-22	E82MV 752_4B		
	52	1349	2.2	28.333	15 - 90	1200 - 775	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	45	1536	1.8	32.267	13 - 79	1367 - 883	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	45	1536	3.1	32.267	13 - 79	1367 - 883	GST14 - 2E □□□ 132-22	E82MV 752_4B		
	40	1745	1.7	36.667	12 - 69	1553 - 1003	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	40	1745	3.1	36.667	12 - 69	1553 - 1003	GST14 - 2E □□□ 132-22	E82MV 752_4B		
	37	1864	1.5	39.160	11 - 65	1659 - 1071	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	37	1864	2.6	39.160	11 - 65	1659 - 1071	GST14 - 2E □□□ 132-22	E82MV 752_4B		
	33	2118	1.4	44.500	9.5 - 57	1885 - 1217	GST11 - 2E □□□ 132-22	E82MV 752_4B		
	33	2118	2.6	44.500	9.5 - 57	1885 - 1217	GST14 - 2E □□□ 132-22	E82MV 752_4B		
	30	2356	1.9	49.500	8.6 - 51	2097 - 1354	GST14 - 2E □□□ 132-22	E82MV 752_4B		
	26	2677	1.9	56.250	7.5 - 45	2383 - 1539	GST14 - 2E □□□ 132-22	E82MV 752_4B		
	<b>GST □□ - 3E</b>									
	24	2871	1.0	61.250	6.9 - 41	2556 - 1650	GST11 - 3E □□□ 132-22	E82MV 752_4B		3-78
	25	2781	1.9	59.321	7.1 - 43	2475 - 1598	GST14 - 3E □□□ 132-22	E82MV 752_4B		
	21	3237	1.5	69.042	6.1 - 37	2881 - 1860	GST14 - 3E □□□ 132-22	E82MV 752_4B		
	19	3678	1.5	78.457	5.4 - 32	3273 - 2114	GST14 - 3E □□□ 132-22	E82MV 752_4B		
	16	4385	1.3	93.541	4.5 - 27	3903 - 2520	GST14 - 3E □□□ 132-22	E82MV 752_4B		
15	4508	1.3	96.157	4.4 - 26	4012 - 2591	GST14 - 3E □□□ 132-22	E82MV 752_4B			
14	4983	1.2	106.296	4.0 - 24	4435 - 2864	GST14 - 3E □□□ 132-22	E82MV 752_4B			
11	6107	1.0	130.278	3.2 - 19	5436 - 3510	GST14 - 3E □□□ 132-22	E82MV 752_4B			
11	6526	0.9	139.211	3.0 - 18	5808 - 3751	GST14 - 3E □□□ 132-22	E82MV 752_4B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

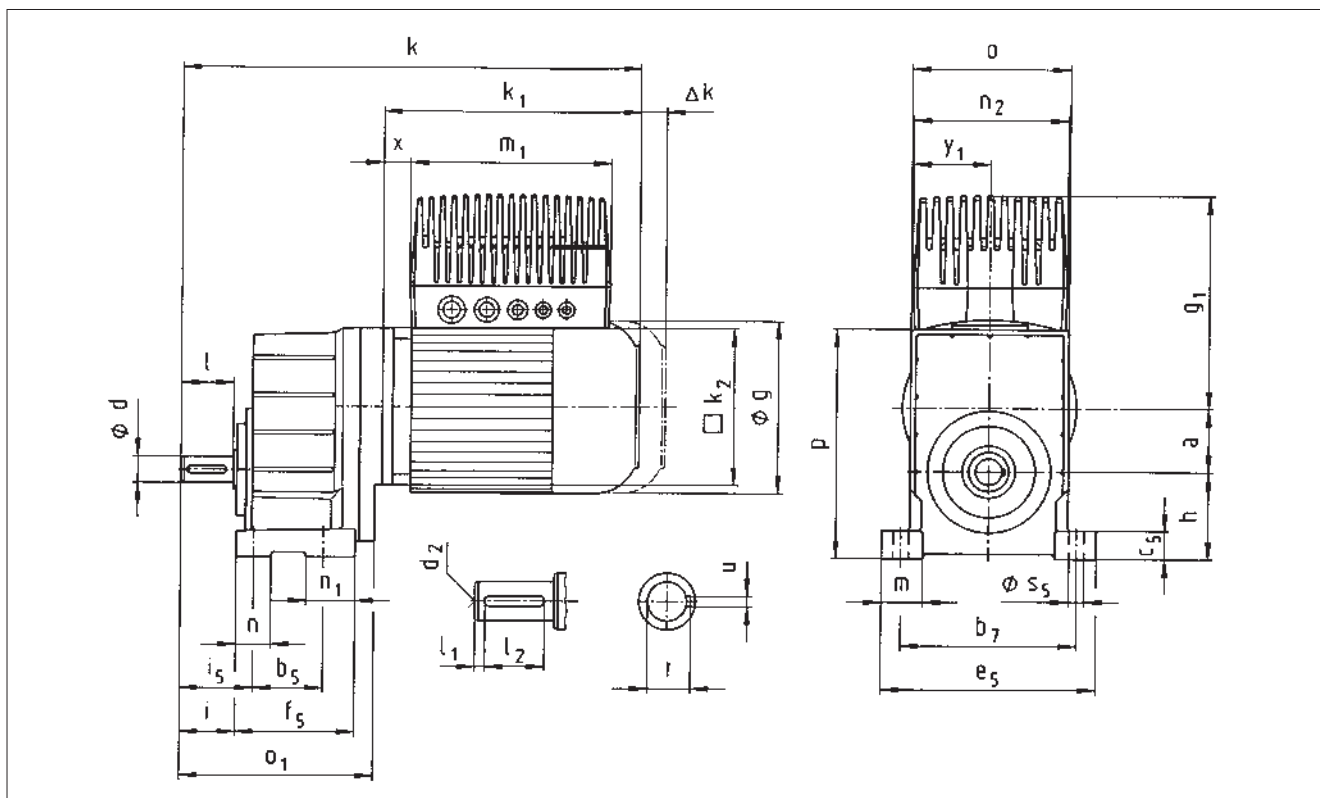
In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical geared motors with motec

## Dimensions

3



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22
<b>GST □ □ - 1 E VBR</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156		176	194		222		262
	k <sub>1</sub>		188			207		225		276	280	310	323	343	409
	k <sub>2</sub>		120			120		145		180	180		222		265
	Δk**	Brake	40			52		73		70	94		101		127
		External blower	129			127		128		126	97		95		104
	Brake + external blower	169			164		184		179	169		183		218	
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290
	g <sub>1</sub> <sup>1)</sup>		207			216									
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325	325	325
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211	211	211
	x		21			23	10	3	3	8	6	2	8		19
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106	106	106
Gearbox size	Gearbox					Total length									
	o*	o <sub>1</sub>	p*	h*	a	k									
	04	100	134	138	50	36	331	351	374	435					
	05	115	165	168	63	45	352	372	395	456	460	490			
	06	145	191	211	80	56	375	395	418	479	483	513	531	551	
	07	180	223	264	100	70			447	508	512	542	560	580	655
09	222	271	329	125	89				551	555	585	603	623	698	

Gearbox size	Solid shaft							Foot										
	d k6	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
04	16	32	6	20	M5	5	18	55	105	17	128	80	35	45	24	20	25	9
05	20	40	6	28	M6	6	22.5	70	125	22	154	99	43	56	32	26	29	11
06	25	50	4	40	M10	8	28	72	160	27	194	115	53	68	37	30	43	13.5
07	30	60	7.5	45	M10	8	33	80	200	35	245	137	64	84	47.5	40	57	18
09	40	80	8.5	63	M16	12	43	105	245	43	296	161	84	107	50.5	45	56	18

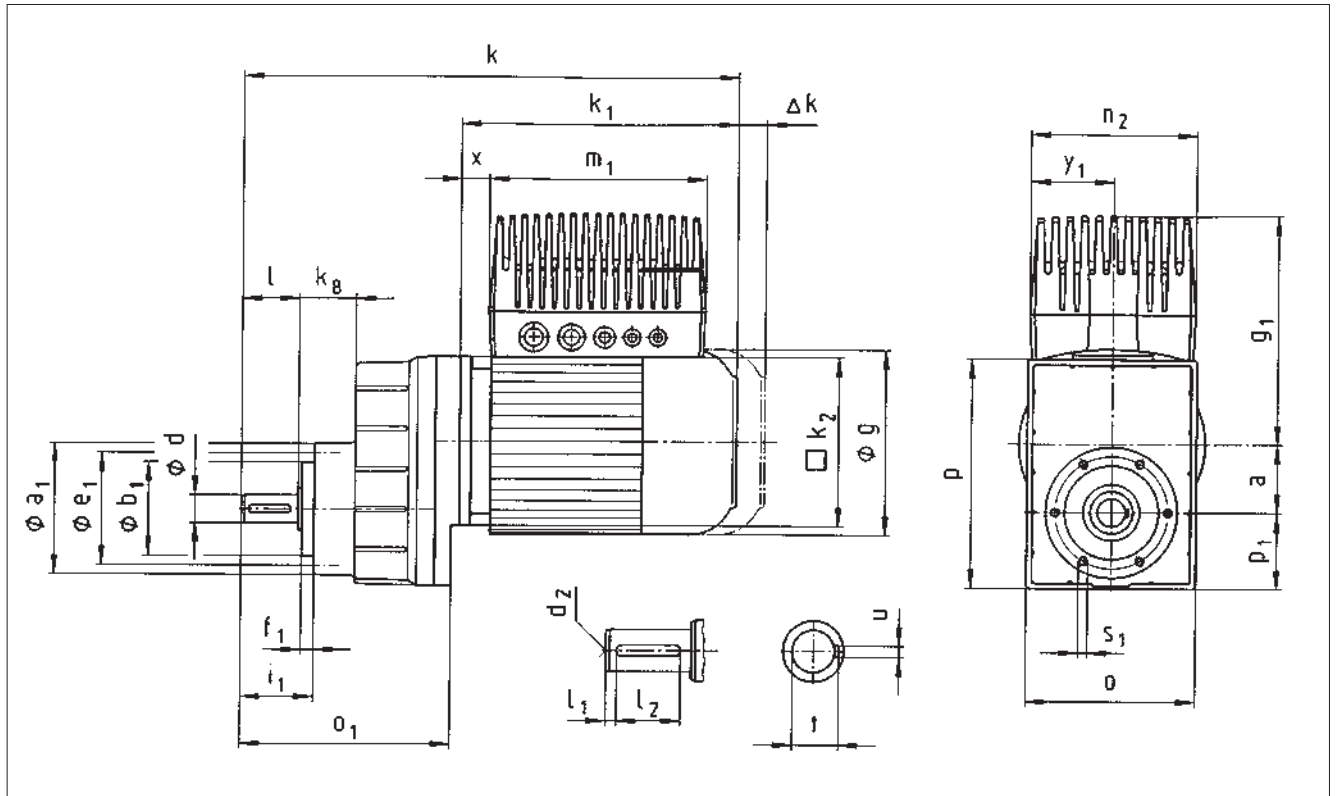
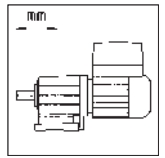
Dimensions in [mm] \* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h+a

\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical geared motors with motec

## Dimensions



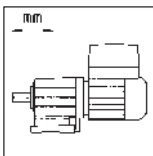
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22					
<b>GST □ □ - 1 E VCR</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752					
Motor		<b>g</b>	123			138		156		176		194		222		262				
		<b>k<sub>1</sub></b>	188			207		225		276		280	310	323	343	409				
		<b>k<sub>2</sub></b>	120			120		145		180		180		222		265				
		<b>Δk**</b>	40			52		73		70		94		101		127				
		Brake	129			127		128		126		97		95		104				
		External blower	169			164		184		179		169		183		218				
		Brake + external blower																		
motec		<b>g<sub>1</sub></b>	171			180		225		221		237		242		258	256	270	290	
		<b>g<sub>1</sub><sup>1)</sup></b>	207			216														
		<b>m<sub>1</sub></b>	190			190		202		202		230		230		230		325		
		<b>n<sub>2</sub></b>	138			138		156		156		176		176		176		211		
		<b>x</b>	21			23		10		3		3		8		6		2		
		<b>y<sub>1</sub></b>	69			69		78		78		88		88		88		106		
Gearbox size	Gearbox							Total length												
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k <sub>8</sub>	k													
04	100	134	129	41	36	35	331		351		374		435							
05	115	165	156	51	45	43	352		372		395		456		460		490			
06	145	191	194	63	56	48	375		395		418		479		483		513		531	
07	180	223	245	82	70	60					447		508		512		542		560	
09	222	271	304	101	89	74							551		555		585		603	

Gearbox size	Solid shaft							Pitch circle						
	d k6	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
04	16	32	6	20	M5	5	18	72	48	61	8	43	M5x10	
05	20	40	6	28	M6	6	22.5	88	58	74	9	52	M6x12	
06	25	50	4	40	M10	8	28	109	70	90	11	64	M8x14	
07	30	60	7.5	45	M10	8	33	140	100	120	13	77	M10x18	
09	40	80	8.5	63	M16	12	43	174	120	145	15	100	M12x20	

Dimensions in [mm] \* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h+a

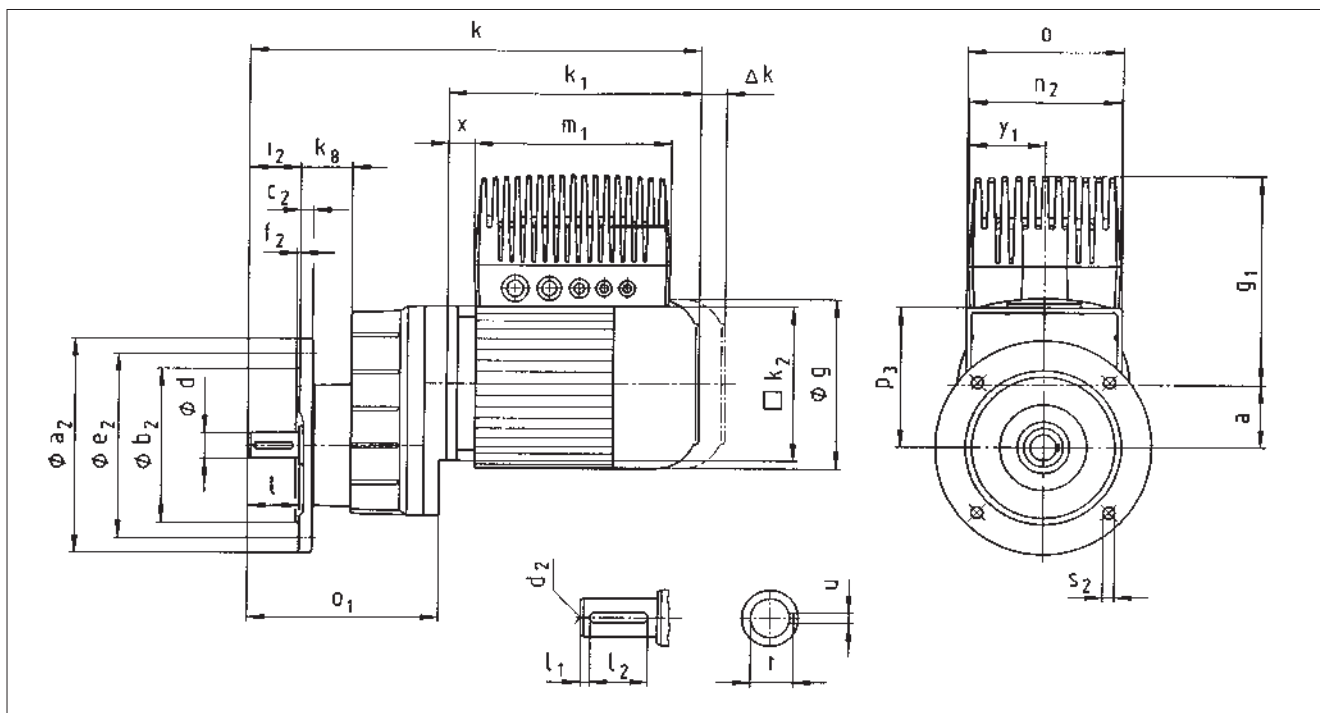
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Helical geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22	
<b>GST □ □ - 1 E VCK</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752	
Motor	g		123			138		156		176		194		222		262
	k <sub>1</sub>		188			207		225		276		280	310	323	343	409
	k <sub>2</sub>		120			120		145		180		180		222		265
	Δk**	Brake	40			52		73		70		94		101		127
		External blower	129			127		128		126		97		95		104
	Brake + external blower	169			164		184		179		169		183		218	
motec	g <sub>1</sub>		171	180	225	221	237	242	258	256	270		290			
	g <sub>1</sub> <sup>1)</sup>		207			216										
	m <sub>1</sub>		190			202		202	230	230	230	325	325		325	
	n <sub>2</sub>		138		138	156	156	176	176	176	211	211		211		
	x		21		23	10	3	3	8	6	2	8		19		
	y <sub>1</sub>		69		69	78	78	88	88	88	106	106		106		
Gearbox size	Gearbox						Total length									
	o*	o <sub>1</sub>	p <sub>1</sub>	p <sub>3</sub> *	a	k <sub>8</sub>	k									
	04	100	134	41	88	36	35	331	351	374	435					
	05	115	165	51	105	45	43	352	372	395	456	460	490			
	06	145	191	63	131	56	48	375	395	418	479	483	513	531	551	
07	180	223	82	164	70	60			447	508	512	542	560	580	655	
09	222	271	101	204	89	74					551	555	585	603	623	698

Gearbox size	Solid shaft							Output flange						
	d k6	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
04	16	32	6	20	M5	5	18	120	80	10	100	3	32	7
								140	95		115	3		9
								160	110		130	3.5		9
05	20	40	6	28	M6	6	22.5	120	80	10	100	3	40	7
								140	95		115	3		9
								160	110		130	3.5		9
								200	130		12	165		3.5
06	25	50	4	40	M10	8	28	160	110	12	130	3.5	50	9
								200	130		165	11		
07	30	60	7.5	45	M10	8	33	200	130	14	165	3.5	60	11
								250	180		15	215		4
09	40	80	8.5	63	M16	12	43	250	180	16	215	4	80	13.5
								300	230		18	265		4

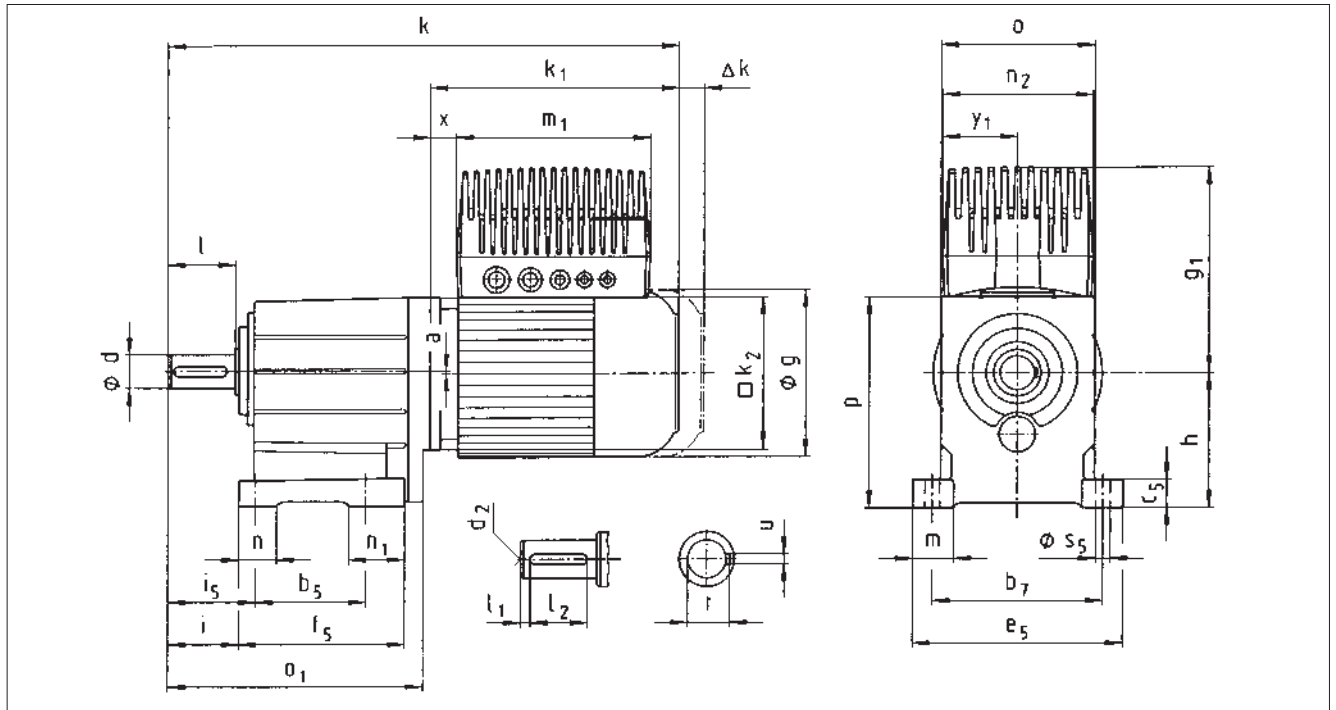
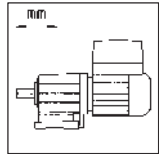
Dimensions in [mm] \* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h+a

\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22
<b>GST □ □ - 2 E VBR</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156		176	194		222		262
	k <sub>1</sub>		188			207		225		276	280	310	323	343	409
	From gearbox fr. size 04	k <sub>2</sub>	120			120		145		180	180		222		265
	Δk**	Brake	40			52		73		70	94		101		127
		External blower	129			127		128		126	97		95		104
	Brake + external blower	169			164		184		179	169		183		218	
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290
	g <sub>1</sub> <sup>1)</sup>		207			216									
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211
	x		21			23	10	3	3	8	6	2	8		19
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106
Gearbox size	Gearbox					Total length k									
	o <sup>2)</sup>	o <sub>1</sub>	p <sup>2)</sup>	h <sup>2)</sup>	a										
03	90	127* 139	101	65	2	317*	338*								
04	100	174	132	80	0	329	350								
05	115	214	159	100	1	371	391	414	475						
06	145	243	198	125	2	401	421	444	505	509	539				
07	180	302	251	160	3	427	447	470	531	535	565	583	603		
09	222	370	311	200	4			526	587	591	621	639	659	734	
11	270	433	385	250	4				650	654	684	702	722	797	
14	328	533	479	315	6					711	741	759	779	854	
												849	869	944	

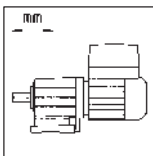
Gearbox size	Solid shaft								Foot									
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
03	14	28	4	20	M5	5	16	60	91	11	105	84	34	40	20	-	-	6.6
	20	40	5	28	M6	6	22.5						46	52				
04	20	40	5	28	M6	6	22.5	76	105	18	129	112	43	53	24.5	20	36	9
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26

Dimensions in [mm] d ≤ 50 mm: k6 \* at solid shaft d=14

d > 50 mm: m6 \*\* See page 3 - 40 for more built-on accessories

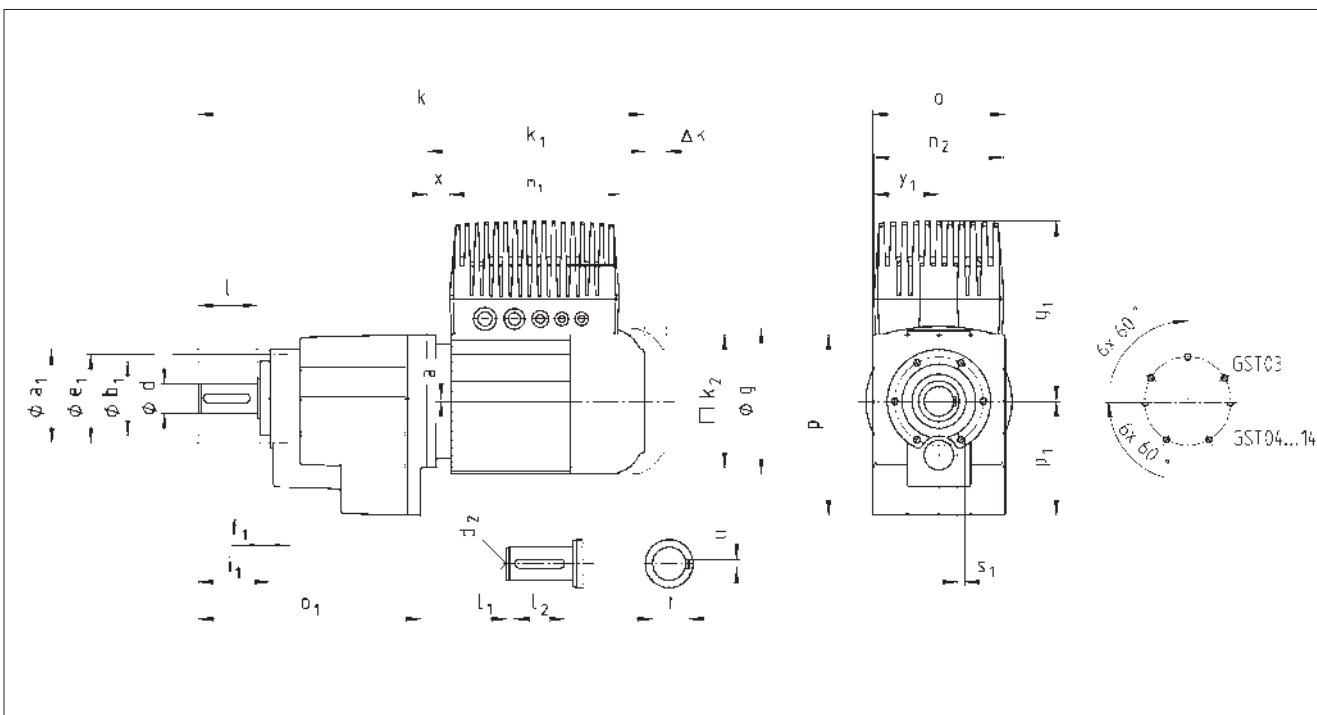
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

<sup>2)</sup> Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h+a



# Helical geared motors with motec

## Dimensions



Geared motor		Motor frame size					Gearbox size																					
GST □ □ - 2 E VCR		motec E82MV □ □ □ □					063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22									
							251	251	251	371	551	751	152	152	222	302	402	552	752									
Motor	g	123					138					156		176		194		222		262								
	k <sub>1</sub>	188					207					225		276		280		310		323		343	409					
	From gearbox fr. size 04	k <sub>2</sub>					120					120		145		180		180		222		265						
	Δk**	Brake					40					52		73		70		94		101		127						
		External blower					129					127		128		126		97		95		104						
	Brake + external blower					169					164		184		179		169		183		218							
motec	g <sub>1</sub>	171					180		225		221		237		242		258		256		270		290					
	g <sub>1</sub> <sup>1)</sup>	207					216																					
	m <sub>1</sub>	190					190					202		202		230		230		230		325		325	325			
	n <sub>2</sub>	138					138					156		156		176		176		211		211		211				
	x	21					23					10		3		3		8		6		2		8		19		
	y <sub>1</sub>	69					69					78		78		88		88		88		106		106		106		
Gearbox size	Gearbox					Total length																						
	o <sup>2)</sup>	o <sub>1</sub>	p <sup>2)</sup>	p <sub>1</sub>	a	k																						
03	90	127* 139	100	64	2	317*					338*																	
04	100	174	129	77	0	329					350					414		475										
05	115	214	156	98	1	371					391					505		509		539								
06	145	243	194	121	2	401					421					444		505		535		565		583		603		
07	180	302	245	155	3	427					447					470		531		535		565		583		603		734
09	222	370	304	194	4											526		587		591		621		639		659		734
11	270	433	378	243	4													650		654		684		702		722		797
14	328	533	470	306	6															711		741		759		779		854
																						849		869		944		

Gearbox size	Solid shaft							Pitch circle						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	
03	14	28	4	20	M5	5	16	71	48	61	8	39	M5x10	
	20	40	5	28	M6	6	22.5							
04	20	40	5	28	M6	6	22.5	72	48	61	8	51	M5x10	
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12	
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14	
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18	
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20	
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26	
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34	

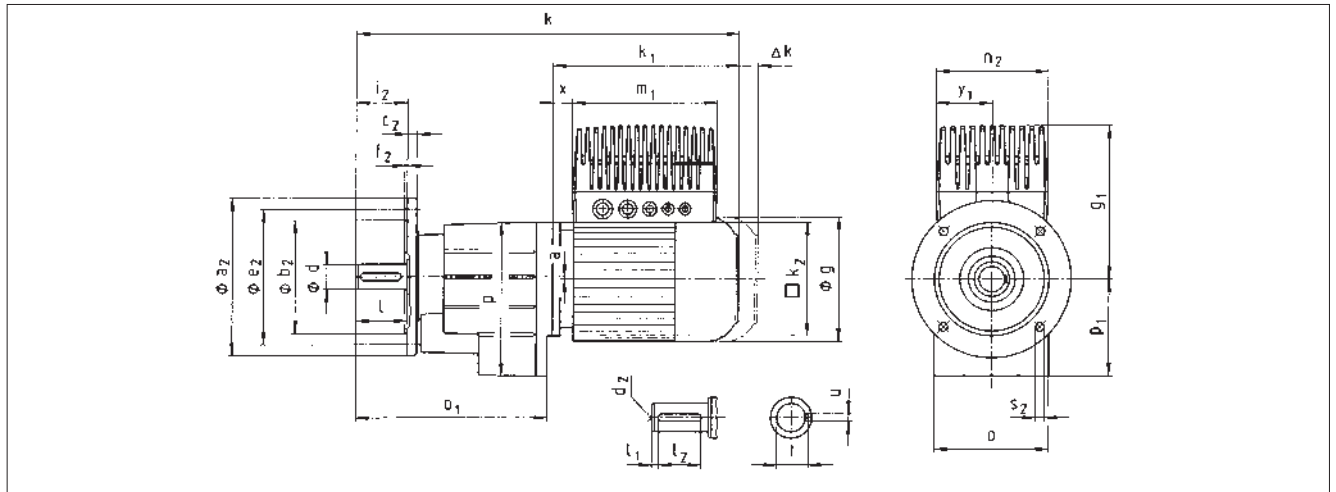
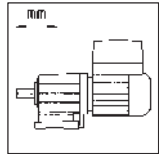
Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* at solid shaft d=14  
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier  
<sup>2)</sup> Please note dimension k<sub>2</sub>

# Helical geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22					
<b>GST □ □ - 2 E VCK</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752					
Motor	g		123			138		156		176		194		222		262				
	k <sub>1</sub>		188			207		225		276		280	310	323	343	409				
	From gearbox fr. size 04	k <sub>2</sub>	120			120		145		180		180		222		265				
	Δk**	Brake	40			52		73		70		94		101		127				
		External blower	129			127		128		126		97		95		104				
	Brake + external blower	169			164		184		179		169		183		218					
motec	g <sub>1</sub>		171			180		225		221	237	242	258	256	270	290				
	g <sub>1</sub> <sup>1)</sup>		207			216														
	m <sub>1</sub>		190			190		202	202	230	230	230	325	325	325	325				
	n <sub>2</sub>		138			138		156	156	176	176	176	211	211	211	211				
	x		21			23		10	3	3	8	6	2	8	19					
	y <sub>1</sub>		69			69		78	78	88	88	88	106	106	106					
Gearbox size	Gearbox					Total length														
	o <sup>2)</sup>	o <sub>1</sub>	p <sup>2)</sup>	p <sub>1</sub>	a	k														
03	90	127*	100	64	2	317*		338*												
		139				329		350												
04	100	174	129	77	0	371	391	414	475											
05	115	214	156	98	1	401	421	444	505	509	539									
06	145	243	194	121	2	427	447	470	531	535	565	583	603							
07	180	302	245	155	3			526	587	591	621	639	659	734						
09	222	370	304	194	4					650	654	684	702	722	797					
11	270	433	378	243	4							711	741	759	779	854				
14	328	533	470	306	6									849	869	944				

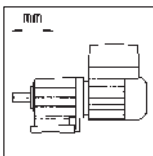
Gearbox size	Solid shaft							Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
03	14	28	4	20	M5	5	16	120	80	10	100	3	28	7
	20	40	5	28	M6	6	22.5	140	95		115	3		9
								160	110		130	3.5		40
04	20	40	5	28	M6	6	22.5	120	80	10	100	3	40	7
								140	95		115	3		9
								160	110		130	3.5		9
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7
								140	95		115	3		9
								160	110		130	3.5		9
								200	130		12	165		3.5
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9
								200	130		165	11		
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11
								250	180		15	215		4
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14
								300	230		18	265		5
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14
								350	250		20	300		5
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18
								400	300		24	350		18

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* at solid shaft d=14  
\*\* See page 3 - 40 for more built-on accessories

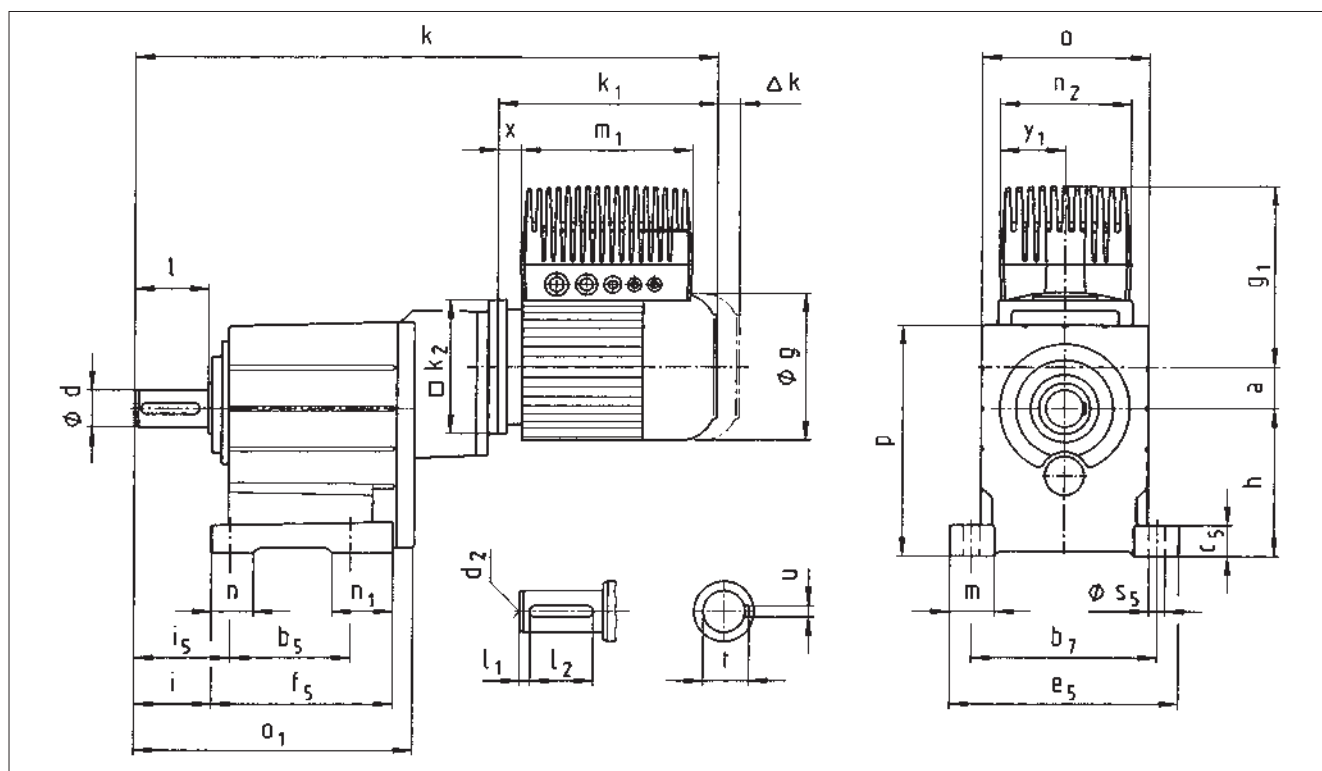
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier  
<sup>2)</sup> Please note dimension k<sub>2</sub>





# Helical geared motors with motec

## Dimensions



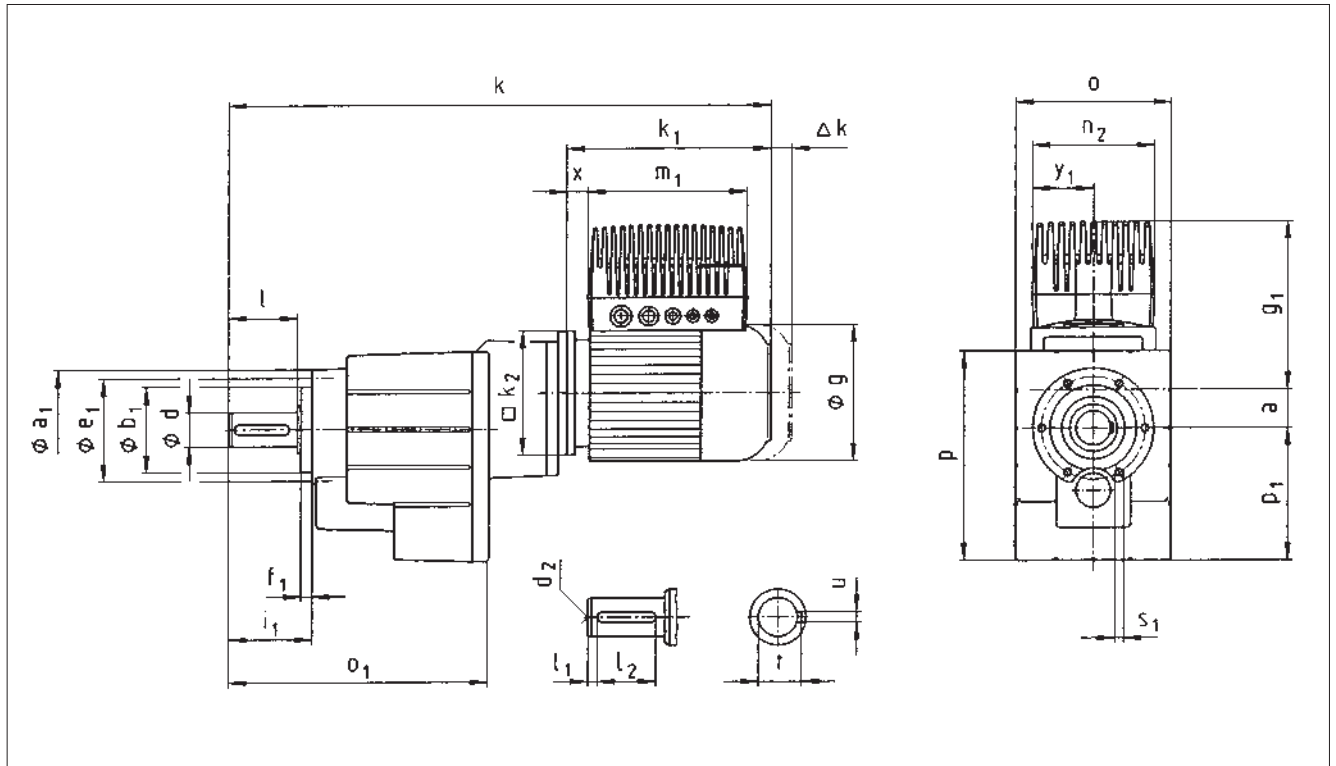
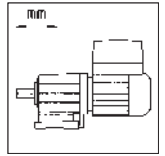
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22
<b>GST □ □ - 3 E VBR</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156		176	194		222		262
	k <sub>1</sub>		188			207		225		276	280	310	323	343	409
	k <sub>2</sub>		120			120		145		180	180		222		265
	Δk**	Brake	40			52		73		70	94		101		127
		External blower	129			127		128		126	97		95		104
	Brake + external blower	169			164		184		179	169		183		218	
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290
	g <sub>1</sub> <sup>1)</sup>		207			216									
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211
	x		21			23	10	3	3	8	6	2	8		19
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106
Gearbox size	Gearbox					Total length									
	o*	o <sub>1</sub>	p*	h	a	k									
05	115	208	159	100	35	478	497	520	581						
06	145	240	198	125	34	521	540	563	624						
07	180	302	251	160	42	588	607	630	691	695	725				
09	222	370	311	200	52	669	688	711	772	776	806	825	845		
11	270	433	385	250	66			787	848	852	882	901	921	995	
14	328	533	479	315	83				972	976	1006	1025	1045	1119	

Gearbox size	Solid shaft								Foot									
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	i	i <sub>5</sub>	m	n	n <sub>1</sub>	s <sub>5</sub>
05	25	50	4	40	M10	8	28	90	125	23	155	139	53	66	32.5	26	49	11
06	30	60	6	45	M10	8	33	106	160	28	196	157	64	79	38	35	52	13.5
07	40	80	7	63	M16	12	43	130	200	34	247	196	84	104	48.5	45	66	18
09	50	100	8	80	M16	14	53.5	165	245	44	298	239	105	127.5	54	48	74	18
11	60	120	8	100	M20	18	64	200	300	54	368	280	125	155	69	65	80	22
14	80	160	15	125	M20	22	85	250	380	65	460	340	165	200	85	85	91	26

Dimensions in [mm] d ≤ 50 mm: k6 \* Please note dimension k<sub>2</sub>  
d > 50 mm: m6 \*\* See page 3 - 40 for more built-on accessories  
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical geared motors with motec

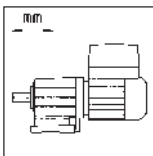
## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22			
<b>GST □ □ - 3 E VCR</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752			
Motor		<b>g</b>	123			138		156		176		194		222		262		
		<b>k<sub>1</sub></b>	188			207		225		276		280	310	323	343	409		
		<b>k<sub>2</sub></b>	120			120		145		180		180		222		265		
		<b>Δk**</b>	40			52		73		70		94		101		127		
		External blower	129			127		128		126		97		95		104		
		Brake + external blower	169			164		184		179		169		183		218		
motec		<b>g<sub>1</sub></b>	171			180	225	221	237	242	258	256	270	290				
		<b>g<sub>1</sub><sup>1)</sup></b>	207			216												
		<b>m<sub>1</sub></b>	190			190	202	202	230	230	230	325	325	325	325			
		<b>n<sub>2</sub></b>	138			138	156	156	176	176	176	211	211	211	211			
		<b>x</b>	21			23	10	3	3	8	6	2	8	19				
		<b>y<sub>1</sub></b>	69			69	78	78	88	88	88	106	106	106	106			
Gearbox size	Gearbox					Total length												
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k												
05	115	208	156	98	35	478		497		520		581						
06	145	240	194	121	34	521		540		563		624						
07	180	302	245	155	42	588		607		630		691	695	725				
09	222	370	304	194	52	669		688		711		772	776	806	825	845		
11	270	433	378	243	66					787		848	852	882	901	921	995	
14	328	533	470	306	83							972	976	1006	1025	1045	1119	

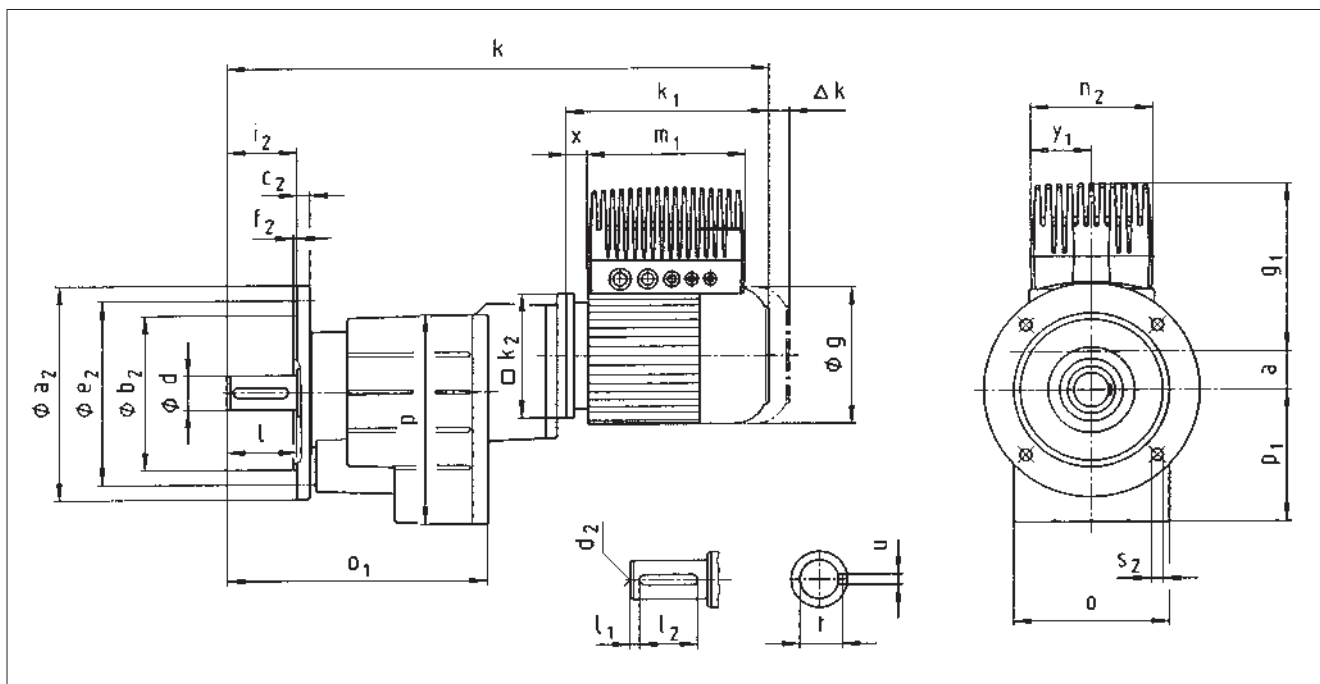
Gearbox size	Solid shaft							Pitch circle					
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20
11	60	120	8	100	M20	18	64	215	150	185	18	143	M16x26
14	80	160	15	125	M20	22	85	265	195	230	22	187	M20x34

Dimensions in [mm] d ≤ 50 mm: k6 \* Please note dimension k<sub>2</sub>  
d > 50 mm: m6 \*\* See page 3 - 40 for more built-on accessories



# Helical geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22
<b>GST □ □ - 3 E VCK</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156	176		194		222		262
	k <sub>1</sub>		188			207		225	276		280	310	323	343	409
	k <sub>2</sub>		120			120		145	180		180		222		265
	Δk**	Brake	40			52		73	70		94		101		127
		External blower	129			127		128	126		97		95		104
	Brake + external blower	169			164		184	179		169		183		218	
motec	g <sub>1</sub>		171		180	225	221	237	242		258	256	270		290
	g <sub>1</sub> <sup>1)</sup>		207		216										
	m <sub>1</sub>		190		190	202	202	230	230	230	230	325		325	325
	n <sub>2</sub>		138		138	156	156	176	176	176	176	211		211	211
	x		21		23	10	3	3	8	6	2	8		19	
	y <sub>1</sub>		69		69	78	78	88	88	88	106	106		106	106
Gearbox size	Gearbox					Total length									
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	k									
	05	115	208	156	98	35	478	497	520	581					
	06	145	240	194	121	34	521	540	563	624					
	07	180	302	245	155	42	588	607	630	691	695	725			
	09	222	370	304	194	52	669	688	711	772	776	806	825	845	
11	270	433	378	243	66			787	848	852	882	901	921	995	
14	328	533	470	306	83				972	976	1006	1025	1045	1119	

Gearbox size	Solid shaft							Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
05	25	50	4	40	M10	8	28	120	80	10	100	3	50	7
								140	95	10	115	3		9
								160	110	10	130	3.5		9
								200	130	12	165	3.5		11
06	30	60	6	45	M10	8	33	160	110	12	130	3.5	60	9
								200	130		165			11
07	40	80	7	63	M16	12	43	200	130	14	165	3.5	80	11
								250	180	15	215	4		14
09	50	100	8	80	M16	14	53.5	250	180	16	215	4	100	14
								300	230	18	265			
11	60	120	8	100	M20	18	64	300	230	18	265	4	120	14
								350	250	20	300	5		18
14	80	160	15	125	M20	22	85	350	250	22	300	5	160	18
								400	300	24	350			

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

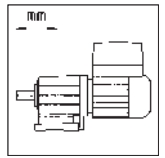
\* Please note dimension k<sub>e</sub>

\*\* See page 3 - 40 for more built-on accessories

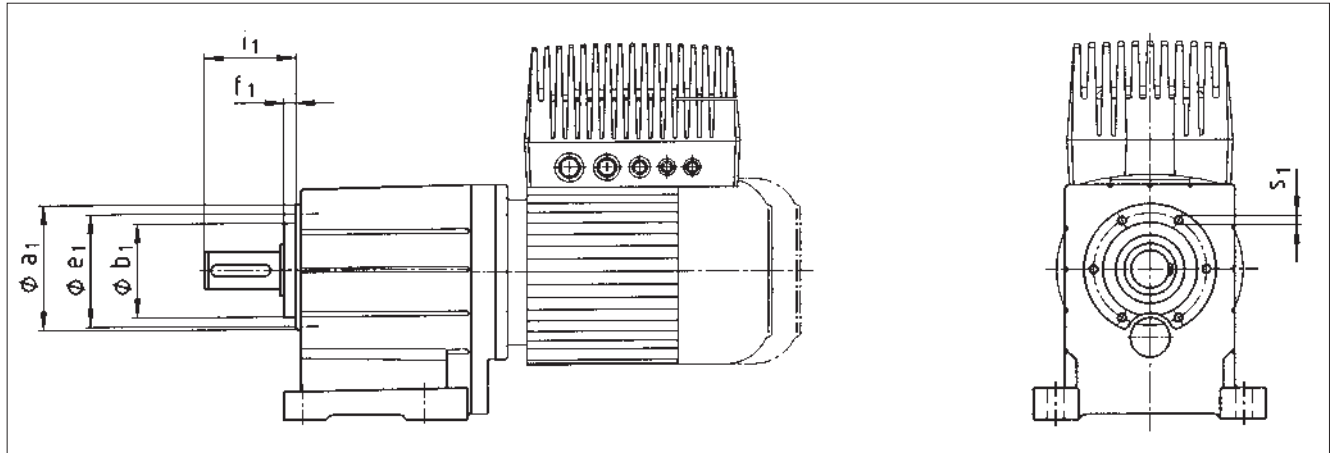
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical geared motors with motec

Output design VAR/VAL GST  -2,  3

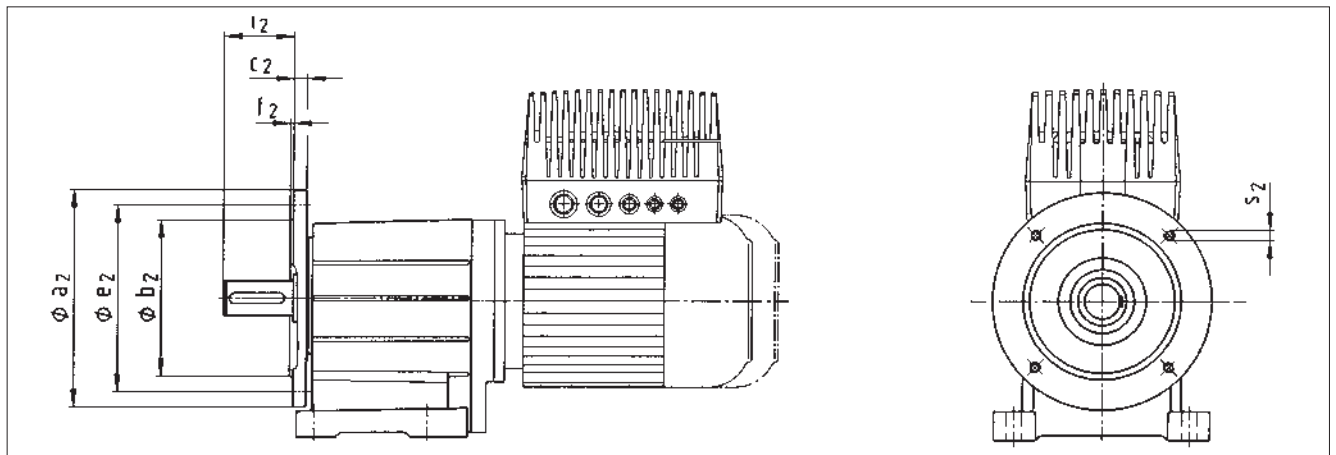


## Output design VAR



Gearbox size	a <sub>1</sub>	b <sub>1</sub> h7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6 x 60°
04	72	48	61	8	51	M5x10
05	88	58	74	9	62	M6x12
06	109	70	90	10	74	M8x14
07	140	100	120	13	97	M10x8
09	174	120	145	15	120	M12x20
11	215	150	185	18	143	M16x26
14	265	195	230	22	187	M20x34

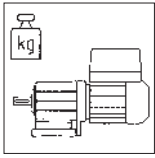
## Output design VAL



Gearbox size	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4 x 90°
04	120	80	10	100	3	40	M6
	140	95		115			M8
05	120	80	10	100	3	50	M6
	140	95		115	3.5		M8
	160	110		130	M8		
06	160	110	12	130	3.5	60	M10
	200	130		165			M12
07	200	130	14	165	3.5	80	M10
	250	180	15	215	4		M12
09	250	180	16	215	4	100	M12
	300	230	18	265			
11	300	230	18	265	4	120	M12
	350	250	20	300	5		M16
14	350	250	22	300	5	160	M16

Dimensions in [mm]

See the dimensions for helical geared motors for more dimensional data



# Helical geared motors with motec

## Weights

### Helical gearbox GST □□-1

Geared motors GST□□-1E VA□ VBR	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	251	371	551	751	152	152	222	302	402	552	752	
04	10	12	13	18	20	26						
05	14	16	17	22	23	30	33	43				
06	18	20	21	26	27	35	38	47	60	66		
07					35	37	44	47	57	69	75	99
09							58	61	71	83	89	114

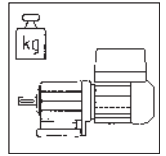
Geared motors GST□□-1E VC□	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	251	371	551	751	152	152	222	302	402	552	752	
04	10	12	13	18	19	26						
05	13	15	16	21	22	29	32	42				
06	16	19	20	24	25	33	36	46	58	64		
07					32	33	41	44	53	66	72	96
09							54	57	67	79	85	109

### Helical gearbox GST □□-2

Geared motors GST□□-2E VA□ VBR	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	251	371	551	751	152	152	222	302	402	552	752	
03	8	10	11									
04	12	14	15	20	22	28						
05	17	20	21	25	26	33	36	46				
06	25	27	28	32	33	41	44	54	66	72		
07					47	49	56	59	69	81	87	111
09							83	86	96	108	114	138
11								132	142	153	159	183
14										245	251	272

Geared motors GST□□-2E VC□	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	251	371	551	751	152	152	222	302	402	552	752	
03	8	10	11									
04	11	14	15	20	21	27						
05	16	18	19	24	25	32	35	45				
06	22	24	25	29	31	38	41	51	64	70		
07					43	44	51	54	64	77	83	106
09							74	77	87	99	105	130
11								117	127	138	144	168
14										217	223	244

Weights in [kg] with oil filling for mounting position A  
All values are approximate



### Helical gearbox GST □□-3

Geared motors GST□□-3E VA□ VBR	Motor frame size										
	063	071			080	090	100-12	100-32	112-22	112-32	132-22
	motec E82MV □□□										
	251	371	551	751	152	152	222	302	402	552	752
05	18	20	21	26	28	34					
06	28	30	31	36	38	44					
07	48	50	51	55	57	64	67	77			
09	80	82	83	87	89	96	99	109	121	127	
11				142	143	150	153	163	176	182	205
14						256	259	269	281	287	312

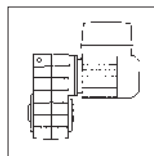
Geared motors GST□□-3E VC□	Motor frame size										
	063	071			080	090	100-12	100-32	112-22	112-32	132-22
	motec E82MV □□□										
	251	371	551	751	152	152	222	302	402	552	752
05	17	19	20	25	26	33					
06	25	28	29	34	35	41					
07	43	46	47	51	52	59	62	72			
09	71	73	74	79	80	88	91	100	113	119	
11				127	128	135	138	148	161	167	190
14						228	231	241	253	259	284

### Additional weights

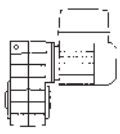
Gearbox size	Flange □□K/□□L
03	0.8
04	1.0
05	1.5
06	3.0
07	4.0
09	7.0
11	10.5
14	15.5

Weights in [kg] with oil filling for mounting position A  
All values are approximate









# Low-profile geared motors with motec

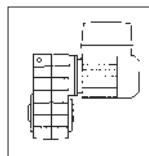
## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.12 kW</b>							<b>GFL □□ - 2E</b>		3-106		
	203	6	5.4	7.025	59 - 353	4.9 - 3.2	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	89	13	5.4	16.087	26 - 154	11.2 - 7.2	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	80	14	5.4	17.920	23 - 138	12.4 - 8.0	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	69	16	5.0	20.519	20 - 121	14.2 - 9.2	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	62	18	5.0	22.857	18 - 108	16 - 10	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	45	25	5.5	31.600	13 - 78	22 - 14	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	41	28	5.5	35.200	12 - 70	24 - 16	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	35	32	4.6	40.697	10 - 61	28 - 18	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	31	35	4.6	45.333	9.1 - 55	31 - 20	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	28	40	4.0	51.579	8.0 - 48	36 - 23	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	25	45	3.9	57.455	7.2 - 43	40 - 26	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	22	50	3.3	64.636	6.4 - 38	45 - 29	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	20	56	3.2	72.000	5.7 - 34	50 - 32	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	17	66	1.6	85.156	4.9 - 29	59 - 38	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
	15	74	1.6	94.857	4.4 - 26	66 - 43	GFL04 - 2E □□□ 063C12	E82MV 251_2B			
								<b>GFL □□ - 3E</b>			3-110
	18	60	3.7	78.639	5.3 - 32	54 - 35	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	16	69	4.4	90.123	4.6 - 28	62 - 40	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	14	78	4.2	101.547	4.1 - 24	69 - 45	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	12	88	3.7	114.952	3.6 - 22	79 - 51	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	11	100	3.3	129.524	3.2 - 19	89 - 57	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	9.9	111	5.1	144.320	2.9 - 17	99 - 64	GFL06 - 3E □□□ 063C12	E82MV 251_2B			
	8.8	125	4.9	162.583	2.5 - 15	111 - 72	GFL06 - 3E □□□ 063C12	E82MV 251_2B			
	8.1	136	2.5	177.027	2.3 - 14	121 - 78	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	7.1	153	2.1	199.467	2.1 - 12	136 - 88	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	6.3	175	2.0	227.989	1.8 - 11	156 - 101	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
	5.6	197	1.7	256.889	1.6 - 10	176 - 113	GFL05 - 3E □□□ 063C12	E82MV 251_2B			
5.5	200	3.1	260.457	1.6 - 10	178 - 115	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
4.9	222	1.6	288.948	1.4 - 9	198 - 128	GFL05 - 3E □□□ 063C12	E82MV 251_2B				
4.9	225	2.9	293.018	1.4 - 8	200 - 129	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
4.4	250	1.3	325.576	1.3 - 8	223 - 144	GFL05 - 3E □□□ 063C12	E82MV 251_2B				
4.8	230	2.7	299.200	1.4 - 8	205 - 132	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
3.9	278	1.2	362.100	1.1 - 7	248 - 160	GFL05 - 3E □□□ 063C12	E82MV 251_2B				
3.9	282	2.3	367.200	1.1 - 7	251 - 162	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
3.5	314	1.1	408.000	1.0 - 6	279 - 180	GFL05 - 3E □□□ 063C12	E82MV 251_2B				
3.4	318	1.9	413.667	1.0 - 6	283 - 183	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
3.0	365	1.8	475.200	0.9 - 5	325 - 210	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
3.0	367	0.9	477.052	0.9 - 5	326 - 211	GFL05 - 3E □□□ 063C12	E82MV 251_2B				
2.7	411	1.5	535.333	0.8 - 5	366 - 236	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
2.5	443	1.4	576.720	0.7 - 4	394 - 255	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
2.2	499	1.2	649.700	0.6 - 4	444 - 287	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
1.9	584	0.9	759.806	0.5 - 3	520 - 336	GFL06 - 3E □□□ 063C12	E82MV 251_2B				
1.7	658	0.9	855.954	0.5 - 3	585 - 378	GFL06 - 3E □□□ 063C12	E82MV 251_2B				

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

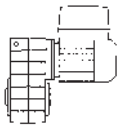


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.18 kW</b>							<b>GFL □□ - 2E</b>		3-106	
	194	9	3.4	7.025	56 - 338	7.6 - 4.9	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	85	20	3.4	16.087	25 - 148	17 - 11	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	76	22	3.4	17.920	22 - 133	19 - 13	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	67	25	3.2	20.519	19 - 116	22 - 14	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	60	28	3.2	22.857	17 - 104	25 - 16	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	43	39	3.5	31.600	13 - 75	34 - 22	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	39	43	3.5	35.200	11 - 67	38 - 25	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	34	50	2.9	40.697	9.7 - 58	44 - 29	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	30	55	2.9	45.333	8.7 - 52	49 - 32	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	27	63	2.6	51.579	7.7 - 46	56 - 36	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	24	70	2.5	57.455	6.9 - 41	62 - 40	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	21	79	2.1	64.636	6.1 - 37	70 - 45	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	19	88	2.0	72.000	5.5 - 33	78 - 51	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	16	104	1.0	85.156	4.6 - 28	93 - 60	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
	14	116	1.0	94.857	4.2 - 25	103 - 67	GFL04 - 2E □□□ 063C32	E82MV 251_2B		
								<b>GFL □□ - 3E</b>		3-110
	17	95	2.4	78.639	5.0 - 30	84 - 54	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	15	109	2.8	90.123	4.4 - 26	97 - 62	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	13	122	2.7	101.547	3.9 - 23	109 - 70	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	12	138	2.4	114.952	3.4 - 21	123 - 80	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	11	156	2.1	129.524	3.1 - 18	139 - 90	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	9.5	174	3.2	144.320	2.7 - 16	155 - 100	GFL06 - 3E □□□ 063C32	E82MV 251_2B		
	8.4	196	3.1	162.583	2.4 - 15	174 - 112	GFL06 - 3E □□□ 063C32	E82MV 251_2B		
	7.7	213	1.6	177.027	2.2 - 13	190 - 122	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	7.6	216	2.8	179.520	2.2 - 13	192 - 124	GFL06 - 3E □□□ 063C32	E82MV 251_2B		
	6.8	240	1.4	199.467	2.0 - 12	214 - 138	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	6.8	243	2.5	202.237	2.0 - 12	217 - 140	GFL06 - 3E □□□ 063C32	E82MV 251_2B		
	6.0	274	1.3	227.989	1.7 - 10	244 - 158	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	5.9	278	2.3	231.200	1.7 - 10	248 - 160	GFL06 - 3E □□□ 063C32	E82MV 251_2B		
	5.3	309	1.1	256.889	1.5 - 9	275 - 178	GFL05 - 3E □□□ 063C32	E82MV 251_2B		
	5.2	313	2.0	260.457	1.5 - 9	279 - 180	GFL06 - 3E □□□ 063C32	E82MV 251_2B		
4.7	348	1.0	288.948	1.4 - 8	309 - 200	GFL05 - 3E □□□ 063C32	E82MV 251_2B			
4.7	353	1.9	293.018	1.4 - 8	314 - 203	GFL06 - 3E □□□ 063C32	E82MV 251_2B			
4.2	392	0.8	325.576	1.2 - 7	349 - 225	GFL05 - 3E □□□ 063C32	E82MV 251_2B			
4.6	360	1.7	299.200	1.3 - 8	320 - 207	GFL06 - 3E □□□ 063C32	E82MV 251_2B			
3.7	442	1.5	367.200	1.1 - 6	393 - 254	GFL06 - 3E □□□ 063C32	E82MV 251_2B			
3.3	498	1.2	413.667	1.0 - 6	443 - 286	GFL06 - 3E □□□ 063C32	E82MV 251_2B			
2.9	572	1.2	475.200	0.8 - 5	509 - 329	GFL06 - 3E □□□ 063C32	E82MV 251_2B			
2.6	644	1.0	535.333	0.7 - 4	573 - 370	GFL06 - 3E □□□ 063C32	E82MV 251_2B			
2.4	694	0.9	576.720	0.7 - 4	618 - 399	GFL06 - 3E □□□ 063C32	E82MV 251_2B			
<b>0.25 kW</b>							<b>GFL □□ - 2E</b>		3-106	
	374	6	4.6	3.659	109 - 651	5.5 - 3.6	GFL04 - 2E □□□ 063C42	E82MV 251_2B		
	273	9	4.6	5.018	79 - 475	7.6 - 4.9	GFL04 - 2E □□□ 063C42	E82MV 251_2B		
	235	10	4.6	5.833	68 - 409	8.8 - 5.7	GFL04 - 2E □□□ 063C42	E82MV 251_2B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.25 kW</b>							<b>GFL □□ - 2E</b>		3-106		
	214	11	4.6	6.400	62 - 372	9.6 - 6.2	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	195	12	5.2	7.025	57 - 339	10.6 - 6.8	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	164	14	4.6	8.379	47 - 285	12.6 - 8.1	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	147	16	4.6	9.333	43 - 255	14.0 - 9.1	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	134	17	5.2	10.238	39 - 233	15.4 - 9.9	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	119	19	4.6	11.491	35 - 207	17 - 11	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	107	22	4.6	12.800	31 - 186	19 - 12	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	93	25	5.2	14.706	27 - 162	22 - 14	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	86	27	4.6	15.904	25 - 150	24 - 15	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	77	30	4.6	17.920	22 - 133	27 - 17	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	67	35	4.8	20.519	19 - 116	31 - 20	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	60	39	4.3	22.857	17 - 104	34 - 22	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	55	43	4.3	25.136	16 - 95	38 - 24	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	49	47	3.6	28.000	14 - 85	42 - 27	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	43	53	3.5	31.600	13 - 75	48 - 31	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	39	60	2.9	35.200	11 - 68	53 - 34	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	34	69	2.7	40.697	9.8 - 59	61 - 40	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	30	77	2.2	45.333	8.8 - 53	68 - 44	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	27	87	2.2	51.579	7.7 - 46	78 - 50	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	24	97	1.8	57.455	6.9 - 41	86 - 56	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	23	99	3.3	58.667	6.8 - 41	88 - 57	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	21	109	1.2	64.636	6.1 - 37	97 - 63	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	22	107	2.6	63.190	6.3 - 38	95 - 61	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	19	122	1.2	72.000	5.5 - 33	108 - 70	GFL04 - 2E □□□ 063C42	E82MV 251_2B			
	19	120	2.5	71.200	5.6 - 33	107 - 69	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	17	137	1.4	80.762	4.9 - 30	122 - 78	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	17	137	2.6	81.000	4.9 - 29	122 - 79	GFL06 - 2E □□□ 063C42	E82MV 251_2B			
	15	154	1.4	91.000	4.4 - 26	137 - 88	GFL05 - 2E □□□ 063C42	E82MV 251_2B			
	15	154	2.6	91.250	4.4 - 26	137 - 89	GFL06 - 2E □□□ 063C42	E82MV 251_2B			
								<b>GFL □□ - 3E</b>			3-110
	14	169	1.9	101.547	3.9 - 23	151 - 97	GFL05 - 3E □□□ 063C42	E82MV 251_2B			
	12	191	1.7	114.952	3.5 - 21	170 - 110	GFL05 - 3E □□□ 063C42	E82MV 251_2B			
	12	194	2.7	116.571	3.4 - 20	173 - 112	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	11	216	1.5	129.524	3.1 - 18	192 - 124	GFL05 - 3E □□□ 063C42	E82MV 251_2B			
	10	219	2.7	131.323	3.0 - 18	195 - 126	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	9.7	235	1.5	140.817	2.8 - 17	209 - 135	GFL05 - 3E □□□ 063C42	E82MV 251_2B			
	9.5	240	2.3	144.320	2.8 - 17	214 - 138	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	8.6	264	1.2	158.667	2.5 - 15	235 - 152	GFL05 - 3E □□□ 063C42	E82MV 251_2B			
	8.4	271	2.3	162.583	2.4 - 15	241 - 156	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	7.7	295	1.2	177.027	2.2 - 13	262 - 169	GFL05 - 3E □□□ 063C42	E82MV 251_2B			
	7.6	299	2.0	179.520	2.2 - 13	266 - 172	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
6.9	332	1.0	199.467	2.0 - 12	296 - 191	GFL05 - 3E □□□ 063C42	E82MV 251_2B				
6.8	337	1.8	202.237	2.0 - 12	300 - 194	GFL06 - 3E □□□ 063C42	E82MV 251_2B				
6.0	380	0.9	227.989	1.7 - 10	338 - 218	GFL05 - 3E □□□ 063C42	E82MV 251_2B				
5.9	385	1.7	231.200	1.7 - 10	343 - 221	GFL06 - 3E □□□ 063C42	E82MV 251_2B				
5.3	434	1.4	260.457	1.5 - 9	386 - 249	GFL06 - 3E □□□ 063C42	E82MV 251_2B				
5.4	422	3.0	253.111	1.6 - 9	375 - 242	GFL07 - 3E □□□ 063C42	E82MV 251_2B				

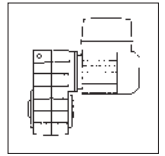
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Low-profile geared motors with motec

## Selection tables

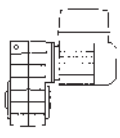


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.25 kW</b>							<b>GFL □□ - 3E</b>		3-110		
	4.7	488	1.4	293.018	1.4 - 8	434 - 280	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	4.7	484	2.9	290.706	1.4 - 8	431 - 278	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	4.6	498	1.2	299.200	1.3 - 8	443 - 286	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	4.2	546	2.3	327.556	1.2 - 7	485 - 313	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	3.7	612	1.1	367.200	1.1 - 6	544 - 351	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	3.9	588	2.4	352.811	1.1 - 7	523 - 338	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	3.3	689	0.9	413.667	1.0 - 6	613 - 396	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	3.5	662	1.9	397.533	1.0 - 6	589 - 380	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	3.4	663	3.2	397.863	1.0 - 6	590 - 381	GFL09 - 3E □□□ 063C42	E82MV 251_2B			
	2.9	791	0.8	475.200	0.8 - 5	704 - 455	GFL06 - 3E □□□ 063C42	E82MV 251_2B			
	3.2	717	1.8	430.222	0.9 - 6	638 - 412	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	2.6	870	1.5	522.133	0.8 - 5	774 - 500	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	2.7	857	3.2	514.881	0.8 - 5	763 - 493	GFL09 - 3E □□□ 063C42	E82MV 251_2B			
	2.4	937	1.2	562.391	0.7 - 4	834 - 538	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	2.5	923	2.3	554.470	0.7 - 4	822 - 531	GFL09 - 3E □□□ 063C42	E82MV 251_2B			
	2.2	1055	1.2	633.680	0.6 - 4	939 - 606	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	2.2	1041	2.2	624.879	0.6 - 4	926 - 598	GFL09 - 3E □□□ 063C42	E82MV 251_2B			
	1.9	1197	0.9	718.786	0.6 - 3	1065 - 688	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	2.0	1167	1.8	700.875	0.6 - 3	1039 - 671	GFL09 - 3E □□□ 063C42	E82MV 251_2B			
	1.7	1349	0.9	809.900	0.5 - 3	1200 - 775	GFL07 - 3E □□□ 063C42	E82MV 251_2B			
	1.7	1315	1.7	789.875	0.5 - 3	1171 - 756	GFL09 - 3E □□□ 063C42	E82MV 251_2B			
	<b>0.37 kW</b>							<b>GFL □□ - 2E</b>			3-106
		385	9	4.0	3.659	112 - 670	7.9 - 4.4	GFL04 - 2E □□□ 071C32		E82MV 371_2B	
281		12	4.0	5.018	81 - 489	10.9 - 6.0	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
242		14	4.0	5.833	70 - 421	12.6 - 7.0	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
220		16	4.0	6.400	64 - 383	13.8 - 7.7	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
201		17	4.5	7.025	58 - 349	15.2 - 8.4	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
168		20	4.0	8.379	49 - 293	18 - 10	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
151		23	4.0	9.333	44 - 263	20 - 11	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
138		25	4.5	10.238	40 - 240	22 - 12	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
123		28	4.0	11.491	36 - 214	25 - 14	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
110		31	4.0	12.800	32 - 192	28 - 15	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
96		36	4.5	14.706	28 - 167	32 - 18	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
89		39	4.0	15.904	26 - 154	34 - 19	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
79		44	3.8	17.920	23 - 137	39 - 22	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
69		50	3.7	20.519	20 - 120	44 - 25	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
62		56	3.0	22.857	18 - 107	49 - 27	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
56		61	3.0	25.136	16 - 98	54 - 30	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
50		68	2.5	28.000	15 - 88	61 - 34	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
45		77	2.4	31.600	13 - 78	68 - 38	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
40		86	2.0	35.200	12 - 70	76 - 42	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
35		99	1.9	40.697	10 - 60	88 - 49	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
35		98	3.2	40.233	10 - 61	87 - 48	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
31		110	1.6	45.333	9.0 - 54	98 - 54	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
31		110	2.9	45.333	9.0 - 54	98 - 54	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
27		125	1.5	51.579	7.9 - 48	112 - 62	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
27		127	2.4	52.067	7.9 - 47	113 - 63	GFL05 - 2E □□□ 071C32	E82MV 371_2B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.37 kW</b>							<b>GFL □□ - 2E</b>		3-106		
	25	140	1.3	57.455	7.1 - 43	124 - 69	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
	24	143	2.3	58.667	7.0 - 42	127 - 70	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
	22	157	1.0	64.636	6.3 - 38	140 - 78	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
	22	154	1.8	63.190	6.5 - 39	137 - 76	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
	22	156	2.8	64.080	6.4 - 38	139 - 77	GFL06 - 2E □□□ 071C32	E82MV 371_2B			
	20	175	1.0	72.000	5.7 - 34	156 - 87	GFL04 - 2E □□□ 071C32	E82MV 371_2B			
	20	173	1.8	71.200	5.7 - 34	154 - 86	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
	20	176	2.8	72.189	5.7 - 34	156 - 87	GFL06 - 2E □□□ 071C32	E82MV 371_2B			
	18	196	1.1	80.762	5.1 - 30	175 - 97	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
	17	197	2.2	81.000	5.0 - 30	175 - 97	GFL06 - 2E □□□ 071C32	E82MV 371_2B			
	16	221	1.1	91.000	4.5 - 27	197 - 109	GFL05 - 2E □□□ 071C32	E82MV 371_2B			
	16	222	2.2	91.250	4.5 - 27	197 - 110	GFL06 - 2E □□□ 071C32	E82MV 371_2B			
								<b>GFL □□ - 3E</b>			3-110
	14	243	1.4	101.547	4.0 - 24	216 - 120	GFL05 - 3E □□□ 071C32	E82MV 371_2B			
	14	238	2.3	99.361	4.1 - 25	212 - 118	GFL06 - 3E □□□ 071C32	E82MV 371_2B			
	12	275	1.2	114.952	3.6 - 21	245 - 136	GFL05 - 3E □□□ 071C32	E82MV 371_2B			
	12	279	1.9	116.571	3.5 - 21	248 - 138	GFL06 - 3E □□□ 071C32	E82MV 371_2B			
	11	310	1.1	129.524	3.2 - 19	276 - 153	GFL05 - 3E □□□ 071C32	E82MV 371_2B			
	11	315	1.9	131.323	3.1 - 19	280 - 155	GFL06 - 3E □□□ 071C32	E82MV 371_2B			
10	337	1.0	140.817	2.9 - 17	300 - 167	GFL05 - 3E □□□ 071C32	E82MV 371_2B				
9.8	346	1.6	144.320	2.8 - 17	308 - 171	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
9.6	353	3.2	147.347	2.8 - 17	314 - 174	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
8.9	380	0.9	158.667	2.6 - 15	338 - 188	GFL05 - 3E □□□ 071C32	E82MV 371_2B				
8.7	389	1.6	162.583	2.5 - 15	347 - 192	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
8.5	398	3.1	166.025	2.5 - 15	354 - 197	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
8.0	424	0.8	177.027	2.3 - 14	377 - 210	GFL05 - 3E □□□ 071C32	E82MV 371_2B				
7.9	430	1.4	179.520	2.3 - 14	383 - 212	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
7.7	439	2.8	183.285	2.2 - 13	391 - 217	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
7.0	484	1.3	202.237	2.0 - 12	431 - 239	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
6.8	495	2.5	206.519	2.0 - 12	440 - 244	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
6.1	554	1.2	231.200	1.8 - 11	493 - 274	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
6.3	538	2.5	224.636	1.8 - 11	479 - 266	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
5.4	624	1.0	260.457	1.6 - 9	555 - 308	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
5.6	606	2.1	253.111	1.6 - 10	539 - 300	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
4.8	702	0.9	293.018	1.4 - 8	625 - 347	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
4.9	696	2.0	290.706	1.4 - 8	620 - 344	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
4.7	717	0.9	299.200	1.4 - 8	638 - 354	GFL06 - 3E □□□ 071C32	E82MV 371_2B				
4.3	784	1.6	327.556	1.2 - 7	698 - 388	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
4.3	785	3.2	327.827	1.2 - 7	699 - 388	GFL09 - 3E □□□ 071C32	E82MV 371_2B				
4.0	845	1.6	352.811	1.2 - 7	752 - 418	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
4.0	845	2.8	353.033	1.2 - 7	752 - 418	GFL09 - 3E □□□ 071C32	E82MV 371_2B				
3.6	952	1.3	397.533	1.0 - 6	847 - 471	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
3.5	953	2.8	397.863	1.0 - 6	848 - 471	GFL09 - 3E □□□ 071C32	E82MV 371_2B				
3.3	1030	1.2	430.222	1.0 - 6	917 - 509	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
3.3	1016	2.7	424.247	1.0 - 6	904 - 502	GFL09 - 3E □□□ 071C32	E82MV 371_2B				
2.7	1250	1.0	522.133	0.8 - 5	1113 - 618	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
2.7	1233	2.2	514.881	0.8 - 5	1097 - 609	GFL09 - 3E □□□ 071C32	E82MV 371_2B				
2.5	1347	0.8	562.391	0.7 - 4	1199 - 666	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
2.5	1328	1.6	554.470	0.7 - 4	1182 - 656	GFL09 - 3E □□□ 071C32	E82MV 371_2B				
2.2	1518	0.8	633.680	0.6 - 4	1351 - 750	GFL07 - 3E □□□ 071C32	E82MV 371_2B				
2.3	1496	1.5	624.879	0.7 - 4	1332 - 740	GFL09 - 3E □□□ 071C32	E82MV 371_2B				

Thermal limit rating not taken into account (see Note on page 3-3).

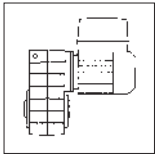
The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

## Selection tables

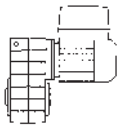


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.37 kW</b>							<b>GFL □□ - 3E</b>		3-110
	2.0	1678	1.3	700.875	0.6 - 4	1494 - 830	GFL09 - 3E □□□ 071C32	E82MV 371_2B	
	1.8	1892	1.2	789.875	0.5 - 3	1683 - 935	GFL09 - 3E □□□ 071C32	E82MV 371_2B	
<b>0.55 kW</b>							<b>GFL □□ - 2E</b>		3-106
	384	13	4.5	3.659	111 - 668	11.8 - 7.6	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	280	18	4.5	5.018	81 - 487	16 - 10	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	241	21	4.5	5.833	70 - 419	19 - 12	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	219	23	4.2	6.422	63 - 381	21 - 13	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	200	26	4.2	7.025	58 - 348	23 - 15	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	168	30	4.5	8.379	49 - 292	27 - 17	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	156	33	4.5	9.010	45 - 271	29 - 19	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	137	37	4.2	10.238	40 - 239	33 - 21	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	122	42	4.3	11.491	35 - 213	37 - 24	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	110	46	3.6	12.800	32 - 191	41 - 27	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	96	53	3.4	14.706	28 - 166	47 - 31	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	87	58	3.1	16.087	25 - 152	52 - 34	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	78	65	2.6	17.920	23 - 136	58 - 37	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	69	74	2.5	20.519	20 - 119	66 - 43	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	62	83	2.0	22.857	18 - 107	74 - 48	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	56	91	2.0	25.136	16 - 97	81 - 52	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	50	102	1.7	28.000	15 - 87	90 - 58	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	50	102	3.1	28.000	15 - 87	90 - 58	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	45	115	1.6	31.600	13 - 77	102 - 66	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	43	117	2.9	32.344	13 - 76	104 - 67	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	40	128	1.3	35.200	12 - 69	114 - 73	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	39	132	2.4	36.444	11 - 67	118 - 76	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	35	148	1.3	40.697	10 - 60	131 - 85	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	35	146	2.4	40.233	10 - 61	130 - 84	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	31	164	1.1	45.333	9.0 - 54	146 - 94	GFL04 - 2E □□□ 071C42	E82MV 551_4B	
	31	164	1.9	45.333	9.0 - 54	146 - 94	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	31	167	3.2	45.963	8.9 - 53	148 - 96	GFL06 - 2E □□□ 071C42	E82MV 551_4B	
	27	189	1.6	52.067	7.8 - 47	168 - 109	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	27	192	2.9	52.800	7.7 - 46	170 - 110	GFL06 - 2E □□□ 071C42	E82MV 551_4B	
	24	213	1.5	58.667	6.9 - 42	189 - 122	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
	24	216	2.9	59.481	6.9 - 41	192 - 124	GFL06 - 2E □□□ 071C42	E82MV 551_4B	
	22	229	1.2	63.190	6.4 - 39	204 - 132	GFL05 - 2E □□□ 071C42	E82MV 551_4B	
22	232	2.4	64.080	6.4 - 38	207 - 134	GFL06 - 2E □□□ 071C42	E82MV 551_4B		
20	258	1.2	71.200	5.7 - 34	230 - 148	GFL05 - 2E □□□ 071C42	E82MV 551_4B		
20	262	2.4	72.189	5.6 - 34	233 - 150	GFL06 - 2E □□□ 071C42	E82MV 551_4B		
17	294	1.4	81.000	5.0 - 30	261 - 169	GFL06 - 2E □□□ 071C42	E82MV 551_4B		
15	331	1.4	91.250	4.5 - 27	295 - 190	GFL06 - 2E □□□ 071C42	E82MV 551_4B		
							<b>GFL □□ - 3E</b>		3-110
15	330	2.9	92.413	4.4 - 26	294 - 190	GFL07 - 3E □□□ 071C42	E82MV 551_4B		
14	363	0.9	101.547	4.0 - 24	323 - 208	GFL05 - 3E □□□ 071C42	E82MV 551_4B		
14	355	1.6	99.361	4.1 - 25	316 - 204	GFL06 - 3E □□□ 071C42	E82MV 551_4B		
14	372	2.9	104.127	3.9 - 23	331 - 214	GFL07 - 3E □□□ 071C42	E82MV 551_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

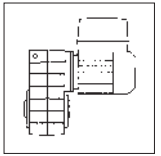
## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.55 kW</b>							<b>GFL □□ - 3E</b>		3-110
	12	411	0.8	114.952	3.5 - 21	365 - 236	GFL05 - 3E □□□ 071C42	E82MV 551_4B	
	12	416	1.3	116.571	3.5 - 21	371 - 239	GFL06 - 3E □□□ 071C42	E82MV 551_4B	
	12	404	2.6	113.206	3.6 - 22	360 - 232	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	11	469	1.3	131.323	3.1 - 19	418 - 270	GFL06 - 3E □□□ 071C42	E82MV 551_4B	
	11	456	2.6	127.556	3.2 - 19	406 - 262	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	9.7	516	1.1	144.320	2.8 - 17	459 - 296	GFL06 - 3E □□□ 071C42	E82MV 551_4B	
	9.5	526	2.2	147.347	2.8 - 17	468 - 303	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	8.6	581	1.1	162.583	2.5 - 15	517 - 334	GFL06 - 3E □□□ 071C42	E82MV 551_4B	
	8.5	593	2.1	166.025	2.5 - 15	528 - 341	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	7.8	641	0.9	179.520	2.3 - 14	571 - 369	GFL06 - 3E □□□ 071C42	E82MV 551_4B	
	7.7	655	1.9	183.285	2.2 - 13	583 - 376	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	7.6	661	3.2	185.111	2.2 - 13	589 - 380	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	7.0	723	0.9	202.237	2.0 - 12	643 - 415	GFL06 - 3E □□□ 071C42	E82MV 551_4B	
	6.8	738	1.7	206.519	2.0 - 12	657 - 424	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	6.7	745	3.2	208.617	2.0 - 12	663 - 428	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	6.3	803	1.7	224.636	1.8 - 11	714 - 461	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	6.3	803	3.0	224.778	1.8 - 11	715 - 461	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	5.6	904	1.4	253.111	1.6 - 10	805 - 520	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	5.6	905	3.0	253.321	1.6 - 10	805 - 520	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	4.8	1039	1.3	290.706	1.4 - 8	924 - 597	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	4.8	1039	2.5	290.889	1.4 - 8	925 - 597	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	4.3	1170	1.1	327.556	1.2 - 7	1041 - 673	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	4.3	1171	2.5	327.827	1.2 - 7	1042 - 673	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	4.0	1260	1.1	352.811	1.2 - 7	1122 - 724	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	4.0	1261	2.2	353.033	1.2 - 7	1122 - 725	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	3.5	1420	0.9	397.533	1.0 - 6	1264 - 816	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	3.5	1421	2.2	397.863	1.0 - 6	1265 - 817	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	3.3	1537	0.8	430.222	0.9 - 6	1368 - 883	GFL07 - 3E □□□ 071C42	E82MV 551_4B	
	3.3	1516	1.8	424.247	1.0 - 6	1349 - 871	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	2.7	1839	1.5	514.881	0.8 - 5	1637 - 1057	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
	2.5	1981	1.1	554.470	0.7 - 4	1763 - 1138	GFL09 - 3E □□□ 071C42	E82MV 551_4B	
2.3	2232	1.0	624.879	0.7 - 4	1987 - 1283	GFL09 - 3E □□□ 071C42	E82MV 551_4B		
2.0	2504	0.8	700.875	0.6 - 3	2228 - 1439	GFL09 - 3E □□□ 071C42	E82MV 551_4B		
1.8	2822	0.8	789.875	0.5 - 3	2511 - 1622	GFL09 - 3E □□□ 071C42	E82MV 551_4B		
<b>0.75 kW</b>							<b>GFL □□ - 2E</b>		3-106
	385	18	4.2	3.659	112 - 670	16 - 10	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	281	25	4.2	5.018	81 - 489	22 - 14	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	242	29	4.2	5.833	70 - 421	26 - 17	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	220	32	3.6	6.422	64 - 382	28 - 18	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	201	35	3.3	7.025	58 - 349	31 - 20	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	168	41	4.2	8.379	49 - 293	37 - 24	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	151	46	3.6	9.333	44 - 263	41 - 26	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	138	51	3.2	10.238	40 - 240	45 - 29	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	123	57	3.2	11.491	36 - 214	50 - 33	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	110	63	2.6	12.800	32 - 192	56 - 36	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	96	73	2.5	14.706	28 - 167	64 - 42	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	88	79	2.3	16.087	25 - 153	71 - 46	GFL04 - 2E □□□ 080C32	E82MV 751_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



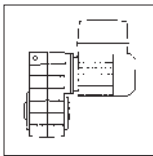
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.75 kW</b>							<b>GFL □□ - 2E</b>		3-106
	79	88	1.9	17.920	23 - 137	79 - 51	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	69	101	1.8	20.519	20 - 120	90 - 58	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	62	113	1.5	22.857	18 - 107	100 - 65	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	62	113	2.8	22.857	18 - 107	100 - 65	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	56	124	1.5	25.136	16 - 98	110 - 71	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	57	123	2.8	24.850	16 - 99	109 - 70	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	50	138	1.2	28.000	15 - 88	123 - 79	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	50	138	2.3	28.000	15 - 88	123 - 79	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	45	156	1.2	31.600	13 - 78	139 - 90	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	44	159	2.2	32.344	13 - 76	142 - 92	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	40	174	1.0	35.200	12 - 70	154 - 100	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	39	180	1.8	36.444	11 - 67	160 - 103	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	35	201	0.9	40.697	10 - 60	178 - 115	GFL04 - 2E □□□ 080C32	E82MV 751_4B	
	35	198	1.7	40.233	10 - 61	176 - 114	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	35	201	2.9	40.800	10 - 60	179 - 116	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	31	223	1.4	45.333	9.0 - 54	199 - 128	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	31	227	2.7	45.963	8.9 - 53	202 - 130	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	27	257	1.2	52.067	7.9 - 47	228 - 147	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	27	260	2.5	52.800	7.7 - 46	232 - 150	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	24	289	1.1	58.667	7.0 - 42	257 - 166	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	24	293	2.1	59.481	6.9 - 41	261 - 168	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	22	311	0.9	63.190	6.5 - 39	277 - 179	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	22	316	1.8	64.080	6.4 - 38	281 - 181	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	22	311	2.5	63.190	6.5 - 39	277 - 179	GFL07 - 2E □□□ 080C32	E82MV 751_4B	
	20	351	0.9	71.200	5.7 - 34	312 - 202	GFL05 - 2E □□□ 080C32	E82MV 751_4B	
	20	356	1.7	72.189	5.7 - 34	317 - 204	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	20	351	2.5	71.200	5.7 - 34	312 - 202	GFL07 - 2E □□□ 080C32	E82MV 751_4B	
	17	399	1.1	81.000	5.0 - 30	355 - 229	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	18	394	2.0	79.875	5.1 - 31	350 - 226	GFL07 - 2E □□□ 080C32	E82MV 751_4B	
	16	450	1.1	91.250	4.5 - 27	400 - 258	GFL06 - 2E □□□ 080C32	E82MV 751_4B	
	16	444	2.0	90.000	4.5 - 27	395 - 255	GFL07 - 2E □□□ 080C32	E82MV 751_4B	
							<b>GFL □□ - 3E</b>		3-110
14	482	1.1	99.361	4.1 - 25	429 - 277	GFL06 - 3E □□□ 080C32	E82MV 751_4B		
14	506	2.1	104.127	3.9 - 24	450 - 290	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
12	566	0.9	116.571	3.5 - 21	504 - 325	GFL06 - 3E □□□ 080C32	E82MV 751_4B		
13	550	1.9	113.206	3.6 - 22	489 - 316	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
11	638	0.9	131.323	3.1 - 19	567 - 366	GFL06 - 3E □□□ 080C32	E82MV 751_4B		
11	619	1.9	127.556	3.2 - 19	551 - 356	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
9.6	715	1.6	147.347	2.8 - 17	637 - 411	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
9.5	722	2.8	148.815	2.7 - 16	643 - 415	GFL09 - 3E □□□ 080C32	E82MV 751_4B		
8.5	806	1.6	166.025	2.5 - 15	717 - 463	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
8.4	814	2.8	167.712	2.4 - 15	725 - 468	GFL09 - 3E □□□ 080C32	E82MV 751_4B		
7.7	890	1.4	183.285	2.2 - 13	792 - 511	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
7.6	899	2.5	185.111	2.2 - 13	800 - 516	GFL09 - 3E □□□ 080C32	E82MV 751_4B		
6.8	1003	1.2	206.519	2.0 - 12	892 - 576	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
6.8	1013	2.5	208.617	2.0 - 12	901 - 582	GFL09 - 3E □□□ 080C32	E82MV 751_4B		
6.3	1090	1.2	224.636	1.8 - 11	970 - 627	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
6.3	1091	2.2	224.778	1.8 - 11	971 - 627	GFL09 - 3E □□□ 080C32	E82MV 751_4B		
5.6	1229	1.0	253.111	1.6 - 10	1094 - 706	GFL07 - 3E □□□ 080C32	E82MV 751_4B		
5.6	1230	2.2	253.321	1.6 - 10	1094 - 707	GFL09 - 3E □□□ 080C32	E82MV 751_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Low-profile geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.75 kW</b>							<b>GFL □□ - 3E</b>		3-110
	4.9	1411	1.0	290.706	1.4 - 8	1256 - 811	GFL07 - 3E □□□ 080C32	E82MV 751_4B	
	4.9	1412	1.9	290.889	1.4 - 8	1257 - 812	GFL09 - 3E □□□ 080C32	E82MV 751_4B	
	4.3	1591	1.9	327.827	1.2 - 7	1416 - 915	GFL09 - 3E □□□ 080C32	E82MV 751_4B	
	4.0	1713	0.8	352.811	1.2 - 7	1524 - 984	GFL07 - 3E □□□ 080C32	E82MV 751_4B	
	4.0	1714	1.6	353.033	1.2 - 7	1525 - 985	GFL09 - 3E □□□ 080C32	E82MV 751_4B	
	3.9	1738	2.5	358.077	1.1 - 7	1547 - 999	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
	3.5	1931	1.6	397.863	1.0 - 6	1719 - 1110	GFL09 - 3E □□□ 080C32	E82MV 751_4B	
	3.5	1959	2.5	403.467	1.0 - 6	1743 - 1126	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
	3.3	2059	1.3	424.247	1.0 - 6	1833 - 1184	GFL09 - 3E □□□ 080C32	E82MV 751_4B	
	3.3	2088	2.9	430.222	1.0 - 6	1859 - 1200	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
	2.7	2499	1.1	514.881	0.8 - 5	2224 - 1436	GFL09 - 3E □□□ 080C32	E82MV 751_4B	
	2.7	2535	2.3	522.133	0.8 - 5	2256 - 1457	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
	2.5	2730	2.0	562.391	0.7 - 4	2430 - 1569	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
	2.2	3076	1.9	633.680	0.6 - 4	2738 - 1768	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
	2.0	3451	1.5	710.888	0.6 - 3	3071 - 1983	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
	1.8	3888	1.5	801.000	0.5 - 3	3461 - 2235	GFL11 - 3E □□□ 080C32	E82MV 751_4B	
<b>1.1 kW</b>							<b>GFL □□ - 2E</b>		3-106
	380	27	4.1	3.659	110 - 661	23 - 15	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	304	34	4.5	4.571	88 - 529	28 - 19	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	277	37	3.0	5.018	80 - 482	31 - 21	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	238	43	3.6	5.833	69 - 415	36 - 25	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	216	47	2.4	6.422	63 - 377	40 - 27	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	198	52	2.2	7.025	57 - 344	43 - 30	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	166	61	2.9	8.379	48 - 289	52 - 35	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	149	68	2.4	9.333	43 - 259	57 - 39	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	136	75	2.1	10.238	39 - 236	63 - 43	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	121	84	2.2	11.491	35 - 210	71 - 48	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	109	94	1.8	12.800	31 - 189	79 - 54	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	109	94	3.0	12.800	31 - 189	79 - 54	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	95	108	1.7	14.706	27 - 164	91 - 62	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	96	107	2.8	14.538	28 - 166	90 - 61	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	86	118	1.5	16.087	25 - 150	99 - 68	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	87	117	2.7	15.904	25 - 152	98 - 67	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	78	131	1.3	17.920	22 - 135	110 - 76	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	78	131	2.4	17.920	22 - 135	110 - 76	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	68	150	1.2	20.519	20 - 118	126 - 86	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	69	149	2.2	20.286	20 - 119	125 - 85	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	61	168	1.0	22.857	18 - 106	141 - 96	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	61	168	1.9	22.857	18 - 106	141 - 96	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	55	184	1.0	25.136	16 - 96	155 - 106	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	56	182	1.9	24.850	16 - 97	153 - 105	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	50	205	0.8	28.000	14 - 86	172 - 118	GFL04 - 2E □□□ 080C42	E82MV 152_4B	
	50	205	1.5	28.000	14 - 86	172 - 118	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	49	208	2.9	28.389	14 - 85	175 - 120	GFL06 - 2E □□□ 080C42	E82MV 152_4B	
	43	237	1.5	32.344	12 - 75	199 - 136	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
	42	241	2.7	32.800	12 - 74	202 - 138	GFL06 - 2E □□□ 080C42	E82MV 152_4B	
	38	267	1.2	36.444	11 - 66	224 - 154	GFL05 - 2E □□□ 080C42	E82MV 152_4B	
38	271	2.3	36.951	11 - 65	228 - 156	GFL06 - 2E □□□ 080C42	E82MV 152_4B		

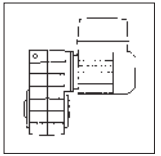
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Low-profile geared motors with motec

## Selection tables

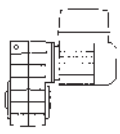


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>1.1 kW</b>							<b>GFL □□ - 2E</b>		3-106		
	35	295	1.2	40.233	10 - 60	248 - 170	GFL05 - 2E □□□ 080C42	E82MV 152_4B			
	34	299	2.2	40.800	9.9 - 59	251 - 172	GFL06 - 2E □□□ 080C42	E82MV 152_4B			
	31	332	1.0	45.333	8.9 - 53	279 - 191	GFL05 - 2E □□□ 080C42	E82MV 152_4B			
	30	337	1.8	45.963	8.8 - 53	283 - 194	GFL06 - 2E □□□ 080C42	E82MV 152_4B			
	31	328	3.1	44.667	9.0 - 54	275 - 188	GFL07 - 2E □□□ 080C42	E82MV 152_4B			
	26	387	1.7	52.800	7.6 - 46	325 - 222	GFL06 - 2E □□□ 080C42	E82MV 152_4B			
	27	382	2.9	52.067	7.7 - 46	321 - 219	GFL07 - 2E □□□ 080C42	E82MV 152_4B			
	23	436	1.4	59.481	6.8 - 41	366 - 251	GFL06 - 2E □□□ 080C42	E82MV 152_4B			
	24	430	2.9	58.667	6.9 - 41	361 - 247	GFL07 - 2E □□□ 080C42	E82MV 152_4B			
	22	470	1.2	64.080	6.3 - 38	395 - 270	GFL06 - 2E □□□ 080C42	E82MV 152_4B			
	22	463	2.3	63.190	6.4 - 38	389 - 266	GFL07 - 2E □□□ 080C42	E82MV 152_4B			
	19	529	1.2	72.189	5.6 - 34	445 - 304	GFL06 - 2E □□□ 080C42	E82MV 152_4B			
	20	522	2.3	71.200	5.7 - 34	439 - 300	GFL07 - 2E □□□ 080C42	E82MV 152_4B			
	17	586	1.4	79.875	5.0 - 30	492 - 337	GFL07 - 2E □□□ 080C42	E82MV 152_4B			
	15	660	1.4	90.000	4.5 - 27	554 - 379	GFL07 - 2E □□□ 080C42	E82MV 152_4B			
								<b>GFL □□ - 3E</b>			3-110
	17	596	2.9	82.465	4.9 - 29	500 - 342	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	15	674	2.5	93.333	4.3 - 26	566 - 387	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	13	752	1.4	104.127	3.9 - 23	632 - 432	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	13	760	2.5	105.185	3.8 - 23	638 - 437	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	12	818	1.3	113.206	3.6 - 21	687 - 470	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	12	826	2.2	114.333	3.5 - 21	694 - 475	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	11	921	1.3	127.556	3.2 - 19	774 - 529	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	11	931	2.2	128.852	3.1 - 19	782 - 535	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	9.4	1064	1.1	147.347	2.7 - 16	894 - 612	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	9.3	1075	1.9	148.815	2.7 - 16	903 - 618	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	8.4	1199	1.0	166.025	2.4 - 15	1007 - 689	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	8.3	1211	1.9	167.712	2.4 - 14	1017 - 696	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	7.6	1324	0.9	183.285	2.2 - 13	1112 - 761	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	7.5	1337	1.7	185.111	2.2 - 13	1123 - 768	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	7.6	1320	3.1	182.792	2.2 - 13	1109 - 759	GFL11 - 3E □□□ 080C42	E82MV 152_4B			
	6.7	1492	0.8	206.519	2.0 - 12	1253 - 857	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	6.7	1507	1.7	208.617	1.9 - 12	1266 - 866	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	6.8	1488	3.1	205.963	2.0 - 12	1249 - 855	GFL11 - 3E □□□ 080C42	E82MV 152_4B			
	6.2	1622	0.8	224.636	1.8 - 11	1363 - 932	GFL07 - 3E □□□ 080C42	E82MV 152_4B			
	6.2	1623	1.5	224.778	1.8 - 11	1364 - 933	GFL09 - 3E □□□ 080C42	E82MV 152_4B			
	6.2	1622	2.8	224.636	1.8 - 11	1363 - 932	GFL11 - 3E □□□ 080C42	E82MV 152_4B			
5.5	1830	1.5	253.321	1.6 - 10	1537 - 1051	GFL09 - 3E □□□ 080C42	E82MV 152_4B				
5.5	1828	2.8	253.111	1.6 - 10	1535 - 1051	GFL11 - 3E □□□ 080C42	E82MV 152_4B				
4.8	2101	1.3	290.889	1.4 - 8	1765 - 1207	GFL09 - 3E □□□ 080C42	E82MV 152_4B				
5.2	1930	2.7	267.259	1.5 - 9	1621 - 1109	GFL11 - 3E □□□ 080C42	E82MV 152_4B				
4.2	2368	1.3	327.827	1.2 - 7	1989 - 1361	GFL09 - 3E □□□ 080C42	E82MV 152_4B				
4.2	2366	2.3	327.556	1.2 - 7	1987 - 1360	GFL11 - 3E □□□ 080C42	E82MV 152_4B				
3.9	2550	1.1	353.033	1.1 - 7	2142 - 1465	GFL09 - 3E □□□ 080C42	E82MV 152_4B				
3.9	2586	2.0	358.077	1.1 - 7	2172 - 1486	GFL11 - 3E □□□ 080C42	E82MV 152_4B				
3.5	2873	1.1	397.863	1.0 - 6	2414 - 1651	GFL09 - 3E □□□ 080C42	E82MV 152_4B				
3.5	2914	2.0	403.467	1.0 - 6	2448 - 1675	GFL11 - 3E □□□ 080C42	E82MV 152_4B				
3.3	3064	0.9	424.247	1.0 - 6	2574 - 1761	GFL09 - 3E □□□ 080C42	E82MV 152_4B				
3.2	3107	1.9	430.222	0.9 - 6	2610 - 1786	GFL11 - 3E □□□ 080C42	E82MV 152_4B				
2.7	3771	1.6	522.133	0.8 - 5	3168 - 2167	GFL11 - 3E □□□ 080C42	E82MV 152_4B				

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.1 kW</b>							<b>GFL □□ - 3E</b>		3-110
	2.5	4062	1.3	562.391	0.7 - 4	3412 - 2334	GFL11 - 3E □□□ 080C42	E82MV 152_4B	
	2.2	4576	1.3	633.680	0.6 - 4	3844 - 2630	GFL11 - 3E □□□ 080C42	E82MV 152_4B	
	2.0	5134	1.0	710.888	0.6 - 3	4313 - 2951	GFL11 - 3E □□□ 080C42	E82MV 152_4B	
	1.7	5785	1.0	801.000	0.5 - 3	4859 - 3325	GFL11 - 3E □□□ 080C42	E82MV 152_4B	
<b>1.5 kW</b>							<b>GFL □□ - 2E</b>		3-106
	380	37	3.0	3.659	110 - 661	33 - 21	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	304	46	3.7	4.571	88 - 529	41 - 26	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	277	50	2.2	5.018	80 - 482	45 - 29	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	238	58	2.6	5.833	69 - 415	52 - 34	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	216	64	1.8	6.422	63 - 377	57 - 37	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	217	64	2.7	6.400	63 - 378	57 - 37	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	198	70	1.6	7.025	57 - 344	63 - 40	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	166	84	2.1	8.379	48 - 289	75 - 48	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	149	93	1.8	9.333	43 - 259	83 - 54	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	154	90	3.0	9.010	45 - 268	80 - 52	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	136	102	1.6	10.238	39 - 236	91 - 59	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	140	99	2.8	9.946	41 - 243	88 - 57	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	121	115	1.6	11.491	35 - 210	102 - 66	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	122	114	2.5	11.360	35 - 213	101 - 65	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	109	128	1.3	12.800	31 - 189	114 - 74	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	109	128	2.2	12.800	31 - 189	114 - 74	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	95	147	1.2	14.706	27 - 164	131 - 84	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	96	145	2.1	14.538	28 - 166	129 - 84	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	86	161	1.1	16.087	25 - 150	143 - 92	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	87	159	2.0	15.904	25 - 152	142 - 91	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	78	179	0.9	17.920	22 - 135	159 - 103	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	78	179	1.7	17.920	22 - 135	159 - 103	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	68	205	0.9	20.519	20 - 118	183 - 118	GFL04 - 2E □□□ 090C32	E82MV 152_4B	
	69	203	1.6	20.286	20 - 119	181 - 117	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	68	206	3.1	20.571	20 - 118	183 - 118	GFL06 - 2E □□□ 090C32	E82MV 152_4B	
	61	229	1.4	22.857	18 - 106	203 - 131	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	60	232	2.6	23.175	17 - 104	206 - 133	GFL06 - 2E □□□ 090C32	E82MV 152_4B	
	56	249	1.4	24.850	16 - 97	221 - 143	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	55	252	2.6	25.200	16 - 96	224 - 145	GFL06 - 2E □□□ 090C32	E82MV 152_4B	
	50	280	1.1	28.000	14 - 86	249 - 161	GFL05 - 2E □□□ 090C32	E82MV 152_4B	
	49	284	2.1	28.389	14 - 85	253 - 163	GFL06 - 2E □□□ 090C32	E82MV 152_4B	
43	323	1.1	32.344	12 - 75	288 - 186	GFL05 - 2E □□□ 090C32	E82MV 152_4B		
42	328	2.0	32.800	12 - 74	292 - 188	GFL06 - 2E □□□ 090C32	E82MV 152_4B		
38	364	0.9	36.444	11 - 66	324 - 209	GFL05 - 2E □□□ 090C32	E82MV 152_4B		
38	369	1.7	36.951	11 - 65	329 - 212	GFL06 - 2E □□□ 090C32	E82MV 152_4B		
35	402	0.9	40.233	10 - 60	358 - 231	GFL05 - 2E □□□ 090C32	E82MV 152_4B		
34	408	1.6	40.800	9.9 - 59	363 - 234	GFL06 - 2E □□□ 090C32	E82MV 152_4B		
35	396	2.8	39.642	10 - 61	353 - 228	GFL07 - 2E □□□ 090C32	E82MV 152_4B		
30	460	1.3	45.963	8.8 - 53	409 - 264	GFL06 - 2E □□□ 090C32	E82MV 152_4B		
31	447	2.8	44.667	9.0 - 54	397 - 257	GFL07 - 2E □□□ 090C32	E82MV 152_4B		
26	528	1.3	52.800	7.6 - 46	470 - 303	GFL06 - 2E □□□ 090C32	E82MV 152_4B		
27	521	2.4	52.067	7.7 - 46	463 - 299	GFL07 - 2E □□□ 090C32	E82MV 152_4B		
23	595	1.0	59.481	6.8 - 41	529 - 342	GFL06 - 2E □□□ 090C32	E82MV 152_4B		
24	587	2.2	58.667	6.9 - 41	522 - 337	GFL07 - 2E □□□ 090C32	E82MV 152_4B		

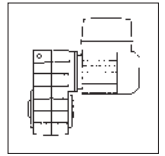
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Low-profile geared motors with motec

## Selection tables

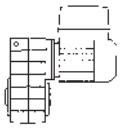


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>1.5 kW</b>	<b>GFL □□ - 2E</b>									
	22	641	0.9	64.080	6.3 - 38	570 - 368	GFL06 - 2E □□□ 090C32	E82MV 152_4B	3-106	
	22	632	2.0	63.190	6.4 - 38	562 - 363	GFL07 - 2E □□□ 090C32	E82MV 152_4B		
	19	722	0.9	72.189	5.6 - 34	642 - 415	GFL06 - 2E □□□ 090C32	E82MV 152_4B		
	20	712	1.8	71.200	5.7 - 34	634 - 409	GFL07 - 2E □□□ 090C32	E82MV 152_4B		
	20	702	2.5	70.211	5.7 - 34	625 - 403	GFL09 - 2E □□□ 090C32	E82MV 152_4B		
	17	799	1.1	79.875	5.0 - 30	711 - 459	GFL07 - 2E □□□ 090C32	E82MV 152_4B		
	18	787	1.9	78.750	5.1 - 31	701 - 453	GFL09 - 2E □□□ 090C32	E82MV 152_4B		
	15	900	1.0	90.000	4.5 - 27	801 - 517	GFL07 - 2E □□□ 090C32	E82MV 152_4B		
	16	887	1.9	88.750	4.5 - 27	790 - 510	GFL09 - 2E □□□ 090C32	E82MV 152_4B		
	<b>GFL □□ - 3E</b>									
	13	1026	1.1	104.127	3.9 - 23	913 - 589	GFL07 - 3E □□□ 090C32	E82MV 152_4B		3-110
	13	1036	1.8	105.185	3.8 - 23	922 - 595	GFL09 - 3E □□□ 090C32	E82MV 152_4B		
	12	1115	0.9	113.206	3.6 - 21	992 - 641	GFL07 - 3E □□□ 090C32	E82MV 152_4B		
	12	1126	1.6	114.333	3.5 - 21	1002 - 647	GFL09 - 3E □□□ 090C32	E82MV 152_4B		
	11	1256	0.9	127.556	3.2 - 19	1118 - 722	GFL07 - 3E □□□ 090C32	E82MV 152_4B		
	11	1269	1.6	128.852	3.1 - 19	1129 - 729	GFL09 - 3E □□□ 090C32	E82MV 152_4B		
	9.3	1466	1.4	148.815	2.7 - 16	1304 - 842	GFL09 - 3E □□□ 090C32	E82MV 152_4B		
	9.3	1469	2.7	149.144	2.7 - 16	1307 - 844	GFL11 - 3E □□□ 090C32	E82MV 152_4B		
8.3	1652	1.4	167.712	2.4 - 14	1470 - 949	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
8.3	1655	2.7	168.049	2.4 - 14	1473 - 951	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
7.5	1823	1.2	185.111	2.2 - 13	1622 - 1048	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
7.6	1800	2.4	182.792	2.2 - 13	1602 - 1035	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
6.7	2055	1.2	208.617	1.9 - 12	1829 - 1181	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
6.8	2028	2.4	205.963	2.0 - 12	1805 - 1166	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
6.2	2214	1.1	224.778	1.8 - 11	1970 - 1272	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
6.2	2212	2.0	224.636	1.8 - 11	1969 - 1271	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
5.5	2495	1.1	253.321	1.6 - 10	2220 - 1434	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
5.5	2493	2.0	253.111	1.6 - 10	2218 - 1433	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
4.8	2865	0.9	290.889	1.4 - 8	2550 - 1646	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
5.2	2632	1.9	267.259	1.5 - 9	2342 - 1513	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
4.2	3229	0.9	327.827	1.2 - 7	2873 - 1855	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
4.2	3226	1.7	327.556	1.2 - 7	2871 - 1854	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
3.9	3477	0.8	353.033	1.1 - 7	3094 - 1998	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
3.9	3526	1.5	358.077	1.1 - 7	3139 - 2027	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
3.9	3475	2.5	352.811	1.1 - 7	3092 - 1997	GFL14 - 3E □□□ 090C32	E82MV 152_4B			
3.5	3918	0.8	397.863	1.0 - 6	3487 - 2252	GFL09 - 3E □□□ 090C32	E82MV 152_4B			
3.5	3973	1.5	403.467	1.0 - 6	3536 - 2284	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
3.5	3915	2.5	397.533	1.0 - 6	3484 - 2250	GFL14 - 3E □□□ 090C32	E82MV 152_4B			
3.2	4237	1.4	430.222	0.9 - 6	3771 - 2435	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
3.2	4237	2.5	430.222	0.9 - 6	3771 - 2435	GFL14 - 3E □□□ 090C32	E82MV 152_4B			
2.7	5142	1.2	522.133	0.8 - 5	4576 - 2955	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
2.7	5142	2.1	522.133	0.8 - 5	4576 - 2955	GFL14 - 3E □□□ 090C32	E82MV 152_4B			
2.5	5539	1.0	562.391	0.7 - 4	4929 - 3183	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
2.5	5539	1.6	562.391	0.7 - 4	4929 - 3183	GFL14 - 3E □□□ 090C32	E82MV 152_4B			
2.2	6241	0.9	633.680	0.6 - 4	5554 - 3587	GFL11 - 3E □□□ 090C32	E82MV 152_4B			
2.2	6241	1.6	633.680	0.6 - 4	5554 - 3587	GFL14 - 3E □□□ 090C32	E82MV 152_4B			
2.0	7001	1.3	710.888	0.6 - 3	6231 - 4024	GFL14 - 3E □□□ 090C32	E82MV 152_4B			
1.7	7888	1.2	801.000	0.5 - 3	7021 - 4534	GFL14 - 3E □□□ 090C32	E82MV 152_4B			

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>2.2 kW</b>	420	49	3.4	3.333	122 - 731	43 - 28	GFL05 - 2E □□□ 100-12	E82MV 222_4B	3-106
	306	67	2.6	4.571	89 - 533	59 - 38	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	273	75	3.0	5.133	79 - 475	67 - 43	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	247	83	2.8	5.667	72 - 430	73 - 47	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	219	93	1.9	6.400	63 - 381	83 - 54	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	199	103	2.4	7.040	58 - 346	91 - 59	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	180	113	2.3	7.771	52 - 313	101 - 65	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	155	131	2.0	9.010	45 - 270	117 - 75	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	141	145	1.9	9.946	41 - 245	129 - 83	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	139	147	3.1	10.092	40 - 241	131 - 84	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	123	165	1.7	11.360	36 - 214	147 - 95	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	109	186	1.5	12.800	32 - 190	166 - 107	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	108	189	3.1	12.978	31 - 188	168 - 109	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	96	212	1.4	14.538	28 - 168	188 - 122	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	95	215	3.0	14.743	28 - 165	191 - 123	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	88	232	1.3	15.904	26 - 153	206 - 133	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	87	235	2.7	16.128	25 - 151	209 - 135	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	78	261	1.2	17.920	23 - 136	232 - 150	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	77	265	2.3	18.169	22 - 134	235 - 152	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	69	295	1.1	20.286	20 - 120	263 - 170	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	68	300	2.2	20.571	20 - 118	267 - 172	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	61	333	0.9	22.857	18 - 107	296 - 191	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	60	337	1.8	23.175	18 - 105	300 - 194	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	56	362	1.0	24.850	16 - 98	322 - 208	GFL05 - 2E □□□ 100-12	E82MV 222_4B	
	56	367	1.8	25.200	16 - 97	327 - 211	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	49	413	1.5	28.389	14 - 86	368 - 238	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	50	408	3.1	28.000	15 - 87	363 - 234	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	43	478	1.3	32.800	12 - 74	425 - 274	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	43	471	2.9	32.344	13 - 75	419 - 271	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	38	538	1.1	36.951	11 - 66	479 - 309	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	38	531	2.4	36.444	11 - 67	472 - 305	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	34	594	1.1	40.800	10.0 - 60	529 - 341	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	35	577	2.4	39.642	10 - 61	514 - 332	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	31	669	0.9	45.963	8.8 - 53	596 - 385	GFL06 - 2E □□□ 100-12	E82MV 222_4B	
	31	650	1.9	44.667	9.1 - 55	579 - 374	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	27	758	1.8	52.067	7.8 - 47	675 - 436	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	27	747	2.7	51.333	7.9 - 47	665 - 430	GFL09 - 2E □□□ 100-12	E82MV 222_4B	
	24	854	1.5	58.667	6.9 - 42	760 - 491	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	24	842	2.7	57.852	7.0 - 42	750 - 484	GFL09 - 2E □□□ 100-12	E82MV 222_4B	
	22	920	1.4	63.190	6.4 - 39	819 - 529	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	23	907	2.3	62.300	6.5 - 39	807 - 521	GFL09 - 2E □□□ 100-12	E82MV 222_4B	
	20	1037	1.2	71.200	5.7 - 34	923 - 596	GFL07 - 2E □□□ 100-12	E82MV 222_4B	
	20	1022	2.3	70.211	5.8 - 35	910 - 587	GFL09 - 2E □□□ 100-12	E82MV 222_4B	
	18	1147	1.4	78.750	5.2 - 31	1020 - 659	GFL09 - 2E □□□ 100-12	E82MV 222_4B	
	18	1163	2.3	79.875	5.1 - 30	1035 - 668	GFL11 - 2E □□□ 100-12	E82MV 222_4B	
	16	1292	1.4	88.750	4.6 - 27	1150 - 743	GFL09 - 2E □□□ 100-12	E82MV 222_4B	
	16	1310	2.3	90.000	4.5 - 27	1166 - 753	GFL11 - 2E □□□ 100-12	E82MV 222_4B	
							<b>GFL □□ - 3E</b>		
13	1508	1.3	105.185	3.9 - 23	1343 - 867	GFL09 - 3E □□□ 100-12	E82MV 222_4B		
13	1512	2.4	105.397	3.9 - 23	1345 - 869	GFL11 - 3E □□□ 100-12	E82MV 222_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

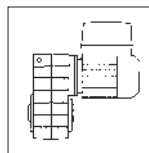
The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

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# Low-profile geared motors with motec

## Selection tables

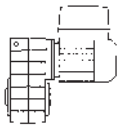


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>2.2 kW</b>							<b>GFL □□ - 3E</b>		3-110
	12	1640	1.1	114.333	3.6 - 21	1459 - 942	GFL09 - 3E □□□ 100-12	E82MV 222_4B	
	12	1643	2.1	114.586	3.5 - 21	1463 - 944	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	11	1848	1.1	128.852	3.2 - 19	1645 - 1062	GFL09 - 3E □□□ 100-12	E82MV 222_4B	
	11	1852	2.1	129.111	3.1 - 19	1648 - 1064	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	9.4	2134	1.0	148.815	2.7 - 16	1899 - 1227	GFL09 - 3E □□□ 100-12	E82MV 222_4B	
	9.4	2139	1.8	149.144	2.7 - 16	1904 - 1229	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	8.4	2405	1.0	167.712	2.4 - 15	2141 - 1382	GFL09 - 3E □□□ 100-12	E82MV 222_4B	
	8.3	2410	1.8	168.049	2.4 - 14	2145 - 1385	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	7.6	2655	0.8	185.111	2.2 - 13	2363 - 1526	GFL09 - 3E □□□ 100-12	E82MV 222_4B	
	7.7	2621	1.6	182.792	2.2 - 13	2333 - 1507	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	6.7	2992	0.8	208.617	1.9 - 12	2663 - 1719	GFL09 - 3E □□□ 100-12	E82MV 222_4B	
	6.8	2954	1.6	205.963	2.0 - 12	2629 - 1698	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	6.9	2898	2.7	202.074	2.0 - 12	2579 - 1665	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	6.2	3222	1.4	224.636	1.8 - 11	2867 - 1851	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	6.2	3222	2.7	224.636	1.8 - 11	2867 - 1851	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	5.5	3630	1.4	253.111	1.6 - 10	3231 - 2086	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	5.5	3630	2.7	253.111	1.6 - 10	3231 - 2086	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	5.2	3833	1.3	267.259	1.5 - 9	3411 - 2203	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	5.1	3926	2.5	273.778	1.5 - 9	3494 - 2256	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	4.3	4697	1.2	327.556	1.2 - 7	4181 - 2700	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	4.2	4768	2.2	332.444	1.2 - 7	4243 - 2740	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	3.9	5135	1.0	358.077	1.1 - 7	4570 - 2951	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	4.0	5060	2.1	352.811	1.2 - 7	4503 - 2908	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	3.5	5786	1.0	403.467	1.0 - 6	5150 - 3325	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	3.5	5701	2.0	397.533	1.0 - 6	5074 - 3276	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	3.3	6170	1.0	430.222	0.9 - 6	5491 - 3546	GFL11 - 3E □□□ 100-12	E82MV 222_4B	
	3.3	6170	1.7	430.222	0.9 - 6	5491 - 3546	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	2.7	7488	1.4	522.133	0.8 - 5	6664 - 4303	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	2.5	8065	1.1	562.391	0.7 - 4	7178 - 4635	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	2.2	9088	1.1	633.680	0.6 - 4	8088 - 5223	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	2.0	10195	0.9	710.888	0.6 - 3	9073 - 5859	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
	1.8	11487	0.9	801.000	0.5 - 3	10223 - 6602	GFL14 - 3E □□□ 100-12	E82MV 222_4B	
<b>3 kW</b>							<b>GFL □□ - 2E</b>		3-106
	420	66	2.5	3.333	122 - 731	59 - 38	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	306	91	1.9	4.571	89 - 533	81 - 52	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	273	102	2.2	5.133	79 - 475	91 - 59	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	247	113	2.1	5.667	72 - 430	100 - 65	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	219	127	1.4	6.400	63 - 381	113 - 73	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	217	128	2.8	6.450	63 - 378	114 - 74	GFL06 - 2E □□□ 100-32	E82MV 302_4B	
	199	140	1.8	7.040	58 - 346	124 - 80	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	196	142	3.1	7.147	57 - 341	126 - 82	GFL06 - 2E □□□ 100-32	E82MV 302_4B	
	180	154	1.7	7.771	52 - 313	137 - 89	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	167	167	3.6	8.400	48 - 290	148 - 96	GFL06 - 2E □□□ 100-32	E82MV 302_4B	
	155	179	1.5	9.010	45 - 270	159 - 103	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	148	188	3.1	9.463	43 - 257	167 - 108	GFL06 - 2E □□□ 100-32	E82MV 302_4B	
	141	198	1.4	9.946	41 - 245	176 - 113	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	139	200	2.3	10.092	40 - 241	178 - 115	GFL06 - 2E □□□ 100-32	E82MV 302_4B	
	123	226	1.2	11.360	36 - 214	201 - 130	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	122	229	2.8	11.520	35 - 211	204 - 131	GFL06 - 2E □□□ 100-32	E82MV 302_4B	
	109	254	1.1	12.800	32 - 190	226 - 146	GFL05 - 2E □□□ 100-32	E82MV 302_4B	
	108	258	2.3	12.978	31 - 188	229 - 148	GFL06 - 2E □□□ 100-32	E82MV 302_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>3 kW</b>							<b>GFL □□ - 2E</b>		3-106	
	96	289	1.0	14.538	28 - 168	257 - 166	GFL05 - 2E □□□ 100-32	E82MV 302_4B		
	95	293	2.2	14.743	28 - 165	261 - 168	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	88	316	1.0	15.904	26 - 153	281 - 181	GFL05 - 2E □□□ 100-32	E82MV 302_4B		
	87	320	2.0	16.128	25 - 151	285 - 184	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	78	356	0.9	17.920	23 - 136	317 - 204	GFL05 - 2E □□□ 100-32	E82MV 302_4B		
	77	361	1.7	18.169	22 - 134	321 - 207	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	78	356	3.3	17.920	23 - 136	317 - 204	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	69	403	0.8	20.286	20 - 120	358 - 231	GFL05 - 2E □□□ 100-32	E82MV 302_4B		
	68	408	1.6	20.571	20 - 118	363 - 235	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	69	403	3.1	20.286	20 - 120	358 - 231	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	60	460	1.3	23.175	18 - 105	409 - 264	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	61	454	2.7	22.857	18 - 107	404 - 261	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	56	500	1.3	25.200	16 - 97	445 - 288	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	56	493	2.7	24.850	16 - 98	439 - 284	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	49	564	1.1	28.389	14 - 86	502 - 324	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	50	556	2.2	28.000	15 - 87	495 - 319	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	43	651	1.0	32.800	12 - 74	580 - 374	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	43	642	2.1	32.344	13 - 75	572 - 369	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	38	734	0.8	36.951	11 - 66	653 - 422	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	38	724	1.7	36.444	11 - 67	644 - 416	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	38	731	2.9	36.815	11 - 66	651 - 420	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	34	810	0.8	40.800	10 - 60	721 - 466	GFL06 - 2E □□□ 100-32	E82MV 302_4B		
	35	787	1.8	39.642	10 - 61	700 - 452	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	35	788	2.5	39.667	10 - 61	701 - 453	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	31	887	1.4	44.667	9.1 - 55	789 - 510	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	31	888	2.5	44.704	9.1 - 54	790 - 510	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	27	1034	1.3	52.067	7.8 - 47	920 - 594	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	27	1019	2.0	51.333	7.9 - 47	907 - 586	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	24	1165	1.1	58.667	6.9 - 42	1037 - 669	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	24	1149	2.0	57.852	7.0 - 42	1022 - 660	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	22	1255	1.0	63.190	6.4 - 39	1117 - 721	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	23	1237	1.7	62.300	6.5 - 39	1101 - 711	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	22	1255	2.1	63.190	6.4 - 39	1117 - 721	GFL11 - 2E □□□ 100-32	E82MV 302_4B		
	20	1414	0.9	71.200	5.7 - 34	1258 - 812	GFL07 - 2E □□□ 100-32	E82MV 302_4B		
	20	1394	1.7	70.211	5.8 - 35	1241 - 801	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	20	1414	2.1	71.200	5.7 - 34	1258 - 812	GFL11 - 2E □□□ 100-32	E82MV 302_4B		
	18	1564	1.0	78.750	5.2 - 31	1391 - 899	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	18	1586	1.7	79.875	5.1 - 30	1411 - 911	GFL11 - 2E □□□ 100-32	E82MV 302_4B		
	16	1762	1.0	88.750	4.6 - 27	1568 - 1013	GFL09 - 2E □□□ 100-32	E82MV 302_4B		
	16	1787	1.7	90.000	4.5 - 27	1590 - 1027	GFL11 - 2E □□□ 100-32	E82MV 302_4B		
							<b>GFL □□ - 3E</b>			3-110
	13	2057	0.9	105.185	3.9 - 23	1831 - 1182	GFL09 - 3E □□□ 100-32	E82MV 302_4B		
	13	2061	1.8	105.397	3.9 - 23	1834 - 1185	GFL11 - 3E □□□ 100-32	E82MV 302_4B		
	13	2051	2.9	104.889	3.9 - 23	1826 - 1179	GFL14 - 3E □□□ 100-32	E82MV 302_4B		
	12	2236	0.8	114.333	3.6 - 21	1990 - 1285	GFL09 - 3E □□□ 100-32	E82MV 302_4B		
	12	2241	1.6	114.586	3.5 - 21	1994 - 1288	GFL11 - 3E □□□ 100-32	E82MV 302_4B		
	12	2232	2.9	114.126	3.6 - 21	1986 - 1283	GFL14 - 3E □□□ 100-32	E82MV 302_4B		
11	2520	0.8	128.852	3.2 - 19	2243 - 1448	GFL09 - 3E □□□ 100-32	E82MV 302_4B			
11	2525	1.6	129.111	3.1 - 19	2247 - 1451	GFL11 - 3E □□□ 100-32	E82MV 302_4B			
11	2515	2.9	128.593	3.2 - 19	2238 - 1445	GFL14 - 3E □□□ 100-32	E82MV 302_4B			
9.4	2917	1.3	149.144	2.7 - 16	2596 - 1676	GFL11 - 3E □□□ 100-32	E82MV 302_4B			
8.3	3286	1.3	168.049	2.4 - 14	2925 - 1889	GFL11 - 3E □□□ 100-32	E82MV 302_4B			
9.0	3054	2.5	156.148	2.6 - 16	2718 - 1755	GFL14 - 3E □□□ 100-32	E82MV 302_4B			
7.7	3575	1.2	182.792	2.2 - 13	3181 - 2054	GFL11 - 3E □□□ 100-32	E82MV 302_4B			
8.2	3326	2.5	170.074	2.4 - 14	2960 - 1911	GFL14 - 3E □□□ 100-32	E82MV 302_4B			

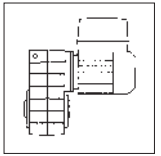
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Low-profile geared motors with motec

## Selection tables



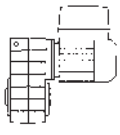
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>3 kW</b>							<b>GFL □□ - 3E</b>		3-110
	6.8	4028	1.2	205.963	2.0 - 12	3585 - 2315	GFL11 - 3E □□□ 100-32	E82MV 302_4B	
	6.9	3952	2.0	202.074	2.0 - 12	3517 - 2271	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	6.2	4393	1.0	224.636	1.8 - 11	3910 - 2525	GFL11 - 3E □□□ 100-32	E82MV 302_4B	
	6.2	4393	2.0	224.636	1.8 - 11	3910 - 2525	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	5.5	4950	1.0	253.111	1.6 - 10	4405 - 2845	GFL11 - 3E □□□ 100-32	E82MV 302_4B	
	5.5	4950	2.0	253.111	1.6 - 10	4405 - 2845	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	5.2	5226	1.0	267.259	1.5 - 9	4652 - 3004	GFL11 - 3E □□□ 100-32	E82MV 302_4B	
	5.1	5354	1.8	273.778	1.5 - 9	4765 - 3077	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	4.3	6406	0.9	327.556	1.2 - 7	5701 - 3681	GFL11 - 3E □□□ 100-32	E82MV 302_4B	
	4.2	6501	1.6	332.444	1.2 - 7	5786 - 3736	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	4.0	6900	1.5	352.811	1.2 - 7	6141 - 3965	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	3.5	7774	1.5	397.533	1.0 - 6	6919 - 4468	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	3.3	8413	1.3	430.222	0.9 - 6	7488 - 4835	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	2.7	10211	1.0	522.133	0.8 - 5	9088 - 5868	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	2.5	10998	0.8	562.391	0.7 - 4	9788 - 6321	GFL14 - 3E □□□ 100-32	E82MV 302_4B	
	<b>4 kW</b>							<b>GFL □□ - 2E</b>	
389		95	3.4	3.675	113 - 677	85 - 55	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
308		120	4.1	4.643	89 - 536	107 - 69	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
274		135	3.1	5.211	80 - 477	120 - 78	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
249		149	3.0	5.750	72 - 433	133 - 86	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
222		167	2.1	6.450	64 - 386	149 - 96	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
200		185	2.3	7.147	58 - 348	165 - 106	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
170		218	2.8	8.400	49 - 296	194 - 125	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
151		245	2.4	9.463	44 - 263	218 - 141	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
142		262	1.8	10.092	41 - 247	233 - 150	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
147		252	3.6	9.714	43 - 256	224 - 145	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
124		299	2.1	11.520	36 - 216	266 - 172	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
110		336	1.8	12.978	32 - 192	299 - 193	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
110		337	3.2	13.000	32 - 191	300 - 194	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
97		382	1.7	14.743	28 - 169	340 - 220	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
101		368	3.1	14.200	29 - 175	328 - 211	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
89		418	1.5	16.128	26 - 154	372 - 240	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
90		412	2.9	15.904	26 - 156	367 - 237	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
79		471	1.3	18.169	23 - 137	419 - 271	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
80		464	2.6	17.920	23 - 139	413 - 267	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
70		533	1.2	20.571	20 - 121	474 - 306	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
71		526	2.4	20.286	20 - 123	468 - 302	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
62		601	1.0	23.175	18 - 107	535 - 345	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
63		592	2.1	22.857	18 - 109	527 - 340	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
57		653	1.0	25.200	16 - 99	581 - 375	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
58		644	2.1	24.850	17 - 100	573 - 370	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
50		736	0.8	28.389	15 - 88	655 - 423	GFL06 - 2E □□□ 112-22	E82MV 402_4B	
51		726	1.7	28.000	15 - 89	646 - 417	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
53		704	3.2	27.173	15 - 92	627 - 405	GFL09 - 2E □□□ 112-22	E82MV 402_4B	
44		838	1.6	32.344	13 - 77	746 - 482	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
44		847	2.5	32.667	13 - 76	753 - 487	GFL09 - 2E □□□ 112-22	E82MV 402_4B	
39		945	1.3	36.444	11 - 68	841 - 543	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
39		954	2.5	36.815	11 - 68	849 - 548	GFL09 - 2E □□□ 112-22	E82MV 402_4B	
36		1027	1.3	39.642	10 - 63	914 - 590	GFL07 - 2E □□□ 112-22	E82MV 402_4B	
36		1028	2.2	39.667	10 - 63	915 - 591	GFL09 - 2E □□□ 112-22	E82MV 402_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Low-profile geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>4 kW</b>	<b>GFL □□ - 2E</b>									
	32	1158	1.1	44.667	9.3 - 56	1030 - 665	GFL07 - 2E □□□ 112-22	E82MV 402_4B	3-106	
	32	1159	2.2	44.704	9.3 - 56	1031 - 666	GFL09 - 2E □□□ 112-22	E82MV 402_4B		
	28	1330	1.7	51.333	8.1 - 48	1184 - 765	GFL09 - 2E □□□ 112-22	E82MV 402_4B		
	28	1349	2.2	52.067	8.0 - 48	1201 - 775	GFL11 - 2E □□□ 112-22	E82MV 402_4B		
	25	1499	1.7	57.852	7.2 - 43	1334 - 862	GFL09 - 2E □□□ 112-22	E82MV 402_4B		
	24	1520	2.2	58.667	7.1 - 42	1353 - 874	GFL11 - 2E □□□ 112-22	E82MV 402_4B		
	23	1615	1.4	62.300	6.7 - 40	1437 - 928	GFL09 - 2E □□□ 112-22	E82MV 402_4B		
	23	1638	1.8	63.190	6.6 - 39	1457 - 941	GFL11 - 2E □□□ 112-22	E82MV 402_4B		
	23	1638	2.2	63.190	6.6 - 39	1457 - 941	GFL14 - 2E □□□ 112-22	E82MV 402_4B		
	20	1820	1.4	70.211	5.9 - 35	1619 - 1046	GFL09 - 2E □□□ 112-22	E82MV 402_4B		
	20	1845	1.8	71.200	5.8 - 35	1642 - 1060	GFL11 - 2E □□□ 112-22	E82MV 402_4B		
	20	1845	2.2	71.200	5.8 - 35	1642 - 1060	GFL14 - 2E □□□ 112-22	E82MV 402_4B		
	18	2070	1.4	79.875	5.2 - 31	1842 - 1190	GFL11 - 2E □□□ 112-22	E82MV 402_4B		
	18	2070	1.8	79.875	5.2 - 31	1842 - 1190	GFL14 - 2E □□□ 112-22	E82MV 402_4B		
	16	2332	1.4	90.000	4.6 - 28	2076 - 1340	GFL11 - 2E □□□ 112-22	E82MV 402_4B		
	16	2332	1.8	90.000	4.6 - 28	2076 - 1340	GFL14 - 2E □□□ 112-22	E82MV 402_4B		
	<b>GFL □□ - 3E</b>									
	14	2691	1.3	105.397	3.9 - 24	2395 - 1546	GFL11 - 3E □□□ 112-22	E82MV 402_4B		3-110
	14	2678	2.5	104.889	4.0 - 24	2383 - 1539	GFL14 - 3E □□□ 112-22	E82MV 402_4B		
13	2925	1.2	114.586	3.6 - 22	2603 - 1681	GFL11 - 3E □□□ 112-22	E82MV 402_4B			
13	2913	2.3	114.126	3.6 - 22	2593 - 1674	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
11	3296	1.2	129.111	3.2 - 19	2933 - 1894	GFL11 - 3E □□□ 112-22	E82MV 402_4B			
11	3283	2.3	128.593	3.2 - 19	2922 - 1887	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
9.6	3807	1.0	149.144	2.8 - 17	3388 - 2188	GFL11 - 3E □□□ 112-22	E82MV 402_4B			
10	3494	2.1	136.889	3.0 - 18	3110 - 2008	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
8.5	4290	1.0	168.049	2.5 - 15	3818 - 2465	GFL11 - 3E □□□ 112-22	E82MV 402_4B			
9.2	3986	2.1	156.148	2.7 - 16	3548 - 2291	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
7.8	4666	0.9	182.792	2.3 - 14	4153 - 2682	GFL11 - 3E □□□ 112-22	E82MV 402_4B			
8.4	4342	1.9	170.074	2.4 - 15	3864 - 2495	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
6.9	5258	0.9	205.963	2.0 - 12	4679 - 3022	GFL11 - 3E □□□ 112-22	E82MV 402_4B			
7.1	5158	1.7	202.074	2.1 - 12	4591 - 2965	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
6.4	5734	1.5	224.636	1.8 - 11	5104 - 3296	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
5.7	6461	1.5	253.111	1.6 - 10	5750 - 3713	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
5.2	6989	1.4	273.778	1.5 - 9	6220 - 4017	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
4.3	8486	1.2	332.444	1.2 - 7	7553 - 4877	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
4.1	9006	1.2	352.811	1.2 - 7	8016 - 5176	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
3.6	10148	1.1	397.533	1.0 - 6	9032 - 5832	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
3.3	10982	1.0	430.222	1.0 - 6	9774 - 6312	GFL14 - 3E □□□ 112-22	E82MV 402_4B			
<b>GFL □□ - 2E</b>										
<b>5.5 kW</b>	392	130	2.5	3.675	114 - 682	116 - 75	GFL06 - 2E □□□ 112-32	E82MV 552_4B	3-106	
	310	164	3.0	4.643	90 - 540	146 - 94	GFL07 - 2E □□□ 112-32	E82MV 552_4B		
	276	184	2.3	5.211	80 - 481	164 - 106	GFL06 - 2E □□□ 112-32	E82MV 552_4B		
	250	204	2.2	5.750	73 - 436	181 - 117	GFL06 - 2E □□□ 112-32	E82MV 552_4B		
	223	228	1.5	6.450	65 - 388	203 - 131	GFL06 - 2E □□□ 112-32	E82MV 552_4B		
	225	227	2.5	6.400	65 - 392	202 - 130	GFL07 - 2E □□□ 112-32	E82MV 552_4B		
	202	253	1.7	7.147	58 - 351	225 - 145	GFL06 - 2E □□□ 112-32	E82MV 552_4B		
	201	253	3.0	7.150	58 - 350	225 - 145	GFL07 - 2E □□□ 112-32	E82MV 552_4B		
	171	297	2.0	8.400	50 - 298	265 - 171	GFL06 - 2E □□□ 112-32	E82MV 552_4B		
	152	335	1.7	9.463	44 - 265	298 - 192	GFL06 - 2E □□□ 112-32	E82MV 552_4B		
	154	332	3.0	9.379	45 - 267	295 - 191	GFL07 - 2E □□□ 112-32	E82MV 552_4B		

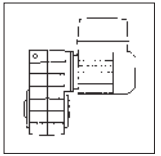
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Low-profile geared motors with motec

## Selection tables

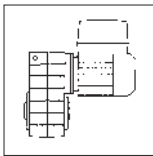


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>5.5 kW</b>							<b>GFL □□ - 2E</b>		3-106
	143	357	1.3	10.092	41 - 248	318 - 205	GFL06 - 2E □□□ 112-32	E82MV 552_4B	
	148	344	2.6	9.714	43 - 258	306 - 198	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	125	408	1.6	11.520	36 - 217	363 - 234	GFL06 - 2E □□□ 112-32	E82MV 552_4B	
	125	408	2.7	11.538	36 - 217	363 - 235	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	111	459	1.3	12.978	32 - 193	409 - 264	GFL06 - 2E □□□ 112-32	E82MV 552_4B	
	111	460	2.4	13.000	32 - 193	409 - 264	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	98	522	1.2	14.743	28 - 170	464 - 300	GFL06 - 2E □□□ 112-32	E82MV 552_4B	
	101	503	2.3	14.200	29 - 176	447 - 289	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	89	571	1.1	16.128	26 - 155	508 - 328	GFL06 - 2E □□□ 112-32	E82MV 552_4B	
	91	563	2.1	15.904	26 - 158	501 - 323	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	79	643	0.9	18.169	23 - 138	572 - 370	GFL06 - 2E □□□ 112-32	E82MV 552_4B	
	80	634	1.9	17.920	23 - 140	564 - 364	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	78	651	3.1	18.407	23 - 136	580 - 374	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	70	728	0.9	20.571	20 - 122	648 - 418	GFL06 - 2E □□□ 112-32	E82MV 552_4B	
	71	718	1.8	20.286	21 - 124	639 - 413	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	73	696	2.8	19.667	21 - 127	619 - 400	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	63	809	1.5	22.857	18 - 110	720 - 465	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	65	784	2.8	22.164	19 - 113	698 - 451	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	58	879	1.5	24.850	17 - 101	783 - 505	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	60	853	2.4	24.111	17 - 104	759 - 490	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	51	991	1.3	28.000	15 - 89	882 - 569	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	53	962	2.4	27.173	15 - 92	856 - 553	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	45	1145	1.2	32.344	13 - 77	1019 - 658	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	44	1156	1.9	32.667	13 - 77	1029 - 664	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	44	1159	2.3	32.739	13 - 77	1031 - 666	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	40	1290	1.0	36.444	11 - 69	1148 - 741	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	39	1303	1.9	36.815	11 - 68	1159 - 749	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	39	1305	2.3	36.889	11 - 68	1162 - 750	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	36	1403	1.0	39.642	11 - 63	1248 - 806	GFL07 - 2E □□□ 112-32	E82MV 552_4B	
	36	1404	1.6	39.667	11 - 63	1249 - 807	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	36	1424	2.0	40.233	10 - 62	1267 - 818	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	32	1582	1.6	44.704	9.3 - 56	1408 - 909	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	32	1604	2.0	45.333	9.2 - 55	1428 - 922	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	28	1817	1.3	51.333	8.1 - 49	1617 - 1044	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	28	1843	1.6	52.067	8.0 - 48	1640 - 1059	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	28	1843	2.0	52.067	8.0 - 48	1640 - 1059	GFL14 - 2E □□□ 112-32	E82MV 552_4B	
	25	2047	1.3	57.852	7.2 - 43	1822 - 1177	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	25	2076	1.6	58.667	7.1 - 43	1848 - 1193	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	25	2076	2.0	58.667	7.1 - 43	1848 - 1193	GFL14 - 2E □□□ 112-32	E82MV 552_4B	
	23	2205	1.1	62.300	6.7 - 40	1962 - 1267	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	23	2236	1.3	63.190	6.6 - 40	1990 - 1285	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	23	2236	1.6	63.190	6.6 - 40	1990 - 1285	GFL14 - 2E □□□ 112-32	E82MV 552_4B	
	21	2485	1.0	70.211	5.9 - 36	2211 - 1428	GFL09 - 2E □□□ 112-32	E82MV 552_4B	
	20	2520	1.3	71.200	5.9 - 35	2242 - 1448	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	20	2520	1.6	71.200	5.9 - 35	2242 - 1448	GFL14 - 2E □□□ 112-32	E82MV 552_4B	
	18	2827	1.1	79.875	5.2 - 31	2516 - 1624	GFL11 - 2E □□□ 112-32	E82MV 552_4B	
	18	2827	1.3	79.875	5.2 - 31	2516 - 1624	GFL14 - 2E □□□ 112-32	E82MV 552_4B	
16	3185	1.1	90.000	4.6 - 28	2835 - 1830	GFL11 - 2E □□□ 112-32	E82MV 552_4B		
16	3185	1.3	90.000	4.6 - 28	2835 - 1830	GFL14 - 2E □□□ 112-32	E82MV 552_4B		
						<b>GFL □□ - 3E</b>		3-110	
14	3674	1.0	105.397	4.0 - 24	3270 - 2111	GFL11 - 3E □□□ 112-32	E82MV 552_4B		
14	3656	1.9	104.889	4.0 - 24	3254 - 2101	GFL14 - 3E □□□ 112-32	E82MV 552_4B		
13	3994	0.9	114.586	3.6 - 22	3555 - 2295	GFL11 - 3E □□□ 112-32	E82MV 552_4B		
13	3978	1.7	114.126	3.7 - 22	3540 - 2286	GFL14 - 3E □□□ 112-32	E82MV 552_4B		
11	4500	0.9	129.111	3.2 - 19	4005 - 2586	GFL11 - 3E □□□ 112-32	E82MV 552_4B		
11	4482	1.7	128.593	3.2 - 19	3989 - 2576	GFL14 - 3E □□□ 112-32	E82MV 552_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

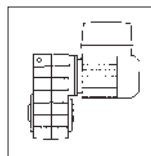
## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>5.5 kW</b>							<b>GFL □□ - 3E</b>		3-106
	11	4771	1.5	136.889	3.1 - 18	4247 - 2742	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	9.2	5443	1.5	156.148	2.7 - 16	4844 - 3128	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	8.5	5928	1.4	170.074	2.5 - 15	5276 - 3407	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	7.1	7044	1.3	202.074	2.1 - 12	6269 - 4048	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	6.4	7830	1.1	224.636	1.9 - 11	6969 - 4500	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	5.7	8823	1.1	253.111	1.6 - 10	7852 - 5070	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	5.3	9543	1.0	273.778	1.5 - 9	8493 - 5484	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	4.3	11588	0.9	332.444	1.3 - 8	10313 - 6660	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	4.1	12298	0.8	352.811	1.2 - 7	10945 - 7068	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
	3.6	13857	0.8	397.533	1.1 - 6	12332 - 7964	GFL14 - 3E □□□ 112-32	E82MV 552_4B	
<b>7.5 kW</b>							<b>GFL □□ - 2E</b>		3-106
	436	159	4.0	3.350	126 - 758	142 - 92	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	315	221	3.0	4.643	91 - 547	197 - 127	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	283	246	3.5	5.159	82 - 492	219 - 141	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	256	271	3.4	5.695	74 - 446	241 - 156	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	228	305	2.2	6.400	66 - 397	271 - 175	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	204	340	2.7	7.150	59 - 355	303 - 196	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	175	396	2.5	8.324	51 - 305	353 - 228	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	156	446	2.2	9.379	45 - 271	397 - 257	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	150	462	2.1	9.714	44 - 262	411 - 266	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	127	549	2.0	11.538	37 - 220	489 - 316	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	112	619	1.8	13.000	33 - 195	551 - 356	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	119	586	3.8	12.307	34 - 206	521 - 337	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	103	676	1.7	14.200	30 - 179	601 - 388	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	102	682	3.5	14.333	30 - 177	607 - 392	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	92	757	1.6	15.904	27 - 160	674 - 435	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	89	777	3.2	16.333	26 - 156	692 - 447	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	82	853	1.4	17.920	24 - 142	759 - 490	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	79	876	2.8	18.407	23 - 138	780 - 503	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	72	966	1.3	20.286	21 - 125	859 - 555	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	74	936	2.7	19.667	22 - 129	833 - 538	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	64	1088	1.1	22.857	19 - 111	968 - 625	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	66	1055	2.5	22.164	19 - 115	939 - 606	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	59	1183	1.1	24.850	17 - 102	1053 - 680	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	61	1148	2.4	24.111	18 - 105	1021 - 660	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	52	1333	0.9	28.000	15 - 91	1186 - 766	GFL07 - 2E □□□ 132-22	E82MV 752_4B	
	54	1293	2.1	27.173	16 - 93	1151 - 743	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	45	1555	1.9	32.667	13 - 78	1384 - 894	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	45	1558	3.0	32.739	13 - 78	1387 - 896	GFL11 - 2E □□□ 132-22	E82MV 752_4B	
	40	1752	1.7	36.815	12 - 69	1559 - 1007	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	40	1756	2.6	36.889	11 - 69	1563 - 1009	GFL11 - 2E □□□ 132-22	E82MV 752_4B	
	37	1888	1.7	39.667	11 - 64	1680 - 1085	GFL09 - 2E □□□ 132-22	E82MV 752_4B	
	36	1915	2.6	40.233	11 - 63	1704 - 1100	GFL11 - 2E □□□ 132-22	E82MV 752_4B	
33	2128	1.4	44.704	9.5 - 57	1894 - 1223	GFL09 - 2E □□□ 132-22	E82MV 752_4B		
32	2158	2.3	45.333	9.3 - 56	1920 - 1240	GFL11 - 2E □□□ 132-22	E82MV 752_4B		
28	2478	2.1	52.067	8.1 - 49	2205 - 1424	GFL11 - 2E □□□ 132-22	E82MV 752_4B		
25	2792	1.9	58.667	7.2 - 43	2485 - 1605	GFL11 - 2E □□□ 132-22	E82MV 752_4B		
25	2792	3.1	58.667	7.2 - 43	2485 - 1605	GFL14 - 2E □□□ 132-22	E82MV 752_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

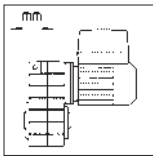


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Low-profile geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>7.5 kW</b>						<b>GFL □□ - 2E</b>			
	23	3008	1.9	63.190	6.7 - 40	2677 - 1728	GFL11 - 2E □□□ 132-22	E82MV 752_4B	3-106
	23	3008	2.6	63.190	6.7 - 40	2677 - 1728	GFL14 - 2E □□□ 132-22	E82MV 752_4B	
	21	3389	1.6	71.200	5.9 - 36	3016 - 1948	GFL11 - 2E □□□ 132-22	E82MV 752_4B	
	21	3389	2.6	71.200	5.9 - 36	3016 - 1948	GFL14 - 2E □□□ 132-22	E82MV 752_4B	
	18	3802	1.9	79.875	5.3 - 32	3383 - 2185	GFL14 - 2E □□□ 132-22	E82MV 752_4B	
	16	4284	1.9	90.000	4.7 - 28	3812 - 2462	GFL14 - 2E □□□ 132-22	E82MV 752_4B	
						<b>GFL □□ - 3E</b>			
	14	4917	1.4	104.889	4.0 - 24	4376 - 2826	GFL14 - 3E □□□ 132-22	E82MV 752_4B	3-110
	13	5350	1.3	114.126	3.7 - 22	4762 - 3075	GFL14 - 3E □□□ 132-22	E82MV 752_4B	
	11	6028	1.3	128.593	3.3 - 20	5365 - 3465	GFL14 - 3E □□□ 132-22	E82MV 752_4B	
	11	6417	1.2	136.889	3.1 - 19	5711 - 3688	GFL14 - 3E □□□ 132-22	E82MV 752_4B	
	9.4	7320	1.1	156.148	2.7 - 16	6515 - 4207	GFL14 - 3E □□□ 132-22	E82MV 752_4B	
	8.6	7973	1.1	170.074	2.5 - 15	7096 - 4582	GFL14 - 3E □□□ 132-22	E82MV 752_4B	
	6.5	10531	0.8	224.636	1.9 - 11	9373 - 6052	GFL14 - 3E □□□ 132-22	E82MV 752_4B	
	5.8	11866	0.8	253.111	1.7 - 10	10561 - 6819	GFL14 - 3E □□□ 132-22	E82MV 752_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

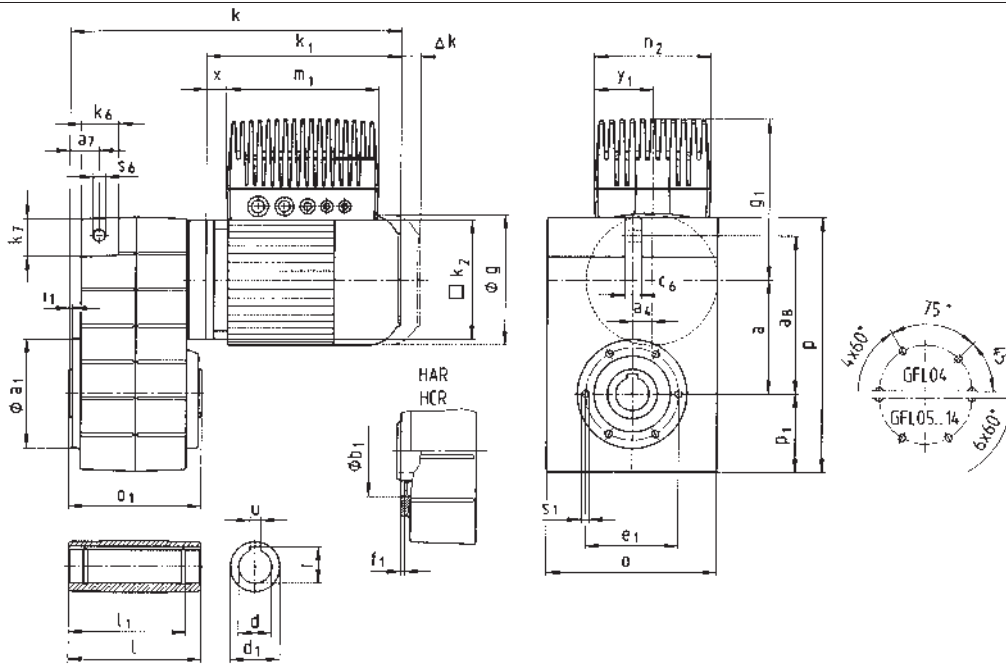
The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Low-profile geared motors with motec

## Dimensions



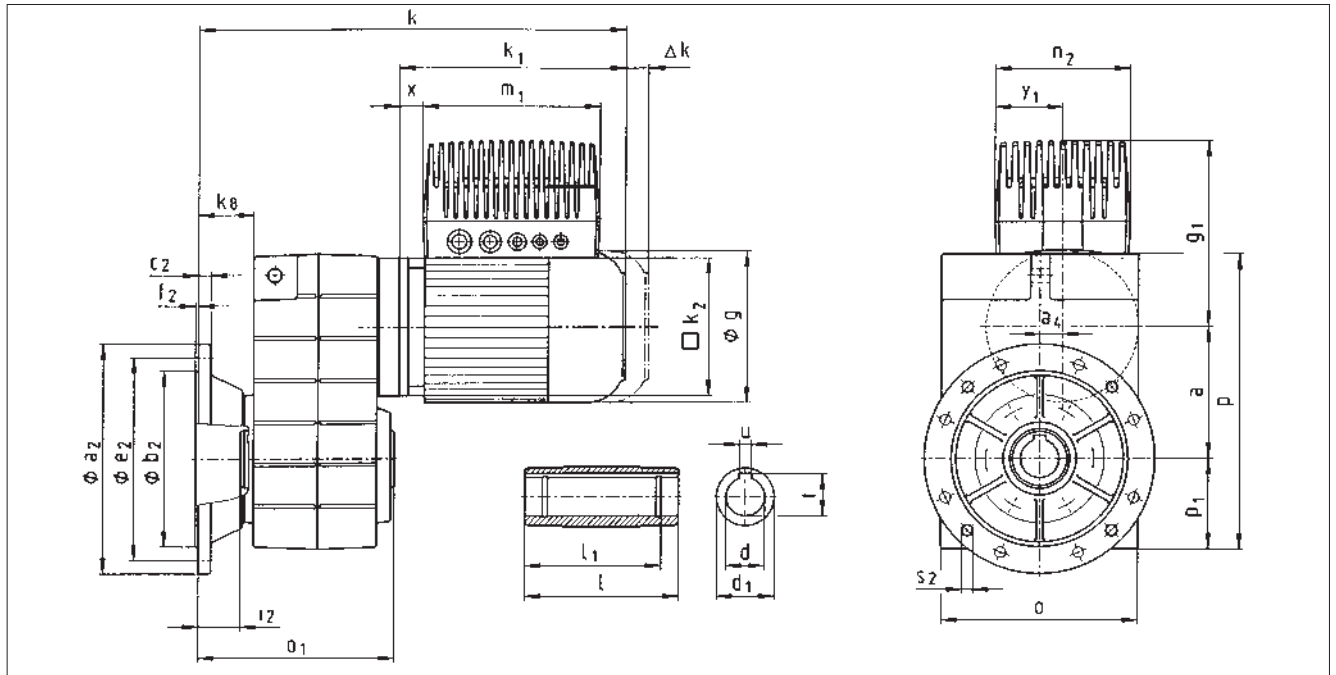
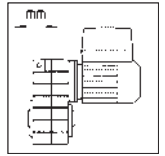
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22								
<b>GFL□□ - 2 E H□R</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752								
Motor	g		123			138		156		176		194		222		262							
	k <sub>1</sub>		188			207		225		276		280	310	323	343	409							
	k <sub>2</sub>		120			120		145		180		180		222		265							
	Δk**	Brake	40			52		73		70		94		101		127							
		External blower	129			127		128		126		97		95		104							
	Brake + external blower	169			164		184		179		169		183		218								
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290								
	g <sub>1</sub> <sup>1)</sup>		207			216																	
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325								
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211								
	x		21			23	10	3	3	8	6	2	8		19								
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106								
Gearbox size	Gearbox						Total length																
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k																
	04	148	115	214	69	90.5	12.5	312			332		355		416								
	05	165	140	252	78	112.5	18.5	334			353		376		437		441		471				
	06	206	160	315	98	140	22	347			366		389		450		454		484		503	523	
	07	256	200	386	118	173	29						422		483		487		517		536	556	630
	09	318	240	486	149	220	37.5								517		521		551		570	590	664
	11	395	290	600	181	276.5	50										562		592		611	631	705
14	490	350	740	228	339	65														656	676	750	

Gearbox size	Hollow shaft						Pitch circle						Torque plate					
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
04	25 30	115	45	100	8 8	28.3 33.3	110	75	90	3	2.5	M6x12	22.5	128	14	12.5	32	35
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114

Dimensions in [mm] \* Please note dimension k<sub>2</sub>  
 \*\* See page 3 - 40 for more built-on accessories  
 1) On motec option only: bus I/O, system terminal or brake rectifier

# Low-profile geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22																	
<b>GFL □ □ - 2 E HCK</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752																	
Motor		<b>g</b>	123			138		156		176		194		222		262																
		<b>k<sub>1</sub></b>	188			207		225		276		280	310	323	343	409																
		<b>k<sub>2</sub></b>	120			120		145		180		180		222		265																
		<b>Δk**</b>	40			52		73		70		94		101		127																
		Brake	129			127		128		126		97		95		104																
		External blower	169			164		184		179		169		183		218																
		Brake + external blower																														
motec		<b>g<sub>1</sub></b>	171			180	225	221	237	242	258	256	270	270	290	290																
		<b>g<sub>1</sub><sup>1)</sup></b>	207			216																										
		<b>m<sub>1</sub></b>	190			190	202	202	230	230	230	325	325	325	325	325																
		<b>n<sub>2</sub></b>	138			138	156	156	176	176	176	211	211	211	211	211																
		<b>x</b>	21			23	10	3	3	8	6	2	8	8	19	19																
		<b>y<sub>1</sub></b>	69			69	78	78	88	88	88	106	106	106	106	106																
Gearbox		Gearbox						Total length																								
size		<b>o*</b>	<b>o<sub>1</sub></b>	<b>p*</b>	<b>p<sub>1</sub></b>	<b>a</b>	<b>a<sub>4</sub></b>	<b>k<sub>8</sub></b>	<b>k</b>																							
04		148	148	214	69	90.5	12.5	41	345			365			388			449														
05		165	173	252	78	112.5	18.5	46	367			386			409			470			474			504								
06		206	201	315	98	140	22	55	388			407			430			491			495			525			544			564		
07		256	255	386	118	173	29	72				477			538			542			572			591			611			685		
09		318	300	486	149	220	37.5	77							577			581			611			630			650			724		
11		395	350	600	181	276.5	50	85										622			652			671			691			765		
14		490	410	740	228	339	65	89																716			736			810		

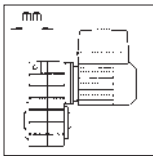
Gearbox size	Hollow shaft							Output shaft						
	<b>d</b> H7	<b>l</b>	<b>d<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>u</b> JS9	<b>t</b> +0.2	<b>a<sub>2</sub></b>	<b>b<sub>2</sub></b> j7	<b>c<sub>2</sub></b>	<b>e<sub>2</sub></b>	<b>f<sub>2</sub></b>	<b>i<sub>2</sub></b>	<b>s<sub>2</sub></b>	
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9	
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14	
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14	
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5	
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5	
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

Dimensions in [mm]

\* Please note dimension k<sub>2</sub>

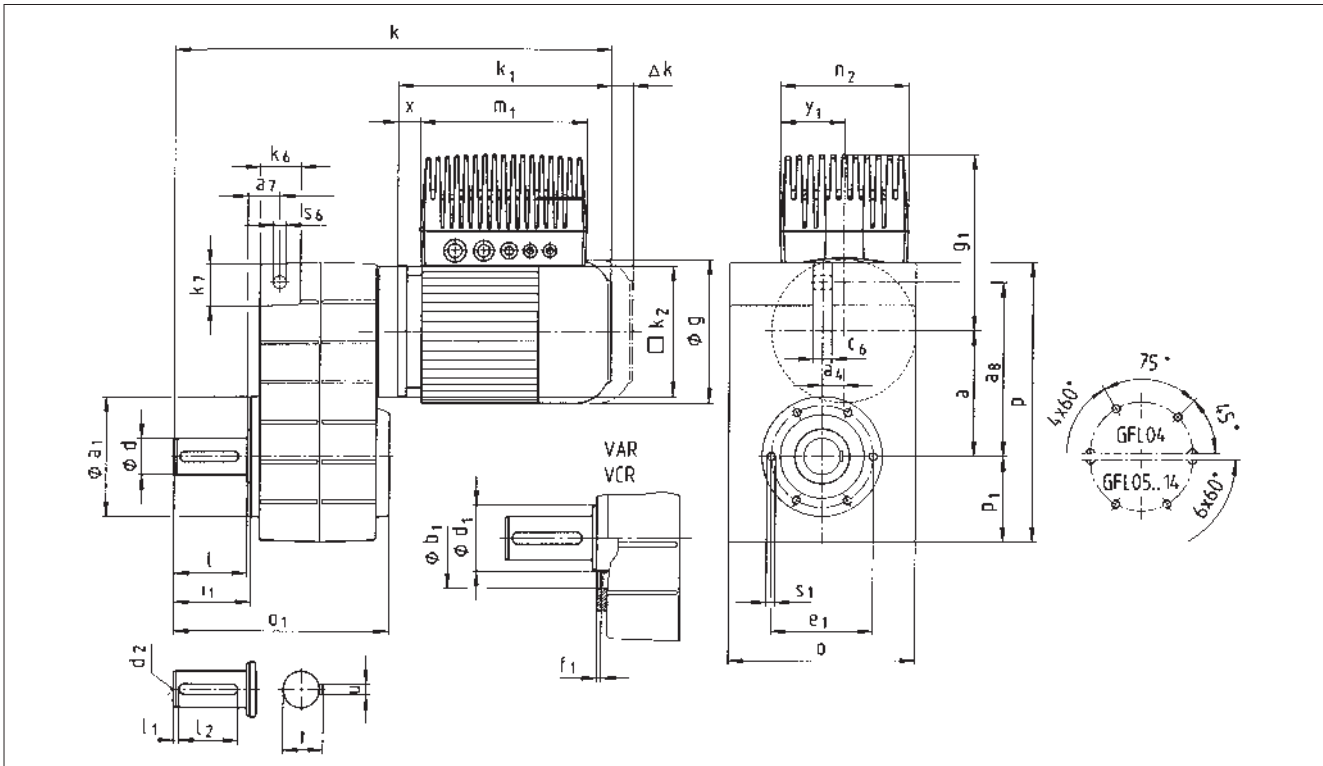
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Low-profile geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22				
<b>GFL□□ - 2 E V□R</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752				
Motor	g		123			138		156	176		194		222		262				
	k <sub>1</sub>		188			207		225	276		280	310	323	343	409				
	k <sub>2</sub>		120			120		145	180		180		222		265				
	Δk**	Brake	40			52		73	70		94		101		127				
		External blower	129			127		128	126		97		95		104				
	Brake + external blower	169			164		184	179		169		183		218					
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270	270	290				
	g <sub>1</sub> <sup>1)</sup>		207			216													
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325	325	325				
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211	211	211				
	x		21			23	10	3	3	8	6	2	8		19				
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106	106	106				
Gearbox size	Gearbox						Total length												
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k												
	04	148	163	214	69	90.5	12.5	362		382		405	466						
	05	165	197	252	78	112.5	18.5	394		413		436	497	501	531				
	06	206	236	315	98	140	22	427		446		469	530	534	564	583	603		
	07	256	296	386	118	173	29			522		583	587	617	636	656	730		
	09	318	356	486	149	220	37.5					637	641	671	690	710	784		
	11	395	445	600	181	276.5	50						722	752	771	791	865		
14	490	544	740	228	339	65									856	876	950		

Gearbox size	Solid shaft								Pitch circle				Torque plate							
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
04	25	50	45	4	40	M10	8	28	110	75	90	3	52.5	M6x12	22.5	128	14	12.5	32	35
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* Please note dimension k<sub>2</sub>

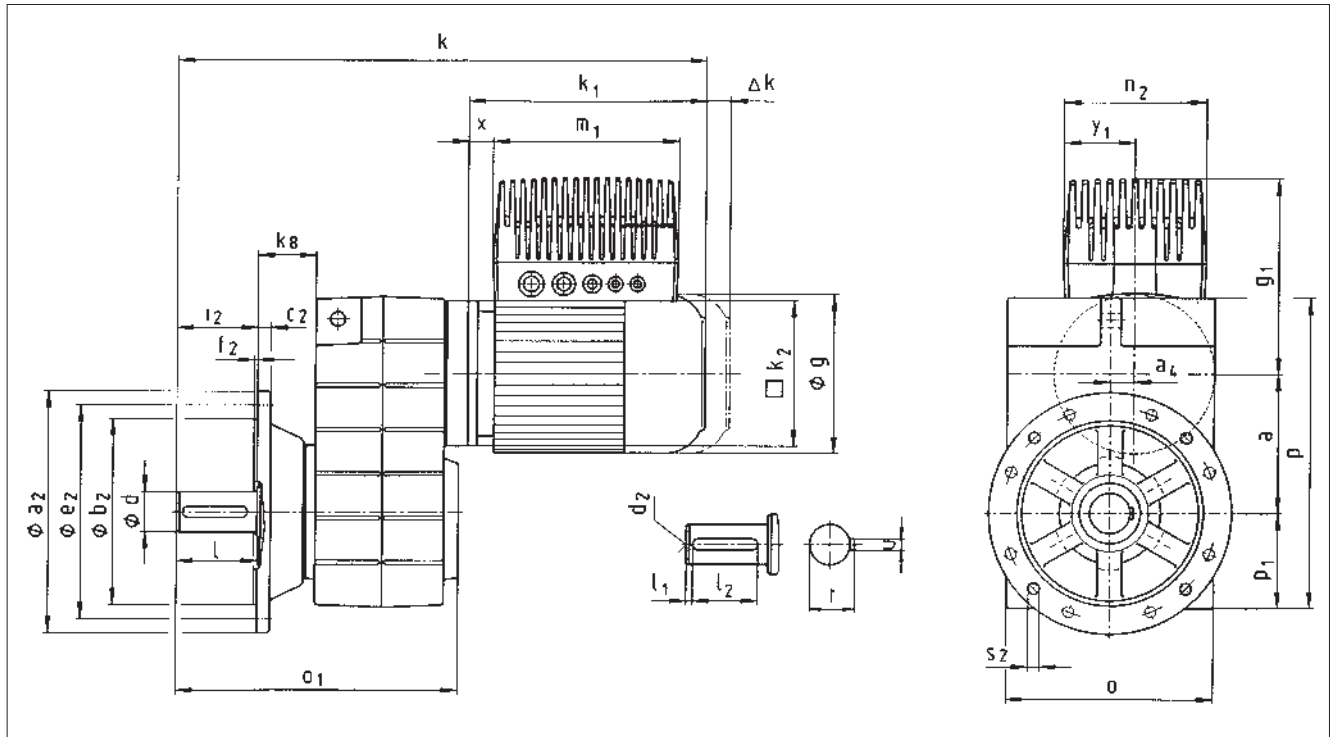
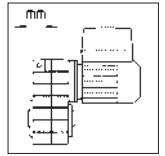
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Low-profile geared motors with motec

## Dimensions



3

Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22										
<b>GFL □ □ - 2 E VCK</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752										
Motor		<b>g</b>	123			138		156		176		194		222		262									
		<b>k<sub>1</sub></b>	188			207		225		276		280	310	323	343	409									
		<b>k<sub>2</sub></b>	120			120		145		180		180		222		265									
		<b>Δk**</b>	40			52		73		70		94		101		127									
		External blower	129			127		128		126		97		95		104									
		Brake + external blower	169			164		184		179		169		183		218									
motec		<b>g<sub>1</sub></b>	171			180		225		221	237	242	258	256	270	290									
		<b>g<sub>1</sub><sup>1)</sup></b>	207			216																			
		<b>m<sub>1</sub></b>	190			190		202	202	230	230	230	325	325	325										
		<b>n<sub>2</sub></b>	138			138		156	156	176	176	176	211	211	211										
		<b>x</b>	21			23		10	3	3	8	6	2	8		19									
		<b>y<sub>1</sub></b>	69			69		78	78	88	88	88	106	106	106										
Gearbox size	Gearbox							Total length																	
	o*	o <sub>1</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	<b>k</b>																	
04	148	196	214	69	90.5	12.5	41	395			415			438		499									
05	165	230	252	78	112.5	18.5	46	427			446			469		530		534	564						
06	206	277	315	98	140	22	55	468			487			510		571		575	605	624	644				
07	256	351	386	118	173	29	72										577		638		642	672	691	711	785
09	318	416	486	149	220	37.5	77												697		701	731	750	770	844
11	395	505	600	181	276.5	50	85														782	812	831	851	925
14	490	604	740	228	339	65	89																916	936	1010

Gearbox size	Solid shaft								Output shaft						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

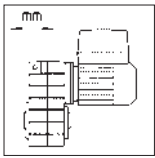
Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* Please note dimension k<sub>2</sub>

\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

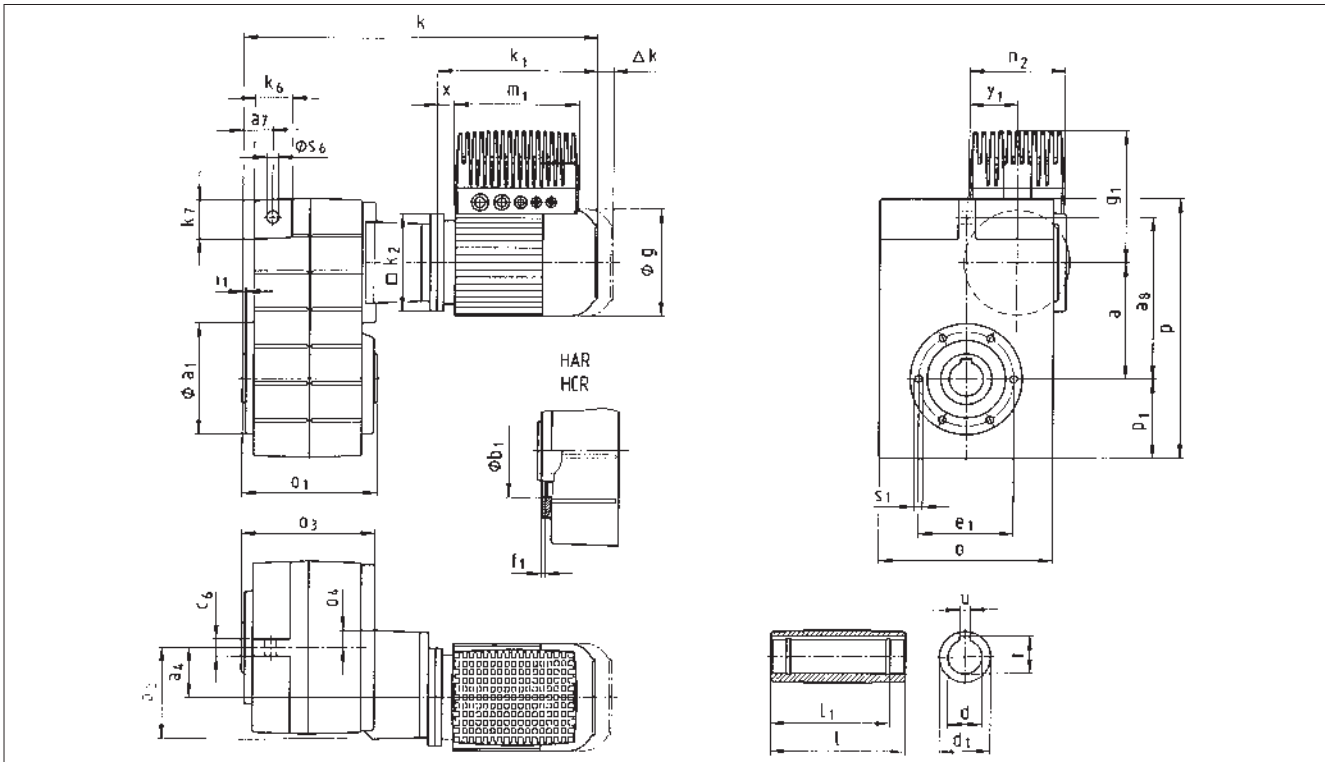




# Low-profile geared motors with motec

## Dimensions

3



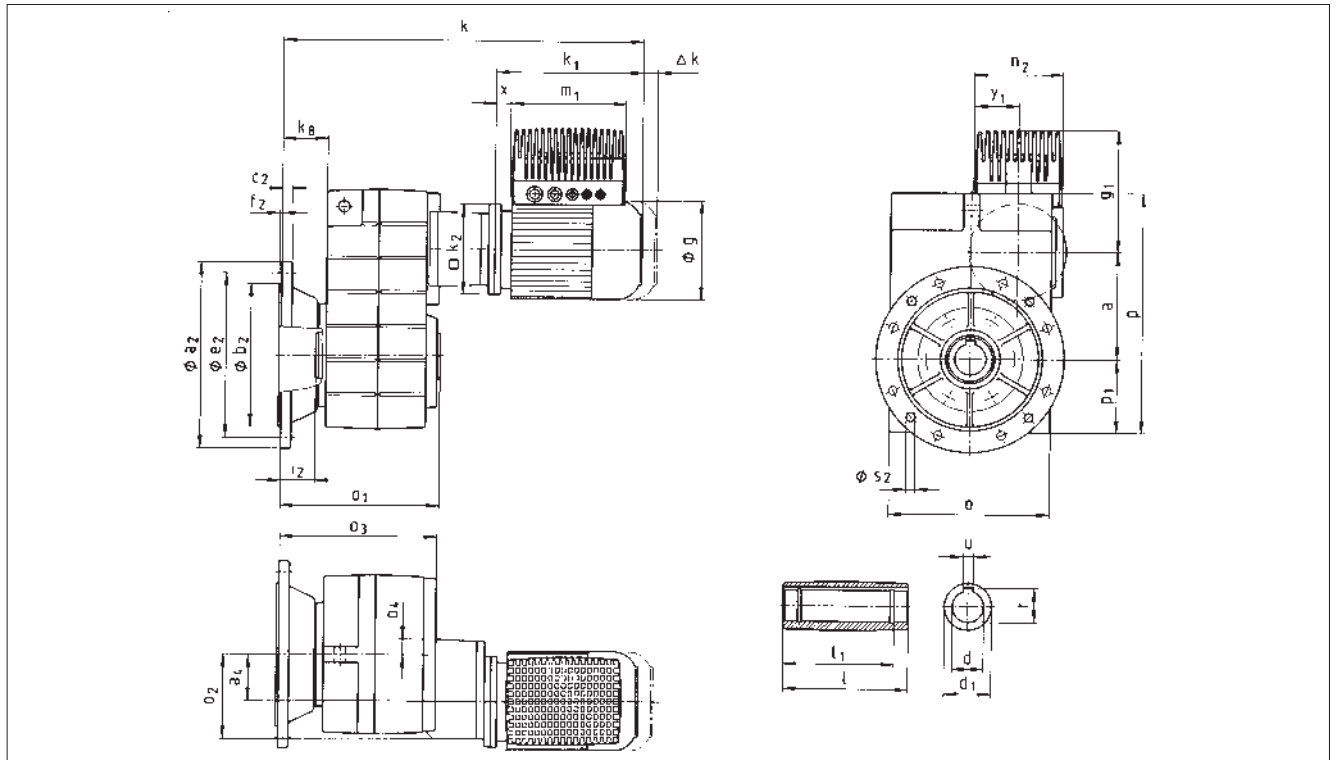
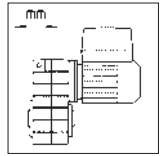
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22		
<b>GFL □ □ - 3 E H □ R</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor	g		123			138		156		176	194		222		262		
	k <sub>1</sub>		188			207		225		276	280	310	323	343	409		
	k <sub>2</sub>		120			120		145		180	180		222		265		
	Δk**	Brake		40			52		73		70	94		101		127	
		External blower		129			127		128		126	97		95		104	
	Brake + external blower		169			164		184		179	169		183		218		
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290		
	g <sub>1</sub> <sup>1)</sup>		207			216											
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325		
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211		
	x		21			23	10	3	3	8	6	2	8		19		
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106		
Gearbox size	Gearbox									Total length							
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k							
05	165	140	122	141	7	252	78	112.5	54.5	410		430		453		514	
06	206	160	111	160	19	315	98	140	58	440		460		483		544	
07	256	200	135	199	22	386	118	173	74	484		504		527		588	
09	318	240	170	238	26	486	149	220	93.5	536		556		579		640	
11	395	290	216	285	32	600	181	276.5	120			639		700		704	
14	490	350	271	340	36	740	228	339	154					779		783	

Gearbox size	Hollow shaft						Pitch circle				Torque plate							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	29	155	16	14	35	38
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	35	195	20	14	46	46
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	44	240	25	18	56	56
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	50	300	32	22	70	70
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	65	375	40	26	84	90
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	80	455	50	32	100	114

Dimensions in [mm] \* Please note dimension k<sub>2</sub>  
 \*\* See page 3 - 40 for more built-on accessories  
 1) On motec option only: bus I/O, system terminal or brake rectifier

# Low-profile geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22			
<b>GFL □ □ - 3 E HCK</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752			
Motor		g	123			138		156		176		194		222		262		
		k <sub>1</sub>	188			207		225		276		280	310	323	343	409		
		k <sub>2</sub>	120			120		145		180		180		222		265		
		Δk**	40			52		73		70		94		101		127		
		External blower	129			127		128		126		97		95		104		
		Brake + external blower	169			164		184		179		169		183		218		
motec		g <sub>1</sub>	171			180	225	221	237	242	258	256	270		290			
		g <sub>1</sub> <sup>1)</sup>	207			216												
		m <sub>1</sub>	190			190	202	202	230	230	230	325	325		325			
		n <sub>2</sub>	138			138	156	156	176	176	176	211	211		211			
		x	21			23	10	3	3	8	6	2	8		19			
		y <sub>1</sub>	69			69	78	78	88	88	88	106	106		106			
Gearbox size	Gearbox										Total length							
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k							
05	165	173	122	174	7	252	78	112.5	54.5	46	443		463		486		547	
06	206	201	111	201	19	315	98	140	58	55	481		501		524		585	
07	256	255	135	254	22	386	118	173	74	72	539		559		582		643	
09	318	300	170	298	26	486	149	220	93.5	77	596		616		639		700	
11	395	350	216	345	32	600	181	276.5	120	85					699		760	
14	490	410	271	400	36	740	228	339	154	89							760	
																	839	
																	843	
																	873	
																	891	
																	911	
																	986	

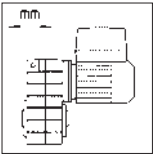
Gearbox size	Hollow shaft					Output shaft							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 1.7
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

Dimensions in [mm]

\* Please note dimension k<sub>2</sub>

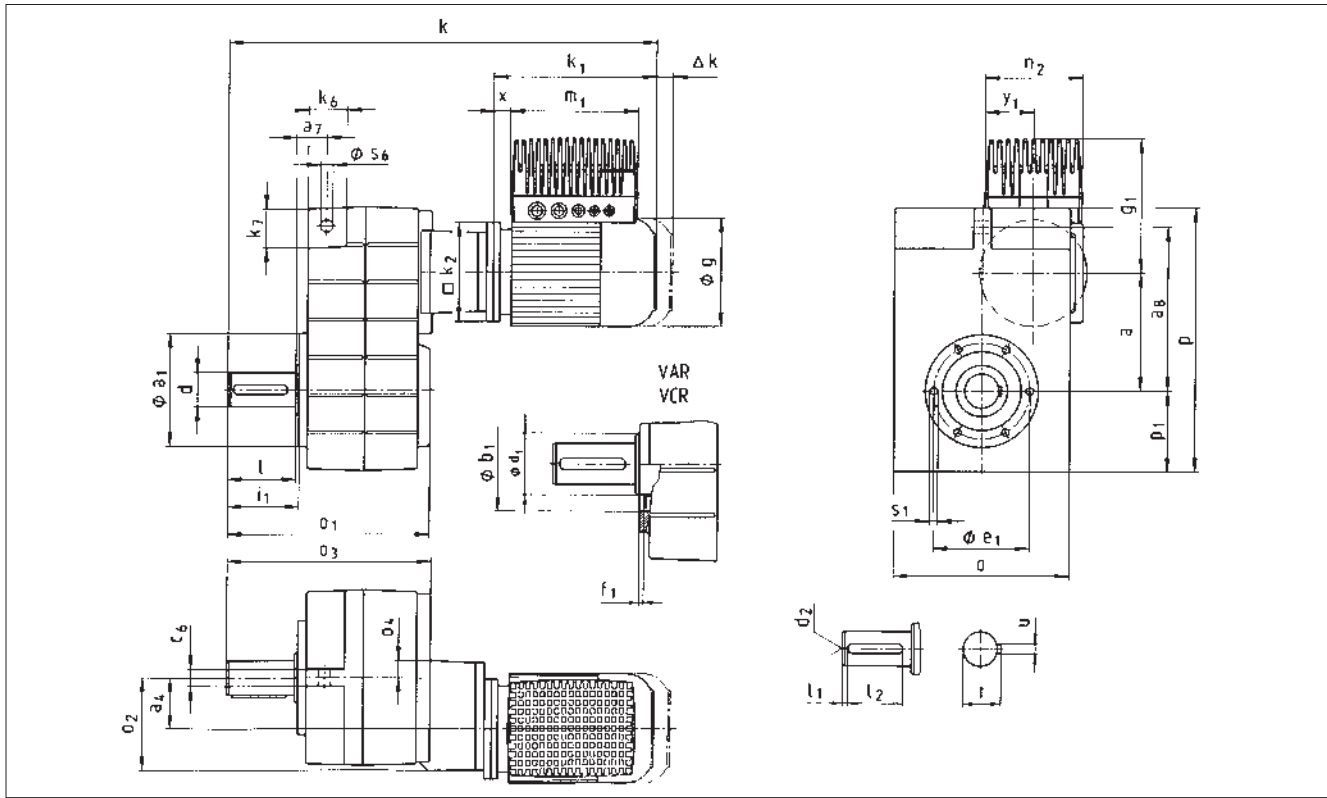
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Low-profile geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22							
<b>GFL □ □ - 3 E V □ R</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752							
Motor	g		123			138		156		176		194		222		262						
	k <sub>1</sub>		188			207		225		276		280	310	323	343	409						
	k <sub>2</sub>		120			120		145		180		180		222		265						
	Δk**	Brake	40			52		73		70		94		101		127						
		External blower	129			127		128		126		97		95		104						
	Brake + external blower	169			164		184		179		169		183		218							
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270	270	290							
	g <sub>1</sub> <sup>1)</sup>		207			216																
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325							
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211							
	x		21			23	10	3	3	8	6	2	8		19							
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106							
Gearbox size	Gearbox								Total length													
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p <sub>1</sub>	a	a <sub>4</sub>	k													
05	165	197	122	201	7	252	78	112.5	54.5	470		490		513		574						
06	206	236	111	240	19	315	98	140	58	520		540		563		624						
07	256	296	135	299	22	386	118	173	74	584		604		627		688		692	722			
09	318	356	170	358	26	486	149	220	93.5	656		676		699		760		764	794	812	832	
11	395	445	216	445	32	600	181	276.5	120					799		860		864	894	912	932	1007
14	490	544	271	540	36	740	228	339	154									983	1013	1031	1051	1126

Gearbox size	Solid shaft									Pitch circle					Torque plate					
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>7</sub>	a <sub>8</sub>	c <sub>6</sub>	s <sub>6</sub>	k <sub>6</sub>	k <sub>7</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	29	155	16	14	35	38
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	35	195	20	14	46	46
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	44	240	25	18	56	56
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	50	300	32	22	70	70
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	65	375	40	26	84	90
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	80	455	50	32	100	114

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

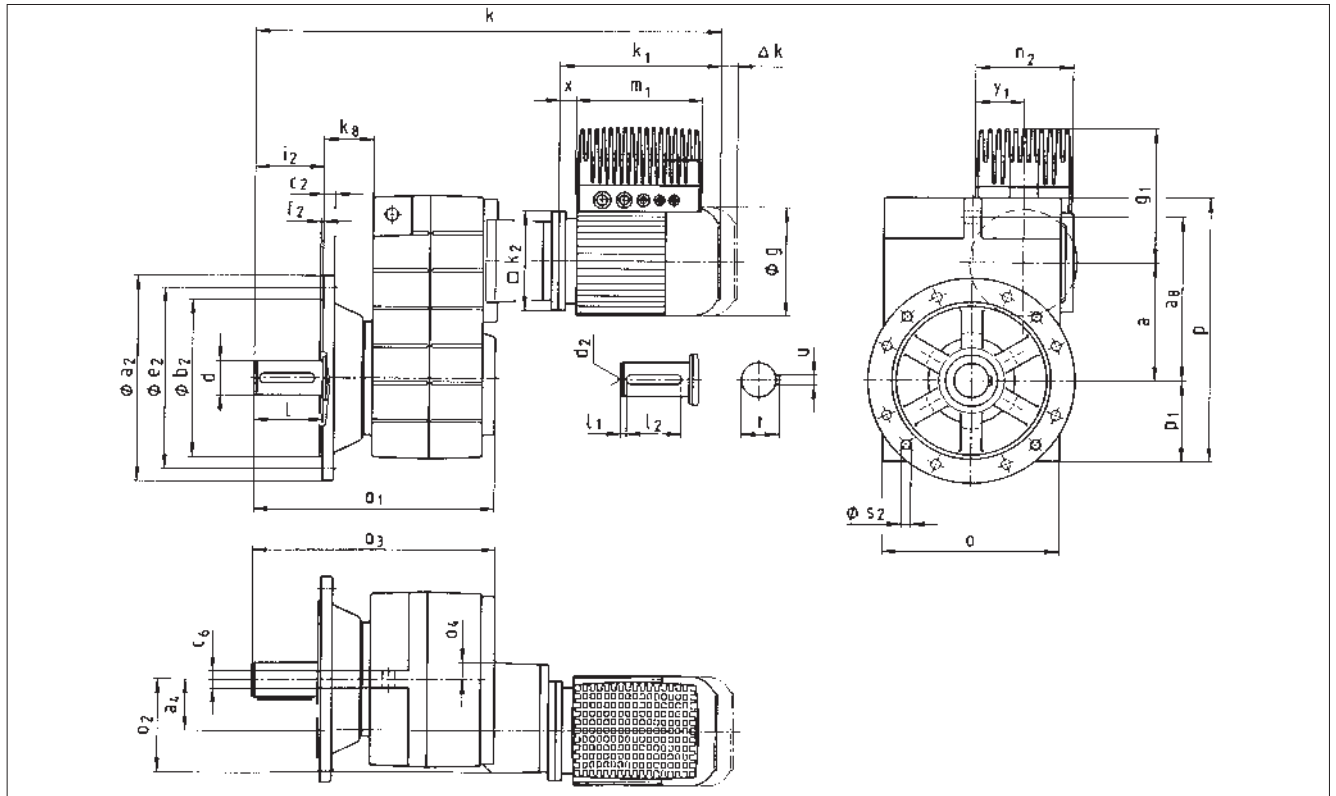
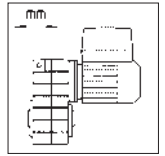
\* Please note dimension k<sub>2</sub>

\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Low-profile geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22					
<b>GFL □ □ - 3 E VCK</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752					
Motor		g	123			138		156		176		194		222		262				
		k <sub>1</sub>	188			207		225		276		280	310	323	343	409				
		k <sub>2</sub>	120			120		145		180		180		222		265				
		Δk**	40			52		73		70		94		101		127				
		External blower	129			127		128		126		97		95		104				
		Brake + external blower	169			164		184		179		169		183		218				
motec		g <sub>1</sub>	171			180		225	221	237	242	258	256	270		290				
		g <sub>1</sub> <sup>1)</sup>	207			216														
		m <sub>1</sub>	190			190		202	202	230	230	230	325	325		325				
		n <sub>2</sub>	138			138		156	156	176	176	176	211	211		211				
		x	21			23		10	3	3	8	6	2	8		19				
		y <sub>1</sub>	69			69		78	78	88	88	88	106	106		106				
Gearbox size	Gearbox										Total length									
	o*	o <sub>1</sub>	o <sub>2</sub>	o <sub>3</sub>	o <sub>4</sub>	p*	p <sub>1</sub>	a	a <sub>4</sub>	k <sub>8</sub>	k									
05	165	230	122	234	7	252	78	112.5	54.5	46										
06	206	277	111	281	19	315	98	140	58	55										
07	256	351	135	354	22	386	118	173	74	72										
09	318	416	170	418	26	486	149	220	93.5	77										
11	395	505	216	505	32	600	181	276.5	120	85										
14	490	604	271	600	36	740	228	339	154	89										
											503	523		546		607				
											561	581		604		665				
											639	659		682		743	747	777		
											716	736		759		820	824	854	872	892
													859		920	924	954	972	992	1067
															1039	1043	1073	1091	1111	1186

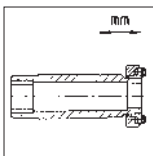
Gearbox size	Solid shaft								Output shaft						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* Please note dimension k<sub>2</sub>

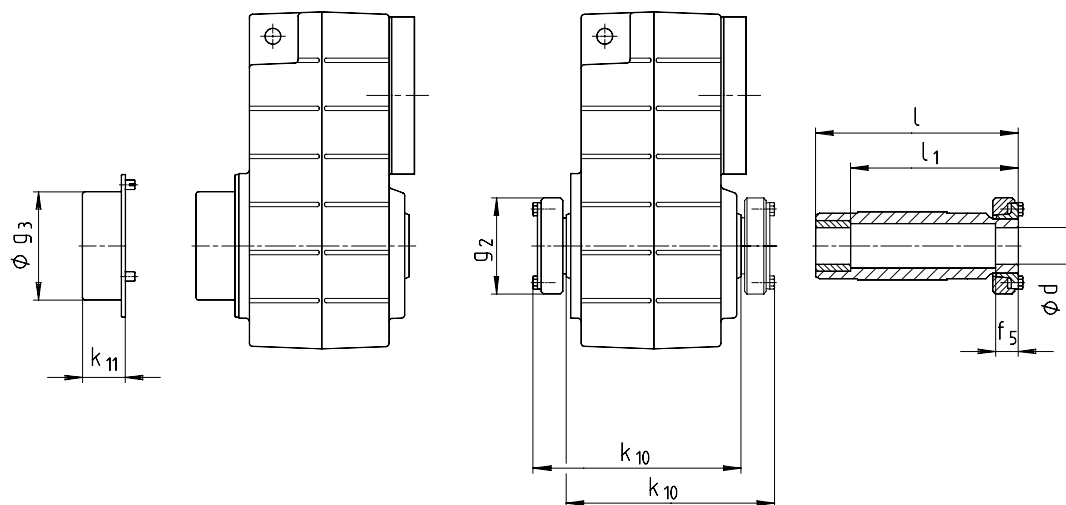
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



## Low-profile geared motors with motec

### Hollow shaft with shrink disk



3

Gearbox size	Machine shaft *)		Hollow shaft			Gearbox		Protective cover	
	d	Fit	l	l <sub>1</sub>	f <sub>5</sub>	g <sub>2</sub>	k <sub>10</sub>	g <sub>3</sub>	k <sub>11</sub>
04	25 30	h6	142	122	26	72	146	79	41
05	35	h6	168	148	28	80	171	90	43
06	40	h6	194	164	30	90	197	100	49
07	50	h6	232	192	26	110	234	124	49
09	65	h6	278	228	30	141	281	159	52
11	80	h6	338	238	42	170	344	191	65
14	100	h6	407	307	55	215	415	253	78

\* On shrink disk versions, make sure that the shaft material is strong enough. If you are using conventional steels (e.g. C45, 42CrMo4), the torques listed in the selection tables can be transmitted without restriction. If you are using materials that are significantly weaker, please contact us. The average surface roughness should not exceed 15 µm (lathing is sufficient)

### Combination options for shrink disk on drive end (position 1)

Gearbox size	Gearbox motors GFL□□-2E with motor frame size						
	063	071	080	090	100	112	132
04							
05	●	● <sup>1)</sup>					
06	●	●	●	● <sup>1)</sup>	● <sup>1)</sup>		
07			●	●	●	● <sup>1)</sup>	
09				●	●	●	●
11					●	●	●
14						●	●

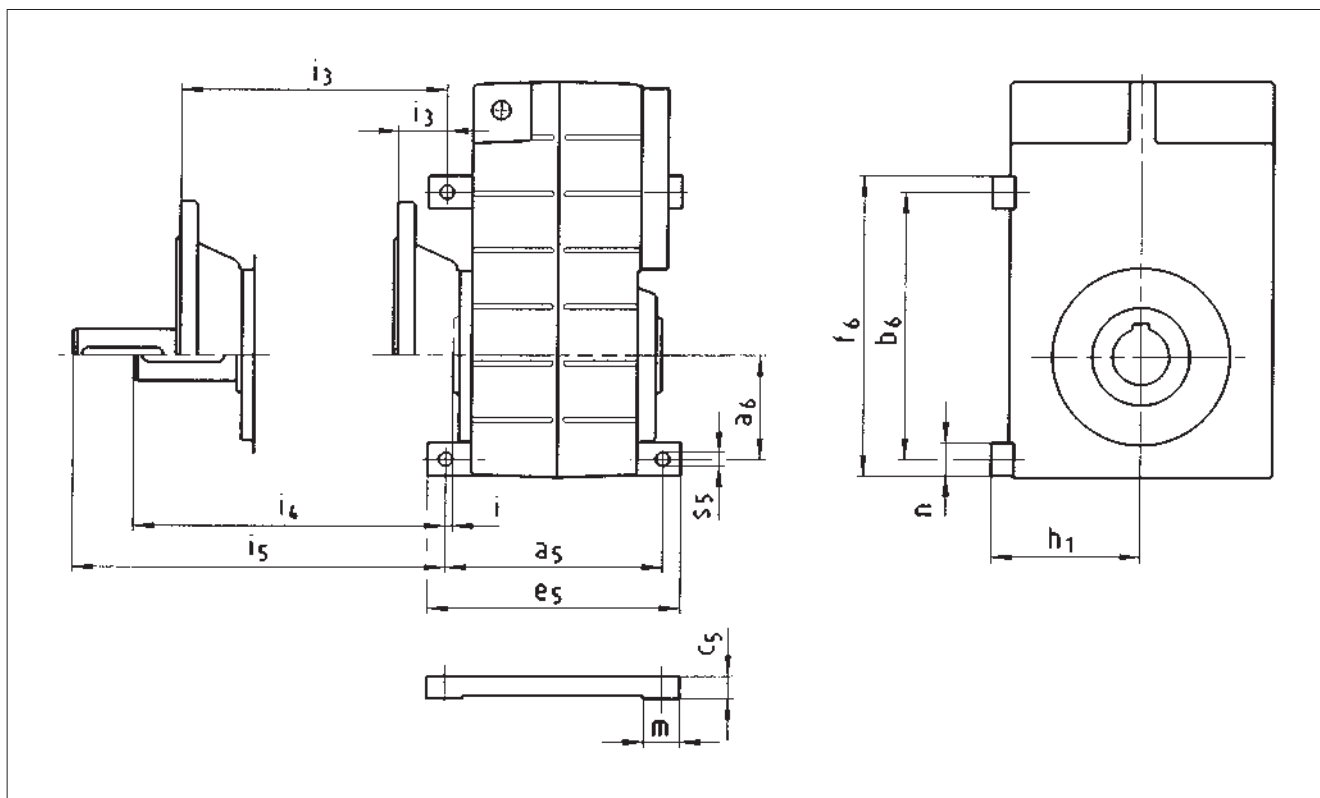
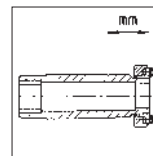
All combinations are possible on GFL□□-3□ geared motors/gearboxes.

1) without protective cover

Dimensions in [mm]

# Low-profile geared motors with motec

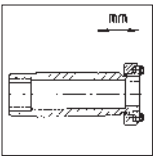
## Foot mounting in position 3



3

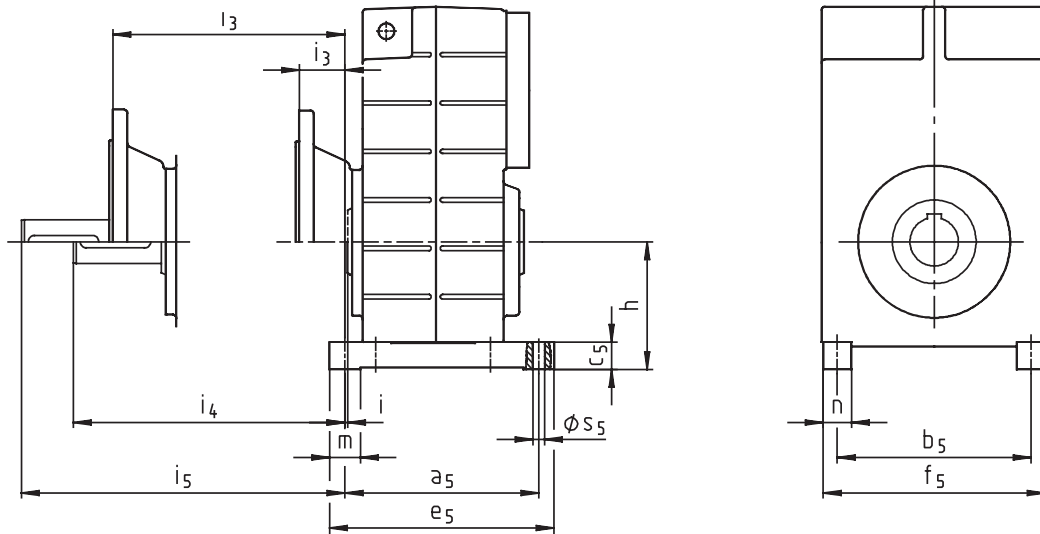
Gearbox size	Gearbox						Foot								Foot not possible with input design
	$a_6$	$h_1$	$i$	$i_3$	$i_4$	$i_5$	$a_5$	$b_6$	$c_5$	$e_5$	$f_6$	$n$	$m$	$s_5$	<b>E</b>
04	47	90	4.5	28.5	45.5	78.5	130	115	18	152	140	25	22	6.6	> 080-ç ç
05	65	100	2	31	58	91	160	167	21	185	192	25	25	9	> 080-ç ç
06	80	125	2	39	78	119	175	205	27	205	233	28	30	11	> 100-ç ç
07	100	155	3	52	97	152	220	260	31	255	292	32	35	13.5	> 132-ç ç
09	125	190	3	57	117	177	260	335	36	300	375	40	40	17.5	
11	155	240	3	57	157	217	315	435	48	365	485	50	50	22	
14	200	295	3	57	197	257	375	540	57	430	600	60	55	26	

Dimensions in [mm]



# Low-profile geared motors with motec

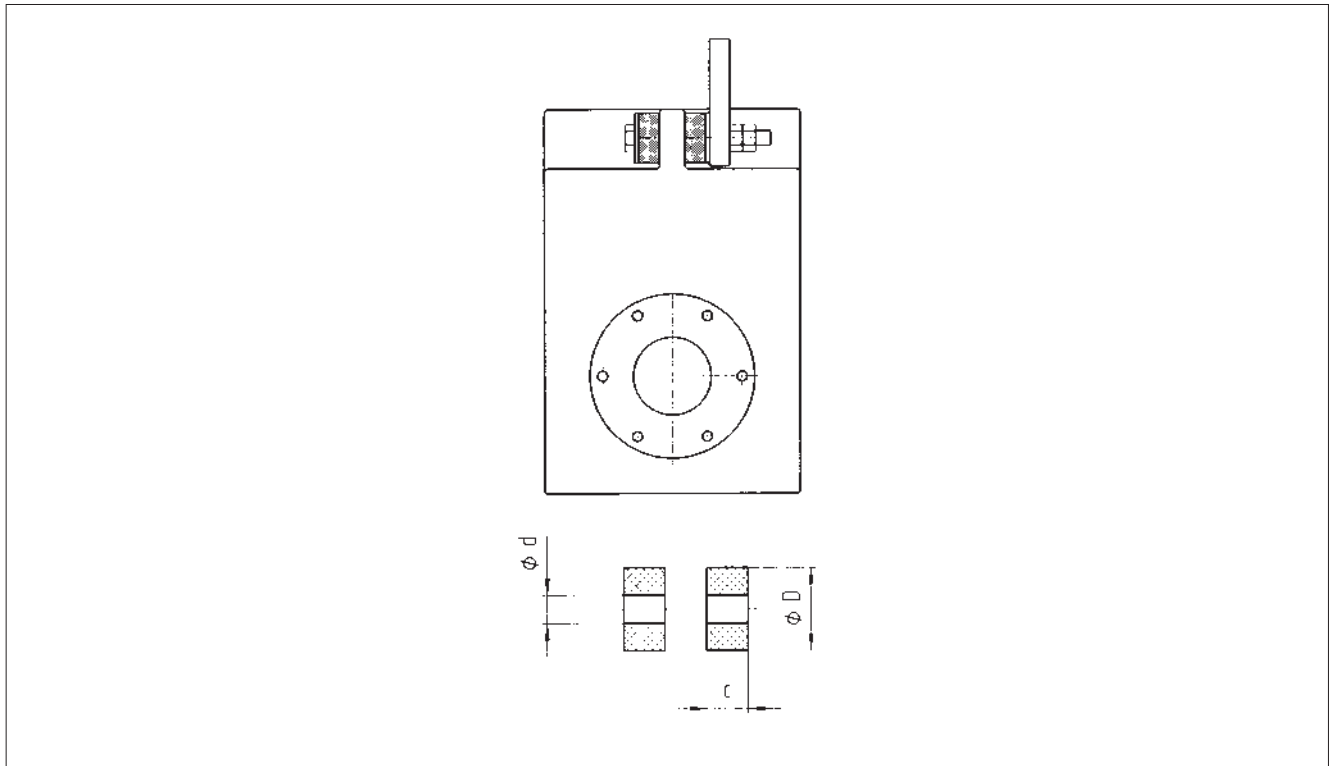
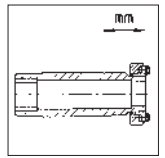
## Foot mounting in position 4



3

Gearbox size	Gearbox*					Foot (in position 4)							
	h	i	i <sub>3</sub>	i <sub>4</sub>	i <sub>5</sub>	a <sub>5</sub>	b <sub>5</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>
04	85	4.5	28.5	45.5	78.5	130	108	18	152	133	25	22	6.6
05	95	2	31	58	91	160	140	21	185	165	25	25	9
06	120	2	39	78	119	175	175	27	205	203	28	30	11
07	145	3	52	97	152	220	220	31	255	252	32	35	13.5
09	180	3	57	117	177	260	275	36	300	315	40	40	17.5
11	224	3	57	157	217	315	340	48	365	390	50	50	22
14	278	3	57	197	257	375	425	57	430	485	60	60	26

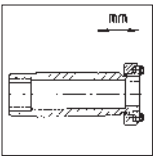
Dimensions in [mm]



Gearbox size	d	D	c
04	11	30	14.5
05	11	30	14.5
06	13	40	15
07	17	50	27
09	21	60	28
11	26	72	29
14	33	92	30

Dimensions in [mm]

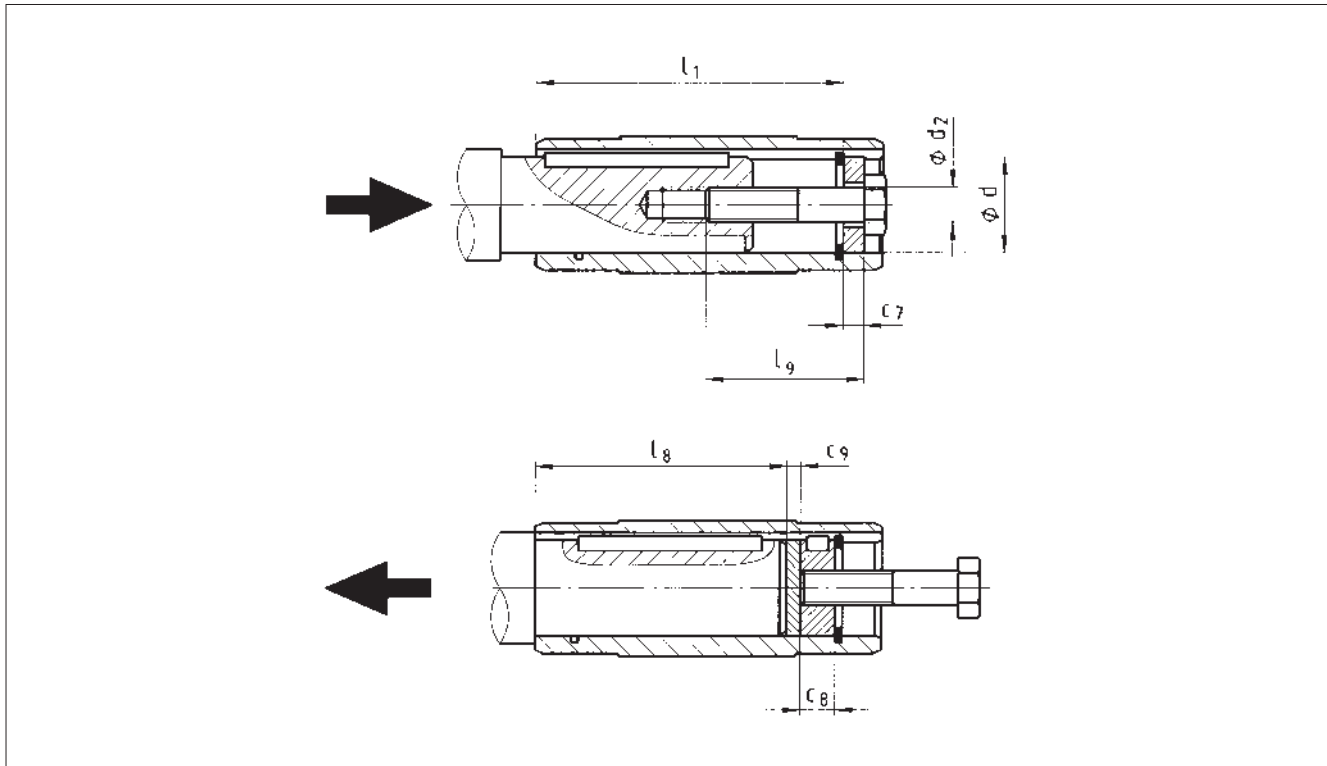




## Low-profile geared motors with motec

Mounting kit: Hollow shaft retention · Proposed design for auxiliary tools

3

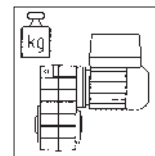


Gearbox size	Hollow shaft (version H)			Mounting kit: Hollow shaft retention (auxiliary tool assembly)			Auxiliary tool Disassembly		Machine shaft max l <sub>8</sub>
	l	l <sub>1</sub>	d H7	d <sub>2</sub>	l <sub>9</sub>	c <sub>7</sub>	c <sub>8</sub>	c <sub>9</sub>	
04	115	100	25 30	M10 M10	40	5 6	10	3	85
05	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
06	160	140	40 45	M16	60	8 9	16	4	118
07	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148
09	240	210	60 70	M20	80	13 14	20	5	182
11	290	250	70 80	M20	80	14 16	20	6	221
14	350	305	100	M24	100	20	24	8	270

Dimensions in [mm]

# Low-profile geared motors with motec

## Weights



### Low-profile gearbox GFL □□-2

Geared motors GFL□□-2E H□□ V□□ S□□	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	motec E82MV □□□											
	251	371	551	751	152	152	222	302	402	552	752	
04	13	15	16	21	22	29						
05	26	28	29	34	35	42	45	55				
06	40	42	43	47	49	56	59	69	81	87		
07				73	75	82	85	95	107	113	137	
09						128	131	141	153	159	184	
11							217	226	238	244	267	
14									380	386	408	

3

### Low-profile gearbox GFL □□-3

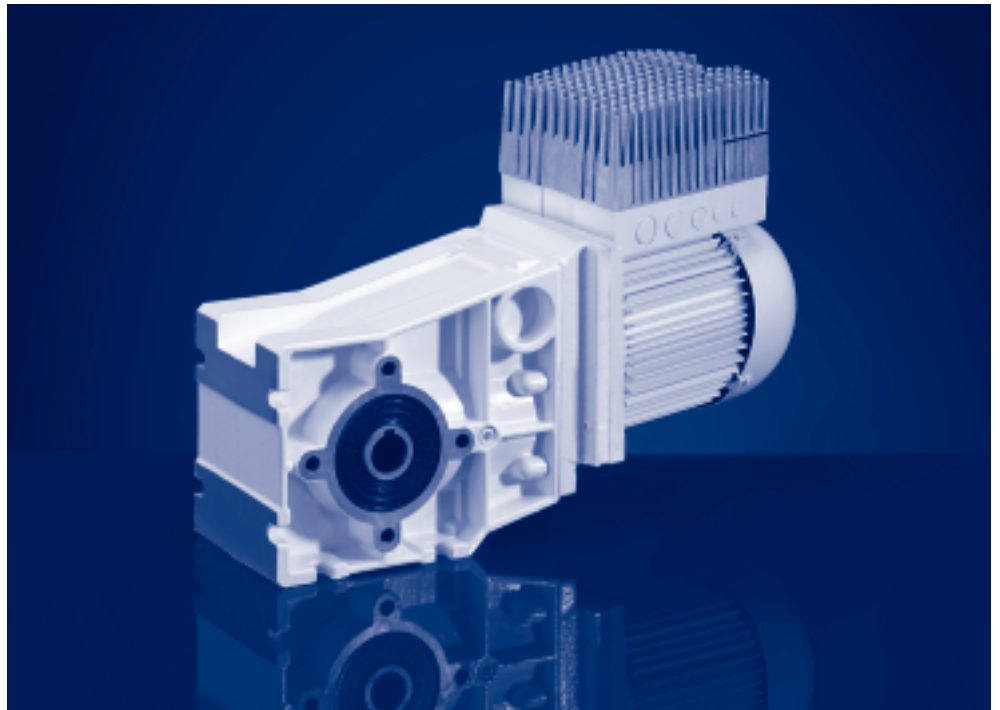
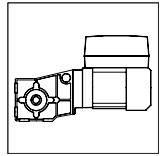
Geared motors GFL□□-3E H□□ V□□ S□□	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	motec E82MV □□□											
	251	371	551	751	152	152	222	302	402	552	752	
05	27	29	30	35	36	43						
06	44	46	47	52	53	60						
07	74	76	77	81	83	90	93	103				
09	125	127	128	133	134	141	144	154	167	173		
11				226	227	234	237	247	260	266	290	
14						391	394	404	416	422	446	

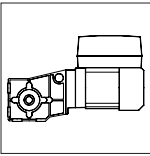
### Excess weights

Gearbox size	Solid shaft V□□	Hollow shaft with shrink disc S□□	Flange □□K	Foot □A□/□B□
04	0.6	0.6	2.5	1
05	1	0.8	4	1.5
06	2.5	1	7	2.5
07	5	1.5	11	4
09	8	3	16	7
11	16	5	24	14
14	33	11	33	23

Weights in [kg] with oil filling for mounting position A  
All values are approximate







# Bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.12 kW</b>							<b>GKR □□ - 2E</b>		3-128
	136	8	5.6	10.466	39 - 237	7.1 - 4.6	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	122	9	5.1	11.640	36 - 213	7.9 - 5.1	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	107	10	4.4	13.386	31 - 185	9.1 - 5.9	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	94	12	3.9	15.111	27 - 164	10.3 - 6.6	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	82	13	3.4	17.378	24 - 143	11.8 - 7.6	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	74	15	3.0	19.365	21 - 128	13.2 - 8.5	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	64	17	2.6	22.270	19 - 111	15.1 - 9.8	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	57	19	2.4	25.051	16 - 99	17 - 11	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	50	22	2.0	28.808	14 - 86	20 - 13	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	44	25	1.8	32.593	13 - 76	22 - 14	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	45	24	3.7	31.919	13 - 78	22 - 14	GKR04 - 2E □□□ 063C12	E82MV 251_2B	
	38	29	1.6	37.481	11 - 66	25 - 16	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	39	28	3.2	36.707	11 - 68	25 - 16	GKR04 - 2E □□□ 063C12	E82MV 251_2B	
	34	32	1.4	42.222	9.8 - 59	29 - 19	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	36	31	3.0	40.000	10 - 62	27 - 18	GKR04 - 2E □□□ 063C12	E82MV 251_2B	
	31	35	2.6	46.000	9.0 - 54	31 - 20	GKR04 - 2E □□□ 063C12	E82MV 251_2B	
	29	37	1.2	48.556	8.5 - 51	33 - 21	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	27	40	1.7	52.698	7.8 - 47	36 - 23	GKR04 - 2E □□□ 063C12	E82MV 251_2B	
	26	41	1.1	53.889	7.7 - 46	37 - 24	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
	24	46	1.7	60.603	6.8 - 41	41 - 27	GKR04 - 2E □□□ 063C12	E82MV 251_2B	
	23	47	1.0	61.972	6.7 - 40	42 - 27	GKR03 - 2E □□□ 063C12	E82MV 251_2B	
<b>0.18 kW</b>							<b>GKR □□ - 2E</b>		3-128
	192	9	5.1	7.111	56 - 334	7.6 - 4.9	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	167	10	4.5	8.178	48 - 290	8.7 - 5.6	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	150	11	4.1	9.101	43 - 261	9.7 - 6.3	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	130	13	3.6	10.466	38 - 227	11.1 - 7.2	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	117	14	3.2	11.640	34 - 204	12.4 - 8.0	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	102	16	2.8	13.386	30 - 177	14.3 - 9.2	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	90	18	2.5	15.111	26 - 157	16 - 10	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	79	21	2.2	17.378	23 - 137	19 - 12	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	71	23	1.9	19.365	20 - 123	21 - 13	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	70	23	3.5	19.556	20 - 121	21 - 13	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	61	27	1.7	22.270	18 - 107	24 - 15	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	61	27	3.4	22.489	18 - 106	24 - 15	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	55	30	1.5	25.051	16 - 95	27 - 17	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	54	30	2.9	25.185	16 - 94	27 - 17	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	47	35	1.3	28.808	14 - 82	31 - 20	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	47	35	2.6	28.963	14 - 82	31 - 20	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	42	39	1.2	32.593	12 - 73	35 - 22	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	43	38	2.4	31.919	12 - 74	34 - 22	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	36	45	1.0	37.481	11 - 63	40 - 26	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	37	44	2.1	36.707	11 - 65	39 - 25	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	32	51	0.9	42.222	9.4 - 56	45 - 29	GKR03 - 2E □□□ 063C32	E82MV 251_2B	
	34	48	1.9	40.000	9.9 - 59	43 - 28	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	30	55	1.6	46.000	8.6 - 52	49 - 32	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	26	63	1.1	52.698	7.5 - 45	56 - 36	GKR04 - 2E □□□ 063C32	E82MV 251_2B	
	23	73	1.1	60.603	6.5 - 39	65 - 42	GKR04 - 2E □□□ 063C32	E82MV 251_2B	

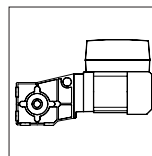
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Bevel geared motors with motec

## Selection tables

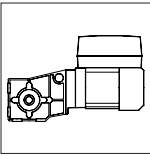


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.25 kW</b>							<b>GKR □□ - 2E</b>		3-128
	253	9	4.4	5.411	73 - 441	8.0 - 5.1	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	220	10	3.9	6.222	64 - 383	9.2 - 5.9	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	193	12	3.7	7.111	56 - 335	10.5 - 6.8	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	168	14	3.3	8.178	49 - 291	12.0 - 7.8	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	151	15	3.0	9.101	44 - 262	13.4 - 8.7	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	131	17	2.6	10.466	38 - 228	15.4 - 10.0	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	118	19	2.3	11.640	34 - 205	17 - 11	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	102	22	2.0	13.386	30 - 178	20 - 13	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	91	25	1.8	15.111	26 - 158	22 - 14	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	88	26	3.5	15.556	26 - 153	23 - 15	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	79	29	1.6	17.378	23 - 137	26 - 17	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	77	30	3.0	17.889	22 - 133	26 - 17	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	71	32	1.4	19.365	21 - 123	29 - 18	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	70	32	2.8	19.556	20 - 122	29 - 19	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	62	37	1.2	22.270	18 - 107	33 - 21	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	61	37	2.4	22.489	18 - 106	33 - 21	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	55	42	1.1	25.051	16 - 95	37 - 24	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	54	42	2.2	25.185	16 - 95	37 - 24	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	48	48	0.9	28.808	14 - 83	42 - 27	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	47	48	1.9	28.963	14 - 82	43 - 28	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	45	51	4.3	30.522	13 - 78	45 - 29	GKR05 - 2E □□□ 063C42	E82MV 251_2B	
	42	54	0.8	32.593	12 - 73	48 - 31	GKR03 - 2E □□□ 063C42	E82MV 251_2B	
	43	53	1.7	31.919	12 - 75	47 - 30	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	37	61	1.5	36.707	11 - 65	54 - 35	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	34	66	1.2	40.000	9.9 - 60	59 - 38	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	30	76	1.2	46.000	8.6 - 52	68 - 44	GKR04 - 2E □□□ 063C42	E82MV 251_2B	
	28	81	3.0	49.133	8.1 - 49	72 - 47	GKR05 - 2E □□□ 063C42	E82MV 251_2B	
	26	87	2.8	52.510	7.6 - 45	77 - 50	GKR05 - 2E □□□ 063C42	E82MV 251_2B	
	23	99	2.4	59.630	6.7 - 40	88 - 57	GKR05 - 2E □□□ 063C42	E82MV 251_2B	
	20	111	1.4	67.113	5.9 - 36	99 - 64	GKR05 - 2E □□□ 063C42	E82MV 251_2B	
	18	126	1.4	76.213	5.2 - 31	112 - 73	GKR05 - 2E □□□ 063C42	E82MV 251_2B	
<b>0.37 kW</b>							<b>GKR □□ - 2E</b>		3-128
	261	13	3.1	5.411	76 - 453	11.5 - 6.4	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	227	15	2.7	6.222	66 - 394	13.2 - 7.3	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	198	17	2.5	7.111	58 - 345	15.1 - 8.4	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	172	20	2.3	8.178	50 - 300	17.3 - 9.6	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	155	22	2.1	9.101	45 - 270	19 - 11	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	135	25	1.8	10.466	39 - 234	22 - 12	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	135	25	3.6	10.466	39 - 234	22 - 12	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	121	28	1.6	11.640	35 - 211	25 - 14	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	123	27	3.3	11.449	36 - 214	24 - 13	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	111	30	3.0	12.698	32 - 193	27 - 15	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	105	32	1.4	13.386	31 - 183	28 - 16	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	97	35	2.6	14.603	28 - 168	31 - 17	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	93	36	1.3	15.111	27 - 162	32 - 18	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	91	37	2.4	15.556	26 - 158	33 - 18	GKR04 - 2E □□□ 071C32	E82MV 371_2B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.37 kW</b>							<b>GKR □□ - 2E</b>		3-128
	81	41	1.1	17.378	24 - 141	37 - 20	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	79	43	2.1	17.889	23 - 137	38 - 21	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	73	46	1.0	19.365	21 - 127	41 - 23	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	72	47	1.9	19.556	21 - 125	41 - 23	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	63	53	0.9	22.270	18 - 110	47 - 26	GKR03 - 2E □□□ 071C32	E82MV 371_2B	
	63	54	1.7	22.489	18 - 109	48 - 26	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	56	60	1.5	25.185	16 - 97	53 - 30	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	49	69	1.3	28.963	14 - 85	61 - 34	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	46	73	3.3	30.522	13 - 80	65 - 36	GKR05 - 2E □□□ 071C32	E82MV 371_2B	
	44	76	1.2	31.919	13 - 77	68 - 38	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	38	87	1.0	36.707	11 - 67	78 - 43	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	42	80	3.0	33.433	12 - 73	71 - 39	GKR05 - 2E □□□ 071C32	E82MV 371_2B	
	35	95	1.0	40.000	10 - 61	85 - 47	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	37	90	2.7	37.967	11 - 65	80 - 45	GKR05 - 2E □□□ 071C32	E82MV 371_2B	
	31	110	0.8	46.000	8.9 - 53	97 - 54	GKR04 - 2E □□□ 071C32	E82MV 371_2B	
	33	103	2.3	43.267	9.5 - 57	92 - 51	GKR05 - 2E □□□ 071C32	E82MV 371_2B	
	29	117	2.1	49.133	8.3 - 50	104 - 58	GKR05 - 2E □□□ 071C32	E82MV 371_2B	
	27	125	1.9	52.510	7.8 - 47	111 - 62	GKR05 - 2E □□□ 071C32	E82MV 371_2B	
	24	142	1.7	59.630	6.9 - 41	126 - 70	GKR05 - 2E □□□ 071C32	E82MV 371_2B	
21	160	1.1	67.113	6.1 - 37	142 - 79	GKR05 - 2E □□□ 071C32	E82MV 371_2B		
19	181	1.1	76.213	5.4 - 32	161 - 90	GKR05 - 2E □□□ 071C32	E82MV 371_2B		
<b>0.55 kW</b>							<b>GKR □□ - 2E</b>		3-128
	271	18	3.7	5.185	79 - 471	16 - 11	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	260	19	2.1	5.411	75 - 452	17 - 11	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	226	22	1.8	6.222	65 - 393	20 - 13	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	225	22	4.5	6.257	65 - 391	20 - 13	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	198	25	1.7	7.111	57 - 344	22 - 15	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	198	25	3.1	7.111	57 - 344	22 - 15	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	172	29	1.5	8.178	50 - 299	26 - 17	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	172	29	2.8	8.178	50 - 299	26 - 17	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	154	32	1.4	9.101	45 - 269	29 - 19	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	154	32	2.6	9.101	45 - 269	29 - 19	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	134	37	1.2	10.466	39 - 234	33 - 21	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	134	37	2.4	10.466	39 - 234	33 - 21	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	121	41	1.1	11.640	35 - 210	37 - 24	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	123	41	2.2	11.449	36 - 214	36 - 23	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	111	45	2.0	12.698	32 - 193	40 - 26	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	106	47	4.5	13.216	31 - 185	42 - 27	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	105	48	1.0	13.386	30 - 183	42 - 27	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	96	52	1.7	14.603	28 - 167	46 - 30	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	94	53	4.2	15.008	27 - 163	47 - 31	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	93	54	0.8	15.111	27 - 162	48 - 31	GKR03 - 2E □□□ 071C42	E82MV 551_4B	
	90	55	1.6	15.556	26 - 157	49 - 32	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	79	64	1.4	17.889	23 - 137	57 - 37	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	72	69	1.3	19.556	21 - 125	62 - 40	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	63	80	1.1	22.489	18 - 109	71 - 46	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	60	83	2.9	23.450	17 - 104	74 - 48	GKR05 - 2E □□□ 071C42	E82MV 551_4B	

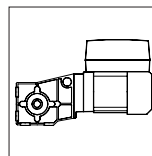
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Bevel geared motors with motec

## Selection tables



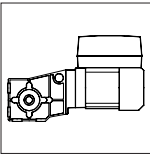
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
0.55 kW							<b>GKR □□ - 2E</b>		3-128
	56	89	1.0	25.185	16 - 97	80 - 51	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	52	96	2.5	26.878	15 - 91	85 - 55	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	49	103	0.9	28.963	14 - 84	92 - 59	GKR04 - 2E □□□ 071C42	E82MV 551_4B	
	46	108	2.2	30.522	13 - 80	96 - 62	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	42	119	2.0	33.433	12 - 73	106 - 68	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	37	135	1.8	37.967	11 - 64	120 - 77	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	33	154	1.6	43.267	9.4 - 57	137 - 88	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	29	175	1.4	49.133	8.3 - 50	155 - 100	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
	27	187	1.3	52.510	7.8 - 47	166 - 107	GKR05 - 2E □□□ 071C42	E82MV 551_4B	
24	212	1.1	59.630	6.8 - 41	188 - 122	GKR05 - 2E □□□ 071C42	E82MV 551_4B		
0.75 kW							<b>GKR □□ - 2E</b>		3-128
	272	25	2.8	5.185	79 - 473	22 - 14	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	237	29	2.5	5.963	69 - 411	26 - 17	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	225	30	4.1	6.257	65 - 392	27 - 17	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	198	34	2.3	7.111	58 - 345	31 - 20	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	172	40	2.1	8.178	50 - 300	35 - 23	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	155	44	1.9	9.101	45 - 270	39 - 25	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	135	51	1.8	10.466	39 - 234	45 - 29	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	123	55	1.6	11.449	36 - 214	49 - 32	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	111	61	1.5	12.698	32 - 193	55 - 35	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	107	64	3.4	13.216	31 - 186	57 - 37	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	97	71	1.3	14.603	28 - 168	63 - 40	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	94	72	3.1	15.008	27 - 163	64 - 42	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	91	75	1.2	15.556	26 - 158	67 - 43	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	84	81	3.0	16.857	24 - 146	72 - 47	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	79	86	1.0	17.889	23 - 137	77 - 50	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	74	92	2.6	19.143	21 - 128	82 - 53	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	72	94	1.0	19.556	21 - 125	84 - 54	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	68	100	2.4	20.650	20 - 119	89 - 57	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	63	109	0.8	22.489	18 - 109	97 - 62	GKR04 - 2E □□□ 080C32	E82MV 751_4B	
	60	113	2.1	23.450	17 - 105	101 - 65	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	53	130	1.9	26.878	15 - 91	115 - 75	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	46	147	1.6	30.522	13 - 80	131 - 85	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	42	161	1.5	33.433	12 - 73	144 - 93	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	37	183	1.3	37.967	11 - 65	163 - 105	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	33	209	1.2	43.267	9.5 - 57	186 - 120	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	29	237	1.0	49.133	8.3 - 50	211 - 136	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
	27	253	1.0	52.510	7.8 - 47	226 - 146	GKR05 - 2E □□□ 080C32	E82MV 751_4B	
24	288	0.8	59.630	6.9 - 41	256 - 165	GKR05 - 2E □□□ 080C32	E82MV 751_4B		
1.1 kW							<b>GKR □□ - 2E</b>		3-128
	390	26	4.5	3.565	113 - 678	21 - 15	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	284	35	4.2	4.889	82 - 495	29 - 20	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	222	45	3.5	6.257	64 - 387	38 - 26	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
202	49	3.6	6.883	59 - 351	42 - 28	GKR05 - 2E □□□ 080C42	E82MV 152_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.1 kW</b>							<b>GKR □□ - 2E</b>		3-128
	178	56	3.3	7.817	52 - 309	47 - 32	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	147	68	2.8	9.440	43 - 256	57 - 39	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	130	77	2.6	10.720	38 - 226	65 - 44	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	115	87	2.4	12.081	33 - 200	73 - 50	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	105	95	2.3	13.216	31 - 183	80 - 55	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	101	99	2.2	13.719	29 - 176	83 - 57	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	93	108	2.1	15.008	27 - 161	91 - 62	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	83	121	2.0	16.857	24 - 143	102 - 70	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	73	137	1.8	19.143	21 - 126	115 - 79	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	67	148	1.6	20.650	20 - 117	125 - 85	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	59	168	1.4	23.450	17 - 103	141 - 97	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	52	193	1.2	26.878	15 - 90	162 - 111	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	46	219	1.1	30.522	13 - 79	184 - 126	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
	42	240	1.0	33.433	12 - 72	202 - 138	GKR05 - 2E □□□ 080C42	E82MV 152_4B	
37	273	0.9	37.967	11 - 64	229 - 157	GKR05 - 2E □□□ 080C42	E82MV 152_4B		
<b>1.5 kW</b>							<b>GKR □□ - 2E</b>		3-128
	390	35	4.0	3.565	113 - 678	31 - 20	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	268	51	1.4	5.185	78 - 466	45 - 29	GKR04 - 2E □□□ 090C32	E82MV 152_4B	
	284	48	3.1	4.889	82 - 495	43 - 28	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	233	58	1.2	5.963	68 - 406	52 - 34	GKR04 - 2E □□□ 090C32	E82MV 152_4B	
	222	61	2.5	6.257	64 - 387	55 - 35	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	196	70	1.1	7.111	57 - 340	62 - 40	GKR04 - 2E □□□ 090C32	E82MV 152_4B	
	202	67	2.7	6.883	59 - 351	60 - 39	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	170	80	1.0	8.178	49 - 296	71 - 46	GKR04 - 2E □□□ 090C32	E82MV 152_4B	
	178	77	2.5	7.817	52 - 309	68 - 44	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	153	89	1.0	9.101	44 - 266	79 - 51	GKR04 - 2E □□□ 090C32	E82MV 152_4B	
	147	92	2.1	9.440	43 - 256	82 - 53	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	133	103	0.9	10.466	39 - 231	91 - 59	GKR04 - 2E □□□ 090C32	E82MV 152_4B	
	130	105	1.9	10.720	38 - 226	93 - 60	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	121	112	0.8	11.449	35 - 211	100 - 64	GKR04 - 2E □□□ 090C32	E82MV 152_4B	
	115	118	1.8	12.081	33 - 200	105 - 68	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	105	129	1.7	13.216	31 - 183	115 - 74	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	101	134	1.6	13.719	29 - 176	120 - 77	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	93	147	1.5	15.008	27 - 161	131 - 84	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	83	165	1.5	16.857	24 - 143	147 - 95	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
	73	187	1.3	19.143	21 - 126	167 - 108	GKR05 - 2E □□□ 090C32	E82MV 152_4B	
67	202	1.2	20.650	20 - 117	180 - 116	GKR05 - 2E □□□ 090C32	E82MV 152_4B		
59	230	1.1	23.450	17 - 103	204 - 132	GKR05 - 2E □□□ 090C32	E82MV 152_4B		
52	263	0.9	26.878	15 - 90	234 - 151	GKR05 - 2E □□□ 090C32	E82MV 152_4B		
46	299	0.8	30.522	13 - 79	266 - 172	GKR05 - 2E □□□ 090C32	E82MV 152_4B		
<b>2.2 kW</b>							<b>GKR □□ - 2E</b>		3-128
	393	51	2.7	3.565	114 - 683	45 - 29	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	286	70	2.1	4.889	83 - 498	62 - 40	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	224	89	1.8	6.257	65 - 389	79 - 51	GKR05 - 2E □□□ 100-12	E82MV 222_4B	

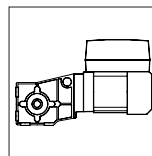
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Bevel geared motors with motec

## Selection tables

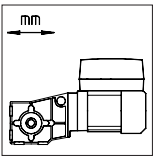


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>2.2 kW</b>							<b>GKR □□ - 2E</b>		3-128
	203	98	1.8	6.883	59 - 354	87 - 56	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	179	111	1.7	7.817	52 - 312	99 - 64	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	148	135	1.4	9.440	43 - 258	120 - 77	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	131	153	1.3	10.720	38 - 227	136 - 88	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	116	172	1.2	12.081	34 - 202	153 - 99	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	106	188	1.1	13.216	31 - 184	168 - 108	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	102	196	1.1	13.719	30 - 178	174 - 112	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	93	214	1.0	15.008	27 - 162	190 - 123	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	83	240	1.0	16.857	24 - 145	214 - 138	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
	73	273	0.9	19.143	21 - 127	243 - 157	GKR05 - 2E □□□ 100-12	E82MV 222_4B	
68	294	0.8	20.650	20 - 118	262 - 169	GKR05 - 2E □□□ 100-12	E82MV 222_4B		
<b>3 kW</b>							<b>GKR □□ - 2E</b>		3-128
	393	69	2.0	3.565	114 - 683	62 - 40	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	286	95	1.5	4.889	83 - 498	85 - 55	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	224	122	1.3	6.257	65 - 389	108 - 70	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	203	134	1.3	6.883	59 - 354	119 - 77	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	179	152	1.2	7.817	52 - 312	135 - 87	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	148	184	1.0	9.440	43 - 258	163 - 105	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	131	208	1.0	10.720	38 - 227	185 - 120	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	116	235	0.9	12.081	34 - 202	209 - 135	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	106	257	0.8	13.216	31 - 184	229 - 148	GKR05 - 2E □□□ 100-32	E82MV 302_4B	
	102	267	0.8	13.719	30 - 178	237 - 153	GKR05 - 2E □□□ 100-32	E82MV 302_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

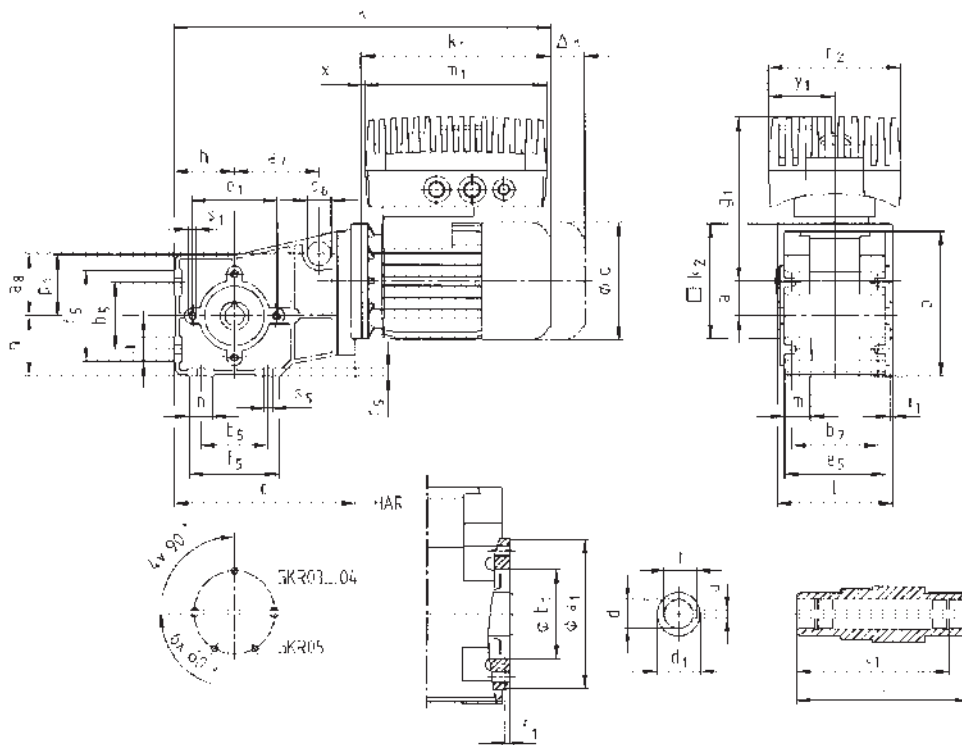
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# Bevel geared motors with motec

## Dimensions



3

Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	
<b>GKR □□ - 2 E H □ R</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	
Motor	g		123			138		156		176	194		
	k <sub>1</sub>		188			207		225		276	280	310	
	From gearbox frame size 04	k <sub>2</sub>	120			120		145		180	180		
	Δk**	Brake	40			52		73		70	94		
		External blower	129			127		128		126	97		
	Brake + external blower	169			164		184		179	169			
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	
	g <sub>1</sub> <sup>1)</sup>		207			216							
	m <sub>1</sub>		190			190	202	202	230	230	230	325	
	n <sub>2</sub>		138			138	156	156	176	176	176	211	
	x		21			23	10	3	3	8	6	2	
	y <sub>1</sub>		69			69	78	78	88	88	88	106	
Gearbox size	Gearbox						Total length						
	l*	p*	p <sub>1</sub>	a	h	o	k						
	03	100	117	48	29	50	142	332		353			
	04	120	151	63	36	63	189	383		403	426	487	
05	143	181	82	40	80	249	437		456	479	540	544	574

Gearbox size	Hollow shaft						Pitch circle					
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t <sup>2)</sup> +0,1	a <sub>1</sub>	b <sub>1</sub> J7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>
03	18 20	100	30	86	6	20,8 22,8	85	55	70	2,5	2,5	M6x12
04	20 25	120	30 35	106	6 8	22,8 27,0	104	62	88	3	2,5	M8x16
05	30 35	143	50	128	8 10	33,3 38,3	116	80	100	4	4	M8x15

Gearbox size	Foot									Torque plate		
	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>	a <sub>7</sub>	a <sub>8</sub>	s <sub>6</sub>	
03	60	75	7	90	80	20	22	6,6	66	39	25x12	
04	70	90	8	105	95	25	28	9	88	65	25x17	
05	100	100	11	115	138	48	27	9		-		

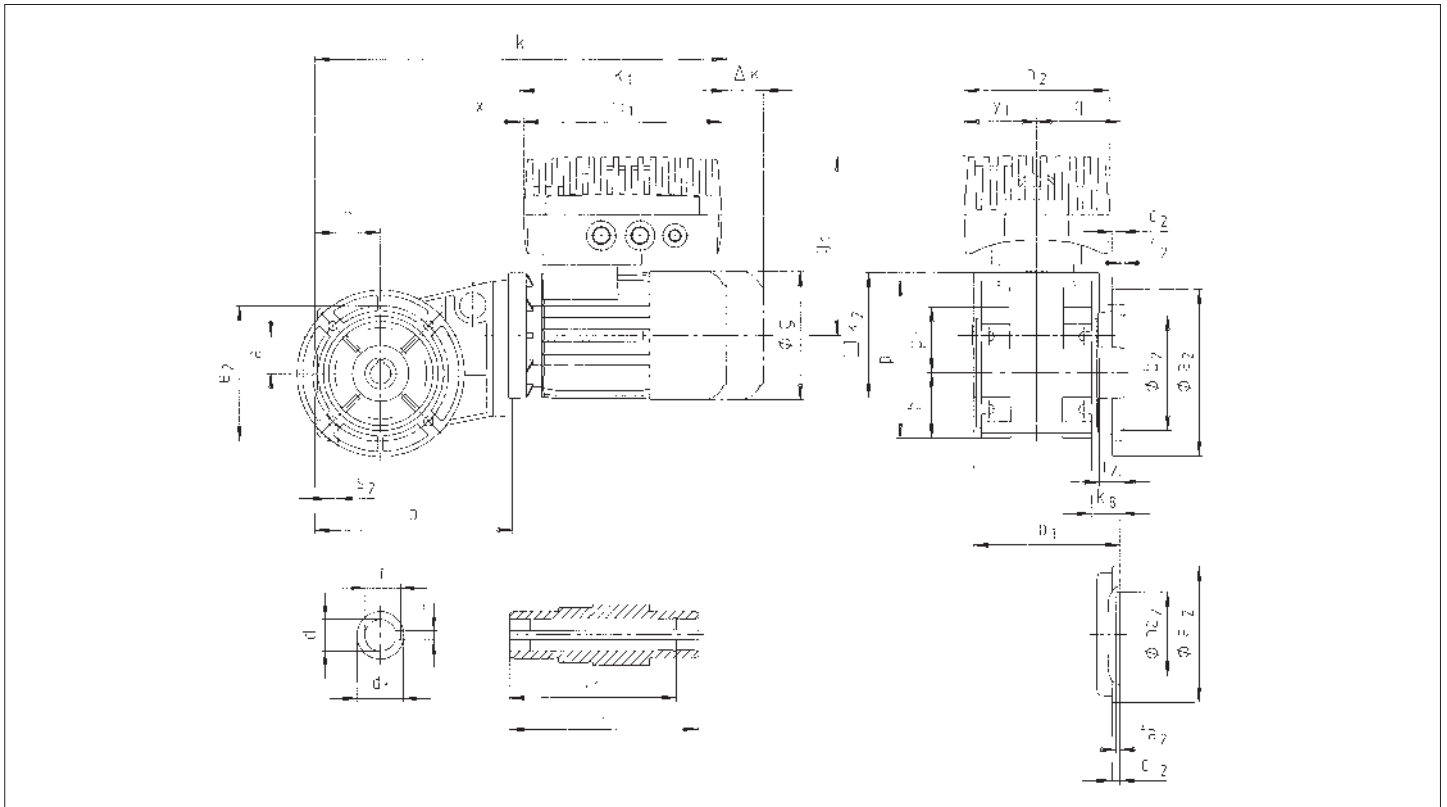
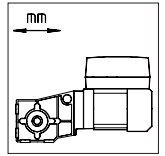
Dimensions in [mm] \* Please note dimension k<sub>2</sub> \*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

<sup>2)</sup> On hollow shaft d=25mm use flat featherkey to DIN 6885/3

# Bevel geared motors with motec

## Dimensions



3

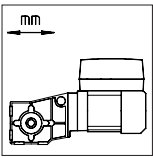
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32		
<b>GKR □ □ - 2E HAK</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302		
Motor		<b>g</b>	123		138		156		176		194			
		<b>k<sub>1</sub></b>	188		207		225		276		310			
		From gearbox frame size 04 <b>k<sub>2</sub></b>	120		120		145		180		180			
		<b>Δk**</b>	40		52		73		70		94			
		External blower	129		127		128		126		97			
		Brake + external blower	169		164		184		179		169			
motec		<b>g<sub>1</sub></b>	171		180		225		221		237			
		<b>g<sub>1</sub><sup>1)</sup></b>	207		216									
		<b>m<sub>1</sub></b>	190		190		202		202		230			
		<b>n<sub>2</sub></b>	138		138		156		156		176			
		<b>x</b>	21		23		10		3		8			
		<b>y<sub>1</sub></b>	69		69		78		88		88			
<b>Gearbox size</b>		Gearbox							Total length					
		<b>o<sub>1</sub>*</b>	<b>p*</b>	<b>p<sub>1</sub></b>	<b>a</b>	<b>h</b>	<b>kg</b>	<b>o</b>	<b>k</b>					
<b>03</b>		130	117	48	29	50	35	142	332		353			
<b>04</b>		140	151	63	36	63	28	189	383		403			
<b>05</b>		176	181	82	40	80	47	249	437		456			
									479		540		544	

Gearbox size	Hollow shaft						Output flange								
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t <sup>2)</sup> +0,1	a <sub>2</sub>	b <sub>2</sub> j7	ba <sub>2</sub> H7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	fa <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub> 4x90°
<b>03</b>	18 20	100	30	86	6	20,8 22,8	110 120	- 80	60 -	8,0	87 100	- 3	4 -	30	9 7
<b>04</b>	20 25	120	30 35	106	6 8	22,8 27	120 160	80 110	-	8,0	100 130	3 3,5	-	20	7 9
<b>05</b>	30 35	143	50	128	8 10	33,3 38,3	160 200	110 130	-	12,0	130 165	3,5	-	33	9 11

Dimensions in [mm] \* Please note dimension k<sub>2</sub> \*\* See page 3 - 40 for more built-on accessories

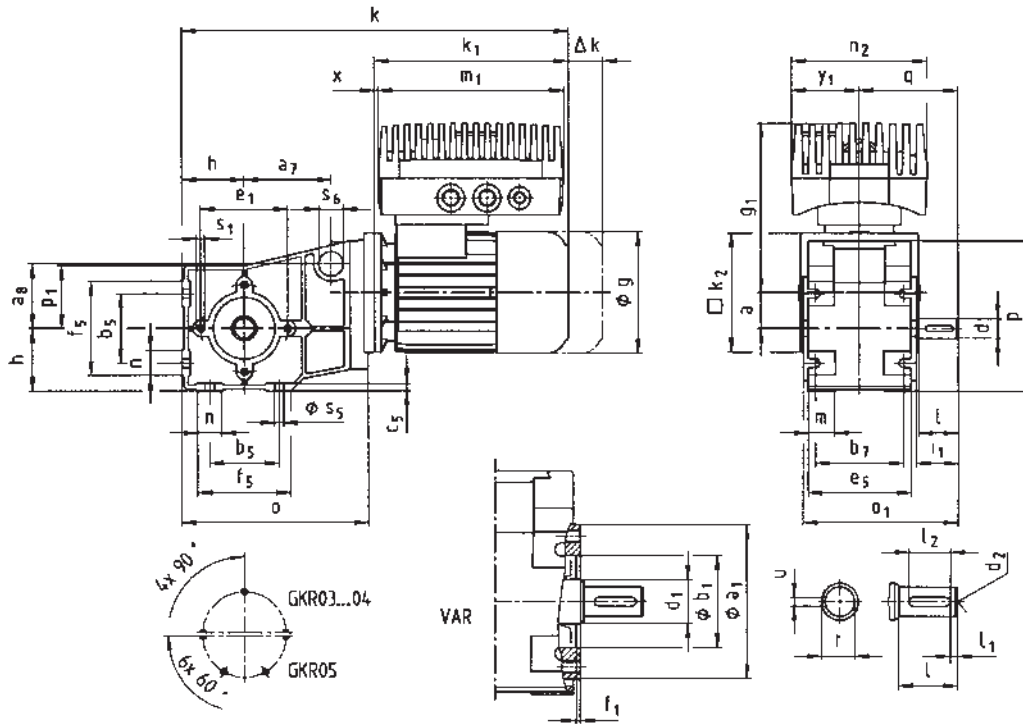
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

<sup>2)</sup> On hollow shaft d=25mm use flat featherkey to DIN 6885/3



# Bevel geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32		
<b>GKR□□ - 2E V□R</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302		
Motor	g		123			138		156		176		194		
	k <sub>1</sub>		188			207		225		276	280	310		
	From gearbox frame size 04	k <sub>2</sub>	120			120		145		180		180		
	Δk**	Brake		40			52		73		70		94	
		External blower		129			127		128		126		97	
Brake + external blower			169			164		184		179		169		
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256		
	g <sub>1</sub> <sup>1)</sup>		207			216								
	m <sub>1</sub>		190			190	202	202	230	230	230	325		
	n <sub>2</sub>		138			138	156	156	176	176	176	211		
	x		21			23	10	3	3	8	6	2		
	y <sub>1</sub>		69			69	78	78	88	88	88	106		
Gearbox size	Gearbox							Total length						
	o <sub>1</sub> *	p*	p <sub>1</sub>	a	h	o	q	k						
	03	138	117	48	29	50	142	90	332		353		426	
	04	158	151	63	36	63	189	100	383		403		479	
05	199	181	82	40	80	249	131,5	437		456		540		

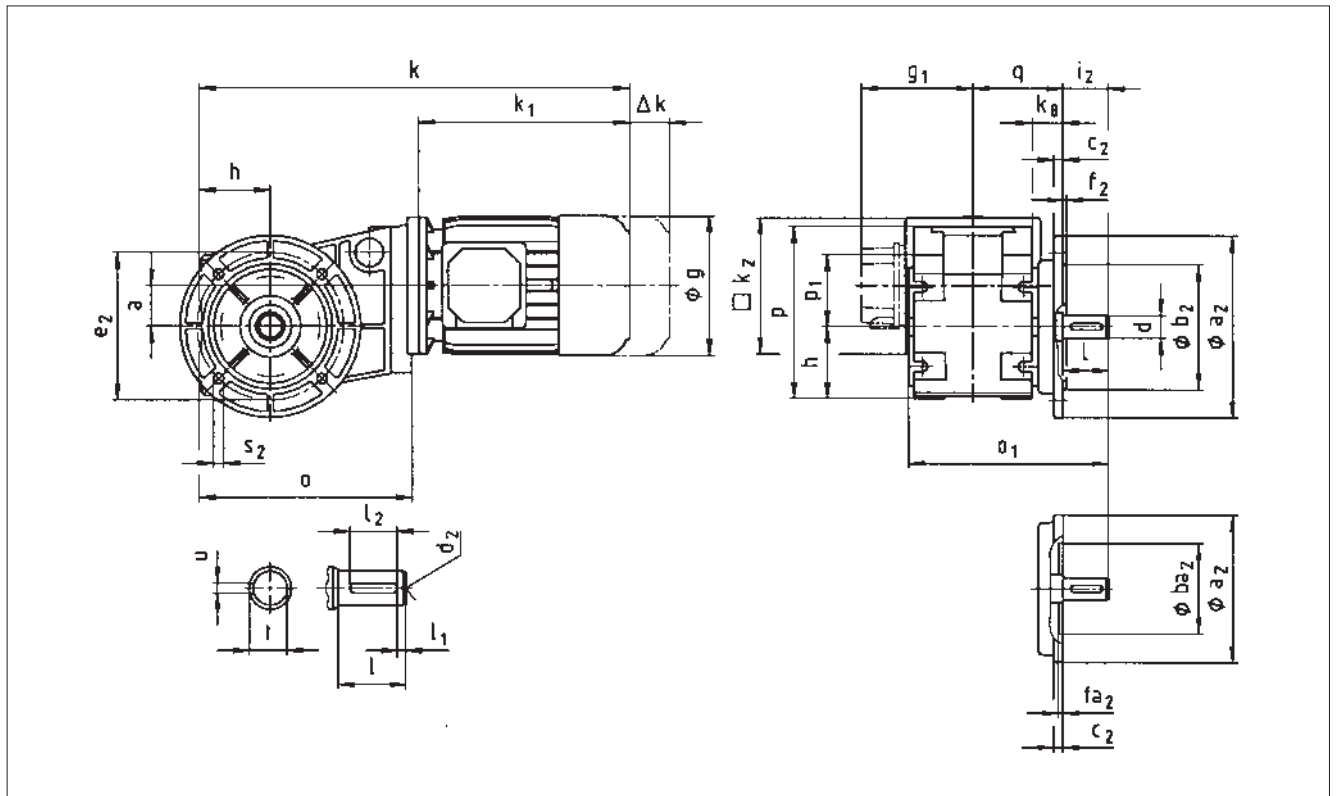
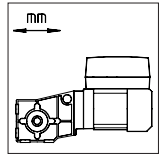
Gearbox size	Solid shaft								Pitch circle					
	d k6	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> J7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>
03	20	40	30	5	28	M6	6	22,5	85	55	70	2,5	42,5	M6x12
04	20	40	30	5	28	M6	6	22,5	104	62	88	3	42,5	M8x16
05	30	60	50	6	45	M10	8	33	116	80	100	4	64	M8x15

Gearbox size	Foot							Torque plate				
	b <sub>5</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	n	m	s <sub>5</sub>	a <sub>7</sub>	a <sub>8</sub>	s <sub>6</sub>	
03	60	75	7	90	80	20	22	6,6	66	39	25x12	
04	70	90	8	105	95	25	28	9	88	65	25x17	
05	100	100	11	115	138	48	27	9	-	-	-	

Dimensions in [mm] \* Please note dimension k<sub>2</sub> \*\* See page 3 - 40 for more built-on accessories  
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Bevel geared motors with motec

## Dimensions



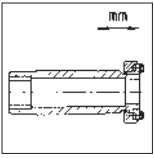
3

Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32		
<b>GKR □ □ - 2E VAK</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302		
Motor		<b>g</b>	123		138		156		176		194			
		<b>k<sub>1</sub></b>	188		207		225		276		280	310		
		From gearbox frame size 04 <b>k<sub>2</sub></b>	120		120		145		180		180			
		<b>Δk**</b>	40		52		73		70		94			
		External blower	129		127		128		126		97			
		Brake + external blower	169		164		184		179		169			
motec		<b>g<sub>1</sub></b>	171		180		225	221	237	242	258	256		
		<b>g<sub>1</sub><sup>1)</sup></b>	207		216									
		<b>m<sub>1</sub></b>	190		190		202	202	230	230	230	325		
		<b>n<sub>2</sub></b>	138		138		156	156	176	176	176	211		
		<b>x</b>	21		23		10	3	3	8	6	2		
		<b>y<sub>1</sub></b>	69		69		78	78	88	88	88	106		
Gearbox size	Gearbox								Total length					
	<b>o<sub>1</sub>*</b>	<b>p*</b>	<b>p<sub>1</sub></b>	<b>a</b>	<b>h</b>	<b>o</b>	<b>q</b>	<b>kg</b>	<b>k</b>					
<b>03</b>	168	117	48	29	50	142	80	35	332		353			
<b>04</b>	178	151	63	36	63	189	80,5	28	383		403		426	
<b>05</b>	232	181	82	40	80	249	105	47	437		456		479	

Gearbox size	Solid shaft								Output flange							
	<b>d</b> k6	<b>l</b>	<b>l<sub>1</sub></b>	<b>l<sub>2</sub></b>	<b>d<sub>2</sub></b>	<b>u</b>	<b>t</b>	<b>a<sub>2</sub></b>	<b>b<sub>2</sub></b> j7	<b>ba<sub>2</sub></b> H7	<b>c<sub>2</sub></b>	<b>e<sub>2</sub></b>	<b>f<sub>2</sub></b>	<b>fa<sub>2</sub></b>	<b>i<sub>2</sub></b>	<b>s<sub>2</sub></b> 4x90°
<b>03</b>	20	40	5	28	M6	6	22,5	110 120	- 80	60	8	87 100	- 3	4 -	40	9 7
<b>04</b>	20	40	5	28	M6	6	22,5	120 160	80 110	-	8	100 130	3 3,5	-	40	7 9
<b>05</b>	30	60	6	45	M10	8	33	160 200	110 130	-	12	130 165	3,5	-	60	9 11

Dimensions in [mm] \* Please note dimension k<sub>2</sub> \*\* See page 3 - 40 for more built-on accessories

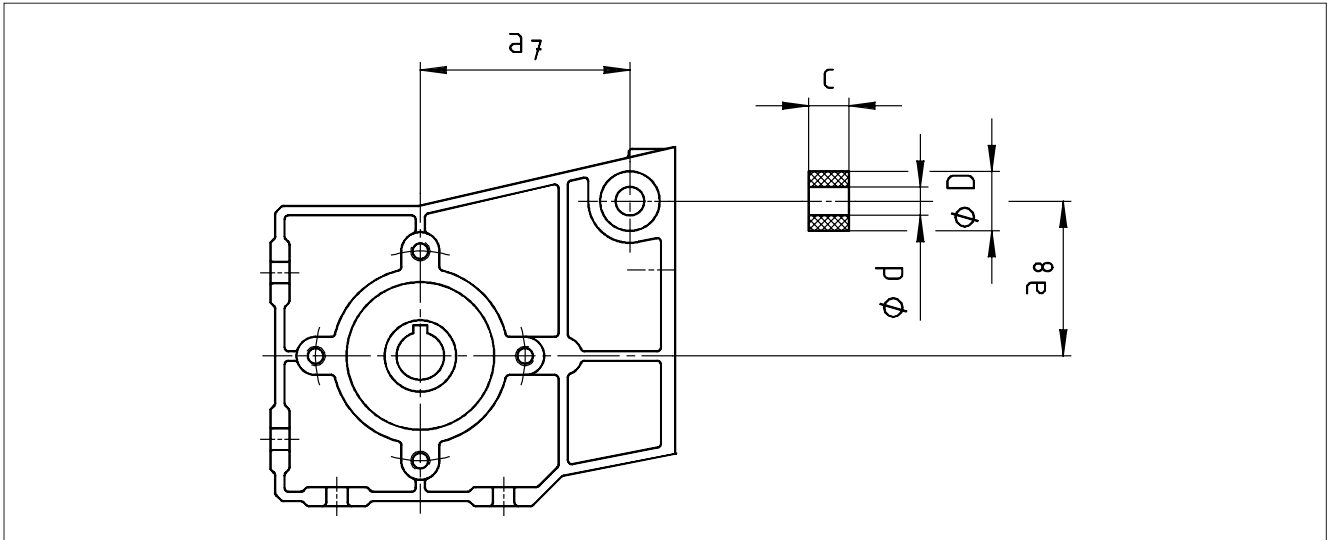
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



## Bevel geared motors with motec

### Rubber buffer set for torque plate

3

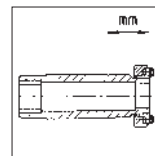


Gearbox size	d	D	c	a <sub>7</sub>	a <sub>8</sub>
03	10	25	13	66	39
04	10	25	13	88	65

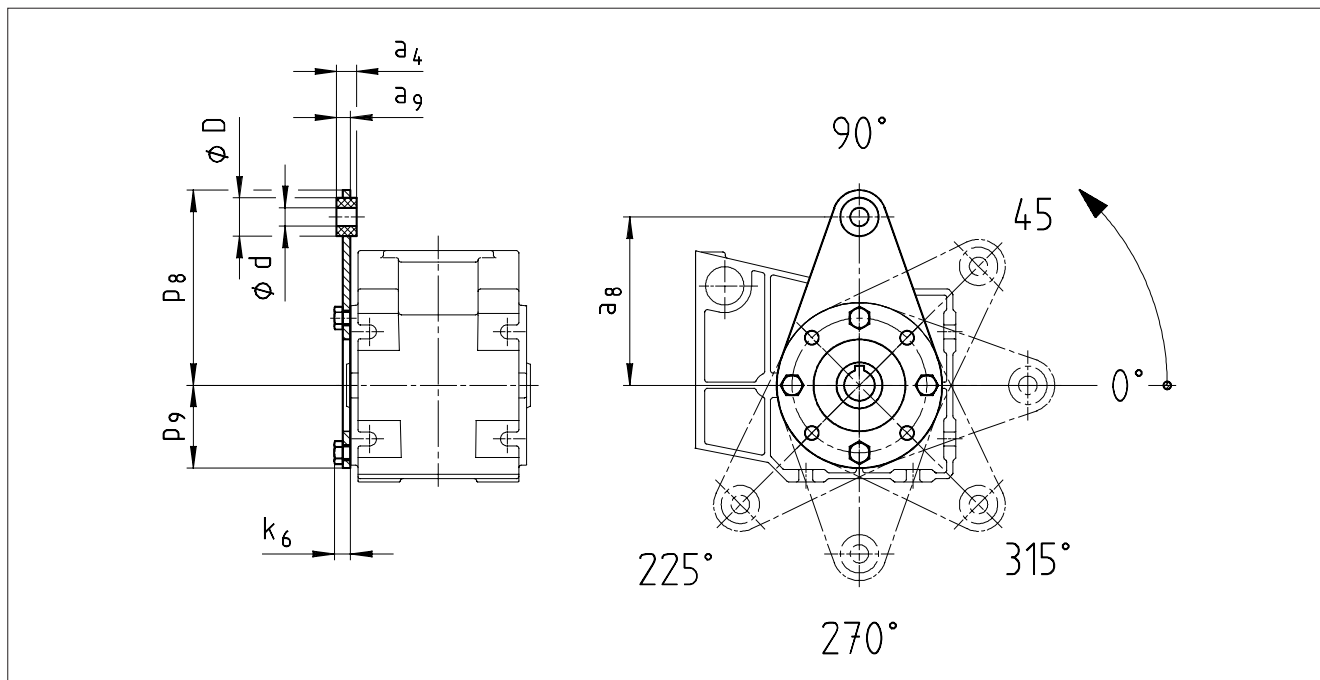
Dimensions in [mm]

# Bevel geared motors with motec

## Torque plate on pitch circle

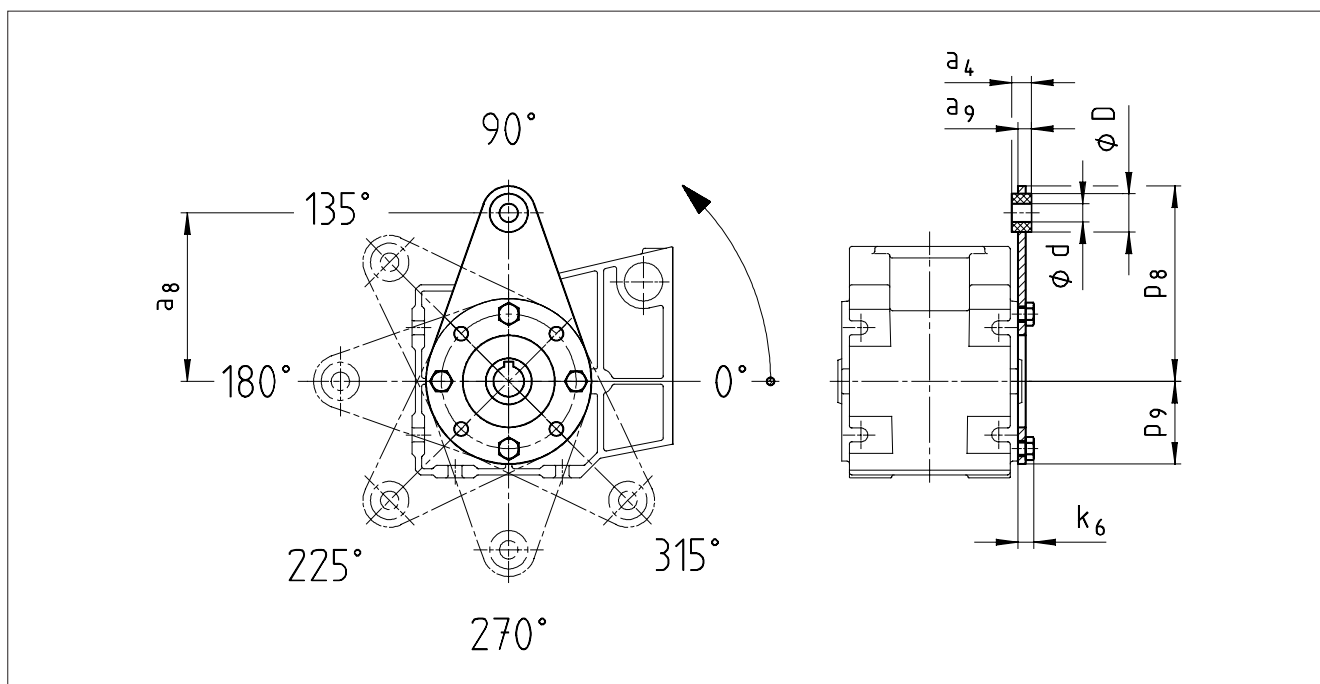


GKR 03/04 in position 3



3

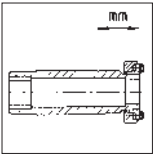
GKR 03/04 in position 5



Gearbox size	Pitch circle							
	$a_4$	$a_8$	$a_9$	$d$	$D$	$k_6$	$p_8$	$p_9$
03	12	100	8	8	20	9	115	42
04	13	110	9	10	25	11	128	54

Dimensions in [mm]

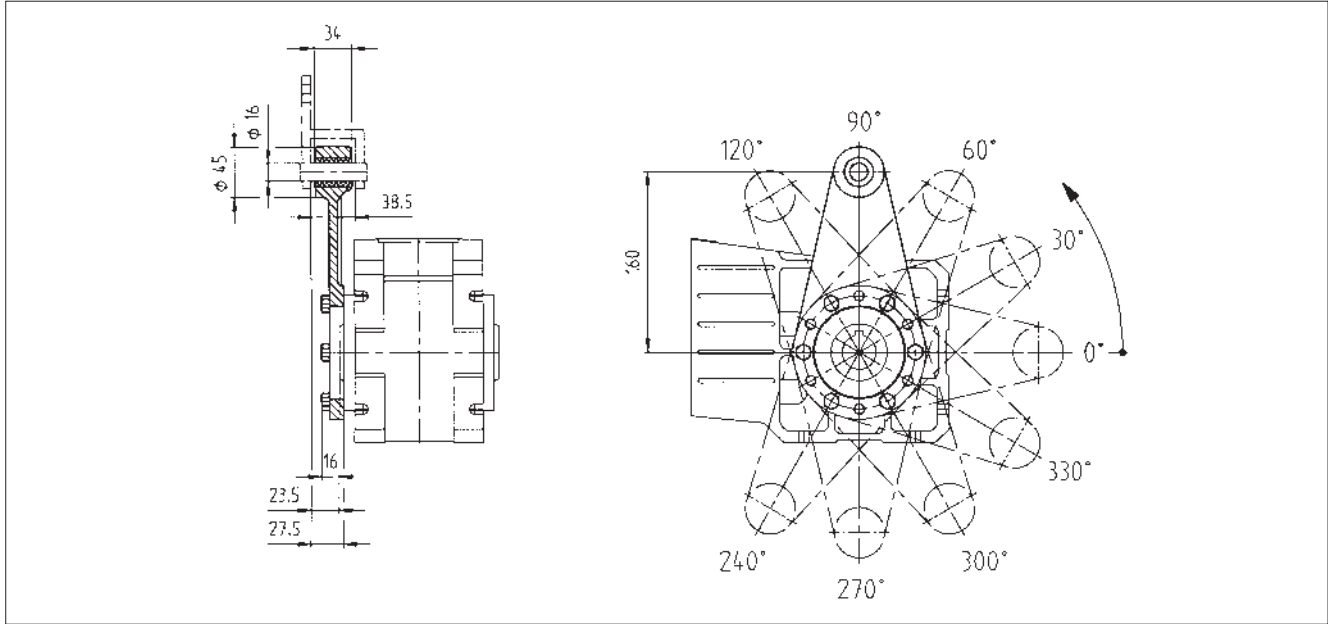




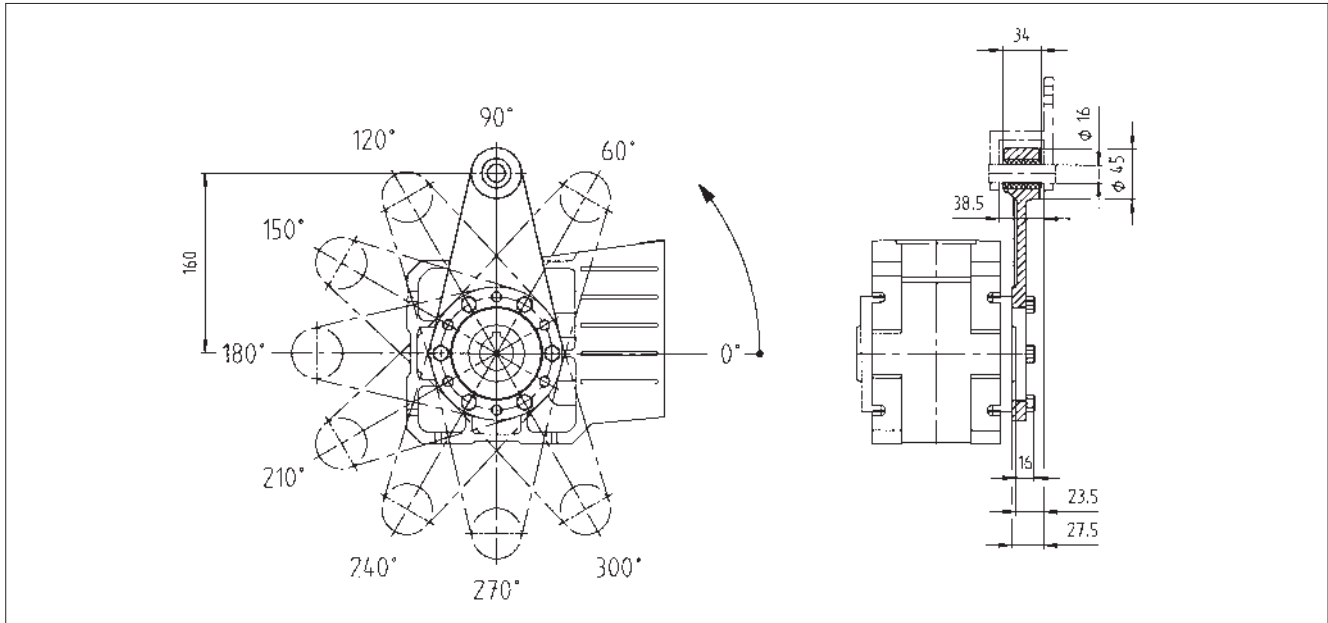
## Bevel geared motors with motec

### Torque plate on pitch circle

#### GKR 05 in position 3



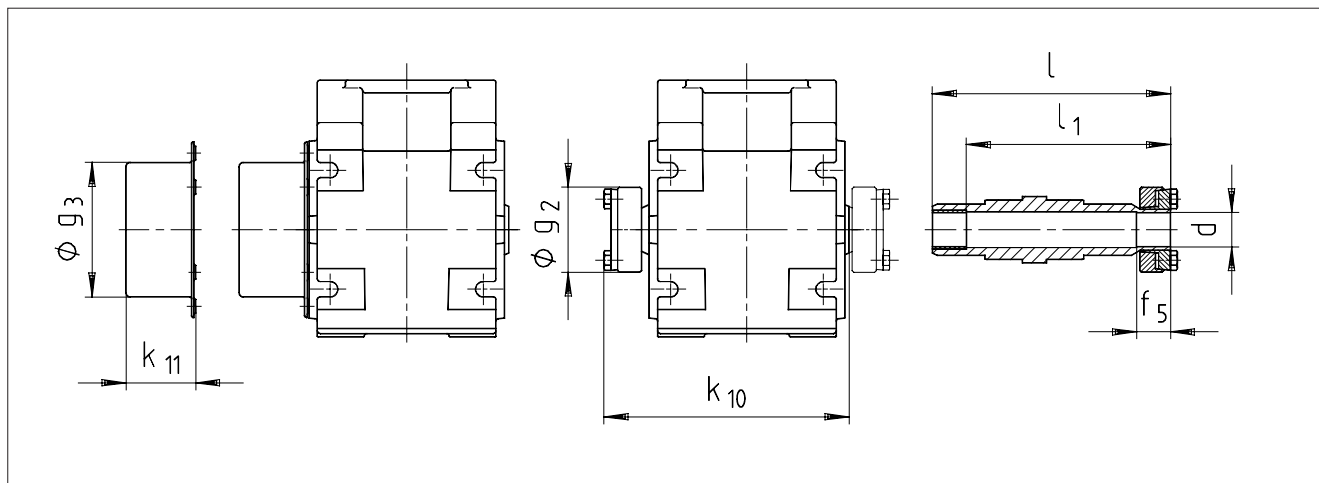
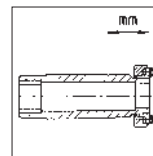
#### GKR 05 in position 5



Dimensions in [mm]

# Bevel geared motors with motec

## Hollow shaft with shrink disk

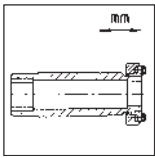


3

Gearbox size	Machine shaft *		l	Hollow shaft		Gearbox		Protective cover	
	d	Fit		l <sub>1</sub>	f <sub>5</sub>	g <sub>2</sub>	k <sub>10</sub>	g <sub>3</sub>	k <sub>11</sub>
03	20	h6	120	100	20	50	124	65	41
04	20	h6	140	120	20	50	144	79	41
05	35	h6	171	151	28	80	177	90	43

\* On shrink disk versions, make sure that the shaft material is strong enough. If you are using conventional steels (e.g. C45, 42CrMo4), the torques listed in the selection tables can be transmitted without restriction. If you are using materials that are significantly weaker, please contact us. The average surface roughness should not exceed 15 µm (lathing is sufficient).

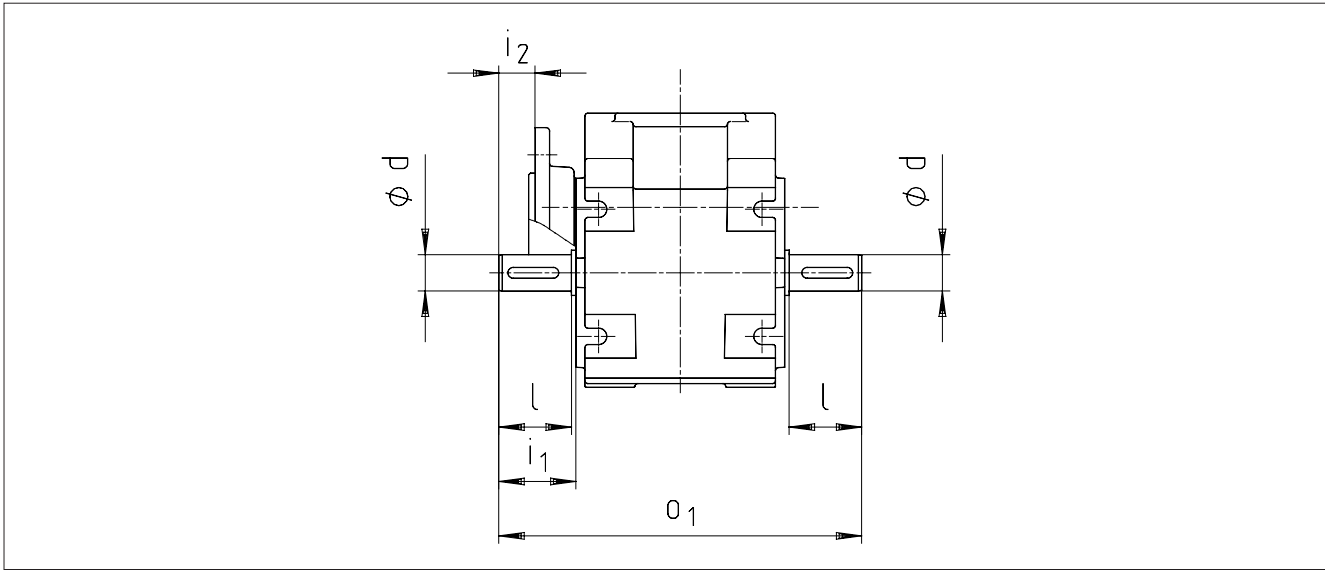
Dimensions in [mm]



## Bevel geared motors with motec

### Gearbox with second output shaft end

3

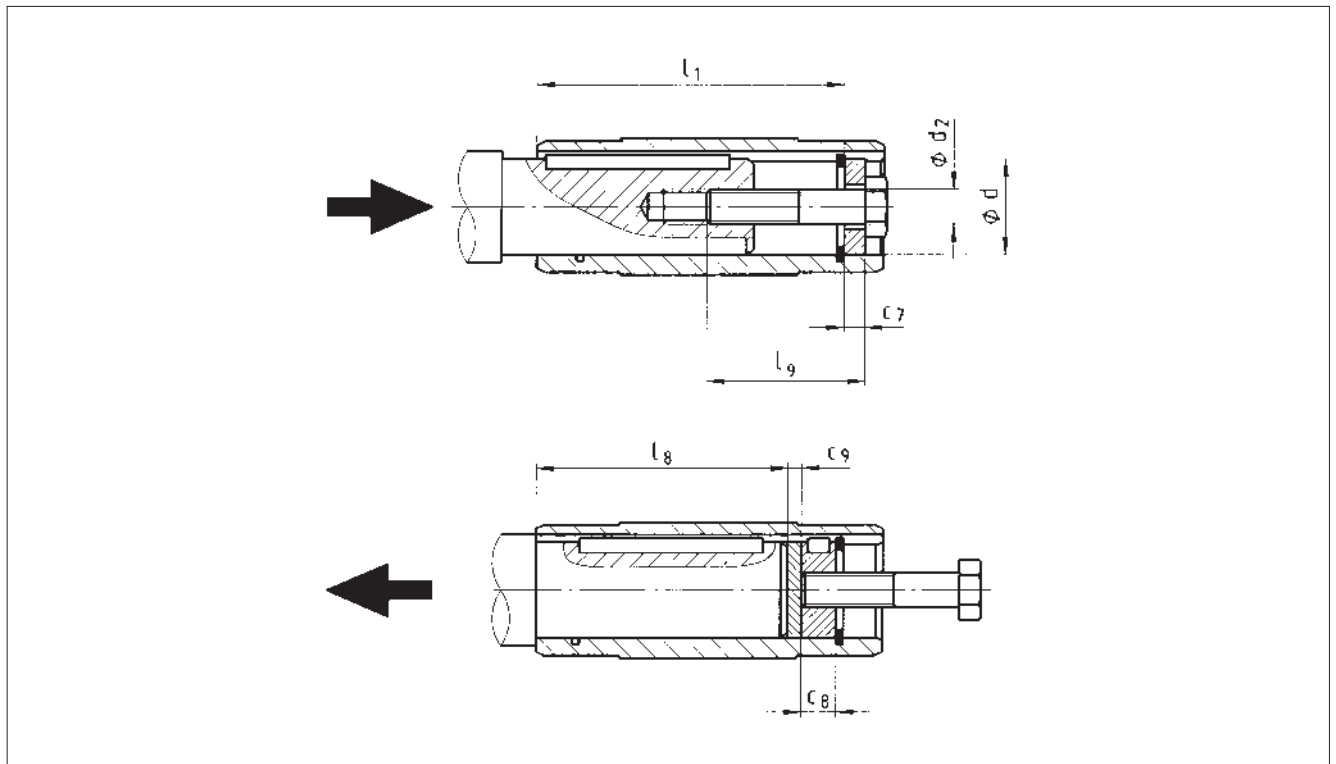
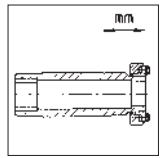


Gearbox size	d k6	l	i <sub>1</sub>	i <sub>2</sub>	o <sub>1</sub>
03	20	40	42.5	9.5	180
04	20	40	42.5	19.5	200
05	30	60	64	27	263

Dimensions in [mm]

# Bevel geared motors with motec

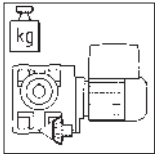
## Mounting kit: Hollow shaft retention - Proposed design for auxiliary tools



3

Gearbox size	Hollow shaft (version H)			Mounting kit: Hollow shaft retention (auxiliary tool assembly)			Auxiliary tool Disassembly		Machine shaft max l <sub>8</sub>
	l	l <sub>1</sub>	d H7	d <sub>2</sub>	l <sub>9</sub>	c <sub>7</sub>	c <sub>8</sub>	c <sub>9</sub>	
03	100	86	18 20	M6	40	4	6	3	76
04	120	106	20 25	M6 M10	40	4 5	6 10	3	95 92
05	143	128	30 35	M10 M12	40 50	6 7	10 12	3	110

Dimensions in [mm]



## Bevel geared motors with motec

### Weights

#### Bevel geared motor GKR □□□ - 2

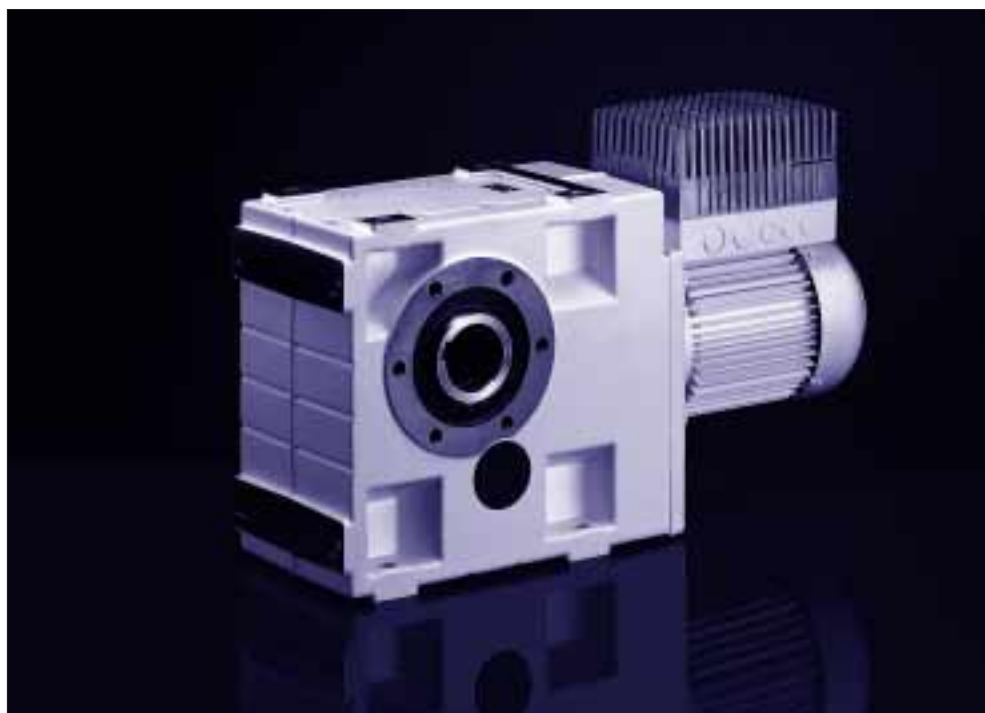
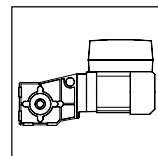
Geared motors GKR□□-2E H□□ V□□ S□□	Motor frame size							
	063	071		080		090	100-12	100-32
	motec E82MV □□□							
	251	371	551	751	152	152	222	302
03	9	11	12					
04	11	13	14	19	20			
05	15	18	19	23	25	32	35	44

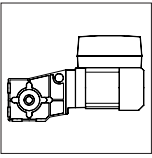
#### Excess weights GKR □□

Gearbox size	Solid shaft	2nd output shaft end	Hollow shaft with shrink disk	Flange	Torque plate	Torque plate
	V□□	V□□	S□□	□□AK	Pitch circle	Frame foot
03	0.2	0.1	0.3	0.4	0.3	
04	0.3	0.1	0.3	0.5	0.4	
05	1.0	0.3	0.8	1.0	1.3	2.0

Weights in [kg] with oil filling for mounting position A  
All values are approximate

3





# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.12 kW</b>							<b>GKS □□ - 3E</b>		3-158
	145	8	5.4	9.836	42 - 252	6.7 - 4.3	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	63	17	5.4	22.522	18 - 110	15.3 - 9.9	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	57	19	5.4	25.088	16 - 99	17 - 11	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	50	22	5.0	28.727	14 - 86	20 - 13	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	45	24	5.0	32.000	13 - 77	22 - 14	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	32	34	5.5	44.240	9.3 - 56	30 - 19	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	28	39	4.7	50.943	8.1 - 49	35 - 22	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	25	44	4.3	56.976	7.3 - 44	39 - 25	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	22	50	3.7	64.978	6.4 - 38	44 - 29	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	20	55	3.4	72.210	5.7 - 34	49 - 32	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	16	69	2.8	90.491	4.6 - 27	62 - 40	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	14	76	2.4	100.067	4.1 - 25	68 - 44	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	13	85	2.0	111.467	3.7 - 22	76 - 49	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	11	98	1.9	128.874	3.2 - 19	88 - 57	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	9.9	110	1.6	143.556	2.9 - 17	98 - 63	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	8.7	125	1.5	163.332	2.5 - 15	111 - 72	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	7.8	139	1.3	181.939	2.3 - 14	124 - 80	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	7.0	156	1.2	204.682	2.0 - 12	139 - 90	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
	6.3	174	1.0	228.000	1.8 - 11	155 - 100	GKS04 - 3E □□□ 063C12	E82MV 251_2B	
5.3	206	0.9	269.660	1.5 - 9	183 - 118	GKS04 - 3E □□□ 063C12	E82MV 251_2B		
							<b>GKS □□ - 4E</b>		3-162
11	95	3.0	126.933	3.3 - 20	85 - 55	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
9.7	110	2.3	146.667	2.8 - 17	98 - 63	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
8.8	122	2.3	161.905	2.6 - 15	108 - 70	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
7.7	139	2.3	185.547	2.2 - 13	124 - 80	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
6.8	157	2.0	209.067	2.0 - 12	140 - 90	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
6.3	170	1.5	225.867	1.8 - 11	151 - 97	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
6.4	169	3.2	224.524	1.8 - 11	150 - 97	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
6.0	178	1.8	236.667	1.7 - 10	158 - 102	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
5.1	210	2.6	279.286	1.5 - 9	187 - 121	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
4.5	238	3.0	316.800	1.3 - 8	212 - 137	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
3.9	274	1.2	364.467	1.1 - 7	244 - 157	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
3.9	271	2.0	361.429	1.1 - 7	242 - 156	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
3.5	308	1.0	410.667	1.0 - 6	274 - 177	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
3.5	306	2.3	408.000	1.0 - 6	273 - 176	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
3.0	352	0.9	469.389	0.9 - 5	314 - 203	GKS05 - 4E □□□ 063C12	E82MV 251_2B		
3.1	344	1.6	458.067	0.9 - 5	306 - 198	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
2.8	388	1.8	517.091	0.8 - 5	346 - 223	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
2.6	417	1.3	555.927	0.7 - 4	372 - 240	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
2.2	481	1.5	640.800	0.6 - 4	428 - 277	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
2.1	523	1.0	696.668	0.6 - 4	466 - 301	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
1.8	610	1.2	812.137	0.5 - 3	543 - 350	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
1.6	687	0.9	914.907	0.5 - 3	611 - 395	GKS06 - 4E □□□ 063C12	E82MV 251_2B		
1.4	764	0.9	1017.741	0.4 - 2	680 - 439	GKS06 - 4E □□□ 063C12	E82MV 251_2B		

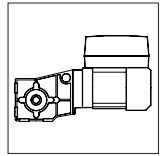
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical bevel geared motors with motec

## Selection tables



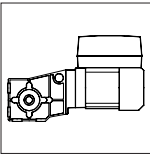
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.18 kW</b>							<b>GKS □□ - 3E</b>		3-158
	139	12	3.4	9.836	40 - 241	10.5 - 6.8	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	61	27	3.4	22.522	18 - 105	24 - 15	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	54	30	3.4	25.088	16 - 95	27 - 17	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	48	34	3.2	28.727	14 - 83	31 - 20	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	43	38	3.2	32.000	12 - 74	34 - 22	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	31	53	3.5	44.240	8.9 - 54	47 - 30	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	27	61	3.0	50.943	7.8 - 47	54 - 35	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	24	68	2.7	56.976	6.9 - 42	61 - 39	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	21	78	2.4	64.978	6.1 - 37	69 - 45	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	19	86	2.2	72.210	5.5 - 33	77 - 50	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	15	108	1.8	90.491	4.4 - 26	96 - 62	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	14	120	1.6	100.067	4.0 - 24	107 - 69	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	12	133	1.3	111.467	3.6 - 21	119 - 77	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	11	154	1.2	128.874	3.1 - 18	137 - 89	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	9.5	172	1.0	143.556	2.8 - 17	153 - 99	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
	8.4	195	1.0	163.332	2.4 - 15	174 - 112	GKS04 - 3E □□□ 063C32	E82MV 251_2B	
							<b>GKS □□ - 4E</b>		3-162
	13	122	3.2	103.721	3.8 - 23	109 - 70	GKS06 - 4E □□□ 063C32	E82MV 251_2B	
	12	135	1.9	114.987	3.4 - 21	120 - 78	GKS05 - 4E □□□ 063C32	E82MV 251_2B	
	11	149	1.9	126.933	3.1 - 19	133 - 86	GKS05 - 4E □□□ 063C32	E82MV 251_2B	
	9.3	172	1.5	146.667	2.7 - 16	153 - 99	GKS05 - 4E □□□ 063C32	E82MV 251_2B	
	8.4	190	1.5	161.905	2.4 - 15	169 - 109	GKS05 - 4E □□□ 063C32	E82MV 251_2B	
	7.4	218	1.5	185.547	2.1 - 13	194 - 125	GKS05 - 4E □□□ 063C32	E82MV 251_2B	
	7.8	205	2.6	174.336	2.3 - 14	182 - 118	GKS06 - 4E □□□ 063C32	E82MV 251_2B	
	6.5	246	1.3	209.067	1.9 - 11	219 - 141	GKS05 - 4E □□□ 063C32	E82MV 251_2B	
	6.0	266	0.9	225.867	1.8 - 11	236 - 153	GKS05 - 4E □□□ 063C32	E82MV 251_2B	
	6.1	264	2.0	224.524	1.8 - 11	235 - 152	GKS06 - 4E □□□ 063C32	E82MV 251_2B	
5.8	278	1.2	236.667	1.7 - 10	248 - 160	GKS05 - 4E □□□ 063C32	E82MV 251_2B		
4.9	328	1.6	279.286	1.4 - 9	292 - 189	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
4.3	373	1.9	316.800	1.2 - 7	332 - 214	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
3.8	425	1.3	361.429	1.1 - 7	378 - 244	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
3.4	480	1.5	408.000	1.0 - 6	427 - 276	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
3.0	539	1.0	458.067	0.9 - 5	479 - 310	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
2.6	608	1.2	517.091	0.8 - 5	541 - 349	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
2.5	654	0.8	555.927	0.7 - 4	582 - 376	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
2.1	753	0.9	640.800	0.6 - 4	671 - 433	GKS06 - 4E □□□ 063C32	E82MV 251_2B		
<b>0.25 kW</b>							<b>GKS □□ - 3E</b>		3-158
	267	9	4.6	5.123	78 - 465	7.5 - 4.9	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	195	12	4.6	7.025	57 - 339	10.3 - 6.7	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	168	14	4.6	8.167	49 - 292	12.0 - 7.8	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	152	15	5.2	8.991	44 - 265	13.2 - 8.6	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	139	16	5.2	9.836	40 - 242	14.5 - 9.4	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	117	19	4.6	11.730	34 - 203	17 - 11	GKS04 - 3E □□□ 063C42	E82MV 251_2B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.25 kW</b>							<b>GKS □□ - 3E</b>		3-158
	105	22	4.6	13.067	30 - 182	19 - 12	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	96	24	5.2	14.333	28 - 166	21 - 14	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	85	27	4.6	16.087	25 - 148	24 - 15	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	77	30	4.6	17.920	22 - 133	26 - 17	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	67	34	5.2	20.588	19 - 116	30 - 20	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	61	37	4.9	22.522	18 - 106	33 - 21	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	55	42	4.0	25.088	16 - 95	37 - 24	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	48	48	3.9	28.727	14 - 83	42 - 27	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	43	53	3.2	32.000	12 - 74	47 - 30	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	39	58	3.1	35.191	11 - 68	52 - 33	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	35	65	2.6	39.200	10 - 61	58 - 37	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	31	73	2.5	44.240	9.0 - 54	65 - 42	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	27	84	2.2	50.943	7.8 - 47	75 - 48	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	24	94	2.0	56.976	7.0 - 42	84 - 54	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	21	108	1.7	64.978	6.1 - 37	96 - 62	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	21	110	3.0	66.592	6.0 - 36	98 - 63	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	19	120	1.6	72.210	5.5 - 33	106 - 69	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	18	124	2.5	75.033	5.3 - 32	111 - 71	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	17	132	1.4	79.598	5.0 - 30	117 - 76	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	17	137	2.4	82.833	4.8 - 29	122 - 79	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	15	150	1.2	90.491	4.4 - 26	133 - 86	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	15	155	2.0	93.333	4.3 - 26	137 - 89	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	14	166	1.1	100.067	4.0 - 24	147 - 95	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	13	177	1.9	107.196	3.7 - 22	158 - 102	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	12	185	0.9	111.467	3.6 - 21	164 - 106	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	11	200	1.6	120.784	3.3 - 20	178 - 115	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	12	187	3.2	113.082	3.5 - 21	167 - 108	GKS06 - 3E □□□ 063C42	E82MV 251_2B	
	11	213	0.9	128.874	3.1 - 18	190 - 123	GKS04 - 3E □□□ 063C42	E82MV 251_2B	
	11	215	1.5	130.097	3.1 - 18	192 - 124	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	11	211	3.0	127.392	3.1 - 19	188 - 121	GKS06 - 3E □□□ 063C42	E82MV 251_2B	
	9.4	243	1.3	146.588	2.7 - 16	216 - 139	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	9.6	237	2.6	142.941	2.8 - 17	211 - 136	GKS06 - 3E □□□ 063C42	E82MV 251_2B	
	8.2	275	1.2	166.276	2.4 - 14	245 - 158	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	8.5	267	2.4	161.029	2.5 - 15	237 - 153	GKS06 - 3E □□□ 063C42	E82MV 251_2B	
	7.3	310	1.0	187.353	2.1 - 13	276 - 178	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	7.2	315	2.2	190.080	2.1 - 13	280 - 181	GKS06 - 3E □□□ 063C42	E82MV 251_2B	
	6.5	350	0.9	211.200	1.9 - 11	311 - 201	GKS05 - 3E □□□ 063C42	E82MV 251_2B	
	6.4	354	1.8	214.133	1.9 - 11	315 - 204	GKS06 - 3E □□□ 063C42	E82MV 251_2B	
	5.9	382	1.8	230.688	1.7 - 10	340 - 219	GKS06 - 3E □□□ 063C42	E82MV 251_2B	
5.3	430	1.5	259.880	1.5 - 9	383 - 247	GKS06 - 3E □□□ 063C42	E82MV 251_2B		
4.7	483	1.5	291.600	1.4 - 8	430 - 277	GKS06 - 3E □□□ 063C42	E82MV 251_2B		
4.2	544	1.2	328.500	1.2 - 7	484 - 312	GKS06 - 3E □□□ 063C42	E82MV 251_2B		
							<b>GKS □□ - 4E</b>		3-162
5.0	445	2.4	273.199	1.5 - 9	396 - 255	GKS07 - 4E □□□ 063C42	E82MV 251_2B		
4.3	522	2.5	321.049	1.2 - 7	465 - 300	GKS07 - 4E □□□ 063C42	E82MV 251_2B		
3.8	588	0.9	361.429	1.1 - 7	523 - 338	GKS06 - 4E □□□ 063C42	E82MV 251_2B		
3.8	584	1.8	358.829	1.1 - 7	520 - 336	GKS07 - 4E □□□ 063C42	E82MV 251_2B		

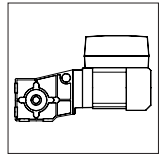
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical bevel geared motors with motec

## Selection tables

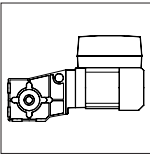


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.25 kW</b>							<b>GKS □□ - 4E</b>		3-162
	3.4	664	1.1	408.000	1.0 - 6	591 - 382	GKS06 - 4E □□□ 063C42	E82MV 251_2B	
	3.4	650	2.0	399.353	1.0 - 6	578 - 373	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	3.0	756	1.4	464.367	0.9 - 5	672 - 434	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	2.7	841	0.8	517.091	0.8 - 5	749 - 484	GKS06 - 4E □□□ 063C42	E82MV 251_2B	
	2.7	841	1.6	516.810	0.8 - 5	748 - 483	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	2.4	917	1.2	563.573	0.7 - 4	816 - 527	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	2.2	1036	1.3	636.581	0.6 - 4	922 - 595	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	1.7	1340	1.0	823.810	0.5 - 3	1193 - 770	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	1.7	1330	2.3	817.551	0.5 - 3	1184 - 764	GKS09 - 4E □□□ 063C42	E82MV 251_2B	
	1.5	1510	0.8	928.237	0.4 - 3	1344 - 868	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	1.5	1499	2.1	921.367	0.4 - 3	1334 - 862	GKS09 - 4E □□□ 063C42	E82MV 251_2B	
	1.4	1627	0.8	999.806	0.4 - 2	1448 - 935	GKS07 - 4E □□□ 063C42	E82MV 251_2B	
	1.4	1614	1.9	992.209	0.4 - 2	1437 - 928	GKS09 - 4E □□□ 063C42	E82MV 251_2B	
	1.2	1819	1.7	1118.204	0.4 - 2	1619 - 1046	GKS09 - 4E □□□ 063C42	E82MV 251_2B	
	1.1	2041	1.5	1254.197	0.3 - 2	1816 - 1173	GKS09 - 4E □□□ 063C42	E82MV 251_2B	
	1.0	2300	1.3	1413.461	0.3 - 2	2047 - 1322	GKS09 - 4E □□□ 063C42	E82MV 251_2B	
	<b>0.37 kW</b>							<b>GKS □□ - 3E</b>	
275		12	4.0	5.123	80 - 479	10.9 - 6.0	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
201		17	4.0	7.025	58 - 349	14.9 - 8.3	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
173		19	4.0	8.167	50 - 300	17.3 - 9.6	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
157		21	4.5	8.991	45 - 273	19 - 11	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
143		23	4.5	9.836	42 - 249	21 - 12	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
120		28	4.0	11.730	35 - 209	25 - 14	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
108		31	4.0	13.067	31 - 188	28 - 15	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
98		34	4.5	14.333	29 - 171	30 - 17	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
88		38	4.0	16.087	25 - 153	34 - 19	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
79		43	3.9	17.920	23 - 137	38 - 21	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
69		49	3.7	20.588	20 - 119	44 - 24	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
63		54	3.4	22.522	18 - 109	48 - 26	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
56		60	2.8	25.088	16 - 98	53 - 30	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
49		68	2.7	28.727	14 - 85	61 - 34	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
44		76	2.2	32.000	13 - 77	68 - 38	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
40		84	2.2	35.191	12 - 70	75 - 41	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
36		93	1.8	39.200	10 - 63	83 - 46	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
32		105	1.8	44.240	9.2 - 55	94 - 52	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
30		112	2.7	47.059	8.7 - 52	100 - 55	GKS05 - 3E □□□ 071C32	E82MV 371_2B	
28		121	1.5	50.943	8.0 - 48	108 - 60	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
25		136	1.4	56.976	7.2 - 43	121 - 67	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
22		155	1.2	64.978	6.3 - 38	138 - 76	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
21		159	2.1	66.592	6.1 - 37	141 - 78	GKS05 - 3E □□□ 071C32	E82MV 371_2B	
20		172	1.1	72.210	5.7 - 34	153 - 85	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
19		179	1.7	75.033	5.4 - 33	159 - 88	GKS05 - 3E □□□ 071C32	E82MV 371_2B	
18		190	1.0	79.598	5.1 - 31	169 - 94	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
17		197	1.7	82.833	4.9 - 30	175 - 97	GKS05 - 3E □□□ 071C32	E82MV 371_2B	
16		215	0.9	90.491	4.5 - 27	192 - 106	GKS04 - 3E □□□ 071C32	E82MV 371_2B	
15		222	1.4	93.333	4.4 - 26	198 - 110	GKS05 - 3E □□□ 071C32	E82MV 371_2B	
15	222	3.2	93.176	4.4 - 26	197 - 110	GKS06 - 3E □□□ 071C32	E82MV 371_2B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.37 kW</b>							<b>GKS □□ - 3E</b>		3-158	
	13	255	1.3	107.196	3.8 - 23	227 - 126	GKS05 - 3E □□□ 071C32	E82MV 371_2B		
	13	250	2.5	104.967	3.9 - 23	222 - 123	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	12	288	1.1	120.784	3.4 - 20	256 - 142	GKS05 - 3E □□□ 071C32	E82MV 371_2B		
	13	269	2.6	113.082	3.6 - 22	240 - 133	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	11	310	1.1	130.097	3.1 - 19	276 - 153	GKS05 - 3E □□□ 071C32	E82MV 371_2B		
	11	303	2.1	127.392	3.2 - 19	270 - 150	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	9.6	349	0.9	146.588	2.8 - 17	311 - 172	GKS05 - 3E □□□ 071C32	E82MV 371_2B		
	9.9	340	2.1	142.941	2.9 - 17	303 - 168	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	8.5	396	0.8	166.276	2.5 - 15	352 - 196	GKS05 - 3E □□□ 071C32	E82MV 371_2B		
	8.8	383	1.7	161.029	2.5 - 15	341 - 189	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	7.4	452	1.6	190.080	2.2 - 13	403 - 224	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	6.6	510	1.3	214.133	1.9 - 11	454 - 252	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	6.1	549	1.3	230.688	1.8 - 11	489 - 271	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	5.4	619	1.0	259.880	1.6 - 9	551 - 306	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	4.8	694	1.0	291.600	1.4 - 8	618 - 343	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
	4.3	782	0.8	328.500	1.2 - 7	696 - 386	GKS06 - 3E □□□ 071C32	E82MV 371_2B		
							<b>GKS □□ - 4E</b>			3-162
	7.9	419	2.5	179.201	2.3 - 14	373 - 207	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	6.3	522	2.0	222.909	1.8 - 11	464 - 258	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	5.2	639	1.7	273.199	1.5 - 9	569 - 316	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	4.4	751	1.8	321.049	1.3 - 8	669 - 371	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	3.9	840	1.3	358.829	1.1 - 7	747 - 415	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	3.5	934	1.4	399.353	1.0 - 6	832 - 462	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	3.0	1087	1.0	464.367	0.9 - 5	967 - 537	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	2.7	1209	1.1	516.810	0.8 - 5	1076 - 598	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	2.2	1489	0.9	636.581	0.6 - 4	1326 - 736	GKS07 - 4E □□□ 071C32	E82MV 371_2B		
	1.7	1913	1.6	817.551	0.5 - 3	1702 - 945	GKS09 - 4E □□□ 071C32	E82MV 371_2B		
	1.5	2156	1.4	921.367	0.4 - 3	1919 - 1065	GKS09 - 4E □□□ 071C32	E82MV 371_2B		
	1.4	2322	1.3	992.209	0.4 - 2	2066 - 1147	GKS09 - 4E □□□ 071C32	E82MV 371_2B		
	1.3	2616	1.2	1118.204	0.4 - 2	2329 - 1293	GKS09 - 4E □□□ 071C32	E82MV 371_2B		
	1.1	2935	1.0	1254.197	0.3 - 2	2612 - 1450	GKS09 - 4E □□□ 071C32	E82MV 371_2B		
1.0	3307	0.9	1413.461	0.3 - 2	2943 - 1635	GKS09 - 4E □□□ 071C32	E82MV 371_2B			
<b>0.55 kW</b>							<b>GKS □□ - 3E</b>		3-158	
	274	18	4.4	5.123	80 - 477	16 - 10	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	200	25	3.7	7.025	58 - 348	22 - 14	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	172	29	4.4	8.167	50 - 299	26 - 17	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	156	32	3.2	8.991	45 - 272	28 - 18	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	143	35	3.0	9.836	41 - 249	31 - 20	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	120	42	4.3	11.730	35 - 208	37 - 24	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	107	47	3.5	13.176	31 - 186	42 - 27	GKS05 - 3E □□□ 071C42	E82MV 551_4B		
	98	51	3.2	14.333	28 - 171	45 - 29	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	87	57	3.2	16.087	25 - 152	51 - 33	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	78	64	2.6	17.920	23 - 136	57 - 37	GKS04 - 3E □□□ 071C42	E82MV 551_4B		
	68	73	2.5	20.588	20 - 119	65 - 42	GKS04 - 3E □□□ 071C42	E82MV 551_4B		

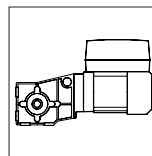
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical bevel geared motors with motec

## Selection tables

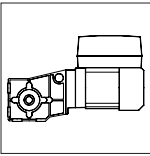


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.55 kW</b>							<b>GKS □□ - 3E</b>		3-158
	62	80	2.3	22.522	18 - 109	71 - 46	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	56	89	1.9	25.088	16 - 97	79 - 51	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	49	102	1.8	28.727	14 - 85	91 - 59	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	47	106	3.1	29.931	14 - 82	95 - 61	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	44	114	1.5	32.000	13 - 76	101 - 65	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	43	116	2.9	32.744	12 - 75	103 - 67	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	40	125	1.5	35.191	12 - 69	111 - 72	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	38	131	2.3	36.894	11 - 66	117 - 75	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	36	139	1.2	39.200	10 - 62	124 - 80	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	34	148	2.2	41.765	9.8 - 59	132 - 85	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	32	157	1.2	44.240	9.2 - 55	140 - 90	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	30	167	1.8	47.059	8.7 - 52	149 - 96	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	28	181	1.0	50.943	8.0 - 48	161 - 104	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	28	182	1.8	51.162	8.0 - 48	162 - 104	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	25	202	0.9	56.976	7.2 - 43	180 - 116	GKS04 - 3E □□□ 071C42	E82MV 551_4B	
	24	205	1.5	57.647	7.1 - 42	182 - 118	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	21	236	1.4	66.592	6.1 - 37	210 - 136	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	22	232	2.7	65.207	6.2 - 37	206 - 133	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	19	266	1.2	75.033	5.4 - 33	237 - 153	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	20	256	2.8	72.000	5.7 - 34	228 - 147	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	17	294	1.1	82.833	4.9 - 30	262 - 169	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	17	288	2.2	81.111	5.0 - 30	256 - 166	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	15	331	1.0	93.333	4.4 - 26	295 - 190	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	15	331	2.1	93.176	4.4 - 26	294 - 190	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	13	381	0.9	107.196	3.8 - 23	339 - 219	GKS05 - 3E □□□ 071C42	E82MV 551_4B	
	13	373	1.7	104.967	3.9 - 23	332 - 214	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	12	402	1.8	113.082	3.6 - 22	357 - 231	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	11	452	1.4	127.392	3.2 - 19	403 - 260	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	9.8	508	1.4	142.941	2.9 - 17	452 - 292	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	8.7	572	1.1	161.029	2.5 - 15	509 - 329	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
	7.4	675	1.0	190.080	2.1 - 13	601 - 388	GKS06 - 3E □□□ 071C42	E82MV 551_4B	
6.6	760	0.8	214.133	1.9 - 11	677 - 437	GKS06 - 3E □□□ 071C42	E82MV 551_4B		
6.1	819	0.9	230.688	1.8 - 11	729 - 471	GKS06 - 3E □□□ 071C42	E82MV 551_4B		
						<b>GKS □□ - 4E</b>		3-162	
13	392	2.7	112.391	3.6 - 22	349 - 225	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
11	441	3.0	126.222	3.2 - 19	392 - 253	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
10	481	2.2	137.748	3.0 - 18	428 - 276	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
9.1	540	2.4	154.622	2.6 - 16	480 - 310	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
7.8	626	1.7	179.201	2.3 - 14	557 - 359	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
7.0	703	1.9	201.254	2.0 - 12	625 - 404	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
6.3	778	1.4	222.909	1.8 - 11	692 - 447	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
5.7	861	1.5	246.659	1.7 - 10	766 - 495	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
5.1	954	1.1	273.199	1.5 - 9	849 - 548	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
4.4	1121	1.2	321.049	1.3 - 8	997 - 644	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
4.3	1129	2.7	323.365	1.3 - 8	1005 - 649	GKS09 - 4E □□□ 071C42	E82MV 551_4B		
3.9	1252	0.8	358.829	1.1 - 7	1115 - 720	GKS07 - 4E □□□ 071C42	E82MV 551_4B		
3.9	1272	2.4	364.427	1.1 - 7	1132 - 731	GKS09 - 4E □□□ 071C42	E82MV 551_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.55 kW</b>							<b>GKS □□ - 4E</b>		3-162
	3.5	1394	1.0	399.353	1.0 - 6	1241 - 801	GKS07 - 4E □□□ 071C42	E82MV 551_4B	
	3.5	1404	2.2	402.234	1.0 - 6	1250 - 807	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
	3.1	1582	1.9	453.311	0.9 - 5	1408 - 909	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
	2.7	1817	1.7	520.538	0.8 - 5	1617 - 1044	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
	2.4	2048	1.5	586.638	0.7 - 4	1822 - 1177	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
	2.2	2205	1.4	631.744	0.6 - 4	1962 - 1267	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
	2.0	2485	1.2	711.965	0.6 - 3	2212 - 1428	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
	1.7	2854	1.1	817.551	0.5 - 3	2540 - 1640	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
	1.5	3216	1.0	921.367	0.4 - 3	2862 - 1848	GKS09 - 4E □□□ 071C42	E82MV 551_4B	
1.4	3463	0.9	992.209	0.4 - 2	3082 - 1990	GKS09 - 4E □□□ 071C42	E82MV 551_4B		
<b>0.75 kW</b>							<b>GKS □□ - 3E</b>		3-158
	275	25	3.3	5.123	80 - 479	22 - 14	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	201	34	2.7	7.025	58 - 349	30 - 19	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	173	39	3.3	8.167	50 - 300	35 - 23	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	157	43	2.4	8.991	45 - 273	39 - 25	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	143	48	2.2	9.836	42 - 249	42 - 27	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	120	57	3.2	11.730	35 - 209	50 - 33	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	108	63	2.6	13.067	31 - 188	56 - 36	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	98	69	2.4	14.333	29 - 171	62 - 40	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	88	78	2.3	16.087	25 - 153	69 - 45	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	79	87	1.9	17.920	23 - 137	77 - 50	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	69	99	1.8	20.588	20 - 119	88 - 57	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	63	109	1.7	22.522	18 - 109	97 - 62	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	56	121	1.4	25.088	16 - 98	108 - 70	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	49	139	1.3	28.727	14 - 85	123 - 80	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	47	144	2.3	29.931	14 - 82	129 - 83	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	44	154	1.1	32.000	13 - 77	137 - 89	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	43	158	2.1	32.744	12 - 75	141 - 91	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	40	170	1.1	35.191	12 - 70	151 - 98	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	38	178	1.7	36.894	11 - 66	158 - 102	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	36	189	0.9	39.200	10 - 63	168 - 109	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	34	202	1.6	41.765	9.8 - 59	179 - 116	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	32	213	0.9	44.240	9.2 - 55	190 - 123	GKS04 - 3E □□□ 080C32	E82MV 751_4B	
	30	227	1.3	47.059	8.7 - 52	202 - 130	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	28	247	1.3	51.162	8.0 - 48	220 - 142	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	25	278	1.1	57.647	7.1 - 43	248 - 160	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	24	279	2.5	57.882	7.1 - 42	249 - 160	GKS06 - 3E □□□ 080C32	E82MV 751_4B	
	21	321	1.0	66.592	6.1 - 37	286 - 185	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
	22	315	2.0	65.207	6.3 - 38	280 - 181	GKS06 - 3E □□□ 080C32	E82MV 751_4B	
	19	362	0.9	75.033	5.4 - 33	322 - 208	GKS05 - 3E □□□ 080C32	E82MV 751_4B	
20	347	2.0	72.000	5.7 - 34	309 - 200	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
17	400	0.8	82.833	4.9 - 30	356 - 230	GKS05 - 3E □□□ 080C32	E82MV 751_4B		
17	391	1.6	81.111	5.0 - 30	348 - 225	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
15	450	1.6	93.176	4.4 - 26	400 - 258	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
15	447	2.9	92.563	4.4 - 27	397 - 257	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
13	506	1.3	104.967	3.9 - 23	451 - 291	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
14	503	2.4	104.296	3.9 - 24	448 - 289	GKS07 - 3E □□□ 080C32	E82MV 751_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

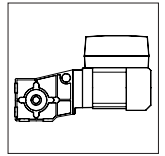
The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical bevel geared motors with motec

## Selection tables

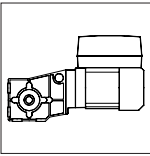


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.75 kW</b>							<b>GKS □□ - 3E</b>		3-158	
	13	546	1.3	113.082	3.6 - 22	486 - 314	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
	13	542	2.5	112.338	3.6 - 22	482 - 311	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
	11	615	1.0	127.392	3.2 - 19	547 - 353	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
	11	611	2.0	126.578	3.2 - 19	544 - 351	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
	9.9	690	1.0	142.941	2.9 - 17	614 - 396	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
	8.8	777	0.8	161.029	2.5 - 15	691 - 447	GKS06 - 3E □□□ 080C32	E82MV 751_4B		
	7.6	891	1.5	184.600	2.2 - 13	793 - 512	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
	6.8	1004	1.2	208.000	2.0 - 12	893 - 577	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
	6.3	1081	1.2	224.037	1.8 - 11	962 - 621	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
	5.6	1218	1.0	252.436	1.6 - 10	1084 - 700	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
	5.0	1366	1.0	283.193	1.4 - 9	1216 - 785	GKS07 - 3E □□□ 080C32	E82MV 751_4B		
								<b>GKS □□ - 4E</b>		3-162
		9.1	733	1.8	154.622	2.6 - 16	653 - 421	GKS07 - 4E □□□ 080C32	E82MV 751_4B	
		4.4	1523	0.9	321.049	1.3 - 8	1355 - 875	GKS07 - 4E □□□ 080C32	E82MV 751_4B	
		4.4	1534	2.0	323.365	1.3 - 8	1365 - 881	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		3.9	1728	1.8	364.427	1.1 - 7	1538 - 993	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		3.5	1908	1.6	402.234	1.0 - 6	1698 - 1096	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		3.1	2150	1.4	453.311	0.9 - 5	1913 - 1236	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		2.7	2469	1.2	520.538	0.8 - 5	2197 - 1419	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		2.4	2782	1.1	586.638	0.7 - 4	2476 - 1599	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		2.2	2996	1.0	631.744	0.6 - 4	2667 - 1722	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		2.0	3377	0.9	711.965	0.6 - 3	3005 - 1941	GKS09 - 4E □□□ 080C32	E82MV 751_4B	
		1.7	3872	1.5	816.455	0.5 - 3	3446 - 2225	GKS11 - 4E □□□ 080C32	E82MV 751_4B	
		1.5	4363	1.4	919.949	0.4 - 3	3883 - 2508	GKS11 - 4E □□□ 080C32	E82MV 751_4B	
		1.4	4700	1.3	990.879	0.4 - 2	4183 - 2701	GKS11 - 4E □□□ 080C32	E82MV 751_4B	
		1.3	5295	1.2	1116.484	0.4 - 2	4713 - 3043	GKS11 - 4E □□□ 080C32	E82MV 751_4B	
		1.1	5940	1.0	1252.516	0.3 - 2	5287 - 3414	GKS11 - 4E □□□ 080C32	E82MV 751_4B	
		1.0	6693	0.9	1411.286	0.3 - 2	5957 - 3847	GKS11 - 4E □□□ 080C32	E82MV 751_4B	
	<b>1.1 kW</b>							<b>GKS □□ - 3E</b>		3-158
271		37	2.2	5.123	79 - 472	31 - 21	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
198		50	1.8	7.025	57 - 344	42 - 29	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
203		49	3.0	6.863	59 - 352	41 - 28	GKS05 - 3E □□□ 080C42	E82MV 152_4B		
170		59	2.2	8.167	49 - 296	49 - 34	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
155		65	1.6	8.991	45 - 269	54 - 37	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
148		68	2.4	9.412	43 - 257	57 - 39	GKS05 - 3E □□□ 080C42	E82MV 152_4B		
141		71	1.5	9.836	41 - 246	59 - 41	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
132		76	3.0	10.569	38 - 229	64 - 44	GKS05 - 3E □□□ 080C42	E82MV 152_4B		
119		84	2.1	11.730	34 - 206	71 - 48	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
119		84	3.0	11.667	35 - 207	70 - 48	GKS05 - 3E □□□ 080C42	E82MV 152_4B		
106		94	1.8	13.067	31 - 185	79 - 54	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
97		103	1.6	14.333	28 - 169	86 - 59	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
96		104	2.4	14.494	28 - 167	87 - 60	GKS05 - 3E □□□ 080C42	E82MV 152_4B		
86		116	1.6	16.087	25 - 150	97 - 66	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
87		115	2.4	16.000	25 - 151	96 - 66	GKS05 - 3E □□□ 080C42	E82MV 152_4B		
78		129	1.3	17.920	22 - 135	108 - 74	GKS04 - 3E □□□ 080C42	E82MV 152_4B		
82		122	2.6	17.054	24 - 142	103 - 70	GKS05 - 3E □□□ 080C42	E82MV 152_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.1 kW</b>							<b>GKS □□ - 3E</b>		3-158
	68	148	1.2	20.588	20 - 117	124 - 85	GKS04 - 3E □□□ 080C42	E82MV 152_4B	
	72	138	2.2	19.216	21 - 126	116 - 79	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	62	162	1.1	22.522	18 - 107	136 - 93	GKS04 - 3E □□□ 080C42	E82MV 152_4B	
	59	168	2.0	23.388	17 - 103	141 - 96	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	53	189	1.6	26.353	15 - 92	159 - 109	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	55	180	0.9	25.088	16 - 96	151 - 103	GKS04 - 3E □□□ 080C42	E82MV 152_4B	
	48	206	0.9	28.727	14 - 84	173 - 119	GKS04 - 3E □□□ 080C42	E82MV 152_4B	
	46	215	1.5	29.931	13 - 81	180 - 123	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	43	235	1.4	32.744	12 - 74	197 - 135	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	43	230	2.7	32.063	13 - 75	193 - 132	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	38	265	1.1	36.894	11 - 66	222 - 152	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	38	261	2.6	36.303	11 - 67	219 - 150	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	33	300	1.1	41.765	9.7 - 58	252 - 172	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	30	338	0.9	47.059	8.6 - 51	284 - 194	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	31	319	2.2	44.471	9.1 - 54	268 - 183	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	27	367	0.9	51.162	7.9 - 47	308 - 211	GKS05 - 3E □□□ 080C42	E82MV 152_4B	
	26	381	1.8	53.074	7.6 - 46	320 - 219	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	24	416	1.7	57.882	7.0 - 42	349 - 239	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	24	413	3.2	57.501	7.0 - 42	347 - 237	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
	21	468	1.3	65.207	6.2 - 37	393 - 269	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	22	465	2.6	64.790	6.2 - 37	391 - 267	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
	19	517	1.4	72.000	5.6 - 34	434 - 297	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	20	506	2.6	70.474	5.7 - 34	425 - 291	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
	17	582	1.1	81.111	5.0 - 30	489 - 335	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	18	570	2.1	79.407	5.1 - 30	479 - 328	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
	15	669	1.1	93.176	4.3 - 26	562 - 384	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	15	664	2.0	92.563	4.4 - 26	558 - 382	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
	13	754	0.8	104.967	3.8 - 23	633 - 433	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	13	749	1.6	104.296	3.9 - 23	629 - 430	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
	12	812	0.9	113.082	3.6 - 21	682 - 467	GKS06 - 3E □□□ 080C42	E82MV 152_4B	
	12	806	1.7	112.338	3.6 - 22	677 - 463	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
	11	909	1.3	126.578	3.2 - 19	763 - 522	GKS07 - 3E □□□ 080C42	E82MV 152_4B	
9.9	1009	1.3	140.548	2.9 - 17	847 - 580	GKS07 - 3E □□□ 080C42	E82MV 152_4B		
8.8	1137	1.1	158.364	2.5 - 15	955 - 653	GKS07 - 3E □□□ 080C42	E82MV 152_4B		
7.5	1325	1.0	184.600	2.2 - 13	1113 - 762	GKS07 - 3E □□□ 080C42	E82MV 152_4B		
6.7	1493	0.8	208.000	1.9 - 12	1254 - 858	GKS07 - 3E □□□ 080C42	E82MV 152_4B		
6.2	1608	0.8	224.037	1.8 - 11	1351 - 924	GKS07 - 3E □□□ 080C42	E82MV 152_4B		
						<b>GKS □□ - 4E</b>		3-162	
10	980	3.1	138.929	2.9 - 17	823 - 563	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
9.2	1066	2.8	151.012	2.7 - 16	895 - 612	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
8.2	1201	2.5	170.188	2.4 - 14	1009 - 690	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
6.8	1444	2.1	204.596	2.0 - 12	1213 - 830	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
6.0	1627	1.9	230.577	1.7 - 10	1367 - 935	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
5.6	1753	1.7	248.439	1.6 - 10	1473 - 1007	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
5.0	1976	1.6	279.986	1.4 - 9	1660 - 1135	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
4.3	2282	1.3	323.365	1.2 - 7	1917 - 1311	GKS09 - 4E □□□ 080C42	E82MV 152_4B		
4.3	2279	2.6	322.931	1.2 - 7	1914 - 1310	GKS11 - 4E □□□ 080C42	E82MV 152_4B		

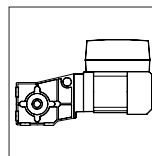
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

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# Helical bevel geared motors with motec

## Selection tables



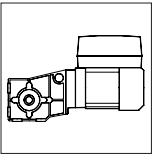
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.1 kW</b>							<b>GKS □□ - 4E</b>		3-162
	3.8	2571	1.2	364.427	1.1 - 7	2160 - 1478	GKS09 - 4E □□□ 080C42	E82MV 152_4B	
	3.8	2568	2.4	363.866	1.1 - 7	2157 - 1476	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	3.5	2838	1.1	402.234	1.0 - 6	2384 - 1631	GKS09 - 4E □□□ 080C42	E82MV 152_4B	
	3.5	2793	2.1	395.787	1.0 - 6	2346 - 1605	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	3.1	3199	1.0	453.311	0.9 - 5	2687 - 1838	GKS09 - 4E □□□ 080C42	E82MV 152_4B	
	3.1	3147	1.9	445.958	0.9 - 5	2643 - 1808	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	2.7	3673	0.8	520.538	0.8 - 5	3085 - 2111	GKS09 - 4E □□□ 080C42	E82MV 152_4B	
	2.7	3614	1.7	512.195	0.8 - 5	3036 - 2077	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	2.4	4072	1.5	577.122	0.7 - 4	3421 - 2340	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	2.2	4386	1.4	621.619	0.6 - 4	3684 - 2521	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	2.0	4942	1.2	700.416	0.6 - 3	4151 - 2840	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	1.7	5761	1.0	816.455	0.5 - 3	4839 - 3311	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	1.5	6491	0.9	919.949	0.4 - 3	5453 - 3731	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	1.4	6992	0.9	990.879	0.4 - 2	5873 - 4018	GKS11 - 4E □□□ 080C42	E82MV 152_4B	
	<b>1.5 kW</b>							<b>GKS □□ - 3E</b>	
271		50	1.6	5.123	79 - 472	45 - 29	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
198		69	1.4	7.025	57 - 344	61 - 40	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
203		67	2.2	6.863	59 - 352	60 - 39	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
170		80	1.6	8.167	49 - 296	71 - 46	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
155		88	1.2	8.991	45 - 269	78 - 51	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
148		92	1.8	9.412	43 - 257	82 - 53	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
141		96	1.1	9.836	41 - 246	86 - 55	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
132		103	2.2	10.569	38 - 229	92 - 59	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
119		115	1.6	11.730	34 - 206	102 - 66	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
119		114	2.2	11.667	35 - 207	102 - 66	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
106		128	1.3	13.067	31 - 185	114 - 74	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
97		140	1.2	14.333	28 - 169	125 - 81	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
96		142	1.8	14.494	28 - 167	126 - 82	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
86		158	1.2	16.087	25 - 150	140 - 90	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
87		157	1.8	16.000	25 - 151	139 - 90	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
78		175	1.0	17.920	22 - 135	156 - 101	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
82		167	1.9	17.054	24 - 142	149 - 96	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
78		174	3.0	17.809	23 - 136	155 - 100	GKS06 - 3E □□□ 090C32	E82MV 152_4B	
68		202	0.9	20.588	20 - 117	179 - 116	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
72		188	1.6	19.216	21 - 126	167 - 108	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
62		221	0.8	22.522	18 - 107	196 - 127	GKS04 - 3E □□□ 090C32	E82MV 152_4B	
59		229	1.4	23.388	17 - 103	204 - 132	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
53		258	1.2	26.353	15 - 92	230 - 148	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
53		255	2.7	26.017	15 - 93	227 - 146	GKS06 - 3E □□□ 090C32	E82MV 152_4B	
46		293	1.1	29.931	13 - 81	261 - 168	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
49		279	2.5	28.461	14 - 85	248 - 160	GKS06 - 3E □□□ 090C32	E82MV 152_4B	
43		321	1.0	32.744	12 - 74	285 - 184	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
43		314	1.9	32.063	13 - 75	279 - 180	GKS06 - 3E □□□ 090C32	E82MV 152_4B	
38		361	0.8	36.894	11 - 66	321 - 208	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
38		355	1.9	36.303	11 - 67	316 - 204	GKS06 - 3E □□□ 090C32	E82MV 152_4B	
33		409	0.8	41.765	9.7 - 58	364 - 235	GKS05 - 3E □□□ 090C32	E82MV 152_4B	
31	435	1.6	44.471	9.1 - 54	387 - 250	GKS06 - 3E □□□ 090C32	E82MV 152_4B		
26	520	1.3	53.074	7.6 - 46	462 - 299	GKS06 - 3E □□□ 090C32	E82MV 152_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>1.5 kW</b>							<b>GKS □□ - 3E</b>		3-158		
	24	567	1.2	57.882	7.0 - 42	504 - 326	GKS06 - 3E □□□ 090C32	E82MV 152_4B			
	24	563	2.3	57.501	7.0 - 42	501 - 323	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	21	638	1.0	65.207	6.2 - 37	568 - 367	GKS06 - 3E □□□ 090C32	E82MV 152_4B			
	22	634	1.9	64.790	6.2 - 37	564 - 364	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	19	705	1.0	72.000	5.6 - 34	627 - 405	GKS06 - 3E □□□ 090C32	E82MV 152_4B			
	20	690	1.9	70.474	5.7 - 34	614 - 396	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	18	777	1.6	79.407	5.1 - 30	692 - 447	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	15	906	1.5	92.563	4.4 - 26	806 - 521	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	15	899	2.8	91.860	4.4 - 26	800 - 517	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	13	1021	1.2	104.296	3.9 - 23	909 - 587	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	13	1013	2.8	103.524	3.9 - 23	902 - 582	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	12	1100	1.2	112.338	3.6 - 22	979 - 632	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	13	1091	2.5	111.484	3.6 - 22	971 - 627	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	11	1239	1.0	126.578	3.2 - 19	1103 - 712	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	11	1230	2.5	125.641	3.2 - 19	1095 - 707	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	9.9	1376	1.0	140.548	2.9 - 17	1224 - 791	GKS07 - 3E □□□ 090C32	E82MV 152_4B			
	9.9	1379	1.9	140.921	2.9 - 17	1228 - 793	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	8.8	1555	1.9	158.816	2.5 - 15	1384 - 893	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	7.6	1782	1.7	182.000	2.2 - 13	1586 - 1024	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	6.8	2008	1.5	205.111	2.0 - 12	1787 - 1154	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	6.3	2162	1.4	220.882	1.8 - 11	1924 - 1243	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	5.6	2437	1.3	248.930	1.6 - 10	2169 - 1400	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	5.0	2733	1.1	279.205	1.4 - 9	2432 - 1571	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
	4.4	3080	1.0	314.659	1.3 - 8	2741 - 1770	GKS09 - 3E □□□ 090C32	E82MV 152_4B			
								<b>GKS □□ - 4E</b>			3-162
	4.3	3107	1.9	322.931	1.2 - 7	2765 - 1786	GKS11 - 4E □□□ 090C32	E82MV 152_4B			
	3.8	3507	0.9	364.427	1.1 - 7	3121 - 2015	GKS09 - 4E □□□ 090C32	E82MV 152_4B			
	3.8	3501	1.7	363.866	1.1 - 7	3116 - 2012	GKS11 - 4E □□□ 090C32	E82MV 152_4B			
	3.5	3808	1.6	395.787	1.0 - 6	3389 - 2189	GKS11 - 4E □□□ 090C32	E82MV 152_4B			
	3.1	4291	1.4	445.958	0.9 - 5	3819 - 2466	GKS11 - 4E □□□ 090C32	E82MV 152_4B			
	2.7	4928	1.2	512.195	0.8 - 5	4386 - 2832	GKS11 - 4E □□□ 090C32	E82MV 152_4B			
2.4	5553	1.1	577.122	0.7 - 4	4942 - 3191	GKS11 - 4E □□□ 090C32	E82MV 152_4B				
2.2	5981	1.0	621.619	0.6 - 4	5323 - 3437	GKS11 - 4E □□□ 090C32	E82MV 152_4B				
2.0	6739	0.9	700.416	0.6 - 3	5998 - 3873	GKS11 - 4E □□□ 090C32	E82MV 152_4B				
1.7	7754	1.5	805.901	0.5 - 3	6901 - 4457	GKS14 - 4E □□□ 090C32	E82MV 152_4B				
1.5	8737	1.3	908.058	0.4 - 3	7776 - 5021	GKS14 - 4E □□□ 090C32	E82MV 152_4B				
1.4	9411	1.2	978.071	0.4 - 2	8376 - 5409	GKS14 - 4E □□□ 090C32	E82MV 152_4B				
1.3	10604	1.1	1102.052	0.4 - 2	9437 - 6094	GKS14 - 4E □□□ 090C32	E82MV 152_4B				
1.1	11896	1.0	1236.326	0.3 - 2	10587 - 6837	GKS14 - 4E □□□ 090C32	E82MV 152_4B				
1.0	13404	0.9	1393.043	0.3 - 2	11929 - 7703	GKS14 - 4E □□□ 090C32	E82MV 152_4B				
<b>2.2 kW</b>							<b>GKS □□ - 3E</b>		3-158		
	216	92	2.9	6.485	63 - 376	82 - 53	GKS06 - 3E □□□ 100-12	E82MV 222_4B			
	204	98	1.5	6.863	59 - 355	87 - 56	GKS05 - 3E □□□ 100-12	E82MV 222_4B			
	149	134	1.2	9.412	43 - 259	119 - 77	GKS05 - 3E □□□ 100-12	E82MV 222_4B			
	152	131	2.9	9.196	44 - 265	117 - 75	GKS06 - 3E □□□ 100-12	E82MV 222_4B			

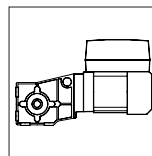
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical bevel geared motors with motec

## Selection tables

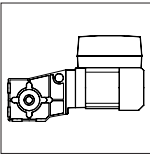


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>2.2 kW</b>	133	151	1.5	10.569	38 - 230	134 - 87	GKS05 - 3E □□□ 100-12	E82MV 222_4B	3-158
	138	145	2.9	10.147	40 - 240	129 - 83	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	120	166	1.5	11.667	35 - 209	148 - 96	GKS05 - 3E □□□ 100-12	E82MV 222_4B	
	123	162	2.0	11.382	36 - 214	144 - 93	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	106	188	0.9	13.176	31 - 185	167 - 108	GKS05 - 3E □□□ 100-12	E82MV 222_4B	
	111	180	2.4	12.612	32 - 193	160 - 103	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	97	207	1.2	14.494	28 - 168	184 - 119	GKS05 - 3E □□□ 100-12	E82MV 222_4B	
	94	211	2.8	14.824	27 - 164	188 - 121	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	88	228	1.2	16.000	25 - 152	203 - 131	GKS05 - 3E □□□ 100-12	E82MV 222_4B	
	84	238	2.5	16.699	24 - 146	212 - 137	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	82	243	1.3	17.054	24 - 143	216 - 140	GKS05 - 3E □□□ 100-12	E82MV 222_4B	
	79	254	2.0	17.809	23 - 137	226 - 146	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	73	274	1.1	19.216	21 - 127	244 - 157	GKS05 - 3E □□□ 100-12	E82MV 222_4B	
	69	290	2.3	20.329	20 - 120	258 - 167	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	60	333	1.0	23.388	17 - 104	297 - 192	GKS05 - 3E □□□ 100-12	E82MV 222_4B	
	61	326	1.9	22.902	18 - 106	291 - 188	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	54	371	1.8	26.017	16 - 94	330 - 213	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	49	406	1.7	28.461	14 - 86	361 - 233	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	50	403	3.0	28.274	14 - 86	359 - 232	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	44	457	1.3	32.063	13 - 76	407 - 263	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	44	454	2.6	31.858	13 - 76	404 - 261	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	39	517	1.3	36.303	11 - 67	461 - 297	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	39	514	2.5	36.063	11 - 68	457 - 295	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	34	591	1.2	41.472	9.8 - 59	526 - 340	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	32	634	1.1	44.471	9.1 - 55	564 - 364	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	32	630	2.1	44.178	9.2 - 55	560 - 362	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	26	757	0.9	53.074	7.6 - 46	673 - 435	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	28	718	1.8	50.345	8.1 - 48	639 - 412	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	24	825	0.8	57.882	7.0 - 42	734 - 474	GKS06 - 3E □□□ 100-12	E82MV 222_4B	
	24	820	1.6	57.501	7.1 - 42	729 - 471	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	22	924	1.3	64.790	6.3 - 38	822 - 531	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	21	939	3.3	65.879	6.2 - 37	836 - 540	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	20	1005	1.3	70.474	5.8 - 35	894 - 577	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	20	1012	3.0	70.982	5.7 - 34	900 - 581	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	18	1132	1.1	79.407	5.1 - 31	1007 - 650	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	18	1140	2.7	79.996	5.1 - 30	1015 - 655	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	15	1319	1.0	92.563	4.4 - 26	1174 - 758	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	15	1309	2.3	91.860	4.4 - 27	1165 - 752	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	13	1487	0.8	104.296	3.9 - 23	1323 - 854	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	14	1476	2.1	103.524	3.9 - 24	1313 - 848	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	13	1601	0.8	112.338	3.6 - 22	1425 - 920	GKS07 - 3E □□□ 100-12	E82MV 222_4B	
	13	1589	1.9	111.484	3.6 - 22	1414 - 913	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	13	1587	2.8	111.335	3.6 - 22	1412 - 912	GKS11 - 3E □□□ 100-12	E82MV 222_4B	
	11	1791	1.7	125.641	3.2 - 19	1594 - 1029	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	11	1788	2.8	125.448	3.2 - 19	1591 - 1028	GKS11 - 3E □□□ 100-12	E82MV 222_4B	
	9.9	2009	1.5	140.921	2.9 - 17	1788 - 1154	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
	10.0	2006	2.3	140.732	2.9 - 17	1785 - 1153	GKS11 - 3E □□□ 100-12	E82MV 222_4B	
	8.8	2264	1.4	158.816	2.6 - 15	2015 - 1301	GKS09 - 3E □□□ 100-12	E82MV 222_4B	
8.8	2260	2.3	158.571	2.6 - 15	2012 - 1299	GKS11 - 3E □□□ 100-12	E82MV 222_4B		
7.7	2594	1.2	182.000	2.2 - 13	2309 - 1491	GKS09 - 3E □□□ 100-12	E82MV 222_4B		
7.5	2659	2.3	186.572	2.2 - 13	2367 - 1528	GKS11 - 3E □□□ 100-12	E82MV 222_4B		
6.8	2924	1.1	205.111	2.0 - 12	2602 - 1680	GKS09 - 3E □□□ 100-12	E82MV 222_4B		
6.7	2996	2.0	210.222	1.9 - 12	2667 - 1722	GKS11 - 3E □□□ 100-12	E82MV 222_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>2.2 kW</b>	<b>GKS □□ - 3E</b>									
	6.3	3148	1.0	220.882	1.8 - 11	2802 - 1809	GKS09 - 3E □□□ 100-12	E82MV 222_4B	3-158	
	6.2	3228	1.9	226.431	1.8 - 11	2872 - 1855	GKS11 - 3E □□□ 100-12	E82MV 222_4B		
	5.6	3548	0.9	248.930	1.6 - 10	3158 - 2039	GKS09 - 3E □□□ 100-12	E82MV 222_4B		
	5.5	3637	1.6	255.133	1.6 - 10	3237 - 2090	GKS11 - 3E □□□ 100-12	E82MV 222_4B		
	4.9	4080	1.5	286.219	1.4 - 9	3631 - 2345	GKS11 - 3E □□□ 100-12	E82MV 222_4B		
	4.3	4597	1.3	322.500	1.3 - 8	4091 - 2642	GKS11 - 3E □□□ 100-12	E82MV 222_4B		
	<b>GKS □□ - 4E</b>									
	3.9	5098	1.2	363.866	1.1 - 7	4537 - 2930	GKS11 - 4E □□□ 100-12	E82MV 222_4B		3-162
	3.9	5079	2.3	362.512	1.1 - 7	4521 - 2919	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
	3.5	5546	1.1	395.787	1.0 - 6	4936 - 3187	GKS11 - 4E □□□ 100-12	E82MV 222_4B		
	3.6	5474	2.1	390.672	1.0 - 6	4872 - 3146	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
	3.1	6249	1.0	445.958	0.9 - 5	5561 - 3591	GKS11 - 4E □□□ 100-12	E82MV 222_4B		
	3.2	6168	1.9	440.193	0.9 - 5	5489 - 3545	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
	2.7	7177	0.8	512.195	0.8 - 5	6387 - 4124	GKS11 - 4E □□□ 100-12	E82MV 222_4B		
	2.7	7190	1.6	513.121	0.8 - 5	6399 - 4132	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
	2.4	8101	1.4	578.164	0.7 - 4	7210 - 4656	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
	2.3	8726	1.3	622.742	0.7 - 4	7766 - 5015	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
	2.0	9832	1.2	701.681	0.6 - 3	8750 - 5650	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
	1.7	11292	1.0	805.901	0.5 - 3	10050 - 6490	GKS14 - 4E □□□ 100-12	E82MV 222_4B		
1.5	12723	0.9	908.058	0.4 - 3	11324 - 7312	GKS14 - 4E □□□ 100-12	E82MV 222_4B			
1.4	13704	0.8	978.071	0.4 - 2	12197 - 7876	GKS14 - 4E □□□ 100-12	E82MV 222_4B			
<b>3 kW</b>	<b>GKS □□ - 3E</b>									
	216	126	2.1	6.485	63 - 376	112 - 72	GKS06 - 3E □□□ 100-32	E82MV 302_4B	3-158	
	204	133	1.1	6.863	59 - 355	119 - 77	GKS05 - 3E □□□ 100-32	E82MV 302_4B		
	149	183	0.9	9.412	43 - 259	163 - 105	GKS05 - 3E □□□ 100-32	E82MV 302_4B		
	152	179	2.1	9.196	44 - 265	159 - 103	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	133	205	1.1	10.569	38 - 230	183 - 118	GKS05 - 3E □□□ 100-32	E82MV 302_4B		
	138	197	2.1	10.147	40 - 240	176 - 113	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	120	227	1.1	11.667	35 - 209	202 - 130	GKS05 - 3E □□□ 100-32	E82MV 302_4B		
	123	221	1.5	11.382	36 - 214	197 - 127	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	123	221	2.8	11.378	36 - 214	197 - 127	GKS07 - 3E □□□ 100-32	E82MV 302_4B		
	111	245	1.7	12.612	32 - 193	218 - 141	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	97	282	0.9	14.494	28 - 168	251 - 162	GKS05 - 3E □□□ 100-32	E82MV 302_4B		
	94	288	2.1	14.824	27 - 164	256 - 166	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	88	311	0.9	16.000	25 - 152	277 - 179	GKS05 - 3E □□□ 100-32	E82MV 302_4B		
	84	325	1.9	16.699	24 - 146	289 - 187	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	82	332	1.0	17.054	24 - 143	295 - 191	GKS05 - 3E □□□ 100-32	E82MV 302_4B		
	79	346	1.5	17.809	23 - 137	308 - 199	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	81	336	3.0	17.270	24 - 141	299 - 193	GKS07 - 3E □□□ 100-32	E82MV 302_4B		
	69	395	1.7	20.329	20 - 120	352 - 227	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	61	445	1.4	22.902	18 - 106	396 - 256	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	54	506	1.3	26.017	16 - 94	450 - 291	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	56	491	2.4	25.244	16 - 96	437 - 282	GKS07 - 3E □□□ 100-32	E82MV 302_4B		
	49	553	1.2	28.461	14 - 86	492 - 318	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	50	550	2.2	28.274	14 - 86	489 - 316	GKS07 - 3E □□□ 100-32	E82MV 302_4B		
	44	623	1.0	32.063	13 - 76	555 - 358	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	44	619	1.9	31.858	13 - 76	551 - 356	GKS07 - 3E □□□ 100-32	E82MV 302_4B		
	39	706	1.0	36.303	11 - 67	628 - 406	GKS06 - 3E □□□ 100-32	E82MV 302_4B		
	39	701	1.8	36.063	11 - 68	624 - 403	GKS07 - 3E □□□ 100-32	E82MV 302_4B		
	40	684	4.1	35.193	12 - 69	609 - 393	GKS09 - 3E □□□ 100-32	E82MV 302_4B		

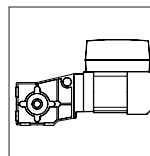
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical bevel geared motors with motec

## Selection tables

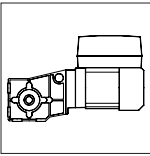


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>3 kW</b>							<b>GKS □□ - 3E</b>		3-158
	34	806	0.9	41.472	9.8 - 59	717 - 463	GKS06 - 3E □□□ 100-32	E82MV 302_4B	
	35	771	3.9	39.662	10 - 61	686 - 443	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	32	859	1.5	44.178	9.2 - 55	764 - 493	GKS07 - 3E □□□ 100-32	E82MV 302_4B	
	28	979	1.3	50.345	8.1 - 48	871 - 562	GKS07 - 3E □□□ 100-32	E82MV 302_4B	
	24	1118	1.2	57.501	7.1 - 42	995 - 642	GKS07 - 3E □□□ 100-32	E82MV 302_4B	
	24	1136	2.7	58.456	6.9 - 42	1011 - 653	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	22	1259	1.0	64.790	6.3 - 38	1121 - 724	GKS07 - 3E □□□ 100-32	E82MV 302_4B	
	21	1281	2.4	65.879	6.2 - 37	1140 - 736	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	20	1370	1.0	70.474	5.8 - 35	1219 - 787	GKS07 - 3E □□□ 100-32	E82MV 302_4B	
	20	1380	2.2	70.982	5.7 - 34	1228 - 793	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	18	1555	2.0	79.996	5.1 - 30	1384 - 894	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	15	1786	1.7	91.860	4.4 - 27	1589 - 1026	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	15	1783	2.5	91.737	4.4 - 27	1587 - 1025	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	14	2012	1.5	103.524	3.9 - 24	1791 - 1156	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	14	2009	2.5	103.365	3.9 - 24	1788 - 1155	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	13	2167	1.4	111.484	3.6 - 22	1929 - 1245	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	13	2164	2.1	111.335	3.6 - 22	1926 - 1244	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	11	2442	1.3	125.641	3.2 - 19	2173 - 1403	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	11	2438	2.1	125.448	3.2 - 19	2170 - 1401	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	9.9	2739	1.1	140.921	2.9 - 17	2438 - 1574	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	10	2735	1.7	140.732	2.9 - 17	2434 - 1572	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	8.8	3087	1.0	158.816	2.6 - 15	2747 - 1774	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	8.8	3082	1.7	158.571	2.6 - 15	2743 - 1771	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	7.7	3538	0.9	182.000	2.2 - 13	3148 - 2033	GKS09 - 3E □□□ 100-32	E82MV 302_4B	
	7.5	3626	1.7	186.572	2.2 - 13	3227 - 2084	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	6.7	4086	1.4	210.222	1.9 - 12	3637 - 2348	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	6.2	4401	1.4	226.431	1.8 - 11	3917 - 2529	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	5.5	4959	1.2	255.133	1.6 - 10	4413 - 2850	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	4.9	5563	1.1	286.219	1.4 - 9	4951 - 3197	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
	4.3	6268	0.9	322.500	1.3 - 8	5579 - 3603	GKS11 - 3E □□□ 100-32	E82MV 302_4B	
							<b>GKS □□ - 4E</b>		
3.9	6952	0.9	363.866	1.1 - 7	6187 - 3995	GKS11 - 4E □□□ 100-32	E82MV 302_4B		
3.9	6926	1.7	362.512	1.1 - 7	6164 - 3981	GKS14 - 4E □□□ 100-32	E82MV 302_4B		
3.6	7464	1.5	390.672	1.0 - 6	6643 - 4290	GKS14 - 4E □□□ 100-32	E82MV 302_4B		
3.2	8411	1.4	440.193	0.9 - 6	7485 - 4834	GKS14 - 4E □□□ 100-32	E82MV 302_4B		
2.7	9804	1.2	513.121	0.8 - 5	8725 - 5634	GKS14 - 4E □□□ 100-32	E82MV 302_4B		
2.4	11047	1.1	578.164	0.7 - 4	9832 - 6349	GKS14 - 4E □□□ 100-32	E82MV 302_4B		
2.3	11898	1.0	622.742	0.7 - 4	10590 - 6838	GKS14 - 4E □□□ 100-32	E82MV 302_4B		
2.0	13407	0.9	701.681	0.6 - 3	11932 - 7705	GKS14 - 4E □□□ 100-32	E82MV 302_4B		
						<b>GKS □□ - 3E</b>		3-158	
221	165	1.6	6.485	64 - 384	146 - 95	GKS06 - 3E □□□ 112-22	E82MV 402_4B		
240	151	3.1	5.955	70 - 418	134 - 87	GKS07 - 3E □□□ 112-22	E82MV 402_4B		
173	209	2.6	8.254	50 - 301	186 - 120	GKS07 - 3E □□□ 112-22	E82MV 402_4B		
156	233	1.6	9.196	45 - 271	208 - 134	GKS06 - 3E □□□ 112-22	E82MV 402_4B		
156	233	3.1	9.171	45 - 271	207 - 134	GKS07 - 3E □□□ 112-22	E82MV 402_4B		
141	258	1.6	10.147	41 - 245	229 - 148	GKS06 - 3E □□□ 112-22	E82MV 402_4B		
141	257	3.1	10.124	41 - 246	229 - 148	GKS07 - 3E □□□ 112-22	E82MV 402_4B		
126	289	1.2	11.382	36 - 219	257 - 166	GKS06 - 3E □□□ 112-22	E82MV 402_4B		
126	289	2.1	11.378	36 - 219	257 - 166	GKS07 - 3E □□□ 112-22	E82MV 402_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>4 kW</b>	113	320	1.3	12.612	33 - 197	285 - 184	GKS06 - 3E □□□ 112-22	E82MV 402_4B	3-158
	113	323	2.6	12.711	33 - 196	287 - 185	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	97	376	1.6	14.824	28 - 168	335 - 216	GKS06 - 3E □□□ 112-22	E82MV 402_4B	
	97	376	2.8	14.798	28 - 168	334 - 216	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	86	424	1.4	16.699	25 - 149	377 - 244	GKS06 - 3E □□□ 112-22	E82MV 402_4B	
	86	423	2.5	16.674	25 - 149	377 - 243	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	80	452	1.2	17.809	23 - 140	402 - 260	GKS06 - 3E □□□ 112-22	E82MV 402_4B	
	83	438	2.3	17.270	24 - 144	390 - 252	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	70	516	1.3	20.329	20 - 122	459 - 296	GKS06 - 3E □□□ 112-22	E82MV 402_4B	
	70	520	2.1	20.511	20 - 121	463 - 299	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	62	581	1.0	22.902	18 - 109	517 - 334	GKS06 - 3E □□□ 112-22	E82MV 402_4B	
	62	586	2.0	23.111	18 - 108	522 - 337	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	55	660	1.0	26.017	16 - 96	587 - 379	GKS06 - 3E □□□ 112-22	E82MV 402_4B	
	57	641	1.8	25.244	16 - 99	570 - 368	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	56	651	4.4	25.649	16 - 97	579 - 374	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	50	722	0.9	28.461	15 - 87	643 - 415	GKS06 - 3E □□□ 112-22	E82MV 402_4B	
	51	717	1.7	28.274	15 - 88	638 - 412	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	49	742	3.9	29.228	14 - 85	660 - 426	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	45	808	1.5	31.858	13 - 78	719 - 465	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	43	836	3.6	32.940	13 - 76	744 - 480	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	40	915	1.4	36.063	11 - 69	814 - 526	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	41	893	3.4	35.193	12 - 71	795 - 513	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	35	1038	1.2	40.906	10 - 61	924 - 596	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	36	1006	3.0	39.662	10 - 63	896 - 578	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	32	1121	1.2	44.178	9.4 - 56	998 - 644	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	33	1095	2.8	43.146	9.6 - 58	974 - 629	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	28	1277	1.0	50.345	8.2 - 49	1137 - 734	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	29	1234	2.5	48.625	8.5 - 51	1098 - 709	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	25	1459	0.9	57.501	7.2 - 43	1298 - 838	GKS07 - 3E □□□ 112-22	E82MV 402_4B	
	25	1483	2.0	58.456	7.1 - 43	1320 - 852	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	22	1672	1.8	65.879	6.3 - 38	1488 - 961	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	22	1649	3.2	64.995	6.4 - 38	1468 - 948	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	20	1801	1.7	70.982	5.8 - 35	1603 - 1035	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	20	1799	2.7	70.887	5.9 - 35	1601 - 1034	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	18	2030	1.5	79.996	5.2 - 31	1806 - 1166	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	18	2027	2.7	79.873	5.2 - 31	1804 - 1165	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	16	2331	1.3	91.860	4.5 - 27	2074 - 1339	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	16	2328	2.2	91.737	4.5 - 27	2072 - 1338	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	14	2627	1.2	103.524	4.0 - 24	2338 - 1510	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	14	2623	2.2	103.365	4.0 - 24	2334 - 1507	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	13	2829	1.1	111.484	3.7 - 22	2517 - 1626	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	13	2825	1.8	111.335	3.7 - 22	2514 - 1623	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	13	2788	2.2	109.896	3.8 - 23	2482 - 1602	GKS14 - 3E □□□ 112-22	E82MV 402_4B	
	11	3188	1.0	125.641	3.3 - 20	2837 - 1832	GKS09 - 3E □□□ 112-22	E82MV 402_4B	
	11	3183	1.8	125.448	3.3 - 20	2833 - 1829	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	12	3142	2.2	123.826	3.3 - 20	2796 - 1806	GKS14 - 3E □□□ 112-22	E82MV 402_4B	
	10	3571	1.4	140.732	2.9 - 18	3178 - 2052	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	10	3525	1.8	138.913	3.0 - 18	3137 - 2026	GKS14 - 3E □□□ 112-22	E82MV 402_4B	
	9.0	4023	1.4	158.571	2.6 - 16	3581 - 2312	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	9.1	3971	1.8	156.522	2.6 - 16	3534 - 2282	GKS14 - 3E □□□ 112-22	E82MV 402_4B	
7.7	4734	1.3	186.572	2.2 - 13	4213 - 2721	GKS11 - 3E □□□ 112-22	E82MV 402_4B		
7.7	4734	2.5	186.572	2.2 - 13	4213 - 2721	GKS14 - 3E □□□ 112-22	E82MV 402_4B		
6.8	5334	1.1	210.222	2.0 - 12	4747 - 3065	GKS11 - 3E □□□ 112-22	E82MV 402_4B		
6.8	5334	2.2	210.222	2.0 - 12	4747 - 3065	GKS14 - 3E □□□ 112-22	E82MV 402_4B		
6.3	5745	1.0	226.431	1.8 - 11	5113 - 3302	GKS11 - 3E □□□ 112-22	E82MV 402_4B		
6.3	5745	2.0	226.431	1.8 - 11	5113 - 3302	GKS14 - 3E □□□ 112-22	E82MV 402_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

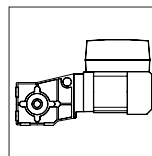
The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

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# Helical bevel geared motors with motec

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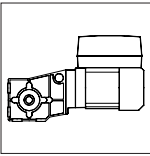


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>4 kW</b>							<b>GKS □□ - 3E</b>		3-158
	5.6	6473	0.9	255.133	1.6 - 10	5761 - 3720	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	5.6	6473	1.8	255.133	1.6 - 10	5761 - 3720	GKS14 - 3E □□□ 112-22	E82MV 402_4B	
	5.0	7262	0.8	286.219	1.4 - 9	6463 - 4174	GKS11 - 3E □□□ 112-22	E82MV 402_4B	
	5.0	7262	1.6	286.219	1.4 - 9	6463 - 4174	GKS14 - 3E □□□ 112-22	E82MV 402_4B	
	4.4	8183	1.4	322.500	1.3 - 8	7282 - 4703	GKS14 - 3E □□□ 112-22	E82MV 402_4B	
	3.9	9041	1.3	362.512	1.1 - 7	8047 - 5196	GKS14 - 4E □□□ 112-22	E82MV 402_4B	
	3.7	9744	1.2	390.672	1.1 - 6	8672 - 5600	GKS14 - 4E □□□ 112-22	E82MV 402_4B	
	3.3	10979	1.1	440.193	0.9 - 6	9771 - 6310	GKS14 - 4E □□□ 112-22	E82MV 402_4B	
	2.8	12798	0.9	513.121	0.8 - 5	11390 - 7355	GKS14 - 4E □□□ 112-22	E82MV 402_4B	
2.5	14420	0.8	578.164	0.7 - 4	12834 - 8287	GKS14 - 4E □□□ 112-22	E82MV 402_4B		
<b>5.5 kW</b>							<b>GKS □□ - 3E</b>		3-158
	222	225	1.2	6.485	64 - 386	200 - 129	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	242	206	2.3	5.955	70 - 421	184 - 119	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	175	286	1.9	8.254	51 - 304	254 - 164	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	157	319	1.2	9.196	45 - 272	284 - 183	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	157	318	2.3	9.171	46 - 273	283 - 183	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	142	352	1.2	10.147	41 - 247	313 - 202	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	142	351	2.3	10.124	41 - 247	312 - 202	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	127	394	0.8	11.382	37 - 220	351 - 227	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	127	394	1.6	11.378	37 - 220	351 - 227	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	114	437	1.0	12.612	33 - 199	389 - 251	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	113	440	1.9	12.711	33 - 197	392 - 253	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	97	514	1.2	14.824	28 - 169	457 - 295	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	97	513	2.0	14.798	28 - 169	456 - 295	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	86	579	1.0	16.699	25 - 150	515 - 332	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	86	578	1.9	16.674	25 - 150	514 - 332	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	89	559	3.2	16.122	26 - 155	497 - 321	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	81	617	0.8	17.809	23 - 141	549 - 355	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	83	598	1.7	17.270	24 - 145	532 - 344	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	82	608	3.2	17.536	24 - 143	541 - 349	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	71	704	0.9	20.329	21 - 123	627 - 405	GKS06 - 3E □□□ 112-32	E82MV 552_4B	
	70	711	1.6	20.511	20 - 122	632 - 408	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	62	801	1.5	23.111	18 - 108	713 - 460	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	57	875	1.4	25.244	17 - 99	778 - 503	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	56	889	3.2	25.649	16 - 98	791 - 511	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	51	980	1.2	28.274	15 - 89	872 - 563	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	49	1013	2.9	29.228	14 - 86	901 - 582	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	45	1104	1.1	31.858	13 - 79	982 - 634	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	44	1141	2.6	32.940	13 - 76	1016 - 656	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	40	1249	1.0	36.063	12 - 69	1112 - 718	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	41	1219	2.5	35.193	12 - 71	1085 - 701	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	35	1417	0.9	40.906	10 - 61	1261 - 814	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	36	1374	2.2	39.662	11 - 63	1223 - 790	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	33	1531	0.9	44.178	9.5 - 57	1362 - 880	GKS07 - 3E □□□ 112-32	E82MV 552_4B	
	33	1495	2.0	43.146	9.7 - 58	1330 - 859	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
	30	1685	1.8	48.625	8.6 - 52	1499 - 968	GKS09 - 3E □□□ 112-32	E82MV 552_4B	
25	2025	1.5	58.456	7.1 - 43	1802 - 1164	GKS09 - 3E □□□ 112-32	E82MV 552_4B		
25	1998	2.3	57.683	7.2 - 43	1779 - 1148	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
22	2282	1.3	65.879	6.3 - 38	2031 - 1312	GKS09 - 3E □□□ 112-32	E82MV 552_4B		
22	2252	2.3	64.995	6.4 - 39	2004 - 1294	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
20	2459	1.2	70.982	5.9 - 35	2189 - 1413	GKS09 - 3E □□□ 112-32	E82MV 552_4B		
20	2456	2.0	70.887	5.9 - 35	2186 - 1411	GKS11 - 3E □□□ 112-32	E82MV 552_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical bevel geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>5.5 kW</b>	18	2771	1.1	79.996	5.2 - 31	2467 - 1593	GKS09 - 3E □□□ 112-32	E82MV 552_4B	3-158	
	18	2767	2.0	79.873	5.2 - 31	2463 - 1590	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	16	3182	1.0	91.860	4.5 - 27	2832 - 1829	GKS09 - 3E □□□ 112-32	E82MV 552_4B		
	16	3178	1.6	91.737	4.6 - 27	2829 - 1827	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	16	3137	2.0	90.551	4.6 - 28	2792 - 1803	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	14	3587	0.9	103.524	4.0 - 24	3192 - 2061	GKS09 - 3E □□□ 112-32	E82MV 552_4B		
	14	3581	1.6	103.365	4.0 - 24	3187 - 2058	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	14	3535	2.0	102.029	4.1 - 25	3146 - 2031	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	13	3857	1.3	111.335	3.8 - 23	3433 - 2217	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	13	3807	1.6	109.896	3.8 - 23	3388 - 2188	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	12	4346	1.3	125.448	3.3 - 20	3868 - 2498	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	12	4290	1.6	123.826	3.4 - 20	3818 - 2465	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	10	4876	1.1	140.732	3.0 - 18	4339 - 2802	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	10	4813	1.3	138.913	3.0 - 18	4283 - 2766	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	9.1	5494	1.1	158.571	2.6 - 16	4889 - 3157	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	9.2	5423	1.3	156.522	2.7 - 16	4826 - 3116	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	7.7	6464	0.9	186.572	2.2 - 13	5753 - 3715	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	7.7	6464	1.8	186.572	2.2 - 13	5753 - 3715	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	6.9	7283	0.8	210.222	2.0 - 12	6482 - 4186	GKS11 - 3E □□□ 112-32	E82MV 552_4B		
	6.9	7283	1.6	210.222	2.0 - 12	6482 - 4186	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	6.4	7845	1.5	226.431	1.8 - 11	6982 - 4508	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	5.6	8839	1.3	255.133	1.6 - 10	7867 - 5080	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	5.0	9916	1.2	286.219	1.5 - 9	8825 - 5699	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
	4.5	11173	1.0	322.500	1.3 - 8	9944 - 6421	GKS14 - 3E □□□ 112-32	E82MV 552_4B		
							<b>GKS □□ - 4E</b>			3-162
	4.0	12346	0.9	362.512	1.2 - 7	10987 - 7095	GKS14 - 4E □□□ 112-32	E82MV 552_4B		
3.7	13305	0.9	390.672	1.1 - 6	11841 - 7646	GKS14 - 4E □□□ 112-32	E82MV 552_4B			
<b>7.5 kW</b>	245	278	1.7	5.955	71 - 427	247 - 159	GKS07 - 3E □□□ 132-22	E82MV 752_4B	3-158	
	177	385	1.4	8.254	51 - 308	342 - 221	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	159	427	1.7	9.171	46 - 277	380 - 246	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	144	472	1.7	10.124	42 - 251	420 - 271	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	128	530	1.2	11.378	37 - 223	472 - 305	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	115	592	1.4	12.711	33 - 200	527 - 340	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	119	572	2.8	12.283	34 - 207	509 - 329	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	99	690	1.5	14.798	29 - 172	614 - 396	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	109	623	2.8	13.360	32 - 190	554 - 358	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	88	777	1.4	16.674	25 - 152	691 - 447	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	91	751	2.4	16.122	26 - 158	669 - 432	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	85	805	1.2	17.270	25 - 147	716 - 462	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	83	817	2.4	17.536	24 - 145	727 - 470	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	71	956	1.2	20.511	21 - 124	851 - 549	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	75	911	2.8	19.541	22 - 130	810 - 523	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	63	1077	1.1	23.111	18 - 110	958 - 619	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	66	1026	2.6	22.022	19 - 115	913 - 590	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	58	1176	1.0	25.244	17 - 101	1047 - 676	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	57	1195	2.4	25.649	17 - 99	1064 - 687	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	52	1317	0.9	28.274	15 - 90	1173 - 757	GKS07 - 3E □□□ 132-22	E82MV 752_4B		
	50	1362	2.1	29.228	14 - 87	1212 - 783	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	44	1535	1.9	32.940	13 - 77	1366 - 882	GKS09 - 3E □□□ 132-22	E82MV 752_4B		
	46	1471	3.8	31.573	13 - 80	1309 - 845	GKS11 - 3E □□□ 132-22	E82MV 752_4B		

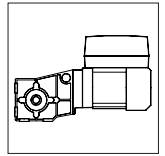
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical bevel geared motors with motec

## Selection tables



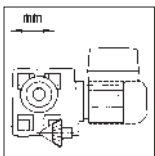
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical bevel geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>7.5 kW</b>							<b>GKS □□ - 3E</b>		3-158
	42	1640	1.9	35.193	12 - 72	1459 - 942	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	41	1665	3.4	35.741	12 - 71	1482 - 957	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	37	1848	1.6	39.662	11 - 64	1645 - 1062	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	36	1877	3.1	40.272	11 - 63	1670 - 1078	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	34	2010	1.5	43.146	9.8 - 59	1789 - 1155	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	33	2040	2.8	43.783	9.7 - 58	1816 - 1172	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	30	2266	1.3	48.625	8.7 - 52	2016 - 1302	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	30	2299	2.6	49.333	8.6 - 51	2046 - 1321	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	25	2724	1.1	58.456	7.2 - 43	2424 - 1565	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	25	2688	2.2	57.683	7.3 - 44	2392 - 1545	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	22	3070	1.0	65.879	6.4 - 39	2732 - 1764	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	23	3028	2.0	64.995	6.5 - 39	2695 - 1740	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	21	3307	0.9	70.982	6.0 - 36	2944 - 1901	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	21	3303	1.8	70.887	6.0 - 36	2940 - 1898	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	21	3212	3.6	68.942	6.1 - 37	2859 - 1846	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	18	3727	0.8	79.996	5.3 - 32	3317 - 2142	GKS09 - 3E □□□ 132-22	E82MV 752_4B	
	18	3722	1.6	79.873	5.3 - 32	3312 - 2139	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	19	3620	3.2	77.681	5.5 - 33	3221 - 2080	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	16	4275	1.4	91.737	4.6 - 28	3804 - 2457	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	16	4219	2.7	90.551	4.7 - 28	3755 - 2425	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	14	4816	1.3	103.365	4.1 - 25	4287 - 2768	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	14	4754	2.5	102.029	4.1 - 25	4231 - 2732	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	13	5188	1.2	111.335	3.8 - 23	4617 - 2981	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	13	5121	2.3	109.896	3.9 - 23	4557 - 2943	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	12	5845	1.0	125.448	3.4 - 20	5202 - 3359	GKS11 - 3E □□□ 132-22	E82MV 752_4B	
	12	5770	2.0	123.826	3.4 - 21	5135 - 3316	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	11	6473	1.8	138.913	3.0 - 18	5761 - 3720	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	9.3	7293	1.6	156.522	2.7 - 16	6491 - 4191	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	7.8	8693	1.3	186.572	2.3 - 14	7737 - 4996	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	7.0	9795	1.2	210.222	2.0 - 12	8718 - 5629	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
	6.5	10551	1.1	226.431	1.9 - 11	9390 - 6064	GKS14 - 3E □□□ 132-22	E82MV 752_4B	
5.7	11888	1.0	255.133	1.7 - 10	10580 - 6832	GKS14 - 3E □□□ 132-22	E82MV 752_4B		
5.1	13336	0.9	286.219	1.5 - 9	11869 - 7665	GKS14 - 3E □□□ 132-22	E82MV 752_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

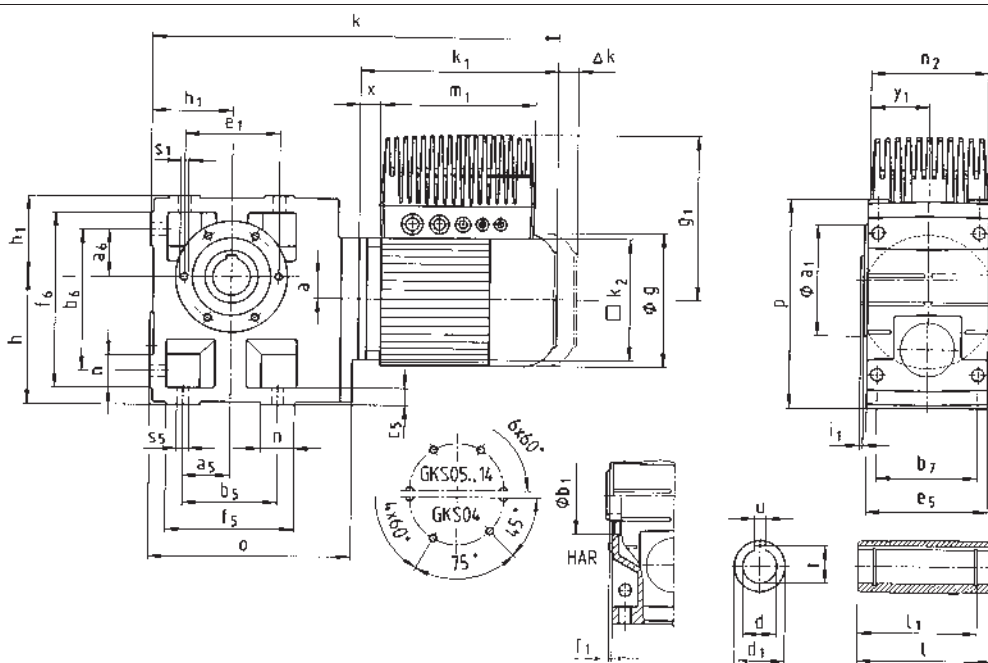
In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Helical bevel geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22			
<b>GKS □ □ - 3 E H □ R</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752			
Motor	<b>g</b>		123			138		156	176	194			222		262			
	<b>k<sub>1</sub></b>		188			207		225	276	280	310	323	343		409			
	<b>k<sub>2</sub></b>		120			120		145	180	180			222		265			
	<b>Δk**</b>	Brake	40			52		73	70	94			101		127			
		External blower	129			127		128	126	97			95		104			
	Brake + external blower	169			164		184	179	169			183		218				
motec	<b>g<sub>1</sub></b>		171			180	225	221	237	242	258	256	270		290			
	<b>g<sub>1</sub><sup>1)</sup></b>		207			216												
	<b>m<sub>1</sub></b>		190			190	202	202	230	230	230	325	325		325			
	<b>n<sub>2</sub></b>		138			138	156	156	176	176	176	211	211		211			
	<b>x</b>		21			23	10	3	3	8	6	2	8		19			
	<b>y<sub>1</sub></b>		69			69	78	78	88	88	88	106	106		106			
Gearbox size	Gearbox						Total length											
	<b>o</b>	<b>l*</b>	<b>p*</b>	<b>h*</b>	<b>h<sub>1</sub></b>	<b>a</b>	<b>k</b>											
	<b>04</b>	203	115	171	100	71	20	399		419		442	503					
	<b>05</b>	232	140	205	125	80	23	419		439		462	523	527	557			
	<b>06</b>	291	160	250	150	100	28	475		495		518	579	583	613	631	651	
	<b>07</b>	354	200	310	190	120	34					574	635	639	669	687	707	782
	<b>09</b>	429	240	386	236	150	41						706	710	740	758	778	853
	<b>11</b>	527	290	485	300	185	54							801	831	849	869	944
<b>14</b>	636	350	605	375	230	67									948	968	1043	

Gearbox size	Hollow shaft						Pitch circle						Foot											
	<b>d</b> H7	<b>l</b>	<b>d<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>u</b> JS9	<b>t</b> +0.2	<b>a<sub>1</sub></b>	<b>b<sub>1</sub></b> H7	<b>e<sub>1</sub></b>	<b>f<sub>1</sub></b>	<b>i<sub>1</sub></b>	<b>s<sub>1</sub></b>	<b>a<sub>5</sub></b>	<b>a<sub>8</sub></b>	<b>b<sub>5</sub></b>	<b>b<sub>6</sub></b>	<b>b<sub>7</sub></b>	<b>c<sub>5</sub></b>	<b>e<sub>5</sub></b>	<b>f<sub>5</sub></b>	<b>f<sub>6</sub></b>	<b>n</b>	<b>m</b>	<b>s<sub>5</sub></b>
<b>04</b>	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9
<b>05</b>	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
<b>06</b>	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
<b>07</b>	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
<b>09</b>	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
<b>11</b>	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
<b>14</b>	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

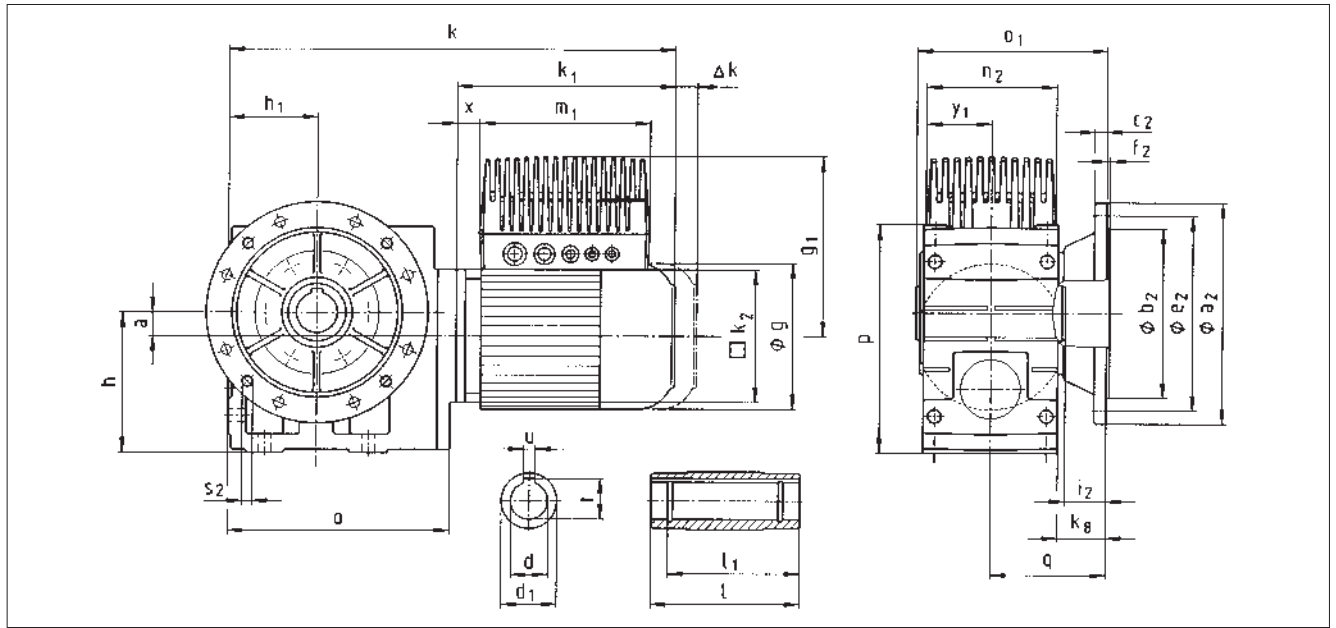
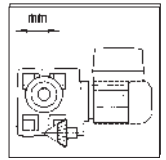
Dimensions in [mm] \* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a

\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical bevel geared motors with motec

## Dimensions



Geared motor		Motor frame size																
GKS □ □ - 3 E HAK		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22				
motec E82MV □ □ □		251	251	251	371	551	751	152	152	222	302	402	552	752				
Motor	g	123			138		156		176		194		222		262			
	k <sub>1</sub>	188			207		225		276		280	310	323	343	409			
	k <sub>2</sub>	120			120		145		180		180		222		265			
	Δk**	40			52		73		70		94		101		127			
	External blower	129			127		128		126		97		95		104			
Brake + external blower		169			164		184		179		169		183		218			
motec	g <sub>1</sub>	171			180	225	221	237	242	258	256	270		290				
	g <sub>1</sub> <sup>1)</sup>	207			216													
	m <sub>1</sub>	190			190	202	202	230	230	230	325	325		325				
	n <sub>2</sub>	138			138	156	156	176	176	176	211	211		211				
	x	21			23	10	3	3	8	6	2	8		19				
	y <sub>1</sub>	69			69	78	78	88	88	88	106	106		106				
Gearbox size	Gearbox								Total length									
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k									
04	203	148	171	100	71	20	38	90.5	399		419		442		503			
05	232	173	205	125	80	23	40	103	419		439		462		523		527 557	
06	291	201	250	150	100	28	49	121	475		495		518		579		583 613 631 651	
07	354	255	310	190	120	34	65	155					574		635		639 669 687 707 782	
09	429	300	386	236	150	41	69	180					706		710		740 758 778 853	
11	527	350	485	300	185	54	70	205							801		831 849 869 944	
14	636	410	605	375	230	67	71	235									948 968 1043	

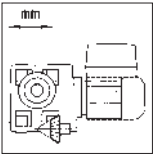
Gearbox size	Hollow shaft						Output flange							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9	
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14	
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14	
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5	
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5	
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5	

Dimensions in [mm]

\* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a

\*\* See page 3 - 40 for more built-on accessories

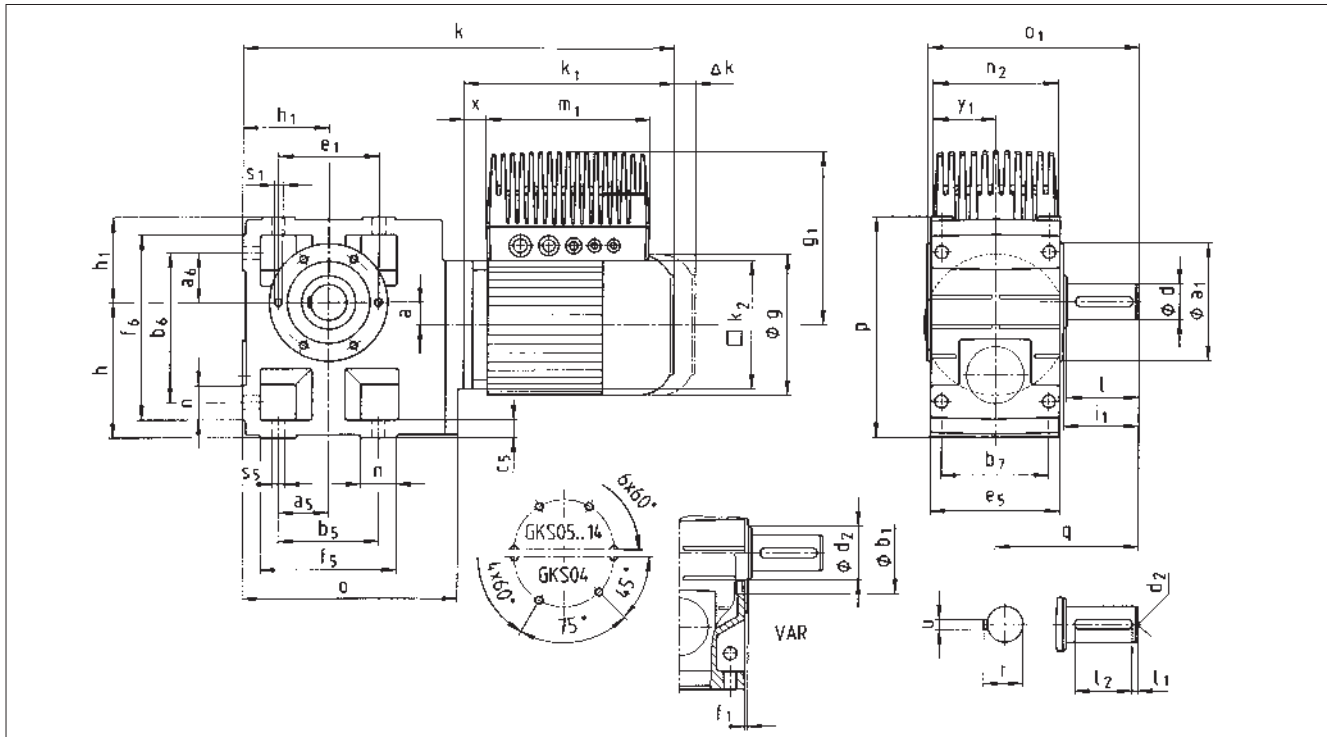
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Helical bevel geared motors with motec

## Dimensions

3



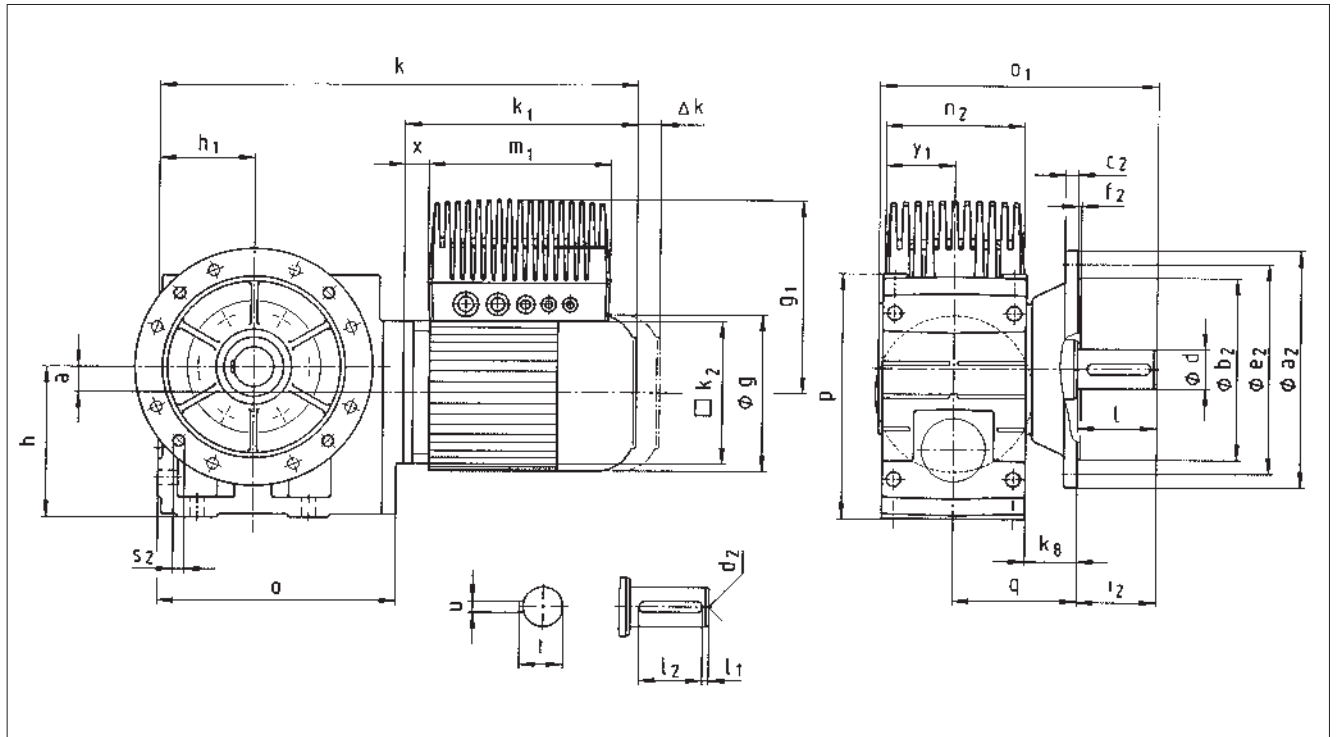
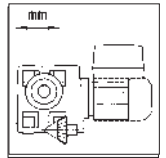
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22						
<b>GKS□□ - 3 E V□R</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752						
Motor	g		123			138		156		176	194		222		262						
	k <sub>1</sub>		188			207		225		276	280	310	323	343	409						
	k <sub>2</sub>		120			120		145		180	180		222		265						
	Δk**	Brake	40			52		73		70	94		101		127						
		External blower	129			127		128		126	97		95		104						
	Brake + external blower	169			164		184		179	169		183		218							
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290						
	g <sub>1</sub> <sup>1)</sup>		207			216															
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325						
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211						
	x		21			23	10	3	3	8	6	2	8		19						
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106						
Gearbox size	Gearbox							Total length													
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	q	k													
	04	203	163	171	100	71	20	107.5	399		419		442		503						
	05	232	197	205	125	80	23	130	419		439		462		523		527	557			
	06	291	236	250	150	100	28	160	475		495		518		579		583	613	631	651	
	07	354	296	310	190	120	34	200					574		635		639	669	687	707	782
	09	429	356	386	236	150	41	240							706		710	740	758	778	853
	11	527	445	485	300	185	54	305									801	831	849	869	944
	14	636	544	605	375	230	67	375											948	968	1043

Gearbox size	Solid shaft								Pitch circle					Foot												
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	110	119	85	14	105	132	141	22	21	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6  
\* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a  
\*\* See page 3 - 40 for more built-on accessories  
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical bevel geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22				
<b>GKS □ □ - 3 E VAK</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752				
Motor		g	123			138		156		176		194		222		262			
		k <sub>1</sub>	188			207		225		276		280	310	323	343	409			
		k <sub>2</sub>	120			120		145		180		180		222		265			
		Δk**	40			52		73		70		94		101		127			
		External blower	129			127		128		126		97		95		104			
		Brake + external blower	169			164		184		179		169		183		218			
motec		g <sub>1</sub>	171			180		225	221	237	242	258	256	270		290			
		g <sub>1</sub> <sup>1)</sup>	207			216													
		m <sub>1</sub>	190			190		202	202	230	230	230	325	325		325			
		n <sub>2</sub>	138			138		156	156	176	176	176	211	211		211			
		x	21			23		10	3	3	8	6	2	8		19			
		y <sub>1</sub>	69			69		78	78	88	88	88	106	106		106			
Gearbox size	Gearbox								Total length										
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k										
04	203	196	171	100	71	20	38	90.5	399		419		442		503				
05	232	230	205	125	80	23	40	103	419		439		462		523		527	557	
06	291	277	250	150	100	28	49	121	475		495		518		579		583	613	631
07	354	351	310	190	120	34	65	155					574		635		639	669	687
09	429	416	386	236	150	41	69	180							706		710	740	758
11	527	505	485	300	185	54	70	205									801	831	849
14	636	604	605	375	230	67	71	235											948

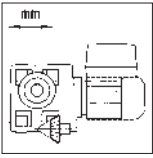
Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a

\*\* See page 3 - 40 for more built-on accessories

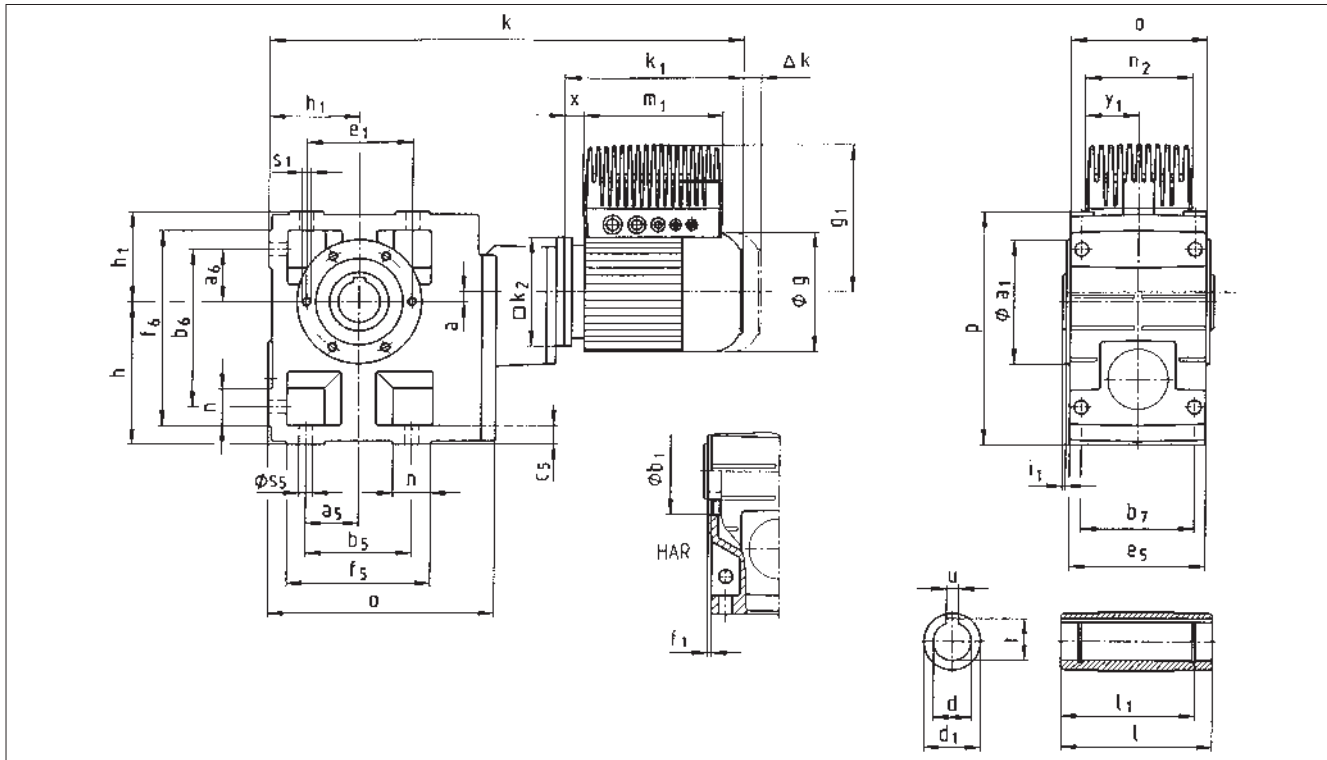
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Helical bevel geared motors with motec

## Dimensions

3



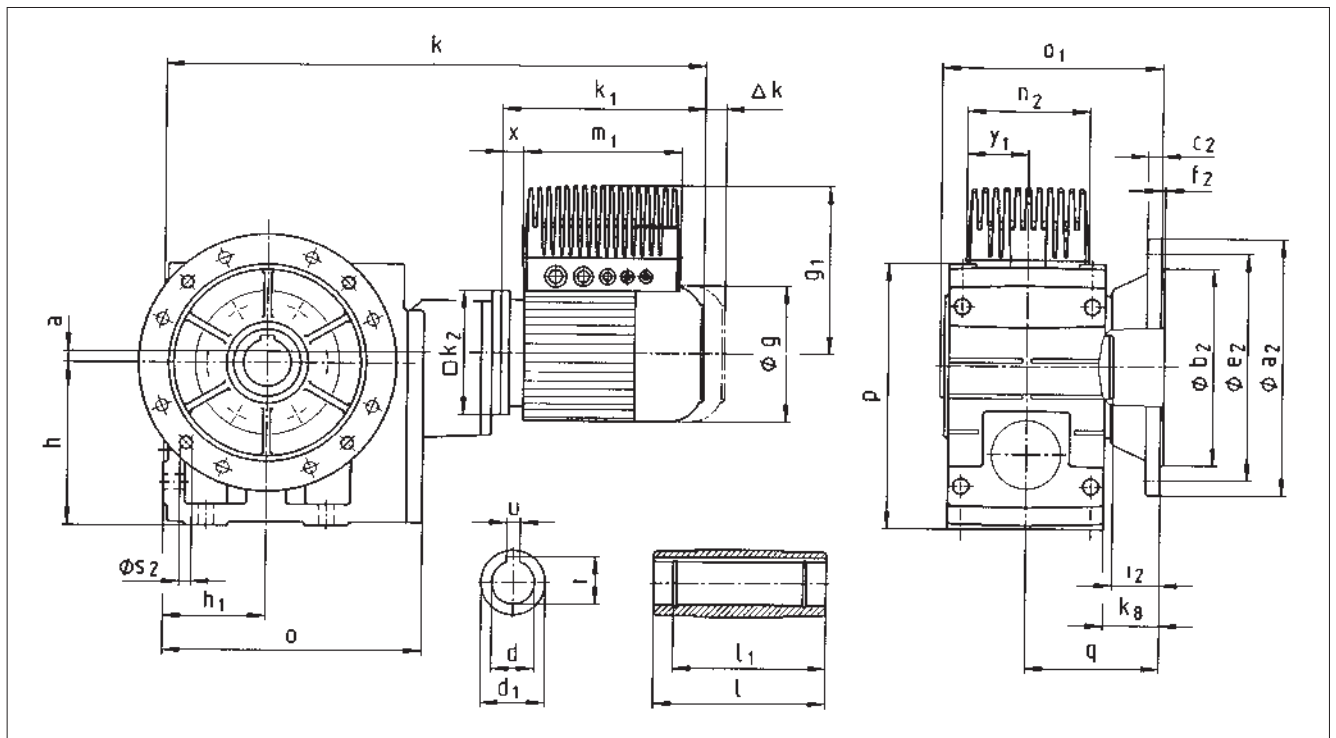
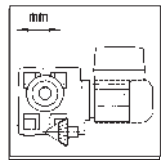
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22			
<b>GKS</b> □ □ - 4 E H □ R		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752			
Motor	g		123		138		156		176		194		222		262			
	k <sub>1</sub>		188		207		225		276		280	310	323	343	409			
	k <sub>2</sub>		120		120		145		180		180		222		265			
	Δk**	Brake	40		52		73		70		94		101		127			
		External blower	129		127		128		126		97		95		104			
	Brake + external blower	169		164		184		179		169		183		218				
motec	g <sub>1</sub>		171		180		225	221	237	242	258	256	270		290			
	g <sub>1</sub> <sup>1)</sup>		207		216													
	m <sub>1</sub>		190		190		202	202	230	230	230	325	325		325			
	n <sub>2</sub>		138		138		156	156	176	176	176	211	211		211			
	x		21		23		10	3	3	8	6	2	8		19			
	y <sub>1</sub>		69		69		78	78	88	88	88	106	106		106			
Gearbox size	Gearbox						Total length											
	o	l*	p*	h	h <sub>1</sub>	a	k											
	05	226	140	205	125	80	13	496		515		538		599				
	06	288	160	250	150	100	8	569		588		611		672				
	07	351	200	310	190	120	11	636		655		678		739	743	773		
	09	426	240	386	236	150	15	725		744		767		828	832	862	881	901
	11	523	290	485	300	185	16					877		938	942	972	991	1011
14	632	350	605	375	230	22							1071	1075	1105	1124	1144	1218

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M 8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
09	60 70	240	95	210	18 20	64.4 74.9	205	145	175	6	5	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
11	70 80	290	105	250	20 22	74.9 85.4	240	140	205	6	6	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
14	100	350	135	305	28	106.4	290	170	250	6	7	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm] \* Please note dimension k<sub>2</sub>  
 \*\* See page 3 - 40 for more built-on accessories  
 1) On motec option only: bus I/O, system terminal or brake rectifier

# Helical bevel geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22				
<b>GKS □ □ - 4 E HAK</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752				
Motor		g	123			138		156		176		194		222		262			
		k <sub>1</sub>	188			207		225		276		280	310	323	343	409			
		k <sub>2</sub>	120			120		145		180		180		222		265			
		Δk**	40			52		73		70		94		101		127			
		External blower	129			127		128		126		97		95		104			
		Brake + external blower	169			164		184		179		169		183		218			
motec		g <sub>1</sub>	171			180		225	221	237	242	258	256	270		290			
		g <sub>1</sub> <sup>1)</sup>	207			216													
		m <sub>1</sub>	190			190		202	202	230	230	230	325	325		325			
		n <sub>2</sub>	138			138		156	156	176	176	176	211	211		211			
		x	21			23		10	3	3	8	6	2		8	19			
		y <sub>1</sub>	69			69		78	78	88	88	88	106	106		106			
Gearbox size	Gearbox								Total length										
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	k <sub>8</sub>	q	k										
05	226	173	205	125	80	13	40	103	496		515		538		599				
06	288	201	250	150	100	8	49	121	569		588		611		672				
07	351	255	310	190	120	11	65	155	636		655		678		739	743	773		
09	426	300	386	236	150	15	69	180	725		744		767		828	832	862	881	901
11	523	350	485	300	185	16	70	205			877		938		942	972	991	1011	1085
14	632	410	605	375	230	22	71	235					1071		1075	1105	1124	1144	1218

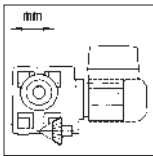
Gearbox size	Hollow shaft		Output flange										
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12.0	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14
09	60 70	240	95	210	18 20	64.4 74.9	350	250	18	300	4	60	4 x 17.5
11	70 80	290	105	250	20 22	74.9 85.4	400 450	300 350	20 22	350 400	5	60	4 x 17.5 8 x 17.5
14	100	350	135	305	28	106.4	450	350	22	400	5	60	8 x 17.5

Dimensions in [mm]

\* Please note dimension k<sub>2</sub>

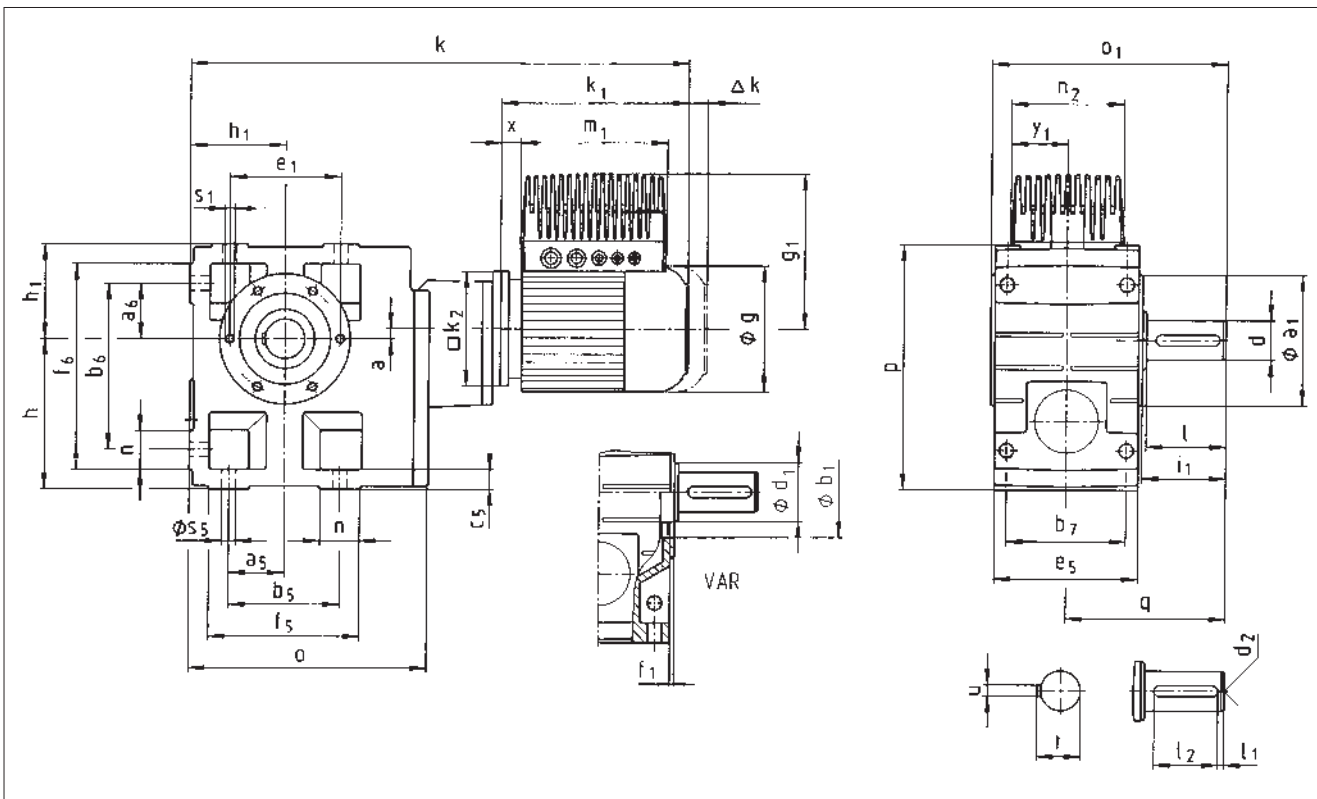
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Helical bevel geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22					
<b>GKS □ □ - 4 E V □ R</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752					
Motor	<b>g</b>		123			138		156		176		194		222		262				
	<b>k<sub>1</sub></b>		188			207		225		276		280	310	323	343	409				
	<b>k<sub>2</sub></b>		120			120		145		180		180		222		265				
	<b>Δk**</b>	Brake	40			52		73		70		94		101		127				
		External blower	129			127		128		126		97		95		104				
	Brake + external blower	169			164		184		179		169		183		218					
motec	<b>g<sub>1</sub></b>		171			180		225		237		242		258		256	270	290		
	<b>g<sub>1</sub><sup>1)</sup></b>		207			216														
	<b>m<sub>1</sub></b>		190			190		202		202		230		230		230	325	325	325	
	<b>n<sub>2</sub></b>		138			138		156		156		176		176		176	211	211	211	
	<b>x</b>		21			23		10		3		3		8		6		2	8	19
	<b>y<sub>1</sub></b>		69			69		78		78		88		88		88	106	106	106	
Gearbox size	Gearbox								Total length											
	<b>o</b>	<b>o<sub>1</sub>*</b>	<b>p*</b>	<b>h</b>	<b>h<sub>1</sub></b>	<b>a</b>	<b>q</b>	<b>k</b>												
	<b>05</b>	226	197	205	125	80	13	130	496		515		538		599					
	<b>06</b>	288	236	250	150	100	8	160	569		588		611		672					
	<b>07</b>	351	296	310	190	120	11	200	636		655		678		739		743	773		
	<b>09</b>	426	356	386	236	150	15	240	725		744		767		828		832	862	881	901
	<b>11</b>	523	445	485	300	185	16	305					877		938		942	972	991	1011
<b>14</b>	632	544	605	375	230	22	375							1071		1075	1105	1124	1144	1218

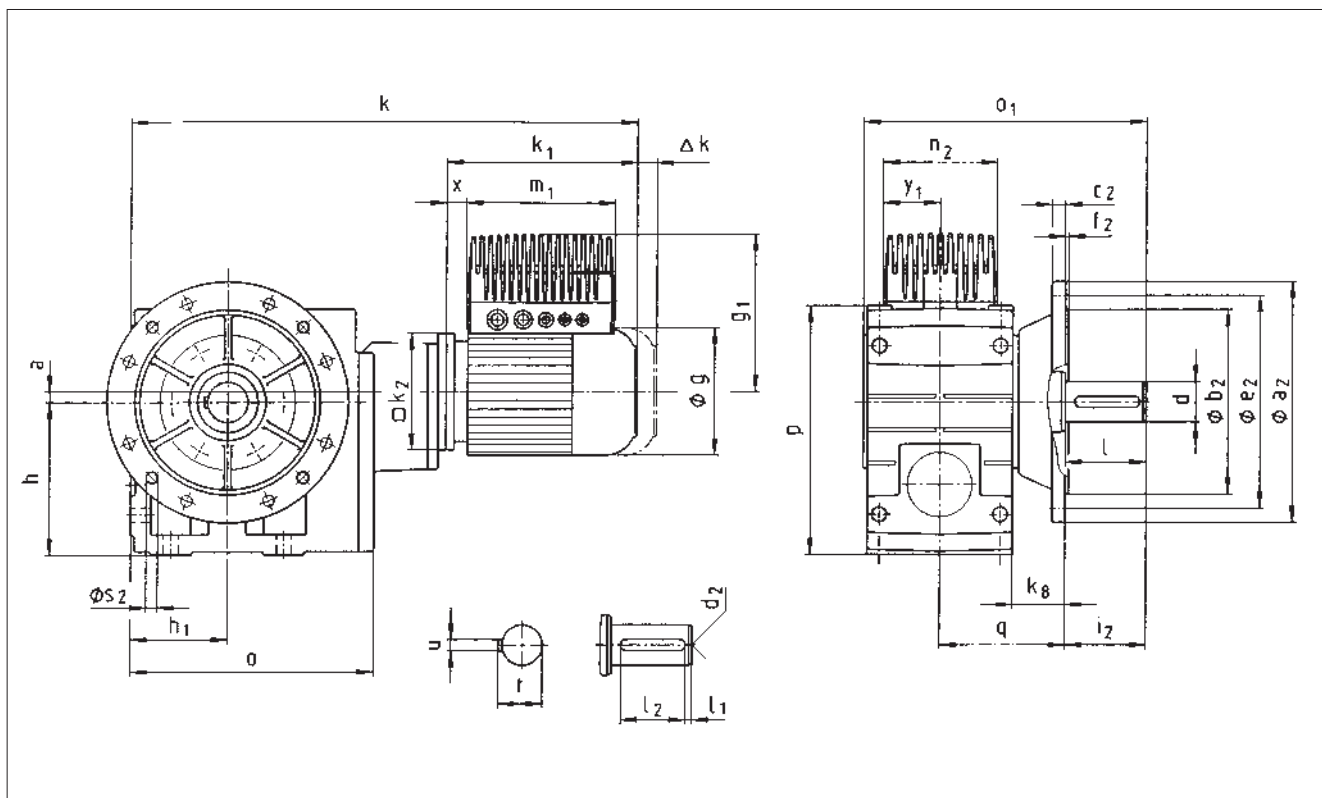
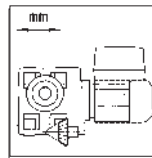
Gearbox size	Solid shaft								Pitch circle					Foot												
	<b>d</b>	<b>l</b>	<b>d<sub>1</sub></b>	<b>l<sub>1</sub></b>	<b>l<sub>2</sub></b>	<b>d<sub>2</sub></b>	<b>u</b>	<b>t</b>	<b>a<sub>1</sub></b>	<b>b<sub>1</sub></b> H7	<b>e<sub>1</sub></b>	<b>f<sub>1</sub></b>	<b>i<sub>1</sub></b>	<b>s<sub>1</sub></b> 6x60°	<b>a<sub>5</sub></b>	<b>a<sub>6</sub></b>	<b>b<sub>5</sub></b>	<b>b<sub>6</sub></b>	<b>b<sub>7</sub></b>	<b>c<sub>5</sub></b>	<b>e<sub>5</sub></b>	<b>f<sub>5</sub></b>	<b>f<sub>6</sub></b>	<b>n</b>	<b>m</b>	<b>s<sub>5</sub></b>
<b>05</b>	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	21	11
<b>06</b>	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	155	170	120	20	145	191	206	36	23	14
<b>07</b>	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	190	210	150	25	180	235	255	45	28	18
<b>09</b>	60	120	95	8	100	M20	18	64	205	145	175	6	125	M16x24	90	90	240	266	185	30	222	300	326	60	37	22
<b>11</b>	80	160	105	15	125	M20	22	85	240	140	205	6	166	M20x32	105	105	290	325	225	40	270	363	398	73	43	26
<b>14</b>	100	200	135	18	160	M24	28	106	290	170	250	6	207	M24x35	135	135	360	415	275	50	328	442	497	82	52	33

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* Please note dimension k<sub>2</sub>  
\*\* See page 3 - 40 for more built-on accessories  
1) On motec option only: bus I/O, system terminal or brake rectifier

# Helical bevel geared motors with motec

## Dimensions



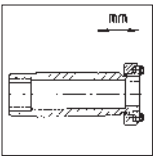
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22						
<b>GKS □ □ - 4 E VAK</b>		motec E82MV □ □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752						
Motor		<b>g</b>	123			138		156		176		194		222		262					
		<b>k<sub>1</sub></b>	188			207		225		276		280	310	323	343	409					
		<b>k<sub>2</sub></b>	120			120		145		180		180		222		265					
		<b>Δk**</b>	40			52		73		70		94		101		127					
		Brake	129			127		128		126		97		95		104					
		External blower	169			164		184		179		169		183		218					
		Brake + external blower																			
motec		<b>g<sub>1</sub></b>	171			180		225		221		237		242		258	256	270	290		
		<b>g<sub>1</sub><sup>1)</sup></b>	207			216															
		<b>m<sub>1</sub></b>	190			190		202		202		230		230		230	325	325	325		
		<b>n<sub>2</sub></b>	138			138		156		156		176		176		176	211	211	211		
		<b>x</b>	21			23		10		3		3		8		6	2	8	19		
		<b>y<sub>1</sub></b>	69			69		78		78		88		88		88	106	106	106		
Gearbox size	Gearbox								Total length												
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	k <sub>8</sub>	q	k												
05	226	230	205	125	80	13	40	103	496		515		538		599						
06	288	277	250	150	100	8	49	121	569		588		611		672						
07	351	351	310	190	120	11	65	155	636		655		678		739		743	773			
09	426	416	386	236	150	15	69	180	725		744		767		828		832	862	881	901	
11	523	505	485	300	185	16	70	205					877		938		942	972	991	1011	1085
14	632	604	605	375	230	22	71	235							1071		1075	1105	1124	1144	1218

Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	
09	60	120	8	100	M20	18	64	350	250	18	300	4	120	4 x 17.5	
11	80	160	15	125	M20	22	85	400 450	300 350	20 22	350 400	5	160	4 x 17.5 8 x 17.5	
14	100	200	18	160	M24	28	106	450	350	22	400	5	200	8 x 17.5	

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

\* Please note dimension k<sub>2</sub>  
\*\* See page 3 - 40 for more built-on accessories  
1) On motec option only: bus I/O, system terminal or brake rectifier

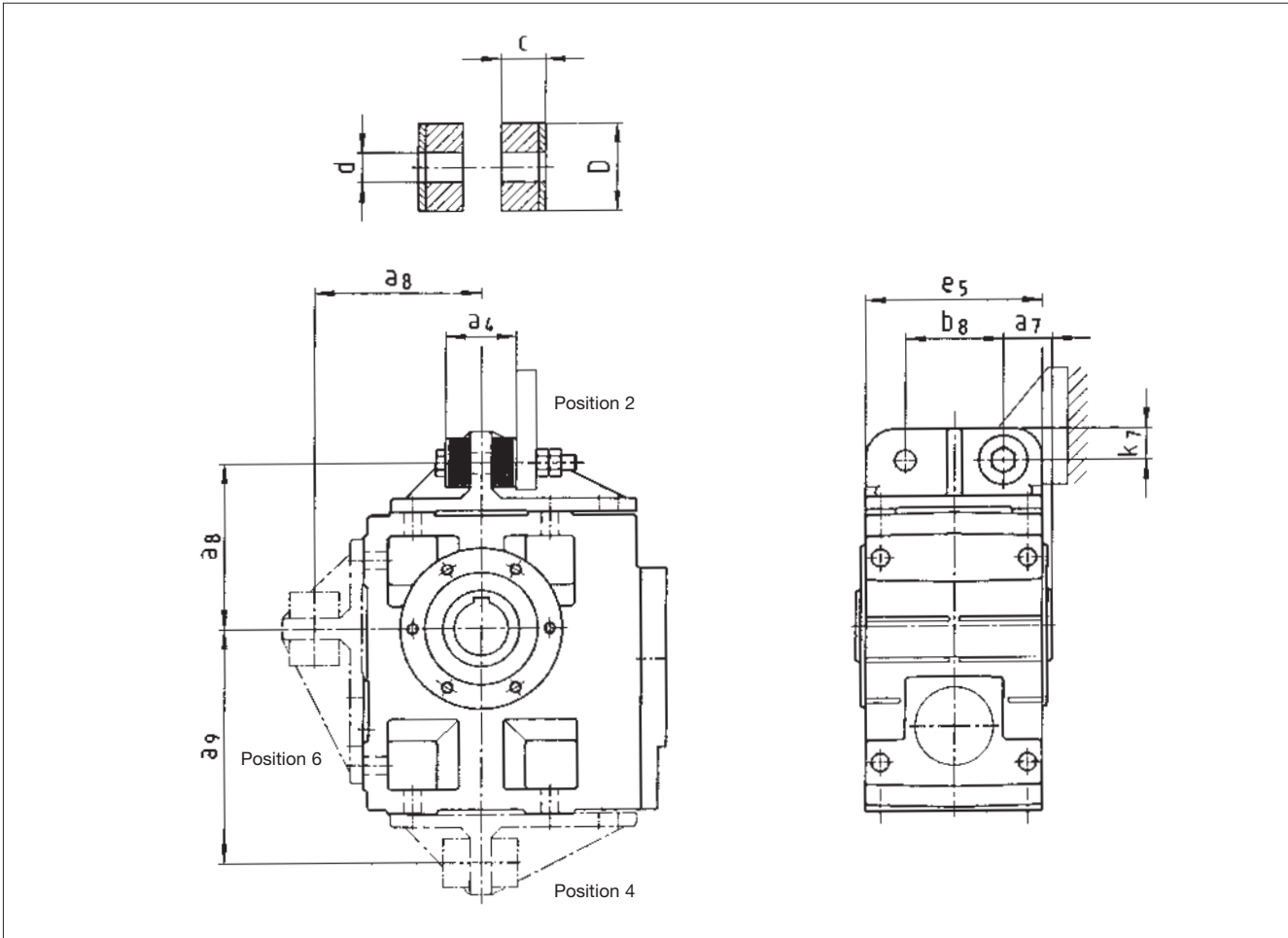




# Helical bevel geared motors with motec

## Torque plate – housing foot

3

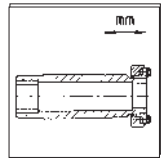


Gearbox size	a <sub>4</sub>	a <sub>7</sub>	a <sub>8</sub>	a <sub>9</sub>	b <sub>8</sub>	c	d	D	e <sub>5</sub>	k <sub>7</sub>
04	41	27.5	106	135	60	14.5	11	30	100	20
05	45	35	115	160	70	15	13	40	127	25
06	72	40	145	195	80	27	17	50	145	30
07	78	50	170	240	100	28	21	60	180	35
09	86	60	214	300	120	29	26	72	222	46
11	94	72.5	260	375	145	30	33	92	270	55
14	100	85	320	465	180	30	39	110	328	70

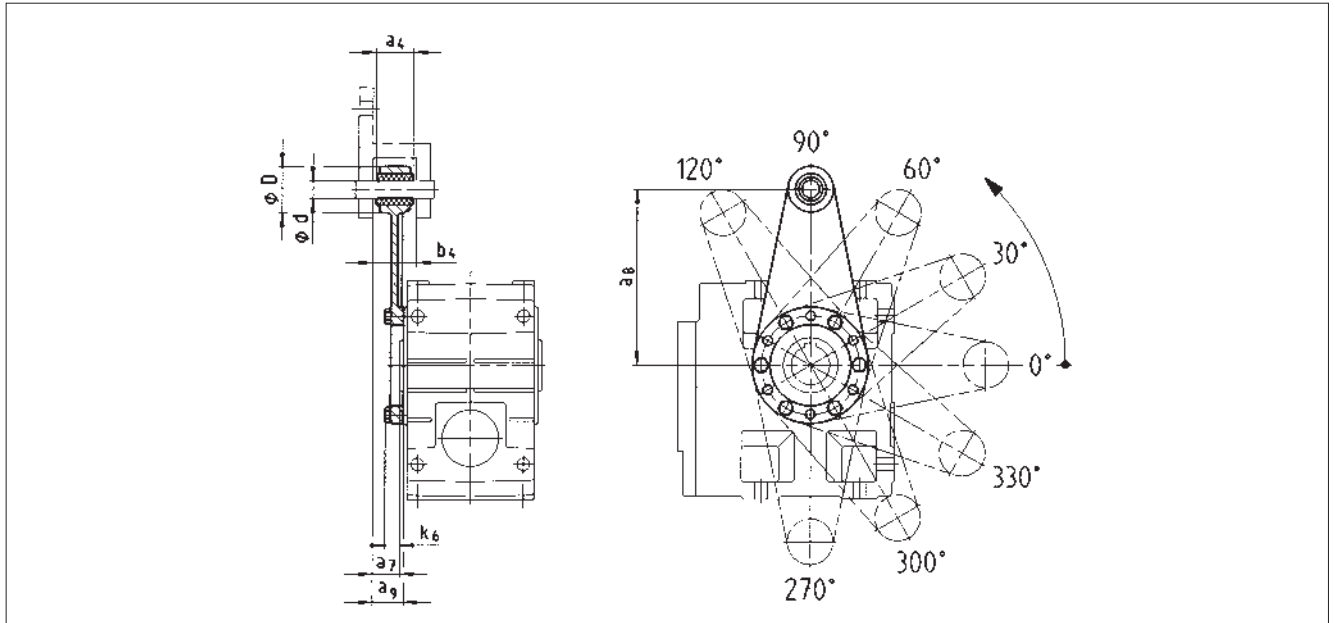
Dimensions in [mm]

# Helical bevel geared motors with motec

## Torque plate – pitch circle

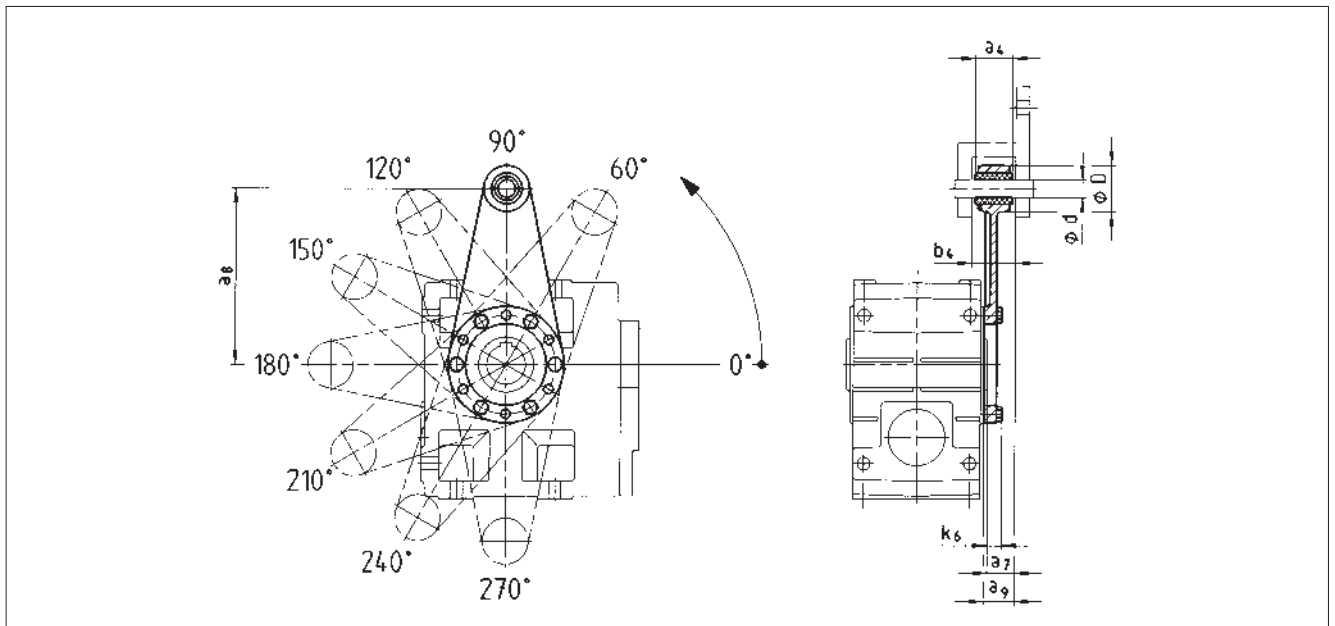


in position 3



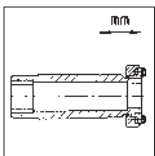
3

in position 5



Gearbox size	Assembly space		Torque arm					
	a <sub>7</sub>	b <sub>4</sub>	a <sub>4</sub>	a <sub>8</sub>	a <sub>9</sub>	d	D	k <sub>6</sub>
04	24	34.5	30	130	26.5	12	35	16
05	23.5	38.5	34	160	27.5	16	45	15
06	28	44.5	40	200	33	20	50	18
07	32.5	50.5	46	250	37.5	25	65	21

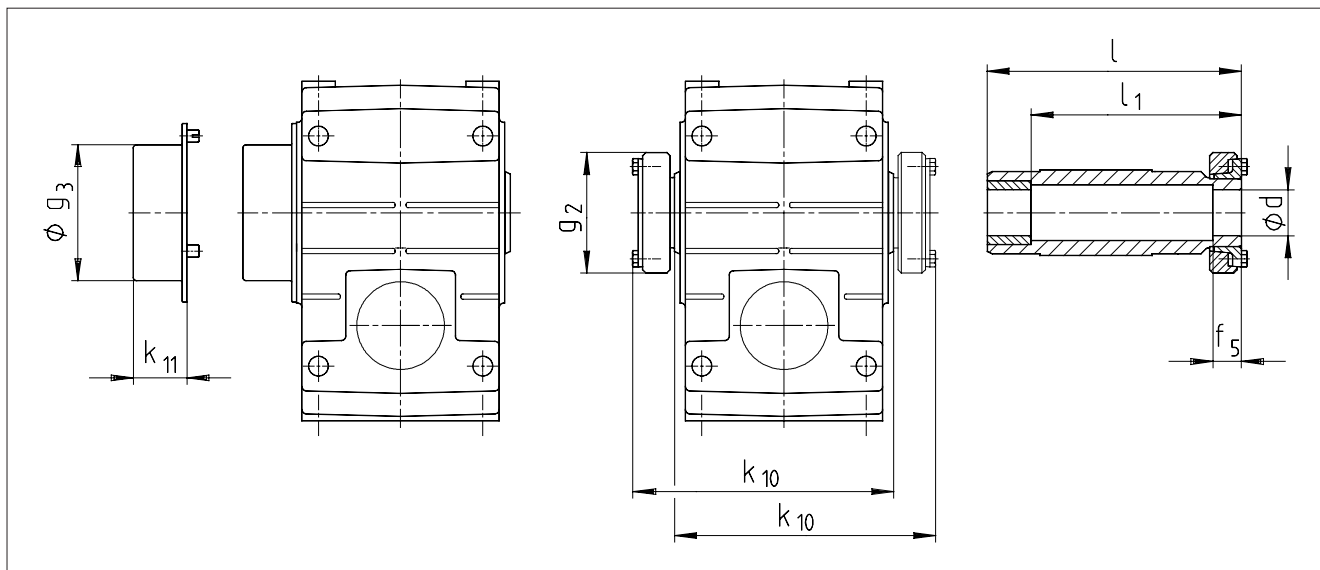
Dimensions in [mm]



## Helical bevel geared motors with motec

### Hollow shaft with shrink disk

3



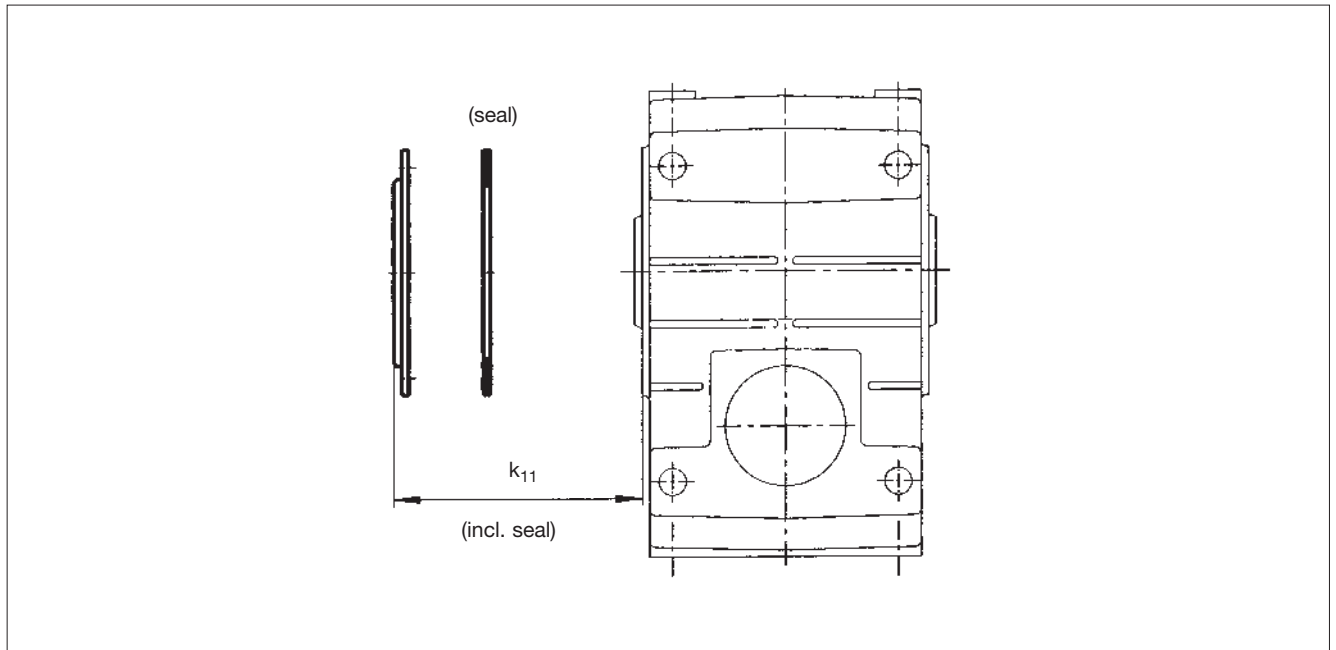
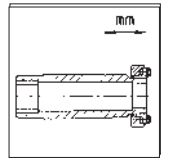
Gearbox size	Machine shaft *		Hollow shaft			Gearbox		Protective cover	
	d	Fit	l	l <sub>1</sub>	f <sub>5</sub>	g <sub>2</sub>	k <sub>10</sub>	g <sub>3</sub>	k <sub>11</sub>
04	25 30	h6	142	122	26	72	146	79	41
05	35	h6	168	148	28	80	171	90	43
06	40	h6	194	164	30	90	197	100	49
07	50	h6	232	192	26	110	234	124	49
09	65	h6	278	228	30	141	281	159	52
11	80	h6	338	238	42	170	344	191	65
14	100	h6	407	307	55	215	415	253	78

\* On shrink disk versions, make sure that the shaft material is strong enough. If you are using conventional steels (e.g. C45, 42CrMo4), the torques listed in the selection tables can be transmitted without restriction. If you are using materials that are significantly weaker, please contact us. The average surface roughness should not exceed 15 µm (lathing is sufficient).

Dimensions in [mm]

# Helical bevel geared motors with motec

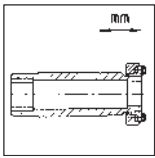
## Jet-proof hollow shaft cover



3

Gearbox size	Protective cover $k_{11}$
04	9
05	10
06	11
07	11
09	54
11	67
14	80

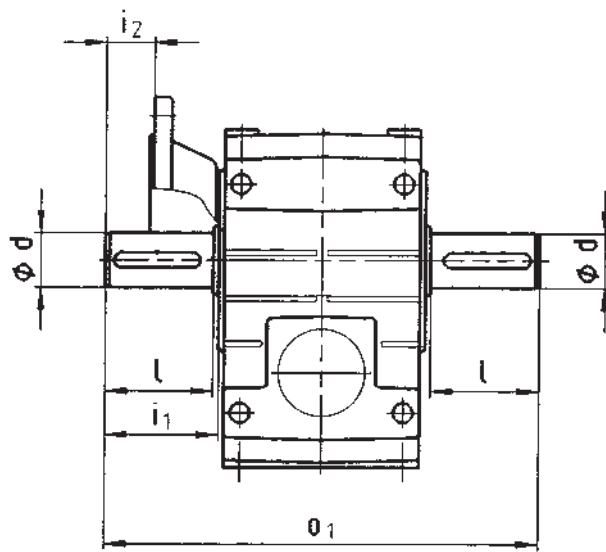
Dimensions in [mm]



## Helical bevel geared motors with motec

### Gearbox with second output shaft end

3

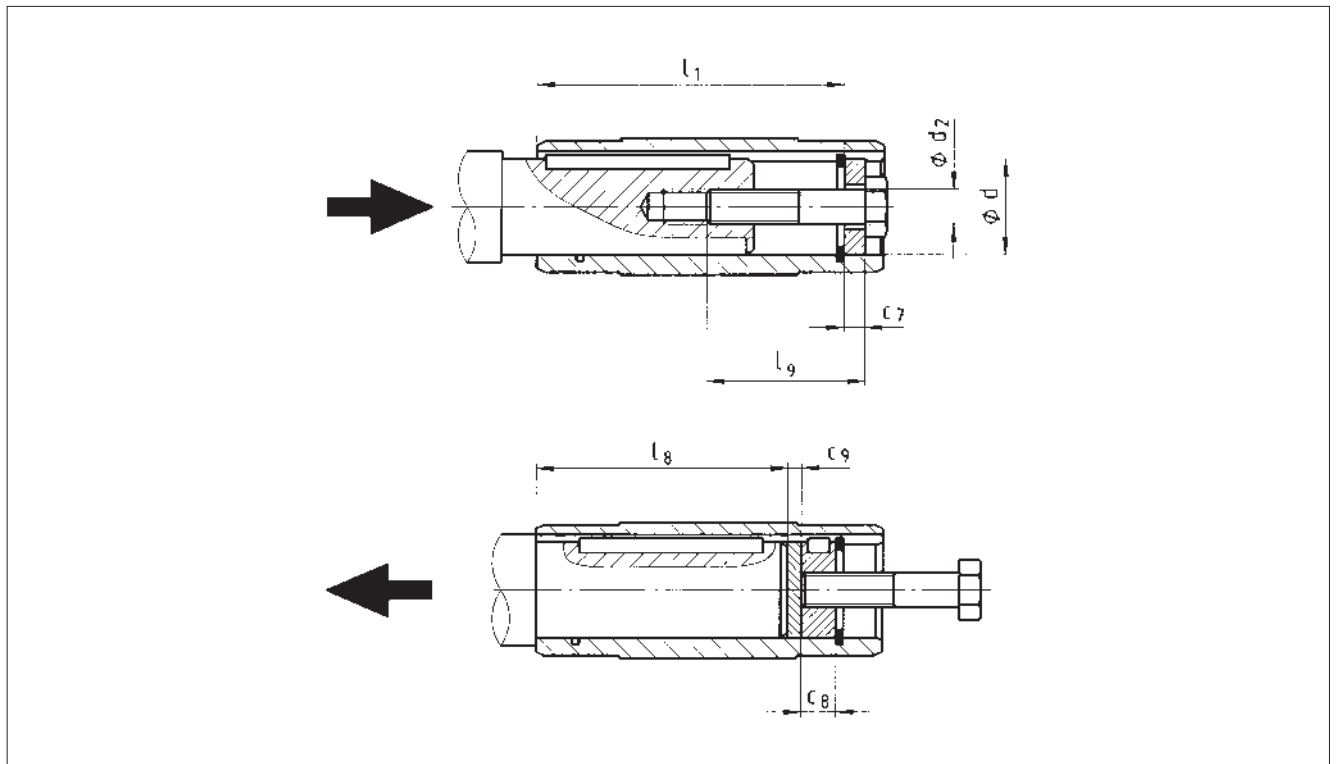
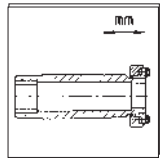


Gearbox size	d	l	$i_1$	$i_2$	$o_1$
04	25	50	52.5	17	215
05	30	60	64	27	260
06	40	80	85	39	320
07	50	100	105	45	400
09	60	120	125	60	480
11	80	160	166	100	610
14	100	200	207	140	750

Dimensions in [mm]

# Helical bevel geared motors with motec

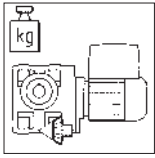
## Mounting kit: Hollow shaft retention – Proposed design for auxiliary tools



3

Gearbox size	Hollow shaft (version H)			Mounting kit: Hollow shaft retention (auxiliary tool assembly)			Auxiliary tool Disassembly		Machine shaft <b>max l<sub>8</sub></b>
	<b>l</b>	<b>l<sub>1</sub></b>	<b>d</b> H7	<b>d<sub>2</sub></b>	<b>l<sub>9</sub></b>	<b>c<sub>7</sub></b>	<b>c<sub>8</sub></b>	<b>c<sub>9</sub></b>	
<b>04</b>	115	100	25 30	M10 M10	40	5 6	10	3	85
<b>05</b>	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
<b>06</b>	160	140	40 45	M16	60	8 9	16	4	118
<b>07</b>	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148
<b>09</b>	240	210	60 70	M20	80	13 14	20	5	182
<b>11</b>	290	250	70 80	M20	80	14 16	20	6	221
<b>14</b>	350	305	100	M24	100	20	24	8	270

Dimensions in [mm]



# Helical bevel geared motors with motec

## Weights

### Helical bevel gearbox GKS □□-3

Geared motors GKS□□-3EH□□ V□□ S□□	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	motec E82MV □□□											
	251	371	551	751	152	152		222	302	402	552	752
04	18	20	21	26	27	34						
05	28	30	31	36	37	44	47	57				
06	42	44	45	50	51	58	61	71	84	90		
07				75	77	84	87	97	109	115	139	
09						132	135	145	157	163	188	
11							235	245	256	262	286	
14									427	433	454	

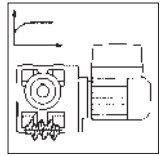
### Helical bevel gearbox GKS □□-4

Geared motors GKS□□-4EH□□ V□□ S□□	Motor frame size											
	063	071			080		090	100-12	100-32	112-22	112-32	132-22
	motec E82MV □□□											
	251	371	551	751	152	152		222	302	402	552	752
05	29	31	32	37	38	45						
06	46	48	49	54	55	62						
07	76	78	79	83	85	92	95	105				
09	129	131	132	137	138	145	148	158	171	177		
11				245	246	253	256	266	278	284	308	
14						438	441	451	463	469	494	

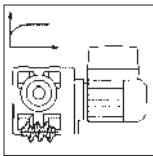
### Excess weights

Gearbox size	Solid shaft V□□	2nd output shaft end V□□	Hollow shaft with shrink disc S□□	Flange □AK	Torque plate Housing foot	Torque plate Pitch circle
04	0.6	0.2	0.6	2.5	1.3	0.9
05	1	0.3	0.8	4	2.2	1.3
06	2.5	0.8	1	7	3.7	2.1
07	5	1.5	1.5	11	6.6	3.7
09	8	2.7	3	16	13	
11	16	6.3	5	24	23	
14	33	12	11	33	44	

Weights in [kg] with oil filling for mounting position A  
All values are approximate







# Helical worm geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.12 kW</b>							<b>GSS □□ - 2E</b>		3-188
	132	8	5.4	10.827	38 - 229	6.6 - 4.3	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	103	10	5.0	13.810	30 - 180	8.4 - 5.5	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	82	12	5.4	17.360	24 - 143	10.3 - 6.7	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	64	15	5.0	22.143	19 - 112	13.0 - 8.7	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	42	22	5.5	34.100	12 - 73	19 - 13	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	36	23	5.4	39.200	11 - 63	21 - 14	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	32	29	4.6	43.917	9.4 - 56	25 - 17	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	29	29	5.0	50.000	8.3 - 50	26 - 18	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	21	41	4.2	68.200	6.1 - 36	35 - 25	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	19	45	3.9	77.000	5.4 - 32	38 - 28	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	16	52	3.3	87.833	4.7 - 28	44 - 32	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	14	57	3.1	99.167	4.2 - 25	48 - 36	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	13	66	2.7	111.318	3.7 - 22	54 - 41	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	11	72	2.5	125.682	3.3 - 20	59 - 46	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	10	82	2.2	139.500	3.0 - 18	66 - 51	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	9.1	89	2.0	157.500	2.6 - 16	72 - 57	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	7.8	106	1.7	183.786	2.2 - 13	84 - 67	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
	6.9	116	1.5	207.500	2.0 - 12	92 - 74	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
								<b>GSS □□ - 3E</b>	
7.4	122	2.9	193.233	2.1 - 13	88 - 69	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
6.4	131	2.7	222.133	1.9 - 11	99 - 79	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
5.7	148	2.4	250.952	1.6 - 10	110 - 89	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
5.0	163	2.2	283.333	1.5 - 9	122 - 100	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
4.6	169	4.1	310.689	1.3 - 8	137 - 110	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
4.1	187	3.7	350.778	1.2 - 7	155 - 124	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
3.7	218	1.6	386.467	1.1 - 6	167 - 134	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
3.3	239	1.5	436.333	0.9 - 6	189 - 150	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
3.3	230	3.0	436.333	0.9 - 6	194 - 153	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
2.9	272	1.3	497.722	0.8 - 5	217 - 168	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
2.9	263	2.7	497.722	0.8 - 5	222 - 172	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
2.5	298	1.2	561.944	0.7 - 4	245 - 187	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
2.5	290	2.4	561.944	0.7 - 4	250 - 193	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
2.3	335	1.1	630.803	0.7 - 4	276 - 207	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
2.3	327	2.2	630.803	0.7 - 4	282 - 214	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
2.0	367	1.0	712.197	0.6 - 3	312 - 231	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
2.0	361	2.0	712.197	0.6 - 3	318 - 240	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
1.8	407	0.9	790.500	0.5 - 3	346 - 252	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
1.8	415	1.7	816.333	0.5 - 3	366 - 270	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
1.6	445	0.8	892.500	0.5 - 3	392 - 280	GSS05 - 3E □□□ 063C12	E82MV 251_2B		
1.6	459	1.6	921.667	0.4 - 3	414 - 301	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
1.4	512	1.4	1023.000	0.4 - 2	461 - 330	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
1.2	567	1.3	1155.000	0.4 - 2	521 - 368	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
1.2	614	1.2	1241.550	0.3 - 2	561 - 391	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
1.0	681	1.1	1401.750	0.3 - 2	635 - 435	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
0.9	797	0.9	1635.693	0.3 - 2	742 - 497	GSS06 - 3E □□□ 063C12	E82MV 251_2B		
0.8	886	0.8	1846.750	0.2 - 1	839 - 555	GSS06 - 3E □□□ 063C12	E82MV 251_2B		

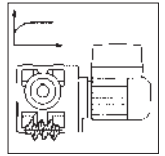
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical worm geared motors with motec

## Selection tables

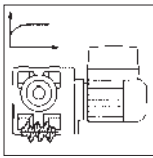


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.18 kW</b>							<b>GSS □□ - 2E</b>		3-188		
	126	12	3.4	10.827	37 - 219	10.6 - 6.9	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	99	16	3.2	13.810	29 - 172	13.5 - 8.9	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	79	19	3.4	17.360	23 - 137	16 - 11	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	62	24	3.2	22.143	18 - 107	21 - 14	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	40	36	3.5	34.100	12 - 70	31 - 21	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	35	37	3.4	39.200	10 - 61	33 - 22	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	31	46	2.9	43.917	9.0 - 54	39 - 28	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	27	47	3.2	50.000	7.9 - 48	41 - 28	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	20	65	2.7	68.200	5.8 - 35	55 - 40	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	18	72	2.5	77.000	5.1 - 31	61 - 44	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	16	83	2.1	87.833	4.5 - 27	69 - 51	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	14	91	2.0	99.167	4.0 - 24	76 - 57	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	12	104	1.7	111.318	3.6 - 21	86 - 65	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	11	114	1.6	125.682	3.1 - 19	93 - 72	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	9.8	129	1.4	139.500	2.8 - 17	104 - 81	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	8.7	141	1.3	157.500	2.5 - 15	113 - 90	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	7.4	168	1.1	183.786	2.2 - 13	132 - 106	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
	6.6	183	1.0	207.500	1.9 - 11	144 - 117	GSS04 - 2E □□□ 063C32	E82MV 251_2B			
								<b>GSS □□ - 3E</b>			3-192
	11	129	2.6	125.476	3.2 - 19	95 - 72	GSS05 - 3E □□□ 063C32	E82MV 251_2B			
	9.6	128	3.2	142.857	2.8 - 17	111 - 83	GSS06 - 3E □□□ 063C32	E82MV 251_2B			
	8.8	140	3.2	155.000	2.6 - 15	119 - 89	GSS06 - 3E □□□ 063C32	E82MV 251_2B			
	7.8	156	3.2	175.000	2.3 - 14	132 - 101	GSS06 - 3E □□□ 063C32	E82MV 251_2B			
	7.1	193	1.8	193.233	2.0 - 12	138 - 110	GSS05 - 3E □□□ 063C32	E82MV 251_2B			
	6.1	208	1.7	222.133	1.8 - 11	156 - 125	GSS05 - 3E □□□ 063C32	E82MV 251_2B			
	5.4	235	1.5	250.952	1.6 - 9	174 - 141	GSS05 - 3E □□□ 063C32	E82MV 251_2B			
	4.8	258	1.4	283.333	1.4 - 8	193 - 158	GSS05 - 3E □□□ 063C32	E82MV 251_2B			
5.1	233	3.0	269.500	1.5 - 9	192 - 153	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
4.4	270	2.6	310.689	1.3 - 8	220 - 175	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
3.9	299	2.4	350.778	1.1 - 7	248 - 196	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
3.5	344	1.1	386.467	1.0 - 6	264 - 210	GSS05 - 3E □□□ 063C32	E82MV 251_2B				
3.5	331	2.1	386.467	1.0 - 6	273 - 215	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
3.1	377	1.0	436.333	0.9 - 5	299 - 235	GSS05 - 3E □□□ 063C32	E82MV 251_2B				
3.1	365	1.9	436.333	0.9 - 5	308 - 242	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
2.7	429	0.8	497.722	0.8 - 5	342 - 263	GSS05 - 3E □□□ 063C32	E82MV 251_2B				
2.7	417	1.7	497.722	0.8 - 5	352 - 272	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
2.4	460	1.6	561.944	0.7 - 4	397 - 304	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
2.2	518	1.4	630.803	0.6 - 4	446 - 338	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
1.9	572	1.3	712.197	0.6 - 3	503 - 377	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
1.7	656	1.1	816.333	0.5 - 3	578 - 424	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
1.5	725	1.0	921.667	0.4 - 3	654 - 472	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
1.3	808	0.9	1023.000	0.4 - 2	727 - 518	GSS06 - 3E □□□ 063C32	E82MV 251_2B				
1.2	895	0.8	1155.000	0.3 - 2	822 - 575	GSS06 - 3E □□□ 063C32	E82MV 251_2B				

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical worm geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.25 kW</b>							<b>GSS □□ - 2E</b>		3-188
	243	9	4.6	5.639	70 - 423	7.7 - 4.8	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	177	12	4.6	7.733	51 - 308	10.5 - 6.7	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	152	13	4.6	9.042	44 - 264	11.9 - 7.6	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	138	15	5.2	9.897	40 - 241	13.2 - 8.6	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	127	17	4.6	10.827	37 - 220	14.6 - 9.5	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	111	18	4.6	12.400	32 - 192	16 - 10	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	99	21	4.8	13.810	29 - 173	18 - 12	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	86	23	5.2	15.869	25 - 150	20 - 13	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	79	26	4.6	17.360	23 - 137	23 - 15	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	67	27	4.6	20.417	19 - 117	24 - 15	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	62	32	4.8	22.143	18 - 108	28 - 19	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	55	34	4.6	24.800	16 - 96	30 - 19	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	51	39	4.3	27.125	15 - 88	34 - 23	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	43	43	4.1	31.738	13 - 75	38 - 25	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	40	50	3.5	34.100	12 - 70	43 - 29	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	35	52	3.4	39.200	10 - 61	46 - 31	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	31	64	2.8	43.917	9.0 - 54	54 - 38	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	27	66	2.7	50.000	7.9 - 48	57 - 39	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	25	73	2.4	54.250	7.3 - 44	63 - 44	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	22	80	2.2	61.250	6.5 - 39	69 - 49	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	20	91	2.0	68.200	5.8 - 35	77 - 55	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	18	100	1.8	77.000	5.2 - 31	85 - 62	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	17	110	3.2	79.722	5.0 - 30	89 - 64	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	16	116	1.5	87.833	4.5 - 27	97 - 72	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	16	122	2.9	87.833	4.5 - 27	99 - 72	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	14	127	1.4	99.167	4.0 - 24	106 - 80	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	14	136	2.6	99.167	4.0 - 24	109 - 80	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	12	145	1.2	111.318	3.6 - 21	119 - 91	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	12	158	2.3	113.667	3.5 - 21	125 - 93	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	11	159	1.1	125.682	3.2 - 19	130 - 100	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	11	174	2.0	128.333	3.1 - 19	137 - 104	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	9.8	180	1.0	139.500	2.8 - 17	145 - 113	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	9.9	190	1.9	137.950	2.9 - 17	148 - 113	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	9.9	182	3.2	137.950	2.9 - 17	150 - 112	GSS06 - 2E □□□ 063C42	E82MV 251_2B	
	8.7	196	0.9	157.500	2.5 - 15	158 - 125	GSS04 - 2E □□□ 063C42	E82MV 251_2B	
	8.8	210	1.7	155.750	2.6 - 15	162 - 126	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	8.8	202	3.2	155.750	2.6 - 15	168 - 126	GSS06 - 2E □□□ 063C42	E82MV 251_2B	
	7.8	240	1.4	176.313	2.3 - 14	184 - 143	GSS05 - 2E □□□ 063C42	E82MV 251_2B	
	7.9	228	2.6	174.375	2.3 - 14	186 - 142	GSS06 - 2E □□□ 063C42	E82MV 251_2B	
6.9	265	1.4	199.063	2.0 - 12	201 - 159	GSS05 - 2E □□□ 063C42	E82MV 251_2B		
7.0	254	2.6	196.875	2.0 - 12	207 - 159	GSS06 - 2E □□□ 063C42	E82MV 251_2B		
						<b>GSS □□ - 3E</b>		3-192	
6.2	289	1.2	222.133	1.8 - 11	218 - 174	GSS05 - 3E □□□ 063C42	E82MV 251_2B		
6.2	269	2.6	220.000	1.8 - 11	225 - 175	GSS06 - 3E □□□ 063C42	E82MV 251_2B		
5.5	326	1.1	250.952	1.6 - 9	242 - 196	GSS05 - 3E □□□ 063C42	E82MV 251_2B		
5.7	294	2.4	238.700	1.7 - 10	242 - 189	GSS06 - 3E □□□ 063C42	E82MV 251_2B		

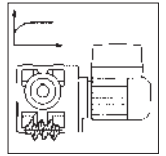
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# Helical worm geared motors with motec

## Selection tables

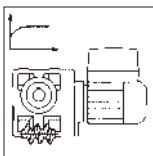


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.25 kW</b>							<b>GSS □□ - 3E</b>		3-192
	4.8	359	1.0	283.333	1.4 - 8	269 - 219	GSS05 - 3E □□□ 063C42	E82MV 251_2B	
	5.1	327	2.2	269.500	1.5 - 9	269 - 213	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	4.5	390	0.9	307.417	1.3 - 8	292 - 236	GSS05 - 3E □□□ 063C42	E82MV 251_2B	
	4.4	378	1.9	310.689	1.3 - 8	308 - 244	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	4.3	402	3.0	321.673	1.2 - 7	333 - 257	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	4.0	429	0.8	347.083	1.1 - 7	330 - 264	GSS05 - 3E □□□ 063C42	E82MV 251_2B	
	3.9	418	1.7	350.778	1.1 - 7	347 - 274	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	3.8	447	2.7	363.179	1.1 - 7	375 - 290	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	3.5	462	1.6	386.467	1.0 - 6	382 - 300	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	3.5	488	2.5	394.245	1.0 - 6	406 - 314	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	3.1	510	1.4	436.333	0.9 - 5	430 - 337	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	3.1	542	2.3	445.116	0.9 - 5	456 - 353	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	2.8	582	1.2	497.722	0.8 - 5	491 - 379	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	2.8	599	2.1	490.403	0.8 - 5	502 - 387	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	2.4	641	1.1	561.944	0.7 - 4	553 - 423	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	2.5	664	1.9	553.681	0.7 - 4	564 - 433	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	2.2	721	1.0	630.803	0.6 - 4	621 - 470	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	2.2	760	1.6	634.639	0.6 - 4	645 - 493	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	1.9	796	0.9	712.197	0.6 - 3	700 - 524	GSS06 - 3E □□□ 063C42	E82MV 251_2B	
	1.9	842	1.5	716.528	0.6 - 3	727 - 551	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	1.6	977	1.3	833.556	0.5 - 3	848 - 631	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	1.5	1081	1.2	941.111	0.4 - 3	959 - 704	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	1.4	1168	1.1	1011.633	0.4 - 2	1032 - 752	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	1.2	1292	1.0	1142.167	0.3 - 2	1167 - 838	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	1.1	1399	0.9	1227.755	0.3 - 2	1256 - 893	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	1.0	1546	0.8	1386.175	0.3 - 2	1420 - 994	GSS07 - 3E □□□ 063C42	E82MV 251_2B	
	<b>0.37 kW</b>							<b>GSS □□ - 2E</b>	
250		12	4.0	5.639	73 - 435	11.1 - 6.0	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
182		17	4.0	7.733	53 - 317	15.1 - 8.3	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
156		19	4.0	9.042	45 - 271	17.2 - 9.4	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
143		22	4.5	9.897	41 - 248	19 - 11	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
130		24	4.0	10.827	38 - 227	21 - 12	GSS05 - 2E □□□ 071C32	E82MV 371_2B	
114		26	4.0	12.400	33 - 198	24 - 13	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
102		31	4.2	13.810	30 - 178	27 - 15	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
89		34	4.5	15.869	26 - 155	30 - 17	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
81		37	4.0	17.360	24 - 141	33 - 19	GSS05 - 2E □□□ 071C32	E82MV 371_2B	
69		39	3.8	20.417	20 - 120	35 - 19	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
64		47	3.7	22.143	18 - 111	41 - 24	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
57		49	3.4	24.800	16 - 99	43 - 24	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
52		57	3.1	27.125	15 - 90	50 - 29	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
44		62	2.8	31.738	13 - 77	55 - 31	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
41		72	2.5	34.100	12 - 72	63 - 37	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
36		75	2.4	39.200	10 - 63	67 - 38	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
32		93	1.9	43.917	9.3 - 56	79 - 48	GSS04 - 2E □□□ 071C32	E82MV 371_2B	
32		95	3.2	43.917	9.3 - 56	80 - 47	GSS05 - 2E □□□ 071C32	E82MV 371_2B	
28		96	1.9	50.000	8.2 - 49	84 - 49	GSS04 - 2E □□□ 071C32	E82MV 371_2B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical worm geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page		
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]					
<b>0.37 kW</b>							<b>GSS □□ - 2E</b>		3-188		
	26	106	1.7	54.250	7.5 - 45	91 - 55	GSS04 - 2E □□□ 071C32	E82MV 371_2B			
	23	116	1.5	61.250	6.7 - 40	101 - 61	GSS04 - 2E □□□ 071C32	E82MV 371_2B			
	21	132	1.4	68.200	6.0 - 36	113 - 69	GSS04 - 2E □□□ 071C32	E82MV 371_2B			
	20	143	2.5	70.611	5.8 - 35	118 - 72	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	18	145	1.2	77.000	5.3 - 32	124 - 77	GSS04 - 2E □□□ 071C32	E82MV 371_2B			
	18	159	2.2	79.722	5.1 - 31	131 - 80	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	16	168	1.1	87.833	4.7 - 28	141 - 89	GSS04 - 2E □□□ 071C32	E82MV 371_2B			
	16	178	2.0	87.833	4.7 - 28	144 - 90	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	14	184	1.0	99.167	4.1 - 25	154 - 99	GSS04 - 2E □□□ 071C32	E82MV 371_2B			
	14	198	1.8	99.167	4.1 - 25	159 - 100	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	13	210	0.9	111.318	3.7 - 22	173 - 113	GSS04 - 2E □□□ 071C32	E82MV 371_2B			
	12	229	1.6	113.667	3.6 - 22	182 - 116	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	12	218	3.2	113.667	3.6 - 22	184 - 115	GSS06 - 2E □□□ 071C32	E82MV 371_2B			
	11	253	1.4	128.333	3.2 - 19	200 - 129	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	11	244	2.9	128.333	3.2 - 19	206 - 130	GSS06 - 2E □□□ 071C32	E82MV 371_2B			
	10	275	1.3	137.950	3.0 - 18	215 - 140	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	10	264	2.7	137.950	3.0 - 18	219 - 139	GSS06 - 2E □□□ 071C32	E82MV 371_2B			
	9.1	303	1.2	155.750	2.6 - 16	236 - 156	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	9.1	294	2.4	155.750	2.6 - 16	245 - 158	GSS06 - 2E □□□ 071C32	E82MV 371_2B			
	8.0	347	1.0	176.313	2.3 - 14	267 - 178	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	8.1	330	2.2	174.375	2.3 - 14	270 - 176	GSS06 - 2E □□□ 071C32	E82MV 371_2B			
	7.1	383	0.9	199.063	2.1 - 12	292 - 198	GSS05 - 2E □□□ 071C32	E82MV 371_2B			
	7.2	368	1.9	196.875	2.1 - 12	302 - 199	GSS06 - 2E □□□ 071C32	E82MV 371_2B			
								<b>GSS □□ - 3E</b>			3-192
	6.4	418	0.9	222.133	1.8 - 11	316 - 217	GSS05 - 3E □□□ 071C32	E82MV 371_2B			
	6.4	391	1.8	220.000	1.9 - 11	328 - 218	GSS06 - 3E □□□ 071C32	E82MV 371_2B			
	6.2	414	3.0	227.778	1.8 - 11	355 - 229	GSS07 - 3E □□□ 071C32	E82MV 371_2B			
	5.9	427	1.7	238.700	1.7 - 10	353 - 237	GSS06 - 3E □□□ 071C32	E82MV 371_2B			
	5.7	453	2.7	247.139	1.7 - 10	383 - 249	GSS07 - 3E □□□ 071C32	E82MV 371_2B			
	5.2	474	1.5	269.500	1.5 - 9	392 - 266	GSS06 - 3E □□□ 071C32	E82MV 371_2B			
	5.1	504	2.4	279.028	1.5 - 9	426 - 281	GSS07 - 3E □□□ 071C32	E82MV 371_2B			
4.5	547	1.3	310.689	1.3 - 8	447 - 305	GSS06 - 3E □□□ 071C32	E82MV 371_2B				
4.4	585	2.1	321.673	1.3 - 8	487 - 322	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
4.0	605	1.2	350.778	1.2 - 7	503 - 341	GSS06 - 3E □□□ 071C32	E82MV 371_2B				
3.9	650	1.9	363.179	1.1 - 7	546 - 362	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
3.7	668	1.1	386.467	1.1 - 6	554 - 374	GSS06 - 3E □□□ 071C32	E82MV 371_2B				
3.6	709	1.7	394.245	1.0 - 6	591 - 393	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
3.2	737	1.0	436.333	0.9 - 6	624 - 420	GSS06 - 3E □□□ 071C32	E82MV 371_2B				
3.2	787	1.6	445.116	0.9 - 6	664 - 442	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
2.8	841	0.9	497.722	0.8 - 5	710 - 472	GSS06 - 3E □□□ 071C32	E82MV 371_2B				
2.9	869	1.4	490.403	0.8 - 5	729 - 483	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
2.6	963	1.3	553.681	0.7 - 4	820 - 540	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
2.2	1101	1.1	634.639	0.6 - 4	936 - 614	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
2.0	1218	1.0	716.528	0.6 - 3	1053 - 688	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
1.7	1413	0.9	833.556	0.5 - 3	1227 - 786	GSS07 - 3E □□□ 071C32	E82MV 371_2B				
1.5	1563	0.8	941.111	0.4 - 3	1387 - 877	GSS07 - 3E □□□ 071C32	E82MV 371_2B				

Thermal limit rating not taken into account (see Note on page 3-3).

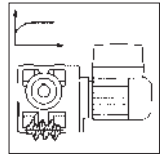
The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical worm geared motors with motec

## Selection tables

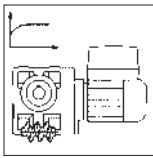


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.55 kW</b>							<b>GSS □□ - 2E</b>		3-188
	249	18	4.5	5.639	72 - 434	16 - 10	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	182	25	4.5	7.733	53 - 316	22 - 14	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	155	29	4.5	9.042	45 - 270	26 - 16	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	142	33	4.2	9.897	41 - 247	29 - 19	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	130	36	4.2	10.827	38 - 226	31 - 20	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	113	39	4.2	12.400	33 - 197	35 - 23	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	102	46	3.4	13.810	30 - 177	40 - 26	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	89	51	3.5	15.869	26 - 154	45 - 29	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	81	55	3.2	17.360	23 - 141	49 - 32	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	69	60	2.5	20.417	20 - 120	53 - 34	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	64	71	2.5	22.143	18 - 110	62 - 41	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	57	74	2.3	24.800	16 - 99	66 - 42	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	52	87	2.1	27.125	15 - 90	76 - 51	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	44	94	1.9	31.738	13 - 77	83 - 55	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	44	95	3.1	31.738	13 - 77	84 - 55	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	41	109	1.6	34.100	12 - 72	94 - 65	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	40	114	3.1	35.306	12 - 69	97 - 66	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	36	114	1.6	39.200	10 - 62	100 - 67	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	36	116	2.7	39.200	10 - 62	102 - 67	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	32	139	1.3	43.917	9.3 - 56	119 - 83	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	32	143	2.5	43.917	9.3 - 56	120 - 83	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	28	144	1.3	50.000	8.1 - 49	126 - 86	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	28	149	2.3	50.000	8.1 - 49	128 - 87	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	26	159	1.1	54.250	7.5 - 45	137 - 96	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	26	165	2.2	54.250	7.5 - 45	140 - 96	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	23	174	1.0	61.250	6.7 - 40	151 - 106	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	23	183	1.9	61.250	6.7 - 40	155 - 107	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	21	198	0.9	68.200	6.0 - 36	169 - 121	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	20	215	1.7	70.611	5.8 - 35	178 - 126	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	18	217	0.8	77.000	5.3 - 32	186 - 134	GSS04 - 2E □□□ 071C42	E82MV 551_4B	
	18	240	1.5	79.722	5.1 - 31	197 - 140	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	18	232	3.0	79.722	5.1 - 31	201 - 140	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	16	268	1.3	87.833	4.6 - 28	217 - 157	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	16	257	2.7	87.833	4.6 - 28	219 - 155	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	14	297	1.2	99.167	4.1 - 25	239 - 175	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	14	287	2.5	99.167	4.1 - 25	246 - 175	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	12	344	1.1	113.667	3.6 - 22	273 - 202	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	12	330	2.2	113.667	3.6 - 22	278 - 201	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	11	379	1.0	128.333	3.2 - 19	300 - 225	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	11	368	1.9	128.333	3.2 - 19	311 - 228	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	10	413	0.9	137.950	3.0 - 18	323 - 245	GSS05 - 2E □□□ 071C42	E82MV 551_4B	
	10	398	1.8	137.950	3.0 - 18	330 - 244	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	9.0	443	1.6	155.750	2.6 - 16	370 - 276	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	8.1	498	1.4	174.375	2.3 - 14	407 - 308	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
	7.1	554	1.3	196.875	2.1 - 12	455 - 348	GSS06 - 2E □□□ 071C42	E82MV 551_4B	
								<b>GSS □□ - 3E</b>	
9.1	437	2.8	155.000	2.6 - 16	378 - 273	GSS07 - 3E □□□ 071C42	E82MV 551_4B		
8.0	485	2.5	175.000	2.3 - 14	423 - 309	GSS07 - 3E □□□ 071C42	E82MV 551_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical worm geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>0.55 kW</b>							<b>GSS □□ - 3E</b>		3-192
	7.0	561	2.2	201.746	2.0 - 12	482 - 356	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	6.4	589	1.2	220.000	1.9 - 11	494 - 381	GSS06 - 3E □□□ 071C42	E82MV 551_4B	
	6.2	625	2.0	227.778	1.8 - 11	537 - 402	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	5.9	642	1.1	238.700	1.7 - 10	530 - 413	GSS06 - 3E □□□ 071C42	E82MV 551_4B	
	5.7	684	1.8	247.139	1.6 - 10	577 - 436	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	5.2	712	1.0	269.500	1.5 - 9	589 - 465	GSS06 - 3E □□□ 071C42	E82MV 551_4B	
	5.0	761	1.6	279.028	1.5 - 9	643 - 492	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	4.5	821	0.9	310.689	1.3 - 8	671 - 531	GSS06 - 3E □□□ 071C42	E82MV 551_4B	
	4.4	881	1.4	321.673	1.3 - 8	733 - 564	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	3.9	978	1.3	363.179	1.1 - 7	822 - 633	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	3.6	1066	1.2	394.245	1.0 - 6	889 - 686	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	3.2	1182	1.1	445.116	0.9 - 5	998 - 771	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
	2.9	1304	1.0	490.403	0.8 - 5	1095 - 842	GSS07 - 3E □□□ 071C42	E82MV 551_4B	
2.5	1445	0.9	553.681	0.7 - 4	1230 - 942	GSS07 - 3E □□□ 071C42	E82MV 551_4B		
<b>0.75 kW</b>							<b>GSS □□ - 2E</b>		3-188
	250	25	4.2	5.639	73 - 435	22 - 14	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	182	35	4.2	7.733	53 - 317	31 - 20	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	156	39	3.8	9.042	45 - 271	35 - 22	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	143	45	3.5	9.897	41 - 248	39 - 25	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	130	49	3.2	10.827	38 - 227	43 - 28	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	114	54	3.1	12.400	33 - 198	48 - 31	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	102	63	2.5	13.810	30 - 178	55 - 36	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	89	69	2.6	15.869	26 - 155	61 - 40	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	81	76	2.3	17.360	24 - 141	67 - 44	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	69	82	1.9	20.417	20 - 120	73 - 46	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	64	97	1.8	22.143	18 - 111	85 - 57	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	57	101	1.7	24.800	16 - 99	90 - 58	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	52	118	1.5	27.125	15 - 90	103 - 70	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	52	120	2.9	27.125	15 - 90	103 - 69	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	44	129	1.4	31.738	13 - 77	114 - 75	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	44	131	2.3	31.738	13 - 77	115 - 75	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	41	148	1.2	34.100	12 - 72	129 - 88	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	40	157	2.3	35.306	12 - 69	134 - 91	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	36	155	1.2	39.200	10 - 63	137 - 91	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	36	159	2.0	39.200	10 - 63	139 - 92	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	32	190	1.0	43.917	9.3 - 56	163 - 114	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	32	196	1.8	43.917	9.3 - 56	164 - 114	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	32	191	2.9	43.917	9.3 - 56	166 - 113	GSS06 - 2E □□□ 080C32	E82MV 751_4B	
	28	196	0.9	50.000	8.2 - 49	172 - 117	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	28	204	1.7	50.000	8.2 - 49	175 - 119	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	26	217	0.8	54.250	7.5 - 45	187 - 130	GSS04 - 2E □□□ 080C32	E82MV 751_4B	
	26	226	1.6	54.250	7.5 - 45	191 - 131	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	23	251	1.4	61.250	6.7 - 40	211 - 146	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	20	294	1.2	70.611	5.8 - 35	244 - 171	GSS05 - 2E □□□ 080C32	E82MV 751_4B	
	20	285	2.5	70.611	5.8 - 35	246 - 170	GSS06 - 2E □□□ 080C32	E82MV 751_4B	
18	328	1.1	79.722	5.1 - 31	269 - 191	GSS05 - 2E □□□ 080C32	E82MV 751_4B		
18	318	2.2	79.722	5.1 - 31	277 - 192	GSS06 - 2E □□□ 080C32	E82MV 751_4B		

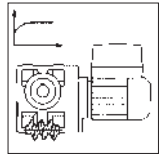
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical worm geared motors with motec

## Selection tables



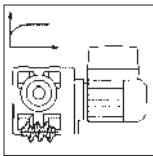
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page	
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]				
<b>0.75 kW</b>							<b>GSS □□ - 2E</b>		3-188	
	16	365	1.0	87.833	4.7 - 28	296 - 214	GSS05 - 2E □□□ 080C32	E82MV 751_4B		
	16	352	2.0	87.833	4.7 - 28	301 - 212	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	14	405	0.9	99.167	4.1 - 25	326 - 238	GSS05 - 2E □□□ 080C32	E82MV 751_4B		
	14	393	1.8	99.167	4.1 - 25	338 - 240	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	12	452	1.6	113.667	3.6 - 22	381 - 275	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	12	462	2.7	113.667	3.6 - 22	396 - 278	GSS07 - 2E □□□ 080C32	E82MV 751_4B		
	11	503	1.4	128.333	3.2 - 19	426 - 311	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	11	516	2.4	128.333	3.2 - 19	444 - 314	GSS07 - 2E □□□ 080C32	E82MV 751_4B		
	10	544	1.3	137.950	3.0 - 18	452 - 334	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	10	560	2.2	137.950	3.0 - 18	473 - 339	GSS07 - 2E □□□ 080C32	E82MV 751_4B		
	9.1	605	1.2	155.750	2.6 - 16	505 - 377	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	9.1	623	2.0	155.750	2.6 - 16	530 - 383	GSS07 - 2E □□□ 080C32	E82MV 751_4B		
	8.1	679	1.1	174.375	2.3 - 14	556 - 421	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	8.1	701	1.8	174.375	2.3 - 14	586 - 428	GSS07 - 2E □□□ 080C32	E82MV 751_4B		
	7.2	755	1.0	196.875	2.1 - 12	622 - 475	GSS06 - 2E □□□ 080C32	E82MV 751_4B		
	7.2	782	1.6	196.875	2.1 - 12	656 - 484	GSS07 - 2E □□□ 080C32	E82MV 751_4B		
							<b>GSS □□ - 3E</b>			3-192
	6.4	803	0.9	220.000	1.9 - 11	674 - 520	GSS06 - 3E □□□ 080C32	E82MV 751_4B		
	6.2	855	1.5	227.778	1.8 - 11	735 - 550	GSS07 - 3E □□□ 080C32	E82MV 751_4B		
	5.9	876	0.8	238.700	1.7 - 10	724 - 563	GSS06 - 3E □□□ 080C32	E82MV 751_4B		
	5.7	935	1.3	247.139	1.7 - 10	790 - 596	GSS07 - 3E □□□ 080C32	E82MV 751_4B		
	5.1	1039	1.2	279.028	1.5 - 9	880 - 672	GSS07 - 3E □□□ 080C32	E82MV 751_4B		
	4.4	1203	1.0	321.673	1.3 - 8	1002 - 769	GSS07 - 3E □□□ 080C32	E82MV 751_4B		
3.9	1335	0.9	363.179	1.1 - 7	1123 - 864	GSS07 - 3E □□□ 080C32	E82MV 751_4B			
3.6	1455	0.9	394.245	1.0 - 6	1213 - 935	GSS07 - 3E □□□ 080C32	E82MV 751_4B			
<b>1.1 kW</b>							<b>GSS □□ - 2E</b>		3-188	
	247	37	3.9	5.639	71 - 429	32 - 21	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	180	52	3.0	7.733	52 - 313	44 - 30	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	154	59	2.6	9.042	45 - 267	50 - 34	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	140	67	2.4	9.897	41 - 244	56 - 38	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	128	74	2.2	10.827	37 - 223	61 - 42	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	112	82	2.1	12.400	33 - 195	68 - 47	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	101	95	1.7	13.810	29 - 175	78 - 54	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	101	94	2.9	13.810	29 - 175	77 - 54	GSS05 - 2E □□□ 080C42	E82MV 152_4B		
	88	104	1.7	15.869	25 - 152	87 - 60	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	88	104	2.8	15.869	25 - 152	87 - 60	GSS05 - 2E □□□ 080C42	E82MV 152_4B		
	80	114	1.6	17.360	23 - 139	95 - 66	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	80	114	2.7	17.360	23 - 139	95 - 66	GSS05 - 2E □□□ 080C42	E82MV 152_4B		
	68	123	1.2	20.417	20 - 118	103 - 69	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	68	123	2.0	20.417	20 - 118	105 - 70	GSS05 - 2E □□□ 080C42	E82MV 152_4B		
	63	145	1.2	22.143	18 - 109	120 - 85	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	63	147	2.3	22.143	18 - 109	121 - 85	GSS05 - 2E □□□ 080C42	E82MV 152_4B		
	63	145	4.5	22.143	18 - 109	122 - 84	GSS07 - 2E □□□ 080C42	E82MV 152_4B		
	56	152	1.1	24.800	16 - 98	127 - 87	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	56	153	1.8	24.800	16 - 98	128 - 87	GSS05 - 2E □□□ 080C42	E82MV 152_4B		
	51	177	1.0	27.125	15 - 89	146 - 105	GSS04 - 2E □□□ 080C42	E82MV 152_4B		
	51	180	2.0	27.125	15 - 89	147 - 104	GSS05 - 2E □□□ 080C42	E82MV 152_4B		

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Helical worm geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.1 kW</b>							<b>GSS □□ - 2E</b>		3-188
	44	193	0.9	31.738	13 - 76	160 - 112	GSS04 - 2E □□□ 080C42	E82MV 152_4B	
	44	196	1.6	31.738	13 - 76	163 - 113	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	44	194	3.1	31.738	13 - 76	162 - 112	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	39	235	1.5	35.306	11 - 69	189 - 136	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	39	229	3.1	35.306	11 - 69	189 - 135	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	36	239	1.4	39.200	10 - 62	197 - 139	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	36	238	2.6	39.200	10 - 62	200 - 139	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	32	293	1.2	43.917	9.2 - 55	232 - 170	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	32	285	2.5	43.917	9.2 - 55	234 - 169	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	28	306	1.2	50.000	8.1 - 48	248 - 178	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	28	303	2.3	50.000	8.1 - 48	253 - 179	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	26	338	1.1	54.250	7.4 - 45	270 - 196	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	26	331	2.2	54.250	7.4 - 45	272 - 195	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	23	375	1.0	61.250	6.6 - 39	298 - 219	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	23	370	1.9	61.250	6.6 - 39	306 - 221	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	20	440	0.8	70.611	5.7 - 34	343 - 256	GSS05 - 2E □□□ 080C42	E82MV 152_4B	
	20	428	1.7	70.611	5.7 - 34	349 - 255	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	20	434	2.8	70.611	5.7 - 34	359 - 257	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	17	478	1.5	79.722	5.1 - 30	392 - 289	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	17	487	2.5	79.722	5.1 - 30	403 - 291	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	16	528	1.4	87.833	4.6 - 28	426 - 318	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	16	531	2.3	86.542	4.7 - 28	435 - 317	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	14	589	1.2	99.167	4.1 - 24	477 - 360	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	14	594	2.1	97.708	4.1 - 25	489 - 358	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	12	676	1.1	113.667	3.5 - 21	537 - 412	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	12	694	1.8	113.667	3.5 - 21	561 - 418	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	11	753	1.0	128.333	3.1 - 19	601 - 465	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	11	774	1.6	128.333	3.1 - 19	629 - 472	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	10	814	0.9	137.950	2.9 - 18	637 - 499	GSS06 - 2E □□□ 080C42	E82MV 152_4B	
	10	840	1.5	137.950	2.9 - 18	669 - 508	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	8.9	934	1.3	155.750	2.6 - 16	749 - 573	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
	8.0	1051	1.2	174.375	2.3 - 14	828 - 641	GSS07 - 2E □□□ 080C42	E82MV 152_4B	
7.1	1171	1.1	196.875	2.0 - 12	926 - 723	GSS07 - 2E □□□ 080C42	E82MV 152_4B		
						<b>GSS □□ - 3E</b>		3-192	
6.1	1280	1.0	227.778	1.8 - 11	1037 - 822	GSS07 - 3E □□□ 080C42	E82MV 152_4B		
5.6	1398	0.9	247.139	1.6 - 10	1114 - 891	GSS07 - 3E □□□ 080C42	E82MV 152_4B		
5.0	1554	0.8	279.028	1.4 - 9	1240 - 1003	GSS07 - 3E □□□ 080C42	E82MV 152_4B		
<b>1.5 kW</b>							<b>GSS □□ - 2E</b>		3-188
	247	52	2.8	5.639	71 - 429	46 - 29	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	180	72	2.2	7.733	52 - 313	63 - 41	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	154	82	1.9	9.042	45 - 267	73 - 46	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	154	81	3.0	9.042	45 - 267	72 - 46	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	140	92	1.7	9.897	41 - 244	81 - 53	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	140	91	2.9	9.897	41 - 244	81 - 52	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	128	101	1.6	10.827	37 - 223	89 - 58	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	128	100	2.7	10.827	37 - 223	88 - 57	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	112	112	1.5	12.400	33 - 195	99 - 64	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	112	112	2.5	12.400	33 - 195	99 - 64	GSS05 - 2E □□□ 090C32	E82MV 152_4B	

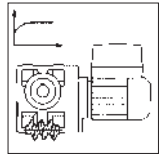
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical worm geared motors with motec

## Selection tables

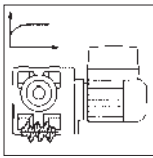


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>1.5 kW</b>							<b>GSS □□ - 2E</b>		3-188
	101	130	1.3	13.810	29 - 175	113 - 74	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	101	129	2.1	13.810	29 - 175	113 - 74	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	88	143	1.3	15.869	25 - 152	126 - 83	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	88	143	2.1	15.869	25 - 152	127 - 83	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	80	156	1.2	17.360	23 - 139	138 - 91	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	80	157	2.0	17.360	23 - 139	139 - 91	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	68	168	0.9	20.417	20 - 118	150 - 95	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	68	168	1.5	20.417	20 - 118	152 - 97	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	63	198	0.9	22.143	18 - 109	174 - 116	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	63	201	1.7	22.143	18 - 109	176 - 116	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	63	198	4.1	22.143	18 - 109	176 - 115	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	56	208	0.8	24.800	16 - 98	184 - 119	GSS04 - 2E □□□ 090C32	E82MV 152_4B	
	56	210	1.3	24.800	16 - 98	187 - 120	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	51	247	1.5	27.125	15 - 89	213 - 143	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	51	242	2.9	27.125	15 - 89	213 - 141	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	44	269	1.1	31.738	13 - 76	236 - 155	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	44	267	2.3	31.738	13 - 76	236 - 154	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	39	322	1.1	35.306	11 - 69	275 - 187	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	39	316	2.3	35.306	11 - 69	276 - 185	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	36	327	1.0	39.200	10 - 62	286 - 190	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	36	327	1.9	39.200	10 - 62	291 - 192	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	32	401	0.9	43.917	9.2 - 55	337 - 233	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	32	392	1.8	43.917	9.2 - 55	340 - 231	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	32	388	2.8	43.271	9.3 - 56	341 - 228	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	28	418	0.8	50.000	8.1 - 48	359 - 244	GSS05 - 2E □□□ 090C32	E82MV 152_4B	
	28	416	1.7	50.000	8.1 - 48	368 - 246	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	28	420	2.9	50.000	8.1 - 48	374 - 247	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	26	454	1.6	54.250	7.4 - 45	396 - 267	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	23	507	1.4	61.250	6.6 - 39	445 - 303	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	20	587	1.2	70.611	5.7 - 34	507 - 350	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	20	597	2.1	70.611	5.7 - 34	523 - 353	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	17	654	1.1	79.722	5.1 - 30	569 - 395	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	17	669	1.9	79.722	5.1 - 30	588 - 400	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	16	723	1.0	87.833	4.6 - 28	618 - 436	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	16	729	1.7	86.542	4.7 - 28	633 - 435	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	14	806	0.9	99.167	4.1 - 24	692 - 493	GSS06 - 2E □□□ 090C32	E82MV 152_4B	
	14	816	1.5	97.708	4.1 - 25	711 - 492	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	12	952	1.3	113.667	3.5 - 21	816 - 573	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
	11	1062	1.2	128.333	3.1 - 19	914 - 647	GSS07 - 2E □□□ 090C32	E82MV 152_4B	
10	1151	1.1	137.950	2.9 - 18	972 - 696	GSS07 - 2E □□□ 090C32	E82MV 152_4B		
8.9	1279	1.0	155.750	2.6 - 16	1088 - 785	GSS07 - 2E □□□ 090C32	E82MV 152_4B		
8.0	1438	0.9	174.375	2.3 - 14	1201 - 878	GSS07 - 2E □□□ 090C32	E82MV 152_4B		
<b>2.2 kW</b>							<b>GSS □□ - 2E</b>		3-188
	248	76	2.9	5.639	72 - 432	68 - 43	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	181	104	2.5	7.733	53 - 315	93 - 60	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	155	119	2.1	9.042	45 - 269	106 - 68	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	142	135	2.0	9.897	41 - 246	119 - 77	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	129	148	1.8	10.827	38 - 225	130 - 84	GSS05 - 2E □□□ 100-12	E82MV 222_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical worm geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>2.2 kW</b>	113	164	1.7	12.400	33 - 196	146 - 94	GSS05 - 2E □□□ 100-12	E82MV 222_4B	3-188
	113	163	3.1	12.400	33 - 196	145 - 93	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	101	189	1.5	13.810	29 - 176	166 - 108	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	98	194	2.7	14.286	28 - 171	171 - 111	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	88	210	1.4	15.869	26 - 154	186 - 121	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	88	208	2.8	15.869	26 - 154	185 - 120	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	81	230	1.4	17.360	23 - 140	203 - 133	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	81	228	2.7	17.360	23 - 140	202 - 132	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	69	247	1.0	20.417	20 - 119	223 - 142	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	69	251	1.9	20.417	20 - 119	225 - 143	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	63	295	1.1	22.143	18 - 110	257 - 170	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	63	291	2.3	22.143	18 - 110	257 - 169	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	63	288	4.1	22.143	18 - 110	257 - 168	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	57	307	0.9	24.800	16 - 98	273 - 176	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	57	307	1.8	24.800	16 - 98	273 - 176	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	52	361	1.0	27.125	15 - 90	313 - 209	GSS05 - 2E □□□ 100-12	E82MV 222_4B	
	52	356	2.0	27.125	15 - 90	314 - 208	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	44	392	1.5	31.738	13 - 77	347 - 227	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	45	387	2.7	31.000	13 - 79	344 - 223	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	40	463	1.5	35.306	11 - 69	405 - 272	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	40	464	2.7	35.306	11 - 69	410 - 272	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	36	479	1.3	39.200	10 - 62	427 - 281	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	36	485	2.4	39.200	10 - 62	434 - 283	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	32	574	1.3	43.917	9.2 - 55	499 - 339	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	32	569	2.2	43.271	9.4 - 56	501 - 335	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	28	610	1.1	50.000	8.1 - 49	539 - 360	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	28	619	2.0	50.000	8.1 - 49	551 - 364	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	26	665	1.1	54.250	7.5 - 45	580 - 392	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	26	676	1.8	54.250	7.5 - 45	596 - 396	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	23	743	1.0	61.250	6.6 - 40	652 - 443	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
	23	758	1.6	61.250	6.6 - 40	671 - 448	GSS07 - 2E □□□ 100-12	E82MV 222_4B	
	20	858	0.8	70.611	5.7 - 34	742 - 511	GSS06 - 2E □□□ 100-12	E82MV 222_4B	
20	876	1.4	70.611	5.7 - 34	768 - 518	GSS07 - 2E □□□ 100-12	E82MV 222_4B		
18	981	1.3	79.722	5.1 - 31	863 - 586	GSS07 - 2E □□□ 100-12	E82MV 222_4B		
16	1069	1.2	86.542	4.7 - 28	929 - 637	GSS07 - 2E □□□ 100-12	E82MV 222_4B		
14	1195	1.1	97.708	4.2 - 25	1042 - 720	GSS07 - 2E □□□ 100-12	E82MV 222_4B		
12	1393	0.9	113.667	3.6 - 21	1195 - 838	GSS07 - 2E □□□ 100-12	E82MV 222_4B		
11	1553	0.8	128.333	3.2 - 19	1338 - 946	GSS07 - 2E □□□ 100-12	E82MV 222_4B		
<b>3 kW</b>	248	104	2.1	5.639	72 - 432	93 - 59	GSS05 - 2E □□□ 100-32	E82MV 302_4B	3-188
	181	143	1.9	7.733	53 - 315	127 - 82	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	175	147	3.3	8.000	51 - 305	131 - 84	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	155	163	1.5	9.042	45 - 269	146 - 93	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	155	163	2.5	9.042	45 - 269	145 - 93	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	142	185	1.5	9.897	41 - 246	163 - 106	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	137	190	2.7	10.238	40 - 238	168 - 108	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	129	202	1.3	10.827	38 - 225	178 - 116	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	125	208	2.5	11.200	36 - 218	184 - 119	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	113	225	1.2	12.400	33 - 196	200 - 129	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	113	224	2.3	12.400	33 - 196	199 - 128	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	101	259	1.1	13.810	29 - 176	227 - 148	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	98	267	2.0	14.286	28 - 171	235 - 153	GSS06 - 2E □□□ 100-32	E82MV 302_4B	

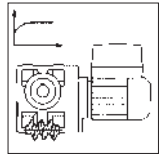
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical worm geared motors with motec

## Selection tables

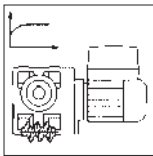


P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>3 kW</b>							<b>GSS □□ - 2E</b>		3-188
	88	288	1.1	15.869	26 - 154	255 - 166	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	88	287	2.1	15.869	26 - 154	254 - 165	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	81	315	1.0	17.360	23 - 140	278 - 182	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	81	314	2.0	17.360	23 - 140	278 - 181	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	69	345	1.4	20.417	20 - 119	309 - 197	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	63	403	0.8	22.143	18 - 110	352 - 233	GSS05 - 2E □□□ 100-32	E82MV 302_4B	
	63	399	1.7	22.143	18 - 110	353 - 232	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	63	398	3.0	22.143	18 - 110	355 - 231	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	57	421	1.3	24.800	16 - 98	374 - 241	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	52	489	1.5	27.125	15 - 90	430 - 285	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	52	489	2.5	27.125	15 - 90	434 - 285	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	44	537	1.1	31.738	13 - 77	476 - 311	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	45	532	2.0	31.000	13 - 79	473 - 306	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	40	635	1.1	35.306	11 - 69	555 - 372	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	40	637	1.9	35.306	11 - 69	564 - 374	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	36	657	1.0	39.200	10 - 62	585 - 385	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	36	667	1.8	39.200	10 - 62	596 - 389	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	32	786	0.9	43.917	9.2 - 55	683 - 464	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	32	780	1.6	43.271	9.4 - 56	687 - 460	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	28	834	0.8	50.000	8.1 - 49	738 - 493	GSS06 - 2E □□□ 100-32	E82MV 302_4B	
	28	849	1.5	50.000	8.1 - 49	756 - 499	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	26	928	1.3	54.250	7.5 - 45	817 - 543	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	23	1039	1.2	61.250	6.6 - 40	919 - 614	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	20	1200	1.0	70.611	5.7 - 34	1052 - 710	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	18	1344	0.9	79.722	5.1 - 31	1181 - 802	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	16	1463	0.9	86.542	4.7 - 28	1271 - 872	GSS07 - 2E □□□ 100-32	E82MV 302_4B	
	<b>4 kW</b>							<b>GSS □□ - 2E</b>	
245		141	2.5	5.833	71 - 427	126 - 80	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
179		193	2.5	8.000	52 - 311	172 - 111	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
158		215	1.9	9.042	46 - 275	191 - 122	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
157		215	2.9	9.086	46 - 274	192 - 123	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
140		249	2.1	10.238	41 - 243	221 - 143	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
128		273	1.9	11.200	37 - 222	241 - 156	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
128		272	3.1	11.200	37 - 222	241 - 156	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
115		294	1.8	12.400	33 - 201	261 - 168	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
114		298	2.6	12.594	33 - 198	267 - 172	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
100		350	1.5	14.286	29 - 174	308 - 201	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
100		349	2.5	14.286	29 - 174	309 - 200	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
90		376	1.6	15.869	26 - 157	334 - 217	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
92		368	2.5	15.500	27 - 161	328 - 212	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
82		412	1.5	17.360	24 - 143	365 - 237	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
82		411	2.4	17.360	24 - 143	367 - 238	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
70		452	1.1	20.417	20 - 122	405 - 257	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
70		460	1.7	20.517	20 - 121	413 - 263	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
65		523	1.3	22.143	19 - 112	464 - 304	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
65		523	2.3	22.143	19 - 112	467 - 304	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
58		552	1.0	24.800	17 - 100	490 - 315	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
57		568	1.6	25.188	16 - 99	507 - 325	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
53		640	1.1	27.125	15 - 92	564 - 373	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
53		642	1.9	27.125	15 - 92	571 - 374	GSS07 - 2E □□□ 112-22	E82MV 402_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).



# Helical worm geared motors with motec

## Selection tables

P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>4 kW</b>							<b>GSS □□ - 2E</b>		3-188
	45	703	0.9	31.738	13 - 78	623 - 406	GSS06 - 2E □□□ 112-22	E82MV 402_4B	
	46	699	1.5	31.000	13 - 80	621 - 402	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
	41	836	1.5	35.306	12 - 70	741 - 490	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
	37	875	1.3	39.200	11 - 63	783 - 510	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
	33	1023	1.2	43.271	9.6 - 58	902 - 602	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
	29	1113	1.1	50.000	8.3 - 50	992 - 654	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
	26	1215	1.0	54.250	7.6 - 46	1072 - 711	GSS07 - 2E □□□ 112-22	E82MV 402_4B	
23	1360	0.9	61.250	6.8 - 41	1205 - 804	GSS07 - 2E □□□ 112-22	E82MV 402_4B		
<b>5.5 kW</b>							<b>GSS □□ - 2E</b>		3-188
	247	193	1.8	5.833	72 - 430	173 - 110	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	246	194	2.7	5.862	71 - 427	174 - 111	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	180	266	1.8	8.000	52 - 313	237 - 152	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	177	271	2.5	8.125	51 - 308	241 - 155	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	159	295	1.4	9.042	46 - 277	262 - 167	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	159	296	2.1	9.086	46 - 276	265 - 169	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	141	342	1.5	10.238	41 - 245	303 - 196	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	144	334	2.4	10.000	42 - 251	297 - 191	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	129	375	1.4	11.200	37 - 224	332 - 215	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	129	374	2.3	11.200	37 - 224	332 - 215	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	116	404	1.3	12.400	34 - 202	359 - 231	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	114	411	1.9	12.594	33 - 199	367 - 236	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	101	480	1.1	14.286	29 - 175	422 - 275	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	101	480	1.8	14.286	29 - 175	424 - 276	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	91	516	1.2	15.869	26 - 158	458 - 297	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	93	506	1.8	15.500	27 - 162	451 - 291	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	83	565	1.1	17.360	24 - 144	500 - 325	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	83	566	1.8	17.360	24 - 144	505 - 327	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	70	631	1.2	20.517	20 - 122	567 - 361	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	65	717	0.9	22.143	19 - 113	636 - 417	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	65	720	1.7	22.143	19 - 113	642 - 418	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	57	780	1.2	25.188	17 - 99	695 - 446	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	53	877	0.8	27.125	15 - 92	773 - 512	GSS06 - 2E □□□ 112-32	E82MV 552_4B	
	53	882	1.4	27.125	15 - 92	784 - 514	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	47	958	1.1	31.000	13 - 81	852 - 551	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	41	1147	1.1	35.306	12 - 71	1016 - 672	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
	37	1200	1.0	39.200	11 - 64	1073 - 699	GSS07 - 2E □□□ 112-32	E82MV 552_4B	
33	1402	0.9	43.271	9.7 - 58	1236 - 825	GSS07 - 2E □□□ 112-32	E82MV 552_4B		
29	1525	0.8	50.000	8.4 - 50	1360 - 896	GSS07 - 2E □□□ 112-32	E82MV 552_4B		
<b>7.5 kW</b>							<b>GSS □□ - 2E</b>		3-188
	249	264	2.0	5.862	72 - 433	235 - 150	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	180	367	1.9	8.125	52 - 313	327 - 210	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	161	401	1.6	9.086	47 - 280	358 - 229	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	146	452	1.8	10.000	42 - 254	402 - 259	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	130	507	1.7	11.200	38 - 227	450 - 290	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	116	555	1.4	12.594	34 - 202	496 - 319	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	102	647	1.6	14.286	30 - 178	573 - 372	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	94	683	1.4	15.500	27 - 164	610 - 394	GSS07 - 2E □□□ 132-22	E82MV 752_4B	

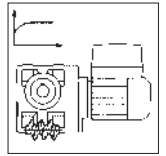
Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).

# Helical worm geared motors with motec

## Selection tables



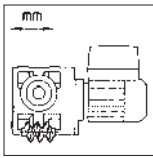
P <sub>1</sub>	50 Hz			i	Adjustment range 1 : 6		Helical worm geared motor	motec	Dim. Page
	n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	c		n <sub>2</sub> [min <sup>-1</sup> ]	M <sub>2</sub> [Nm]			
<b>7.5 kW</b>							<b>GSS □□ - 2E</b>		3-188
	84	765	1.3	17.360	24 - 146	682 - 442	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	71	851	0.9	20.517	21 - 124	766 - 486	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	66	972	1.2	22.143	19 - 115	868 - 565	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	58	1052	0.9	25.188	17 - 101	938 - 602	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	54	1191	1.1	27.125	16 - 94	1059 - 694	GSS07 - 2E □□□ 132-22	E82MV 752_4B	
	47	1293	0.8	31.000	14 - 82	1151 - 744	GSS07 - 2E □□□ 132-22	E82MV 752_4B	

Thermal limit rating not taken into account (see Note on page 3-3).

The specified torques in adjustment range 1:6 already take into account the required torque reduction of the motor (see page 3-29).

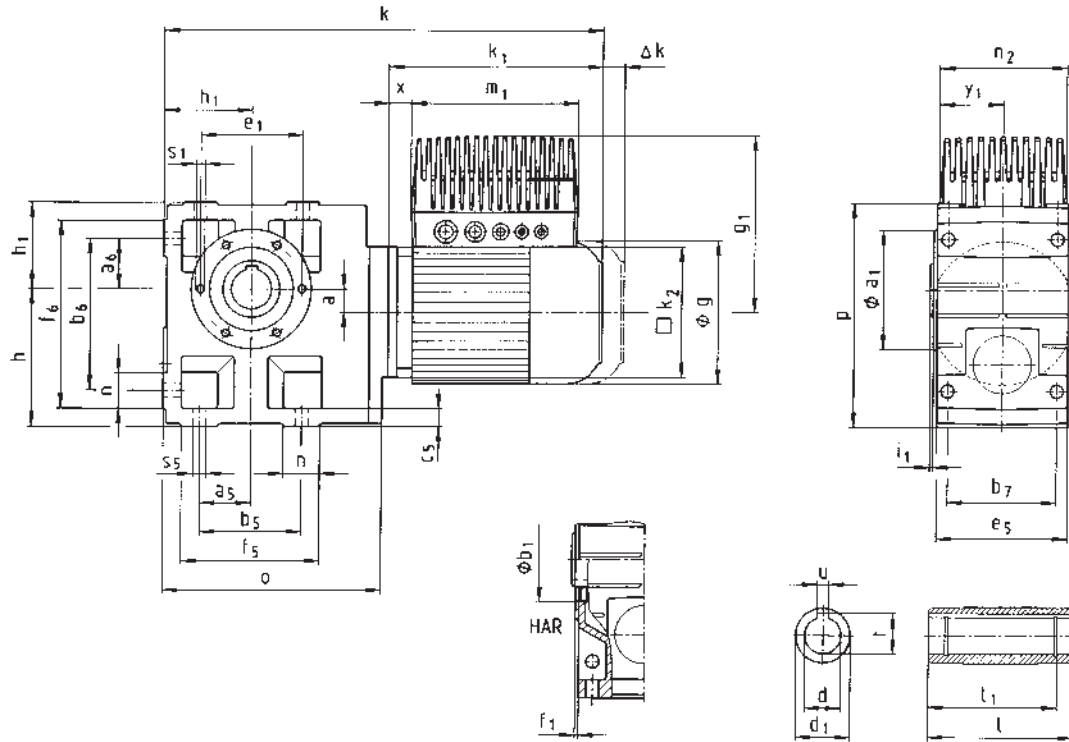
In the power range between 3 and 7.5 kW on self-ventilated motors, you may need to take into account additional current derating of the 8200 motec (see page 4-17).





# Helical worm geared motors with motec

## Dimensions



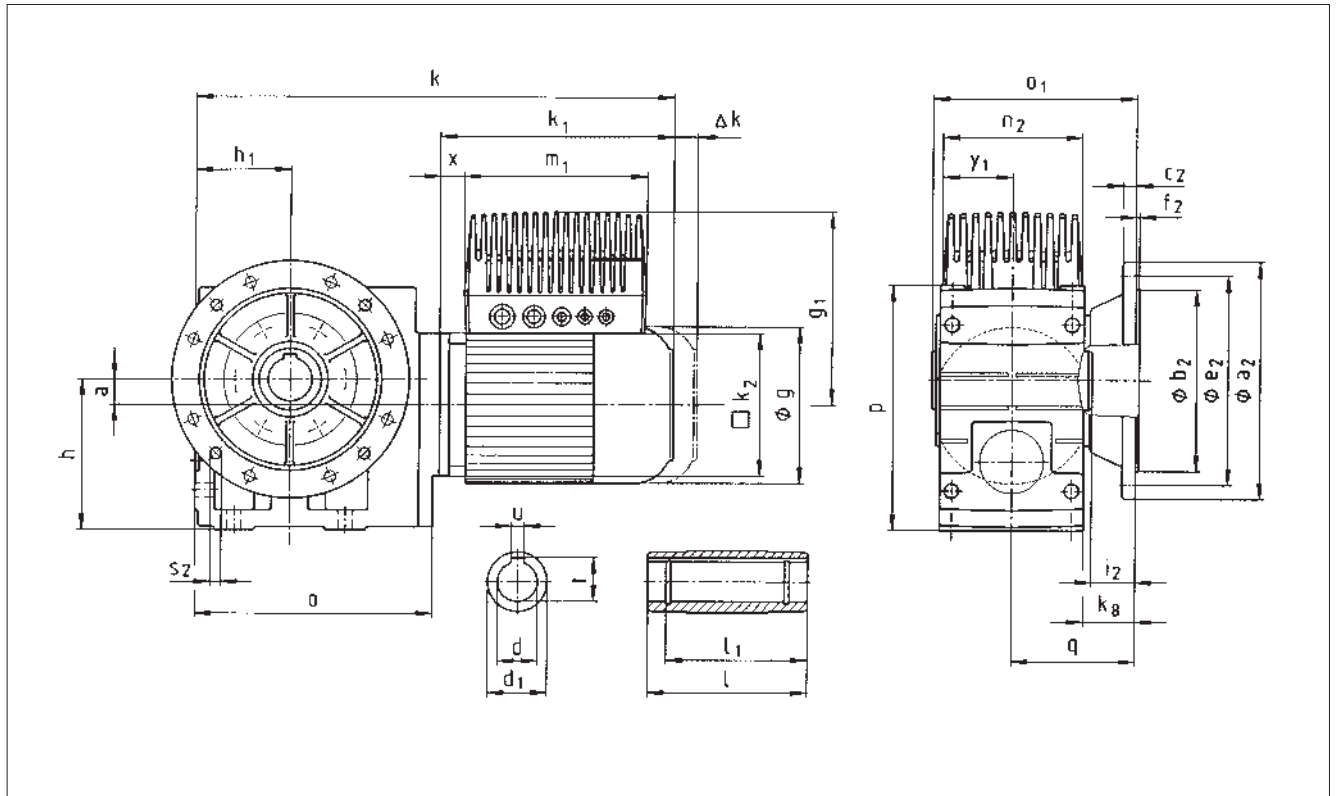
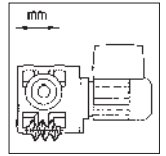
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22		
<b>GSS □ □ - 2 E H □ R</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor	g		123			138		156	176		194		222		262		
	k <sub>1</sub>		188			207		225	276		280	310	323	343	409		
	k <sub>2</sub>		120			120		145	180		180		222		265		
	Δk**	Brake	40			52		73	70		94		101		127		
		External blower	129			127		128	126		97		95		104		
	Brake + external blower	169			164		184	197		169		183		218			
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290		
	g <sub>1</sub> <sup>1)</sup>		207			216											
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325		
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211		
	x		21			23	10	3	3	8	6	2	8		19		
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106		
Gearbox size	Gearbox						Total length										
	o	l*	p*	h*	h <sub>1</sub>	a	k										
	04	181	115	171	100	71	20	378		397		420	481				
	05	212	140	205	125	80	23	399		419		442	503	507	537		
	06	255	160	250	150	100	26	439		459		482	543	547	577	595	615
07	305	200	310	190	120	33					525	586	590	620	638	658	733

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
04	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm] \* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a  
 \*\* See page 3 - 40 for more built-on accessories  
 1) On motec option only: bus I/O, system terminal or brake rectifier

# Helical worm geared motors with motec

## Dimensions

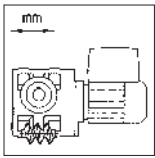


Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22								
<b>GSS □ □ - 2 E HAK</b>		motec E82MV □ □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752								
Motor		<b>g</b>	123			138		156		176		194		222		262							
		<b>k<sub>1</sub></b>	188			207		225		276		280	310	323	343	409							
		<b>k<sub>2</sub></b>	120			120		145		180		180		222		265							
		<b>Δk**</b>	40			52		73		70		94		101		127							
		Brake	40			52		73		70		94		101		127							
		External blower	129			127		128		126		97		95		104							
		Brake + external blower	169			164		184		179		169		183		218							
motec		<b>g<sub>1</sub></b>	171			180		225	221	237	242	258	256	270		290							
		<b>g<sub>1</sub><sup>1)</sup></b>	207			216																	
		<b>m<sub>1</sub></b>	190			190		202	202	230	230	230	325	325		325							
		<b>n<sub>2</sub></b>	138			138		156	156	176	176	176	211	211		211							
		<b>x</b>	21			23		10	3	3	8	6	2	8		19							
		<b>y<sub>1</sub></b>	69			69		78	78	88	88	88	106	106		106							
Gearbox size	Gearbox									Total length													
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k														
04	181	148	171	100	71	20	38	90.5	378							397	420	481					
05	212	173	205	125	80	23	40	103	399							419	442	503	507	537			
06	255	201	250	150	100	26	49	121	439							459	482	543	547	577	595	615	
07	305	255	310	190	120	33	65	155									525	586	590	620	638	658	733

Gearbox size	Hollow shaft						Output flange							
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9	
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11	
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14	
07	50 55	200	75	175	14 16	53.8 59.3	250 300	180 230	14.5 16.5	215 265	4	55	4 x 14	

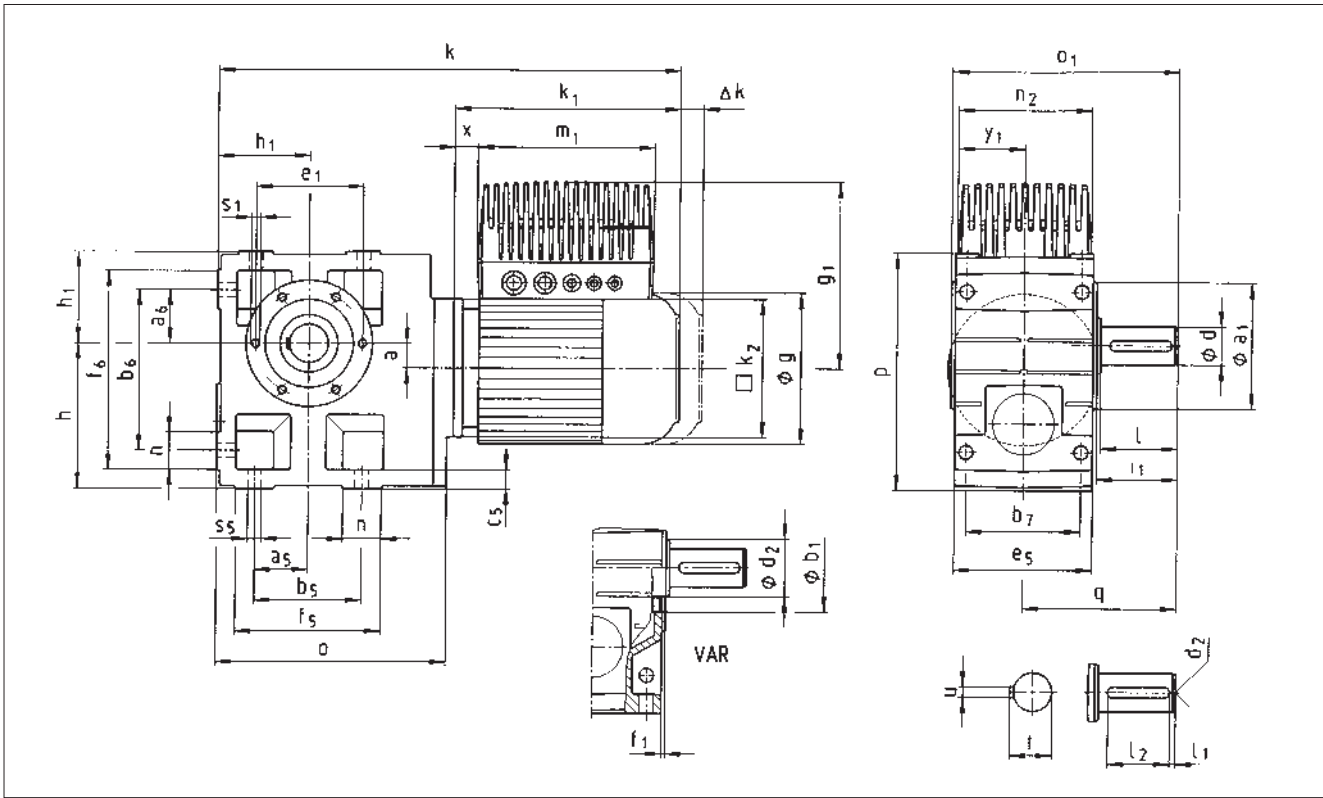
Dimensions in [mm] \* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a  
 \*\* See page 3 - 40 for more built-on accessories  
 1) On motec option only: bus I/O, system terminal or brake rectifier





# Helical worm geared motors with motec

## Dimensions



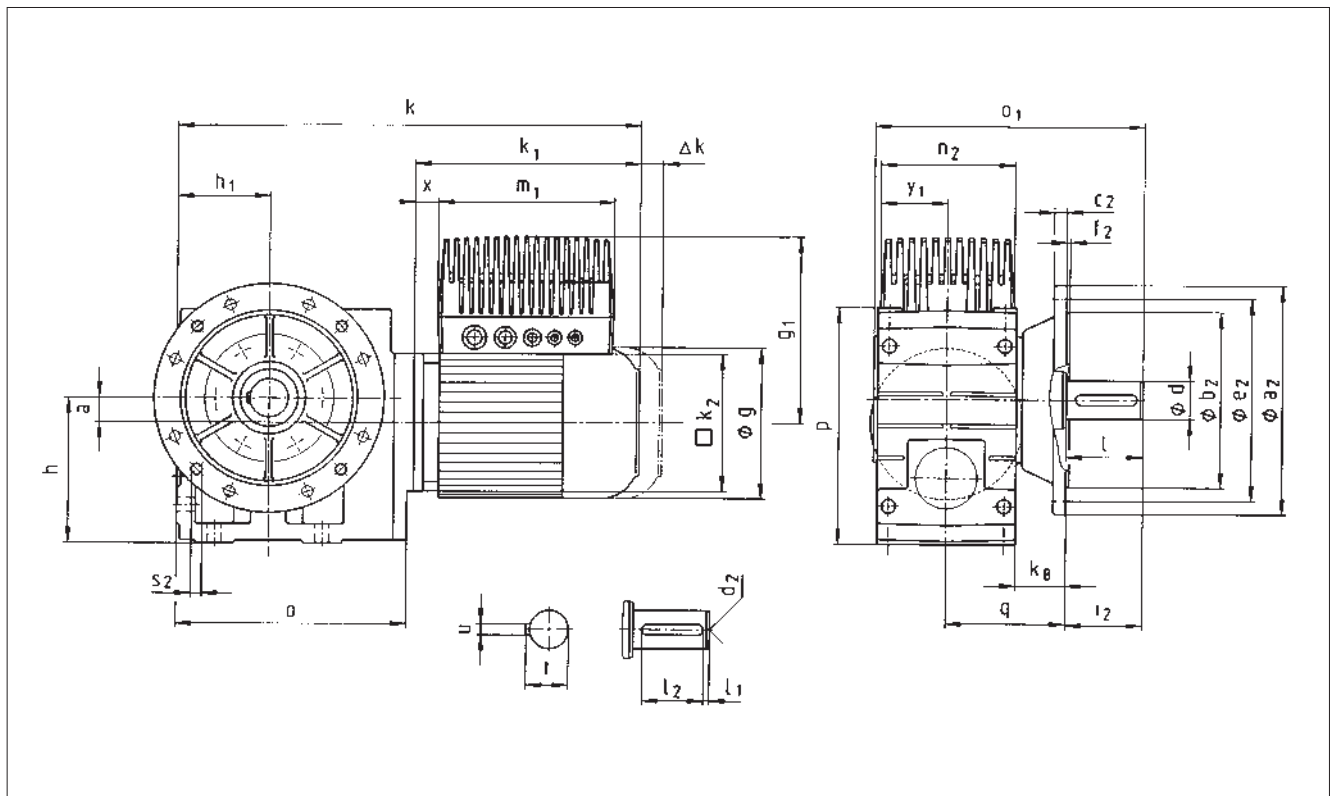
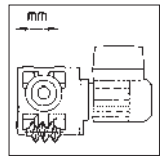
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22			
<b>GSS □ □ - 2 E V □ R</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	402	552	752			
Motor	g		123			138		156		176	194		222		262			
	k <sub>1</sub>		188			207		225		276	280	310	323	343	409			
	k <sub>2</sub>		120			120		145		180	180		222		265			
	Δk**	Brake	40			52		73		70	94		101		127			
		External blower	129			127		128		126	97		95		104			
	Brake + external blower	169			164		184		179	169		183		218				
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256	270		290			
	g <sub>1</sub> <sup>1)</sup>		207			216												
	m <sub>1</sub>		190			190	202	202	230	230	230	325	325		325			
	n <sub>2</sub>		138			138	156	156	176	176	176	211	211		211			
	x		21			23	10	3	3	8	6	2	8		19			
	y <sub>1</sub>		69			69	78	78	88	88	88	106	106		106			
Gearbox size	Gearbox							Total length k										
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	q											
	04	181	163	171	100	71	20	107.5	378		397		420	481				
	05	212	197	205	125	80	23	130	399		419		442	503	507	537		
	06	255	236	250	150	100	26	160	439		459		482	543	547	577	595	615
07	305	296	310	190	120	33	200					525	586	590	620	638	658	733

Gearbox size	Solid shaft								Pitch circle					Foot													
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub>	H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub>	6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	90	119	85	14	100	112	141	22	20	9	
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11	
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14	
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18	

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6  
\* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a  
\*\* See page 3 - 40 for more built-on accessories  
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical worm geared motors with motec

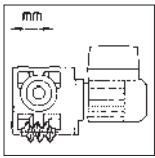
## Dimensions



GSS □ □ - 2 E VAK		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	112-22	112-32	132-22													
		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752													
Motor		g	123			138		156		176		194		222		262												
		k <sub>1</sub>	188			207		225		276		280	310	323	343	409												
		k <sub>2</sub>	120			120		145		180		180		222		265												
		Δk**	40			52		73		70		94		101		127												
		External blower	129			127		128		126		97		95		104												
		Brake + external blower	169			164		184		179		169		183		218												
motec		g <sub>1</sub>	171			180	225	221	237	242	258	256	270		290													
		g <sub>1</sub> <sup>1)</sup>	207			216																						
		m <sub>1</sub>	190			190	202	202	230	230	230	325	325		325													
		n <sub>2</sub>	138			138	156	156	176	176	176	211	211		211													
		x	21			23	10	3	3	8	6	2	8		19													
		y <sub>1</sub>	69			69	78	78	88	88	88	106	106		106													
Gearbox size	Gearbox							Total length																				
	o	o <sub>1</sub> *	p*	h*	h <sub>1</sub>	a	k <sub>8</sub>	q	k																			
04	181	196	171	100	71	20	38	90.5	378			397			420		481											
05	212	230	205	125	80	23	40	103	399			419			442		503		507		537							
06	255	277	250	150	100	26	49	121	439			459			482		543		547		577		595		615			
07	305	351	310	190	120	33	65	155							525		586		590		620		638		658		733	

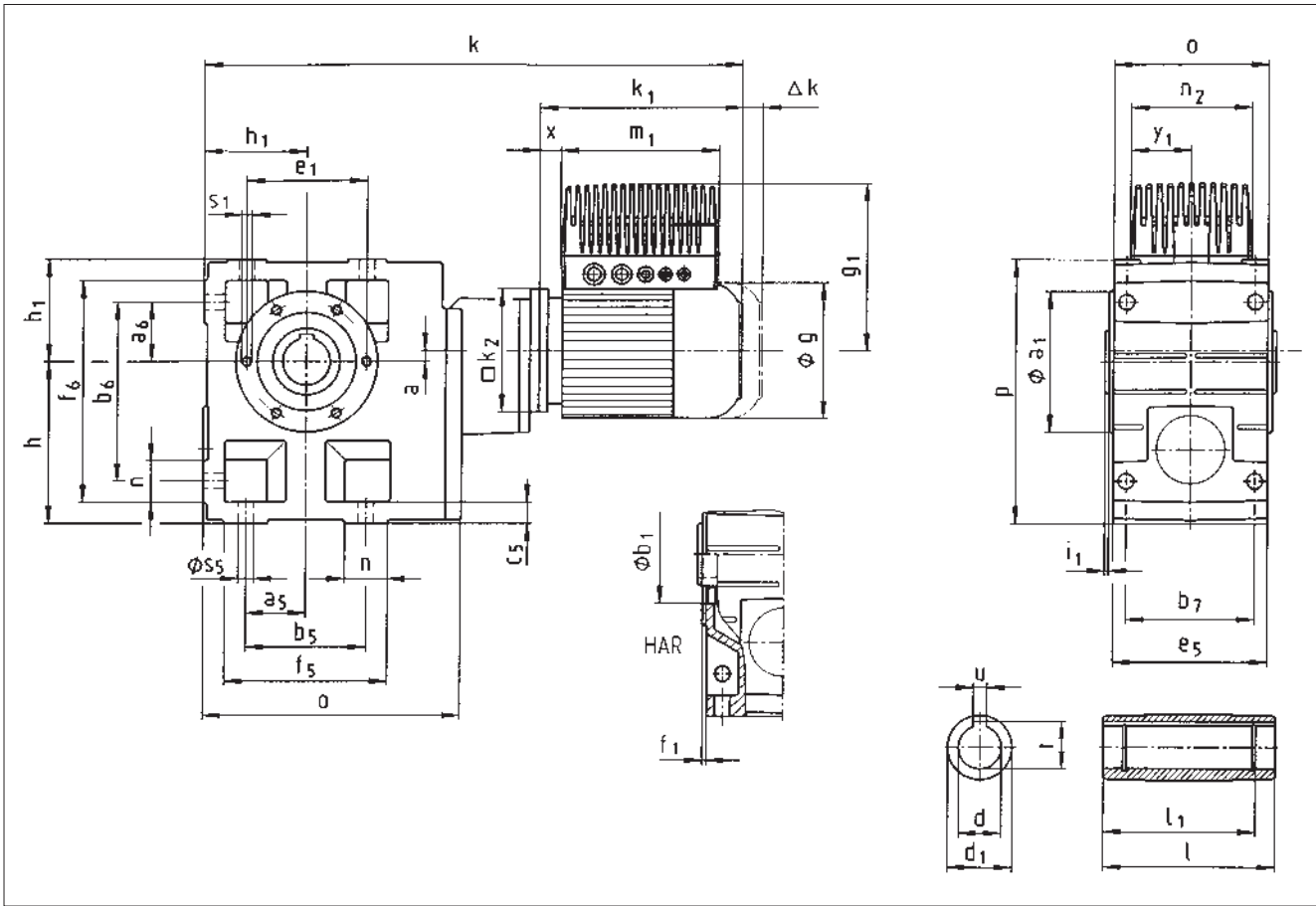
Gearbox size	Solid shaft								Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>	
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9	
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11	
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14	
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14	

Dimensions in [mm] d ≤ 50 mm: k<sub>6</sub> \* Please note dimension k<sub>2</sub>: on gearbox size 04 with motor frame size 090, k<sub>2</sub> / 2 > h-a  
d > 50 mm: m<sub>6</sub> \*\* See page 3 - 40 for more built-on accessories  
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Helical worm geared motors with motec

## Dimensions



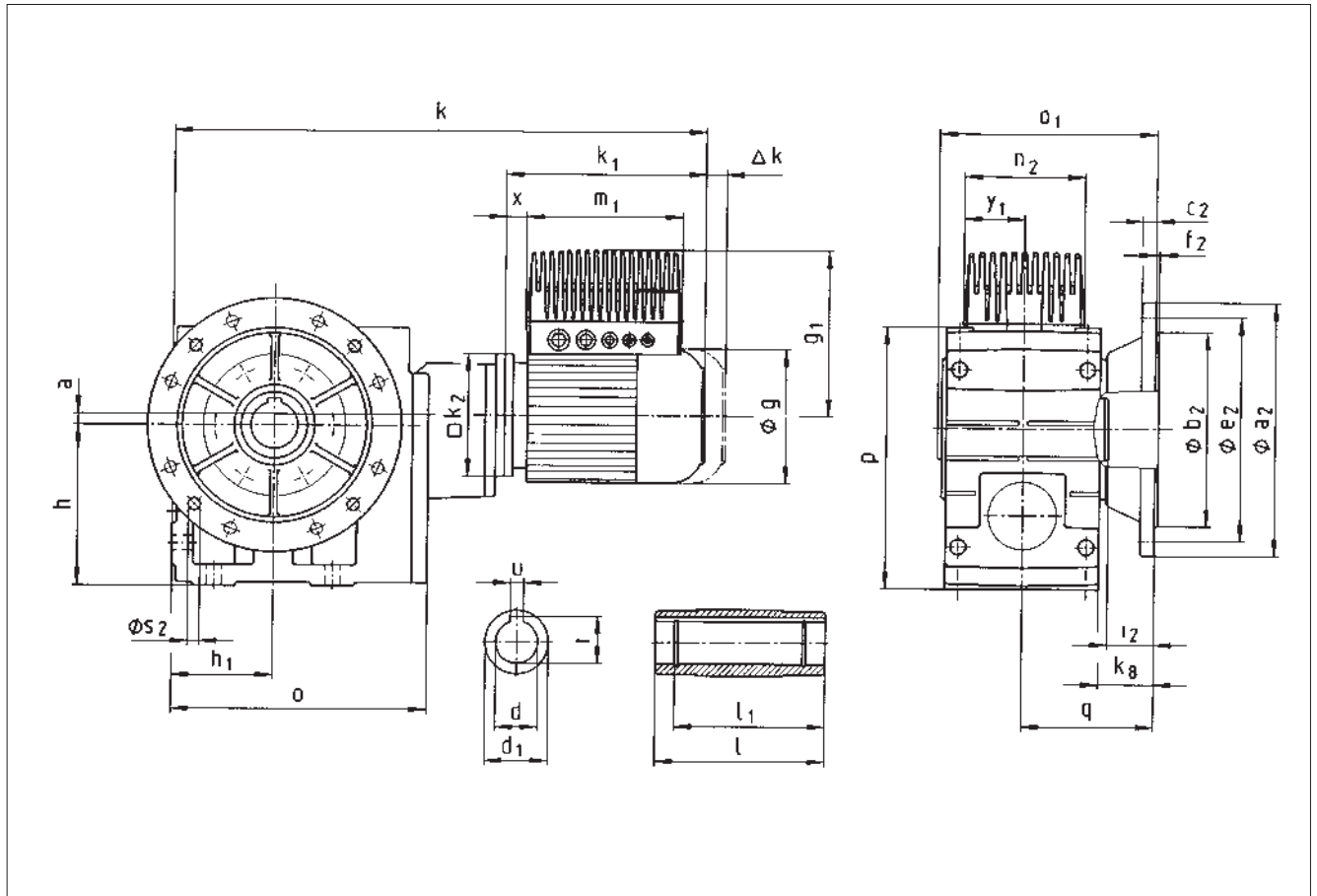
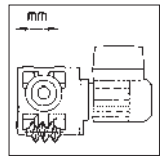
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32		
<b>GSS□□ - 3 E H□R</b>		motec E82MV□□□	251	251	251	371	551	751	152	152	222	302		
Motor	g		123			138		156		176		194		
	k <sub>1</sub>		188			207		225		276	280	310		
	k <sub>2</sub>		120			120		145		180		180		
	Δk**	Brake	40			52		73		70		94		
		External blower	129			127		128		126		97		
		Brake + external blower	169			164		184		179		169		
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256		
	g <sub>1</sub> <sup>1)</sup>		207			216								
	m <sub>1</sub>		190			190	202	202	230	230	230	325		
	n <sub>2</sub>		138			138	156	156	176	176	176	211		
	x		21			23	10	3	3	8	6	2		
	y <sub>1</sub>		69			69	78	78	88	88	88	106		
Gearbox size	Gearbox						Total length							
	o	l*	p*	h	h <sub>1</sub>	a	k							
	05	209	140	205	125	80	13	476	495	518	579			
	06	252	160	250	150	100	10	533	552	575	636			
07	299	200	310	190	120	12	587	606	629	690	694	724		

Gearbox size	Hollow shaft						Pitch circle						Foot											
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50 55	200	75	175	14 16	53.8 59.3	165	115	140	5	5	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm] \* Please note dimension k<sub>2</sub>  
 \*\* See page 3 - 40 for more built-on accessories  
<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical worm geared motors with motec

## Dimensions



3

Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	
<b>GSS □ □ - 3 E HAK</b>		motec E82MV □ □ □		251	251	251	371	551	751	152	152	222	302	
Motor		<b>g</b>		123			138		156		176		194	
		<b>k<sub>1</sub></b>		188			207		225		276		280 310	
		<b>k<sub>2</sub></b>		120			120		145		180		180	
		<b>Δk**</b>		40			52		73		70		94	
		Brake		129			127		128		126		97	
		External blower		169			164		184		179		169	
		Brake + external blower												
motec		<b>g<sub>1</sub></b>		171			180 225		221 237		242 258		256	
		<b>g<sub>1</sub><sup>1)</sup></b>		207			216							
		<b>m<sub>1</sub></b>		190			190		202 202		230 230		230 325	
		<b>n<sub>2</sub></b>		138			138 156		156 176		176 176		176 211	
		<b>x</b>		21			23 10		3 3		8 8		6 2	
		<b>y<sub>1</sub></b>		69			69 78		78 88		88 88		88 106	
Gearbox size	Gearbox									Total length				
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	k <sub>8</sub>	q	<b>k</b>					
05	209	173	205	125	80	13	40	103	476 495 518 579					
06	252	201	250	150	100	10	49	121	533 552 575 636					
07	299	255	310	190	120	12	65	155	587 606 629 690 694 724					

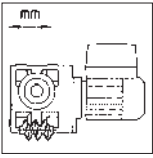
Gearbox size	Hollow shaft						Output flange						
	d H7	l	d <sub>1</sub>	l <sub>1</sub>	u JS9	t +0.2	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
05	30	140	50	124	8	33.3	200	130	12	165	3.5	33	4 x 11
	35				10	38.3							
06	40	160	65	140	12	43.3	200	130	12	165	3.5	42	4 x 11
	45				14	48.8							
07	50	200	75	175	14	53.8	250	180	14.5	215	4	55	4 x 14
	55				16	59.3							

Dimensions in [mm]

\* Please note dimension k<sub>2</sub>

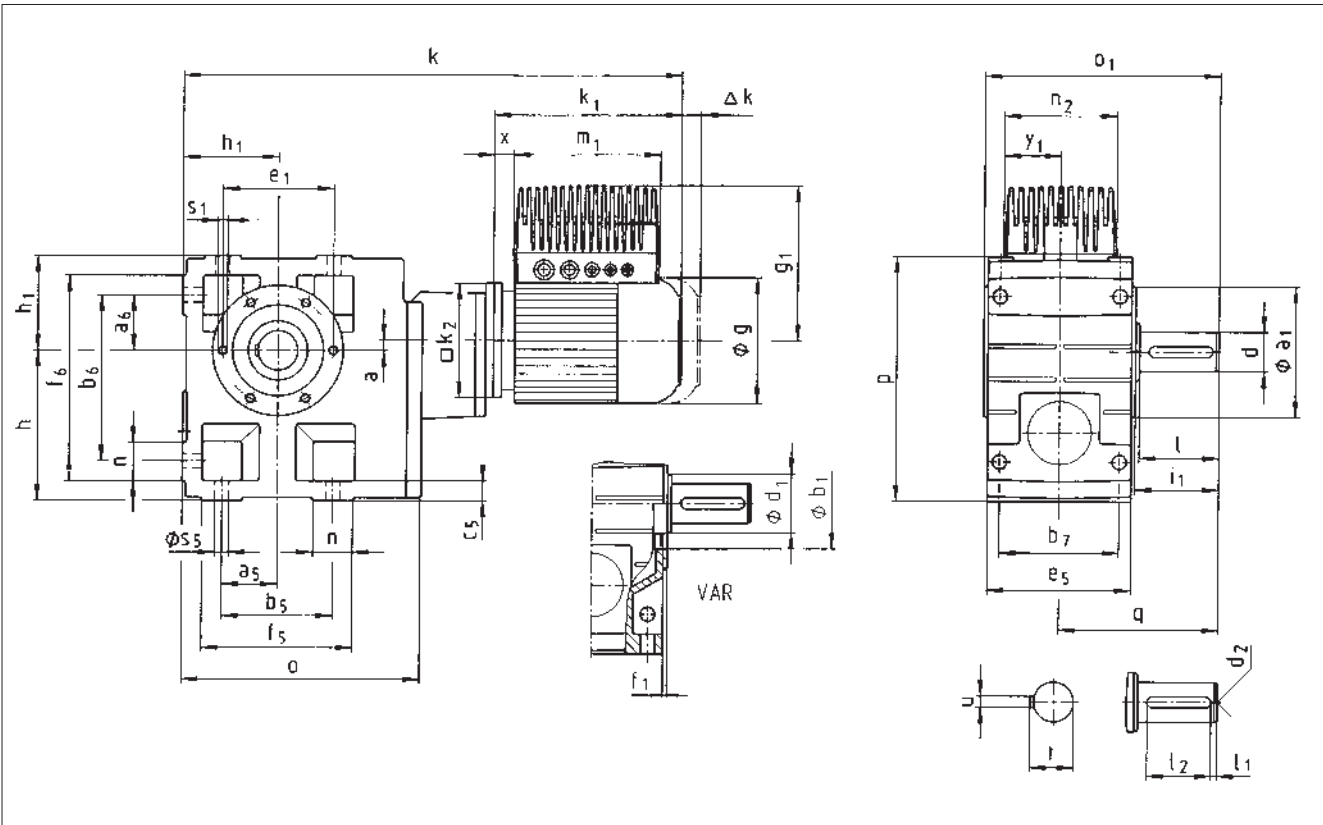
\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier



# Helical worm geared motors with motec

## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32	
<b>GSS □ □ - 3 E V □ R</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302	
Motor	<b>g</b>		123		138		156		176		194		
	<b>k<sub>1</sub></b>		188		207		225		276		280   310		
	<b>k<sub>2</sub></b>		120		120		145		180		180		
	<b>Δk**</b>	Brake	40		52		73		70		94		
		External blower	129		127		128		126		97		
motec	<b>g<sub>1</sub></b>		171		180		225		237		258   256		
	<b>g<sub>1</sub><sup>1)</sup></b>		207		216								
	<b>m<sub>1</sub></b>		190		190		202		230		230   325		
	<b>n<sub>2</sub></b>		138		138		156		176		176   211		
	<b>x</b>		21		23		10		3		6   2		
	<b>y<sub>1</sub></b>		69		69		78		88		88   106		
Gearbox size	Gearbox							Total length k					
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	q						
05	209	197	205	125	80	13	130	476		495		518   579	
06	252	236	250	150	100	10	160	533		552		575   636	
07	299	296	310	190	120	12	200	587		606		629   690   694   724	

Gearbox size	Solid shaft									Pitch circle					Foot											
	d	l	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>1</sub>	b <sub>1</sub> H7	e <sub>1</sub>	f <sub>1</sub>	i <sub>1</sub>	s <sub>1</sub> 6x60°	a <sub>5</sub>	a <sub>6</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub>	c <sub>5</sub>	e <sub>5</sub>	f <sub>5</sub>	f <sub>6</sub>	n	m	s <sub>5</sub>
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	21	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	23	14
07	50	100	75	8	80	M16	14	53.5	165	115	140	5	105	M12x18	70	70	140	210	150	25	180	185	255	45	28	18

Dimensions in [mm] d ≤ 50 mm: k6  
d > 50 mm: m6

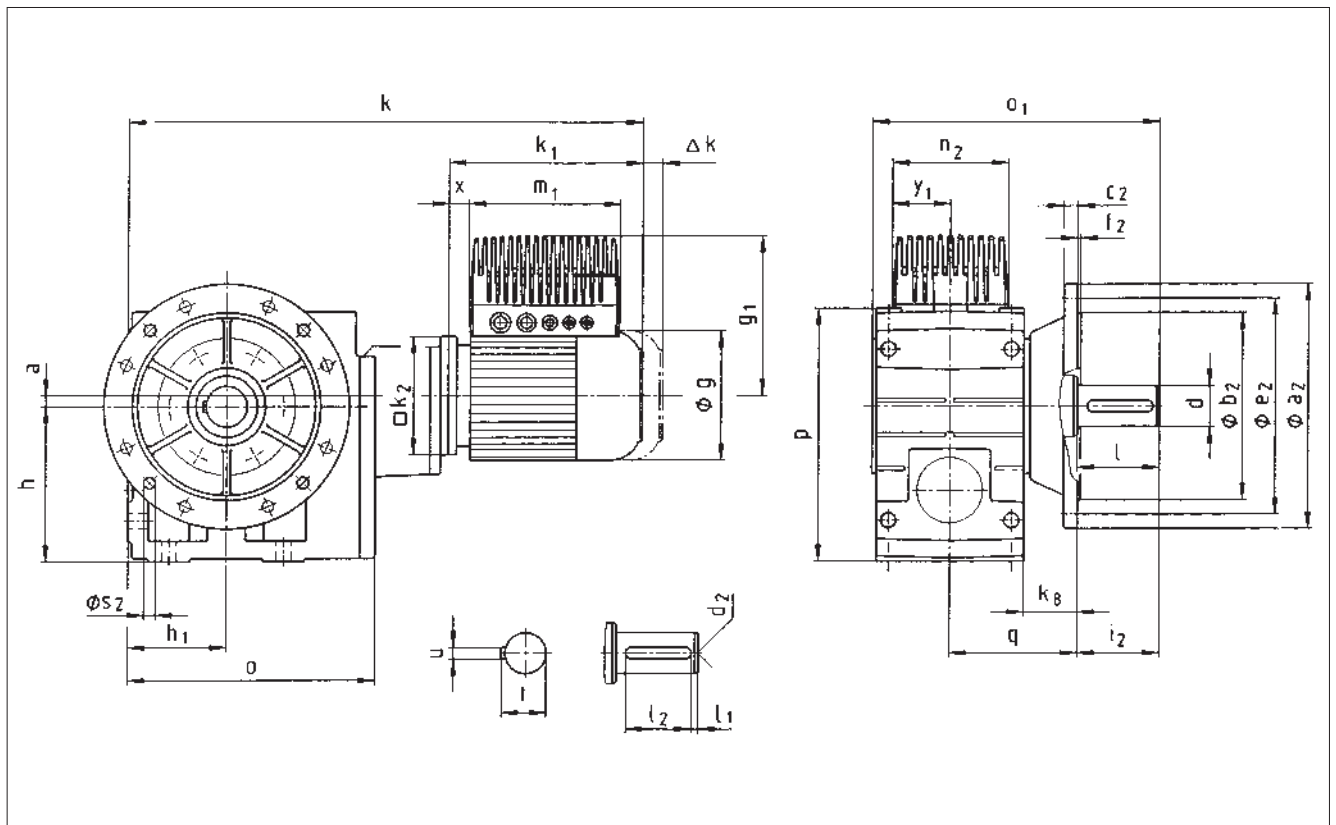
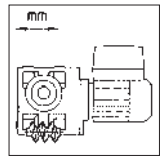
\* Please note dimension k<sub>2</sub>

\*\* See page 3 - 40 for more built-on accessories

<sup>1)</sup> On motec option only: bus I/O, system terminal or brake rectifier

# Helical worm geared motors with motec

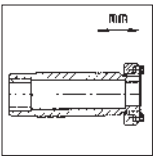
## Dimensions



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100-12	100-32		
<b>GSS □ □ - 3 E VAK</b>		motec E82MV □ □ □	251	251	251	371	551	751	152	152	222	302		
Motor	g		123			138		156		176	194			
	k <sub>1</sub>		188			207		225		276	280	310		
	k <sub>2</sub>		120			120		145		180	180			
	Δk**	Brake	40			52		73		70	94			
		External blower	129			127		128		126	97			
	Brake + external blower	169			164		184		179	169				
motec	g <sub>1</sub>		171			180	225	221	237	242	258	256		
	g <sub>1</sub> <sup>1)</sup>		207			216								
	m <sub>1</sub>		190			190	202	202	230	230	230	325		
	n <sub>2</sub>		138			138	156	156	176	176	176	211		
	x		21			23	10	3	3	8	6	2		
	y <sub>1</sub>		69			69	78	78	88	88	88	106		
Gearbox size	Gearbox								Total length					
	o	o <sub>1</sub> *	p*	h	h <sub>1</sub>	a	k <sub>8</sub>	q	k					
05	209	230	205	125	80	13	40	103	476	495	518	579		
06	252	277	250	150	100	10	49	121	533	552	575	636		
07	299	351	310	190	120	12	65	155	587	606	629	690	694	724

Gearbox size	Hollow shaft							Output flange						
	d	l	l <sub>1</sub>	l <sub>2</sub>	d <sub>2</sub>	u	t	a <sub>2</sub>	b <sub>2</sub> j7	c <sub>2</sub>	e <sub>2</sub>	f <sub>2</sub>	i <sub>2</sub>	s <sub>2</sub>
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14
07	50	100	8	80	M16	14	53.5	250 300	180 230	14.5 16.5	215 265	4	100	4 x 14

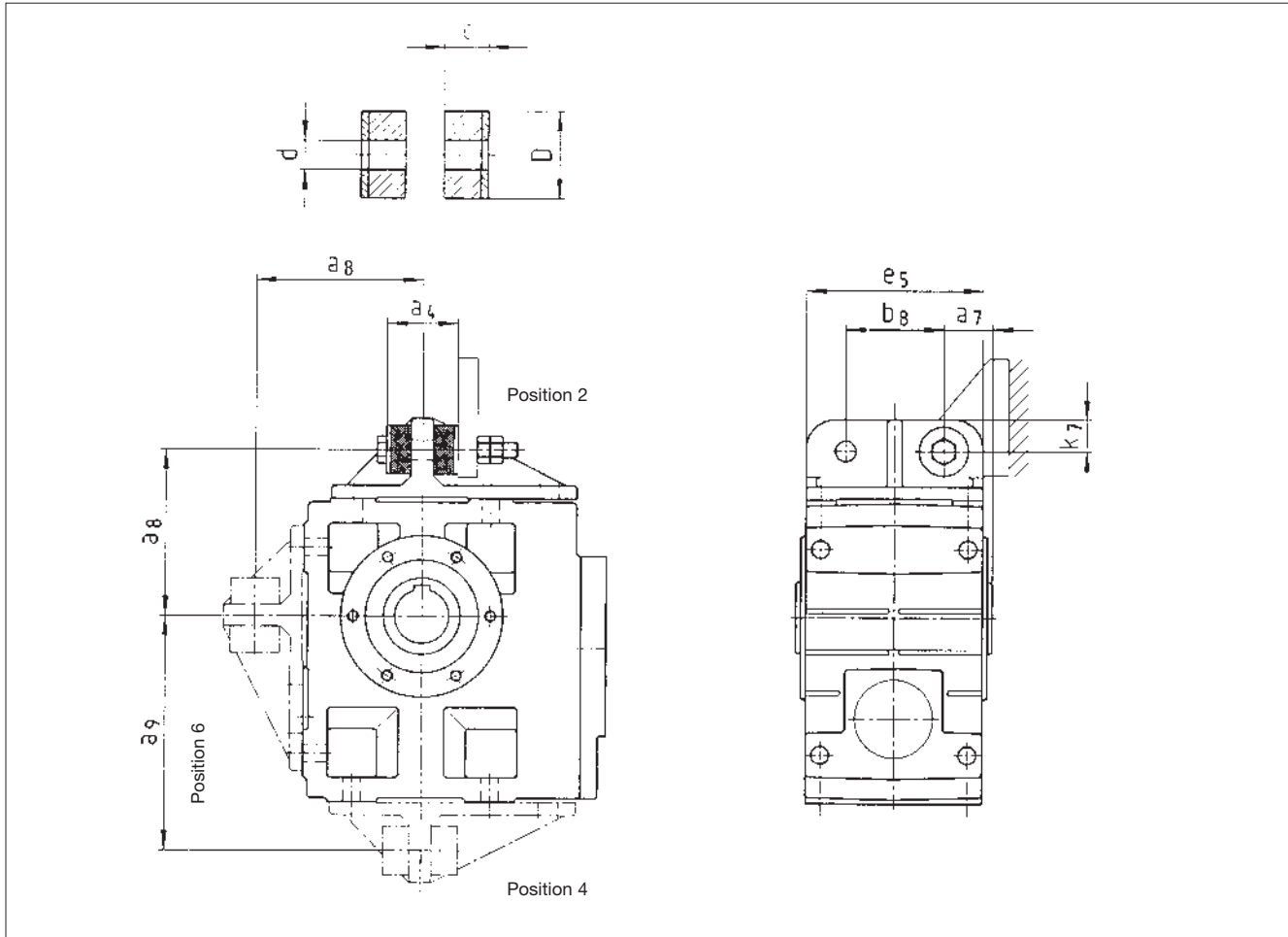
Dimensions in [mm] d ≤ 50 mm: k6  
 d > 50 mm: m6 \* Please note dimension k<sub>2</sub>  
 \*\* See page 3 - 40 for more built-on accessories  
 1) On motec option only: bus I/O, system terminal or brake rectifier



# Helical worm geared motors with motec

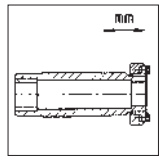
## Torque plate – housing foot

3

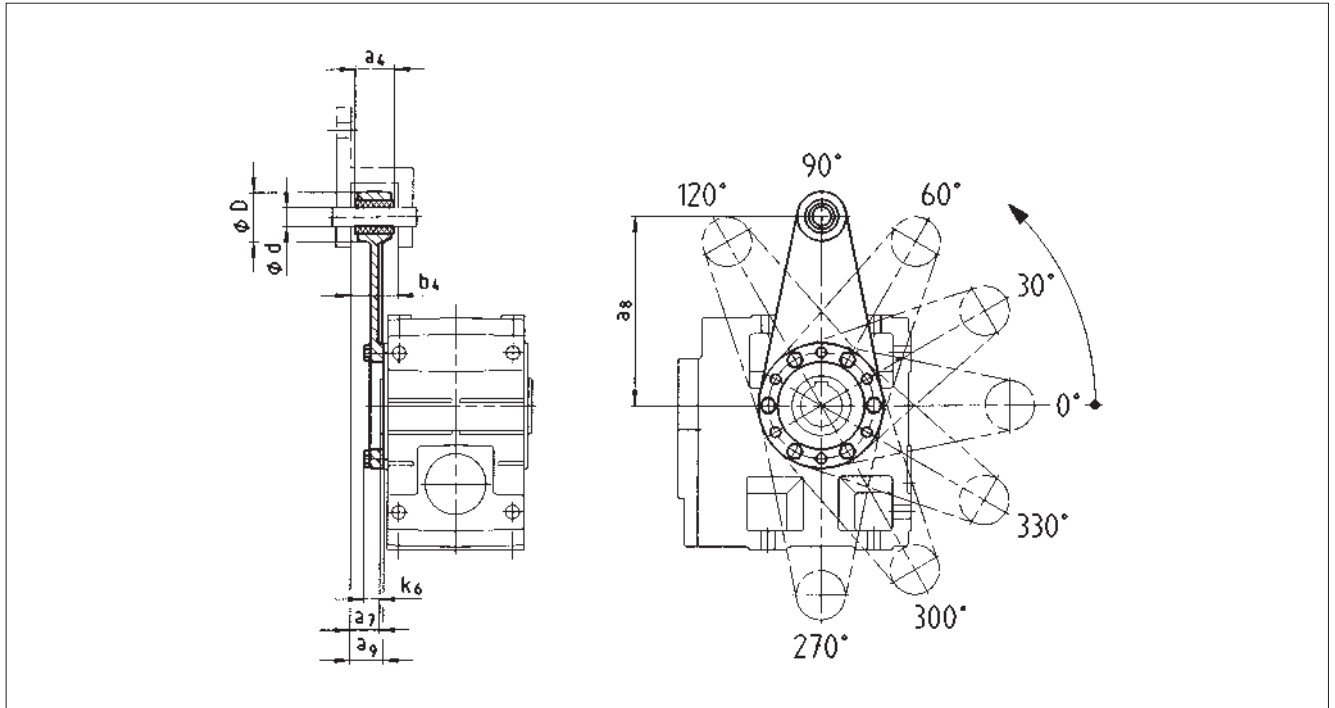


Gearbox size	$a_4$	$a_7$	$a_8$	$a_9$	$b_8$	$c$	$d$	$D$	$e_5$	$k_7$
04	41	27.5	106	135	60	14.5	11	30	100	20
05	45	35	115	160	70	15	13	40	127	25
06	72	40	145	195	80	27	17	50	145	30
07	78	50	170	240	100	28	21	60	180	35

Dimensions in [mm]

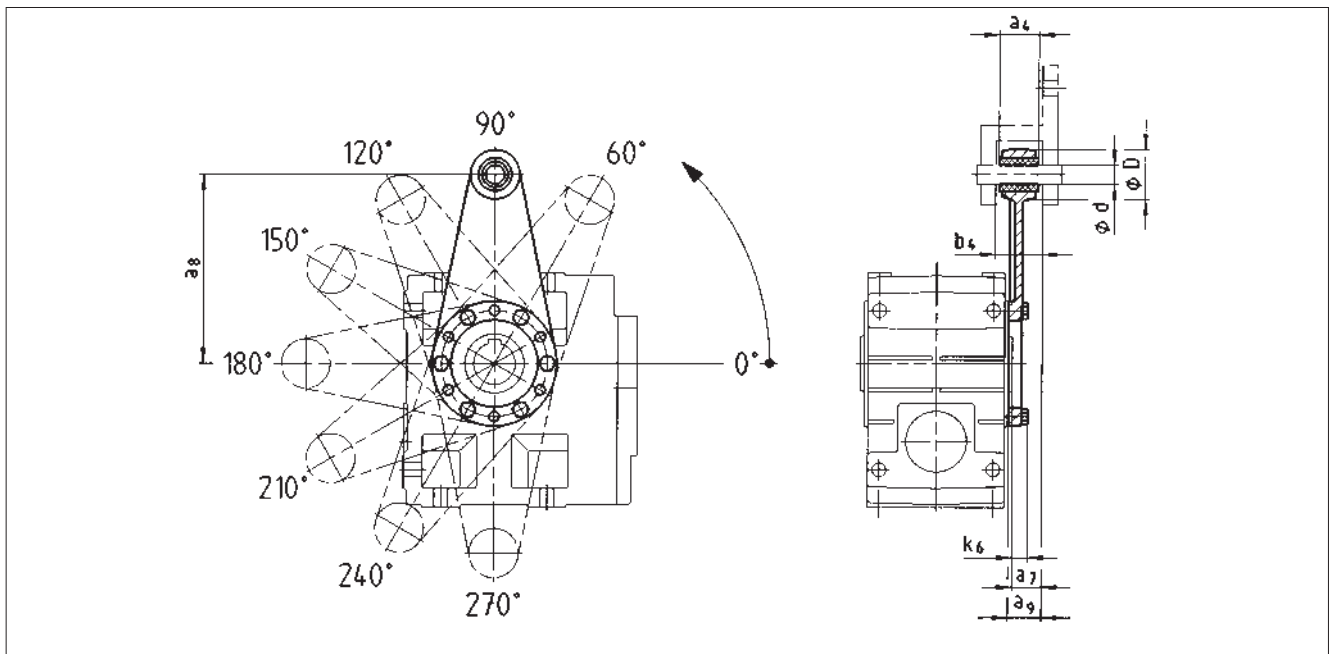


in position 3



3

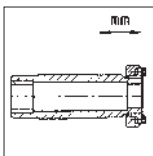
in position 5



Gearbox size	Assembly space		Torque plate					
	a <sub>7</sub>	b <sub>4</sub>	a <sub>4</sub>	a <sub>8</sub>	a <sub>9</sub>	d	D	k <sub>6</sub>
04	24	34.5	30	130	26.5	12	35	16
05	23.5	38.5	34	160	27.5	16	45	15
06	28	44.5	40	200	33	20	50	18
07	32.5	50.5	46	250	37.5	25	65	21

Dimensions in [mm]

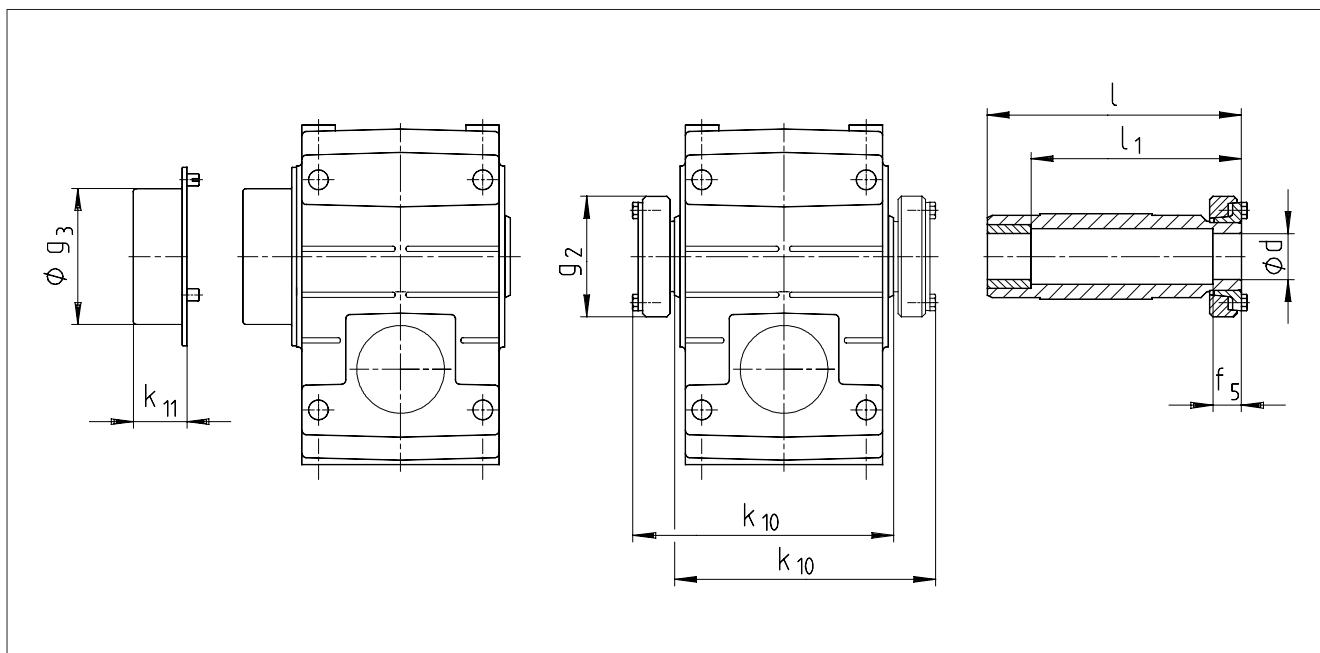




## Helical worm geared motors with motec

### Hollow shaft with shrink disk

3



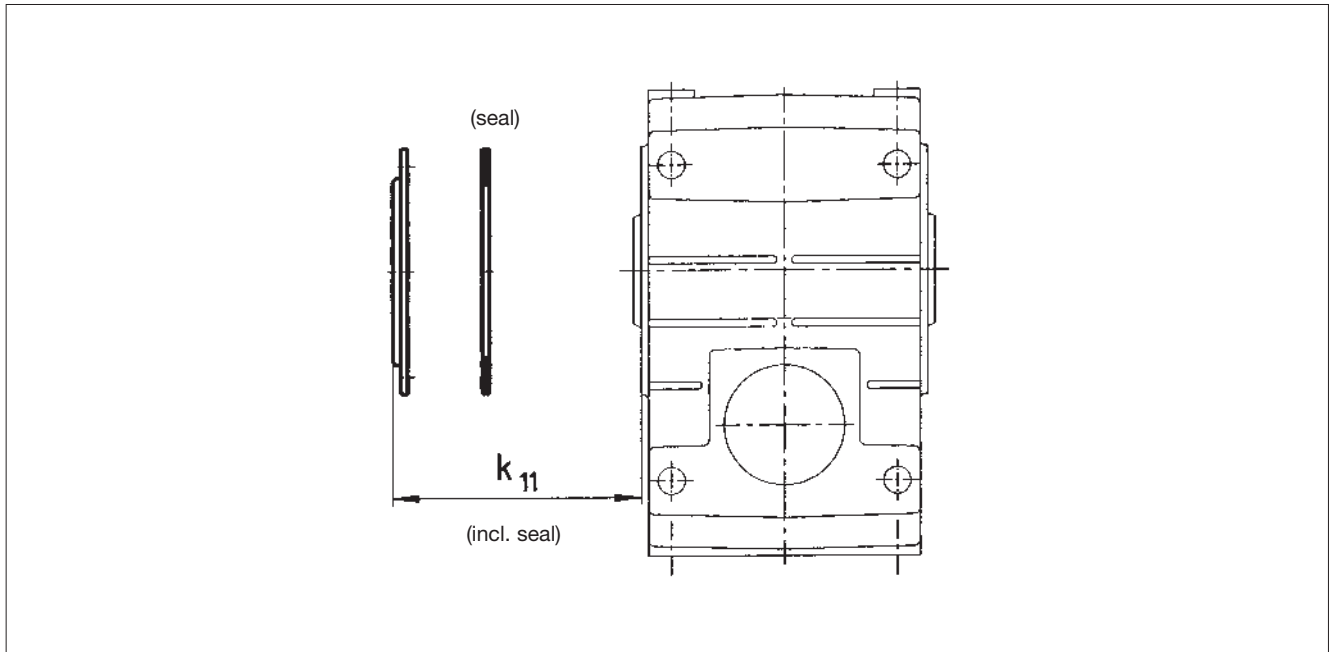
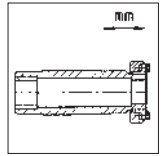
Gearbox size	Machine shaft *		Hollow shaft			Gearbox*		Protective cover	
	d	Fit	l	l <sub>1</sub>	f <sub>5</sub>	g <sub>2</sub>	k <sub>10</sub>	g <sub>3</sub>	k <sub>11</sub>
04	25 30	h6	142	122	26	72	146	79	41
05	30 35	h6	168	148	28	80	171	90	43
06	40	h6	194	164	30	90	197	100	49
07	50	h6	232	192	26	110	234	124	49

\* On shrink disk versions, make sure that the shaft material is strong enough. If you are using conventional steels (e.g. C45, 42CrMo4), the torques listed in the selection tables can be transmitted without restriction. If you are using materials that are significantly weaker, please contact us. The average surface roughness should not exceed 15 µm (lathing is sufficient).

Dimensions in [mm]

# Helical worm geared motors with motec

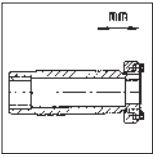
## Jet-proof hollow shaft cover



3

Gearbox size	Protective cover $k_{11}$
04	9
05	10
06	11
07	11

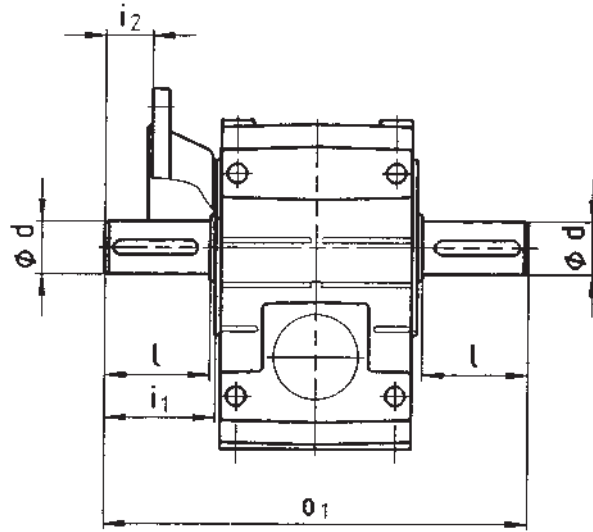
Dimensions in [mm]



## Helical worm geared motors with motec

### Gearbox with second output shaft

3

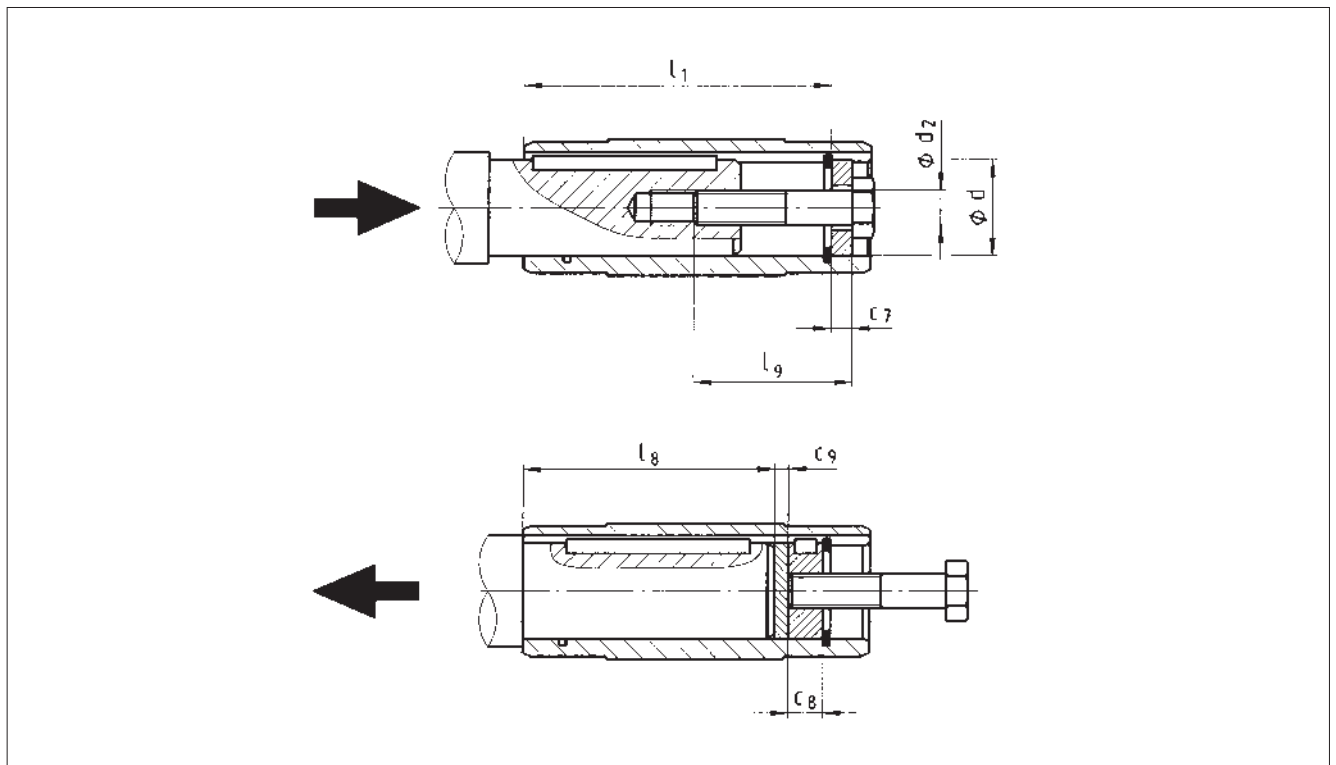
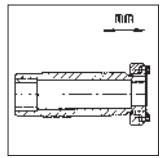


Gearbox size	d	l	$i_1$	$i_2$	$o_1$
04	25	50	52.5	17	215
05	30	60	64	27	260
06	40	80	85	39	320
07	50	100	105	45	400

Dimensions in [mm]

# Helical worm geared motors with motec

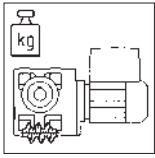
## Mounting kit: Hollow shaft retention – Proposed design for auxiliary tools



3

Gearbox size	Hollow shaft (version H)			Mounting kit: Hollow shaft retention (auxiliary tool assembly)			Auxiliary tool Disassembly		Machine shaft max l <sub>8</sub>
	l	l <sub>1</sub>	d H7	d <sub>2</sub>	l <sub>9</sub>	c <sub>7</sub>	c <sub>8</sub>	c <sub>9</sub>	
04	115	100	25 30	M10 M10	40	5 6	10	3	85
05	140	124	30 35	M10 M12	40 50	6 7	10 12	3	107
06	160	140	40 45	M16	60	8 9	16	4	118
07	200	175	50 55	M16 M20	60 80	10 11	16 20	5	148

Dimensions in [mm]



# Helical worm geared motors with motec

## Weights

### Helical worm gearbox GSS □□-2

Geared motors GSS□□-2EH□□ V□□ S□□	Motor frame size										
	063	071		080		090	100-12	100-32	112-22	112-32	132-22
	motec E82MV □□□										
	251	371	551	751	152	152	222	302	402	552	752
04	18	20	21	26	27	34					
05	27	30	31	35	36	43	46	56			
06	40	42	43	47	49	56	59	69	81	87	
07				72	74	81	84	94	106	112	136

3

### Helical worm gearbox GSS □□-3

Geared motors GSS□□-3EH□□ V□□ S□□	Motor frame size							
	063	071		080		090	100-12	100-32
	motec E82MV □□□							
	251	371	551	751	152	152	222	302
05	28	30	31	36	38	44		
06	43	45	46	51	53	59		
07	72	75	76	80	82	88	91	101

### Excess weights

Gearbox size	Solid shaft V□□	2nd output shaft end V□□	Hollow shaft with shrink disc S□□	Flange □AK	Torque plate Housing foot	Torque plate Pitch circle
04	0.6	0.2	0.6	2.5	1.3	0.9
05	1	0.3	0.8	4	2.2	1.3
06	2.5	0.8	1	7	3.7	2.1
07	5	1.5	1.5	11	6.6	3.7

Weights in [kg] with oil filling for mounting position A  
All values are approximate





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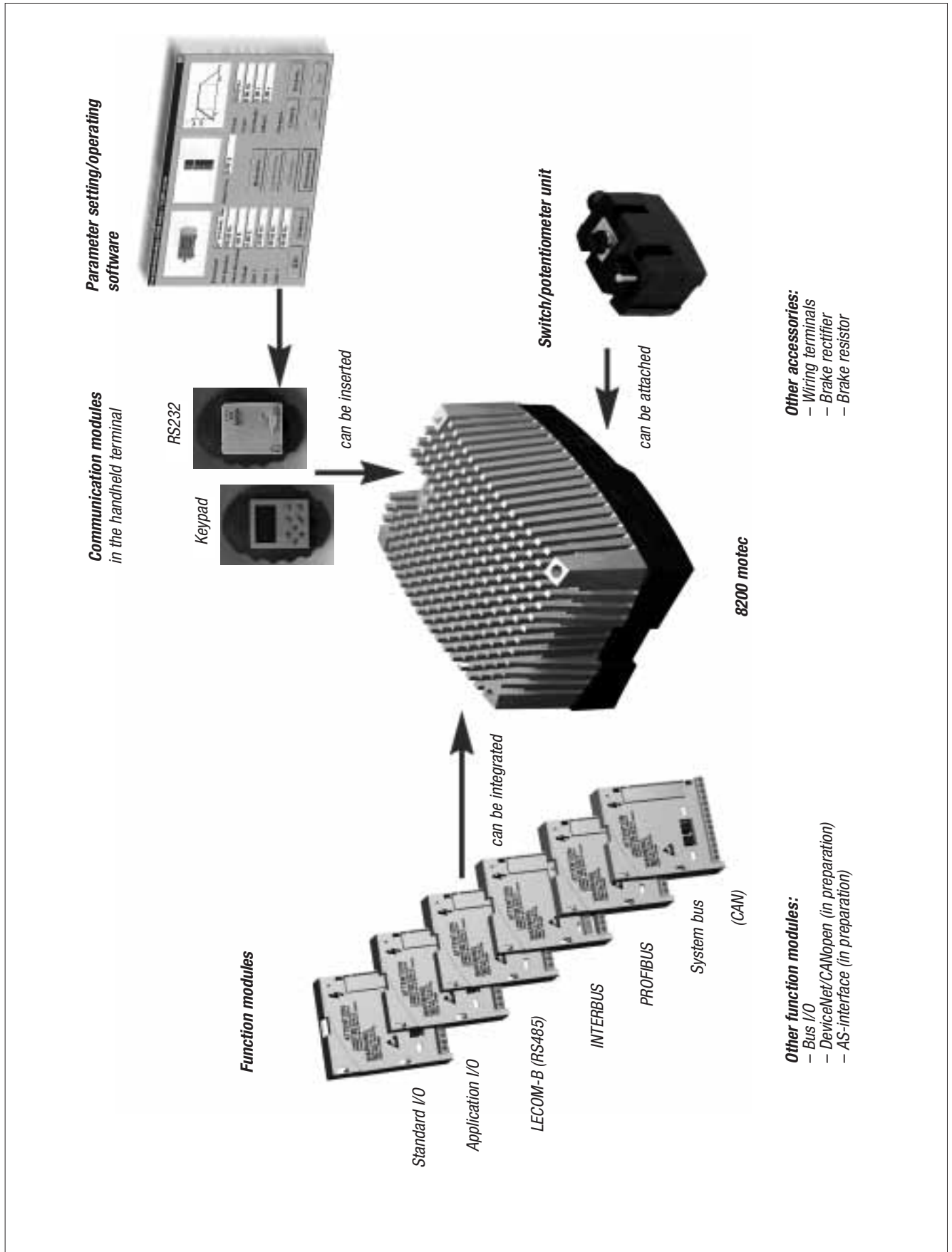
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**motec**

## Product information - 8200 motec

The concept of the 8200 motec frequency inverter is based on a modular design which combines coordinated components to form decentralised drive systems. When used with a Lenze geared motor or Lenze three-phase AC motor, the inverter forms a high-performance electronic variable speed drive. These robust drives can be used for speed adjustment in many industries and applications, such as materials handling, HVAC technology, automation, etc. Individual drive tasks can be configured thanks to freely assignable input and output signals, which can also be combined with various bus communication systems.

The 8200 motec frequency inverter is part of Lenze's innovative vector class, and is characterised by the following features:

### A complete programme

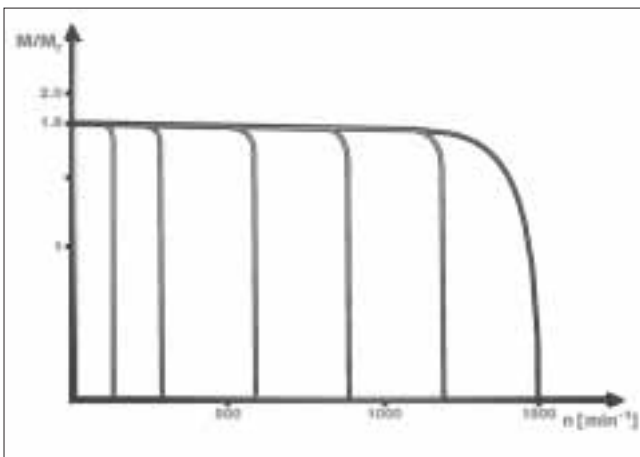
- Frequency inverters for single and three-phase mains connection
- Power ranges
  - 230 V, 0.25 - 0.37 kW
  - 400/500 V, 0.55 - 2.2 kW
  - 400/500 V, 3 - 7.5 kW (in preparation)

### Global application

- It goes without saying that the 8200 series frequency inverters satisfy the relevant EC directives:
  - CE-conformity with low voltage directive
  - CE-conformity with EMC directive for generic CE drive systems
- UL approval (3-7.5 kW in preparation)

### Vector control

- 180% torque
- High speed control range – up to 1:50 without feedback
- Extremely smooth running
- Torque adjustment range up to 1:10
- Wide speed and torque adjustment range due to innovative inverter technology



### Adaptability

The selectable form of the V/f characteristic enables the frequency inverter to be adapted to loads with constant or square-law torque requirements. The integrated flying restart circuit enables the machine to be restarted even if the shaft is still rotating.

### Operational reliability

An adjustable slip compensation function compensates load-dependent speed deviations without complex speed feedback. The maximum current limitation ensures stable operation at all times with both static and dynamic loads.

### Optimised performance

The performance of the frequency inverters can be optimised, with the following advantages:

- Use of a more powerful motor in continuous operation
- Applications: e.g. pumps, air conditioning systems, etc.

### Versatile

Many different types of three-phase AC motors can be controlled:

- Three-phase asynchronous motors
- Three-phase reluctance motors
- Medium-frequency motors

### Energy-saving

The power is adapted to the drive requirements, i.e. the momentary torque and current requirements.

### Robust design

The high degree of protection IP 65 (0.25-2.2 kW) for motor or wall mounting of the inverter enables use in harsh conditions.

All of the wiring (mains and control cables) is located in the carrier housing (terminal cradle) of the 8200 motec. The inverter is a push-fit and attaches simply to the carrier housing - no further wiring is required.

### Ready for immediate operation

The frequency inverters are preset for standard operation.

The following parameters are also preset:

- Safe start with maximum overload
- Controlled acceleration and deceleration due to preset upward and downward ramp times
- Assignment of standard I/O functions to inputs (e.g. with Standard I/O function module)

### Enhanced accessibility

In all mounting positions the frequency inverter can be directly attached to a Lenze geared motor/three-phase AC motor or, alternatively, to a wall. This always guarantees optimum accessibility to the 8200 motec for direct on-site operation and/or diagnostics.

### **User-friendly**

Configuring and setting parameters for your drive system is made easy with the plug-on keypad, which has a clear LCD display. All the basic settings for standard applications can be made using the 10 parameters in the "User" menu. The keypad also displays the status of the drive and is used for troubleshooting as well as for transferring parameters to other devices.

### **Application-specific functions**

The following features are among those required of inverters in the HVAC industry:

- PID controller
- Manual-remote changeover
- Belt monitoring

### **Global Dive Control easy parameter setting/operating software**

8200 motec frequency inverters can be adapted quickly and easily to system data using the operating software. Simple dialogs (e.g. for quick start-up) facilitate the process.

### **The correct setpoint source for every application**

- Via setpoint potentiometer at the control terminals
- Via master reference voltage or master reference current at the control terminals
- Via digital frequency input
- Via the keypad on the frequency inverter
- Via a networking module directly from a host system

### **Application-specific function modules**

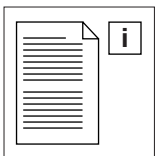
The various application-specific modules ensure maximum flexibility. If process requirements change, the modules can be retrofitted. The wiring and installation of the frequency inverter remain the same. The following modules are available:

I/O function modules (for processing digital and analog signals)

- Standard I/O
- Application I/O
- Bus I/O

Bus function modules (for connection to standard bus systems)

- LECOM-B (RS485)
- INTERBUS
- PROFIBUS-DP
- System bus (CAN)
- DeviceNet/CANopen (in preparation)
- AS-interface (in preparation)



## Ordering data - 8200 motec

### A step-by-step guide to ordering your drive

<p>The following sections of this catalog will assist you in finding a tailor-made frequency inverter for your speed controlled drive. Use the fax order form to order your products (⇒ page 5-3 ff.).</p>									
<p><b>1. Select the device type E82MVxxx_xB</b> (⇒ Selection page 4-9, rating data page 4-14 ff.) Select the frequency inverter to control the speed of your three-phase AC motor. The type of device will depend on the motor power required and on the voltage class.</p>	<p><b>Example: Frequency inverter 1.5 kW, 3~400 V</b></p> <ul style="list-style-type: none"> <li>8200 motec for 400 V, 1.5 kW motor power (type E82MV152_4B)</li> </ul> <p><b>Type key</b></p> <p><b>E 8 2 M V</b> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <b>-</b> <input type="checkbox"/> <b>B</b></p> <p style="margin-left: 150px;">4 = 400 V</p> <table border="1" style="margin-left: 100px;"> <tr> <td colspan="4" style="text-align: center;"><b>Power</b></td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">5</td> <td style="text-align: center;">2</td> <td style="text-align: center;">= 1.5 kW</td> </tr> </table>	<b>Power</b>				1	5	2	= 1.5 kW
<b>Power</b>									
1	5	2	= 1.5 kW						
<p><b>2. Select the type of frequency inverter control</b> Select whether the frequency inverter is to be controlled via terminals or fieldbus (⇒ page 4-24 ff.)</p>	<ul style="list-style-type: none"> <li>Control via analog setpoint and digital inputs ⇒ Selection: Standard I/O function module E82ZAFS001</li> <li>To change the default setting quickly and easily: ⇒ Selection: Hand terminal (handheld keypad) E82ZBB with 2.5 m connecting cable E82ZWL025</li> </ul>								
<p><b>3. Select the accessories</b> Select the accessory components: - Fuses - Brake resistors, etc ⇒ General overview: see page 4-65 ff.</p>	<ul style="list-style-type: none"> <li>Select the circuit-breaker for 8200 motec 1.5 kW, 400 V ⇒ Selection: Circuit-breaker B6A, Order ref. EFA3B06A</li> </ul>								



We want to be sure that you receive the correct products in good time. In order to help us to do this, please make sure you provide the following information:

- Your address and ordering data
- Our order reference numbers/designations for each catalog product
- Your delivery details, i.e. delivery date and delivery address

### How to order

Please use this step-by-step guide to help you. It makes ordering your tailor-made drive extremely easy:

- Make a photocopy of the fax order form which you will find on the last page of this catalog.  
(⇒ page 5-3 ff.).
- Enter the order data.  
Use the “Overview of accessories” and “Product-specific accessories” sections to help you  
(⇒ page 4-68 ff.).
- Post or fax the form to your Lenze representative.  
A list of all Lenze subsidiaries is included on the last two pages of this catalog.

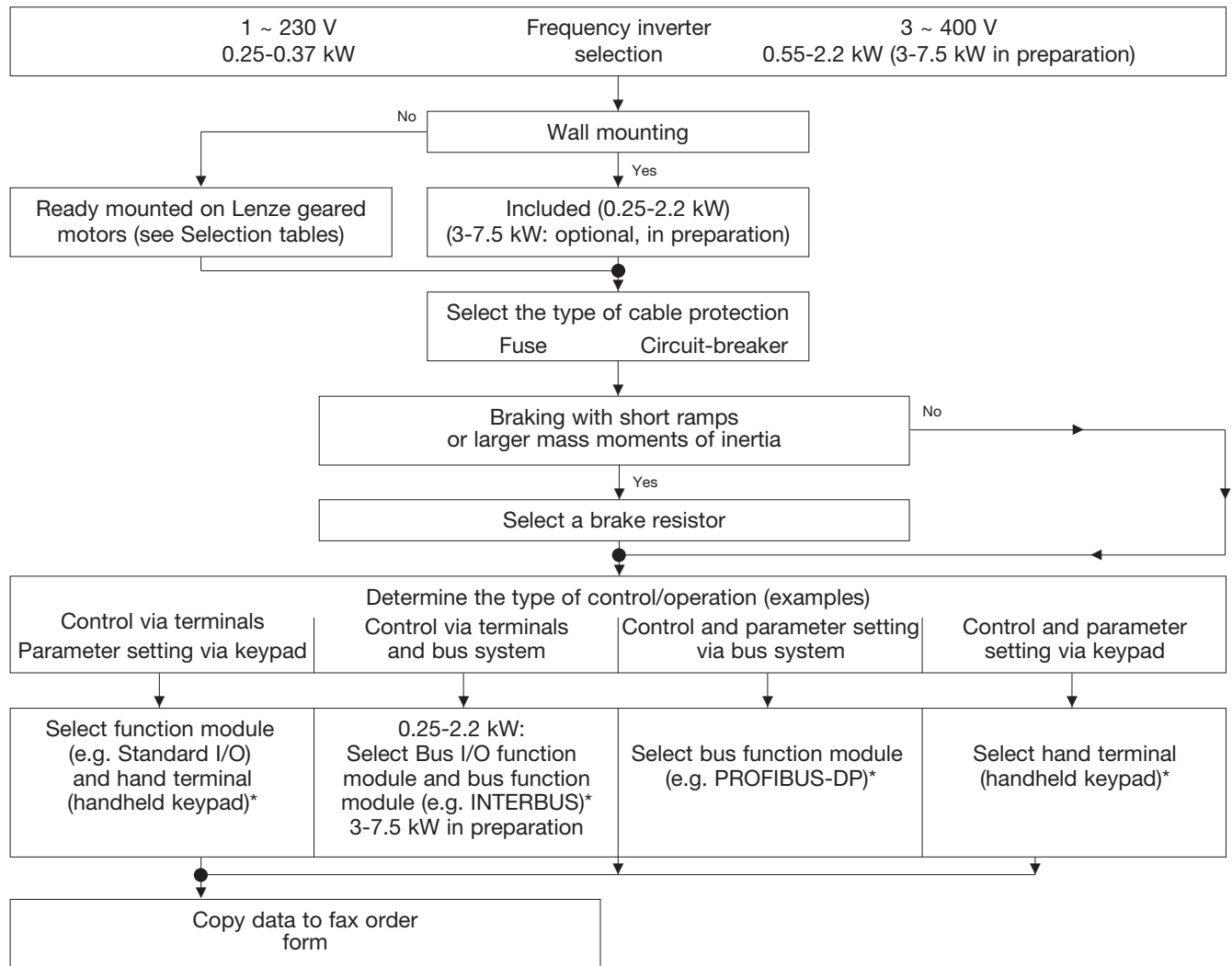
### Delivery

- All products are individually packed and checked prior to delivery.
- Orders are subject to the general terms of sale and delivery of Lenze Drive Systems GmbH:
  - Terms of delivery: Ex works according to the delivery method specified. Packaging not included.





### Sequence diagram



\* **Note:** Refer to page 4-65 ff. for accessories.





## Design of the 8200 motec

### Product features

Robust frequency inverter with integrated RFI filter, brake transistor, PTC input for single-phase and three-phase mains connection:

- 1 ~ 230 V, 0.25...0.37 kW
- 3 ~ 400/500 V, 0.55...2.2 kW (3...7.5 kW \*\*\*)

### Features

	8200 motec	
	230 V 0.25-0.37 kW	400 V 0.55-2.2 kW 3-7.5 kW***
High degree of protection IP65	●	● 1)
1.8 x M <sub>r</sub> (with 1.5 x I <sub>r</sub> for 60 s)	●	●
Inverter outputs protected against short-circuit	●	●
Variable operating frequency: 2, 4, 8, 16 kHz	●	●
Vector control or V/f characteristic control selectable	●	●
Torque preselection	●	●
Mains voltage compensation	●	●
Slip compensation	●	●
Adjustable current limitation	●	●
Pulse width modulation inverter with IGBT power stages	●	●
Brake unit connection	●	●
Relay outputs (changeover contacts)	1	1
Isolated (volt-free) digital inputs with programmable functions	4 or 6*	4 or 6*
4 parameter sets (can be switched online)	●	●
Up to 3/7 fixed frequencies (JOG) per parameter set**	●	●
DC braking	●	●
TRIP set and TRIP reset functions	●	●
Motor potentiometer	●	●
Output frequency up to 480 Hz (650 Hz in preparation)	●	●
Flying restart with coasting motor	●	●
Operational counter with record of number of hours in operation	●	●

\* With Standard I/O or Application I/O function module

\*\* 7 fixed frequencies with Application I/O function module

\*\*\* In preparation

1) for 8200 motec 0.55-2.2 kW



### More features (selection)

	8200 motec	
	230 V 0.25-0.37 kW	400 V 0.55-2.2 kW 3-7.5 kW***
Integrated PID process controller	●	●
Elimination of mechanical resonances	●	●
Load loss (V-belt) monitoring	●	●
Smooth start/stop along S-ramps	●	●
Manual/automatic changeover	●	●
Motor phase failure detection	●	●
Inverse setpoint processing	●	●
Volume current control without feedback	●	●
Torque control	●	●
Max. possibilities for analog input signals	1 or 2*	1 or 2*
Max. possibilities for digital output signals	1 or 2*	1 or 2*
Level inversion of digital input/output signals	●	●

Function modules		
I/O function modules		
Standard I/O	●	●
Application I/O	●	●
Bus I/O	●	● (0.55...2.2 kW)
Bus function modules		
LECOM-B (RS485)	●	●
INTERBUS	●	●
PROFIBUS-DP	●	●
System bus (CAN)	●	●
DeviceNet/CANopen (in preparation)	●	●
AS-interface (in preparation)	●	●

Communication modules		
Keypad for control and parameter setting with memory for parameter transfer (copy function)	●	●
Hand terminal with RS232 interface	●	●

\* With Standard I/O or Application I/O function module

\*\* In addition a bus function module should always be selected.

\*\*\* In preparation

### Standards and application conditions\*

<b>Conformity</b>	CE	Low voltage directive (73/23/EEG) EMC directive (93/68/EEG)
<b>Approvals</b>	UL 508C	Underwriter Laboratories (File no. E132659) Power Conversion Equipment
<b>Vibrational stability</b>	Accelerational stability up to 2g (Germanischer Lloyd, general conditions)	
<b>Climatic conditions</b>	3K3 to EN 50178 (without condensation, average relative humidity 85%)	
<b>Pollution degree</b>	VDE 0110 part 2 pollution degree 2	
<b>Packaging (DIN 4180)</b>	Dust packaging	
<b>Permissible temperature ranges</b>	Transport	-25°C...+70°C
	Storage	-25°C...+60°C
	Operation	-20°C...+60°C over +40°C: reduce the rated output current by 2.5%/°C
<b>Permissible altitude for installation h</b>	0...4000 m above sea level over 1000 m above sea level: reduce the rated output current by 5%/1000 m	
<b>Mounting positions</b>	All mounting positions and orientations of installation are permitted	
<b>Mounting clearances</b>	Above	100 mm
	To the side	100 mm
<b>DC bus operation</b>	Not possible	

### General electrical data\*

<b>EMC</b>	Compliance with requirements to EN 61800-3/A11		
<b>Noise emissions</b>	Motor mounting	Compliance with threshold classes A and B to EN 55011	
	Wall mounting	Compliance with threshold class A to EN 55011 (motor cable shielded up to 10 m)  Compliance with threshold class B to EN 55011 (motor cable shielded up to 1 m)	
<b>Noise immunity</b>	Requirements to EN 61800-3 incl. A11		
	<b>Requirements</b>	<b>Standard</b>	<b>Intensity of tests</b>
	ESD	EN61000-4-2	3, i.e. 8 kV with air discharge, 6 kV with contact discharge
	Line-bound HF interference	EN61000-4-6	150 kHz...80 MHz, 10 V/m 80 % AM (1 kHz)
	HF irradiation interference (housing)	EN61000-4-3	80 MHz...1000 MHz, 10 V/m 80 % AM (1 kHz)
	Burst	EN61000-4-4	3/4, i.e. 2 kV/5 kHz
	Surge (voltage surge on mains cable)	EN61000-4-5	3, i.e. 1.2/50 µs, 1 kV phase-phase, 2 kV phase-PE
<b>Insulation strength</b>	Overvoltage category III to VDE 0110		
<b>Leakage current to PE</b> (to EN 50178)	> 3.5 mA		
<b>Degree of protection</b>	IP65, NEMA 4		
<b>Protection measures against</b>	Short circuit, earth fault (earth-fault-proof during operation, earth-fault-proof with restrictions when switching on the mains supply), overvoltage, motor stalling, motor overtemperature (input for PTC or thermal contact, I <sup>2</sup> t monitoring)		
<b>Total insulation of control circuits</b>	Safe insulation from the mains: double/reinforced insulation to EN 50178		

\* Valid for 0.25-2.2 kW

### General electrical data\*

Open and closed loop controls				
<b>Control methods</b>		V/f characteristic control (linear or quadratic), vector control, torque preselection		
<b>Operating frequency</b>		optionally 2 kHz, 4 kHz, 8 kHz, 16 kHz		
<b>Maximum torque</b>		1.8 x M <sub>r</sub> for 60 s, if rated motor power = rated power of 8200 motec		
<b>Torque adjustment range</b>		1:10		
	Speed range	3...50 Hz		
<b>Sensorless speed control</b>		Min. output frequency	1.0 Hz (0 ... M <sub>r</sub> )	
		Adjustment range	1:50 (related to 50 Hz)	
		Accuracy	± 0.5 % 3 ... 50 Hz	
		Concentricity	± 0.1 Hz	
<b>Output frequency</b>	Range	- 480 Hz ... + 480 Hz (650 Hz in preparation)		
	Resolution	absolute	0.02 Hz	
		normalised	Parameters: 0.01 %, process data: 0.006 % (= 2 <sup>14</sup> )	
	Digital setpoint selection	Accuracy	± 0.005 Hz (= ±100 ppm)	
	Analog setpoint selection	Linearity	± 0.5 %	Signal level: 5 V or 10 V
		Temperature sensitivity	+ 0.3 %	0 ... 60°C
Offset		± 0 %		
<b>Analog inputs/ outputs</b>	With Standard I/O function module	1 input, bipolar as an option 1 output		
	With Application I/O function module	2 inputs, bipolar as an option 2 outputs		
<b>Digital inputs/ outputs</b>	With Standard I/O function module	4 inputs, 1 optional single-track frequency input 0 ... 10 kHz; 1 input for controller inhibit 1 output		
	With Application I/O function module	6 inputs, 1 optional single/double-track frequency input 0 ... 100 kHz; 1 input for controller inhibit, 2 outputs, 1 frequency output 0 ... 10 kHz		
<b>Scan time</b>	Digital inputs	1 ms		
	Digital outputs	4 ms		
	Analog inputs	2 ms		
	Analog outputs	4 ms (filter time: 10 ms)		
<b>Relay output</b>		Change-over contacts, 250 V AC /3 A, 24 V DC /2 A ... 240 V/0.22 A		
<b>Generator mode (internally monitored)</b>		Integrated brake transistor		

\* Valid for 0.25-2.2 kW

### Mechanical design

<b>Housing</b>	Carrier housing: glass-fibre reinforced plastic, heatsink: diecast aluminium
<b>Type</b>	<b>Screw connections</b>
E82MV251K2B, E82MV371K2B	4 x M20/2 x M16 (thread length 10 mm, without locknut)
E82MV551K4B, E82MV751K4B	2 x M25/4 x M16 (thread length 10 mm, without locknut) 1 x M20 for motor cable with wall mounting (EMC cable screw connection, thread length 10 mm, with locknut)
E82MV152K4B, E82MV222K4B	2 x M25/1 x M20/4 x M16 (thread length 10 mm, without locknut) 1 x M20 for motor cable with wall mounting (EMC cable screw connection, thread length 10 mm, with locknut)
E82MV302K4B, E82MV402K4B E82MV552K4B, E82MV752K4B	3 x M25/4 x M16 (thread length 10 mm, without locknut)

### Operation at rated power (normal operation)

Power		$P_r$ [kW]	<b>0.25</b>	<b>0.37</b>
		$P_r$ [hp]	0.34	0.5
<b>8200 motec</b>		<b>Type</b>	<b>E82MV 251_2B</b>	<b>E82MV 371_2B</b>
Mains voltage range		$V_{\text{mains}}$ [V]	1/N/PE AC 180 V - 0%...264 V + 0% (45 Hz - 0%...65 Hz + 0%)	
Data for operation with 1/N/PE 230 V AC			1/N/PE AC	1/N/PE AC
Rated mains current		$I_{\text{mains}}$ [A]	3.4	5.0
Rated output current	2/4 kHz*	$I_{r24}$ [A]	2.0	2.9
	8 kHz*	<b><math>I_{r8}</math> [A]</b>	<b>1.7</b>	<b>2.4</b>
	16 kHz*	$I_{r16}$ [A]	1.1	1.6
Max. permissible output current for 60s	2/4 kHz*	$I_{\text{max}24}$ [A]	2.5	3.6
	8 kHz*	<b><math>I_{\text{max}8}</math> [A]</b>	<b>2.5</b>	<b>3.6</b>
	16 kHz*	$I_{\text{max}16}$ [A]	1.6	1.4
Power loss (operation at $I_{r8}$ )		$P_{\text{loss}}$ [W]	30	40
Dimensions L x W x H		[mm]	190 x 138 x 100	
Weight		m [kg]	1.8	1.8

\* Chopper frequency of the inverter



Note: Torque reduction of self-ventilated motors (refer to page 3-29).

## Design of the 8200 motec

### Rating at 230 V mains voltage



#### Operation at increased rated power

- The restrictions described here apply to continuous operation under increased load.
- Typical applications:
  - Pumps with quadratic load characteristics
  - Fans
- **Advantage:**
  - Use of a more powerful motor in continuous operation**
- Operation only permitted:
  - at the specified mains voltage ranges
  - at chopper frequencies  $\leq 4$  kHz

Motor power		<b>P<sub>r</sub> [kW]</b>	<b>0.37</b>	<b>0.55</b>
		P <sub>r</sub> [hp]	0.5	0.75
<b>8200 motec</b>		<b>Type</b>	<b>E82MV 251_2B</b>	<b>E82MV 371_2B</b>
Mains voltage range		V <sub>mains</sub> [V]	1/N/PE AC 180 V - 0%...264 V + 0% (45 Hz - 0%...65 V + 0%)	
Data for operation with 1/N/PE 230 V AC			1/N/PE AC	1/N/PE AC
Rated mains current		I <sub>mains</sub> [A]	4.1	6.0
Rated output current	2/4 kHz*	I <sub>r24</sub> [A]	2.0	2.9
Max. permissible output current for 60s	2/4 kHz*	I <sub>max24</sub> [A]	2.5	3.6
Power loss		P <sub>loss</sub> [W]	30	40
Dimensions L x W x H		[mm]	190 x 138 x 100	
Weight		m [kg]	1.8	1.8

\* Chopper frequency of the inverter



Note: Torque reduction of self-ventilated motors (refer to page 3-29).

### Operation at rated power (normal operation)

Power	$P_r$ [kW]	0.55		0.75		1.5		2.2	
	$P_r$ [hp]	0.75		1.0		2.0		3.0	
8200 motec	Type	E82MV551_4B		E82MV751_4B		E82MV152_4B		E82MV222_4B	
Mains voltage range	$V_{\text{mains}}$ [V]	3 PE 320 V AC - 0%...550 V + 0% (45 Hz - 0%...65 Hz + 0%)							
Data for operation with 3 PE AC		400 V	500 V	400 V	500 V	400 V	500 V	400 V	500 V
Rated mains current	$I_{\text{mains}}$ [A]	1.8	1.4	2.4	1.9	3.8	3.0	5.5	4.5
Rated output current	2/4 kHz* $I_{r24}$ [A]	2.1	1.8	2.9	2.4	4.6	3.9	6.7	5.6
	8 kHz* $I_{r8}$ [A]	<b>1.8</b>	<b>1.6</b>	<b>2.4</b>	<b>2.1</b>	<b>3.9</b>	<b>3.5</b>	<b>5.6</b>	<b>5.0</b>
	16 kHz* $I_{r16}$ [A]	1.2	1.1	1.6	1.4	2.5	2.3	3.6	3.2
Max. permissible output current for 60s	2/4 kHz* $I_{\text{max}24}$ [A]	2.7	2.4	3.6	3.2	5.8	5.2	8.4	7.6
	8 kHz* $I_{\text{max}8}$ [A]	<b>2.7</b>	<b>2.4</b>	<b>3.6</b>	<b>3.2</b>	<b>5.8</b>	<b>5.2</b>	<b>8.4</b>	<b>7.6</b>
	16 kHz* $I_{\text{max}16}$ [A]	1.8	1.6	2.4	2.1	3.9	3.5	5.3	4.8
Power loss (operation at $I_{r8}$ )	$P_{\text{loss}}$ [W]	35		45		70		95	
Dimensions L x W x H	[mm]	202 x 156 x 151				230 x 176 x 167			
Weight	m [kg]	2.8		2.8		4.1		4.1	

\* Chopper frequency of the inverter



Note: Torque reduction of self-ventilated motors (refer to page 3-29).

### Operation at rated power (normal operation)

Power	$P_r$ [kW]	3		4		5.5		7.5	
	$P_r$ [hp]	4.1		5.4		7.5		10.2	
8200 motec	Type	E82MV302_4B		E82MV402_4B		E82MV552_4B		E82MV752_4B	
Mains voltage range	$V_{mains}$ [V]	3 PE 320 V AC - 0%...550 V + 0% (45 Hz - 0%...65 Hz + 0%)							
Data for operation with 3 PE AC		400 V	500 V	400 V	500 V	400 V	500 V	400 V	500 V
Rated mains current	$I_{mains}$ [A]	9.5	7.6	12.3	9.8	16.8	13.4	21.5	17.2
Rated output current	2/4 kHz* $I_{r24}$ [A]	8.8	7.0	11.4	9.2	15.6	12.5	16.5	13.2
	8 kHz* $I_{r8}$ [A]	<b>7.3</b>	<b>5.8</b>	<b>9.5</b>	<b>7.6</b>	<b>13.0</b>	<b>10.4</b>	<b>16.5</b>	<b>13.2</b>
	16 kHz* $I_{r16}$ [A]	4.7	4.2	6.1	5.5	8.4	7.6	10.7	9.6
Max. permissible output current for 60s	2/4 kHz* $I_{max24}$ [A]	11.0	8.7	14.2	11.4	19.5	15.6	24.8	19.8
	8 kHz* $I_{max8}$ [A]	<b>11.0</b>	<b>8.7</b>	<b>14.2</b>	<b>11.4</b>	<b>19.5</b>	<b>15.6</b>	<b>24.8</b>	<b>19.8</b>
	16 kHz* $I_{max16}$ [A]	7.1	6.4	9.1	8.2	12.7	11.4	16.1	14.5
Dimensions L x W x H	[mm]	325 x 211 x 163 (223**)							
Weight	m [kg]	9.7		9.7		9.7		9.7	

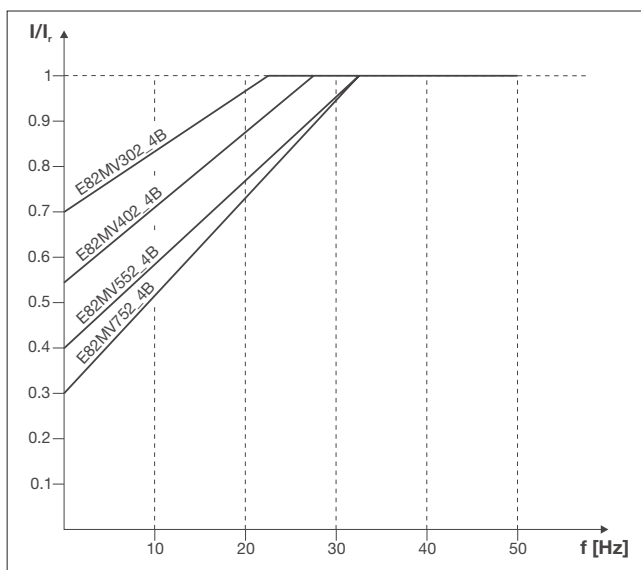
\* Chopper frequency of the inverter

\*\* For wall mounting or with additional module (E82ZMV)

### Current derating

If the 8200 motec is used under certain application conditions it may be necessary to reduce the rated output current for types E82MV302\_4B to EMV752\_4B:

8200 motec mounted on...	Current derating
...Lenze motor/geared motor with separate fan	not required
...Lenze motor/geared motor with integral fan	see Fig. 1
...Lenze motor/geared motor, with integral fan and additional module E82ZMV	not required
...non-Lenze motor/geared motor ⇒ additional module E82ZMV must always be fitted	not required
...a wall (wall mounting) ⇒ additional module E82ZMV must always be fitted	not required



**Fig. 1:**

Derating of the rated output current in continuous operation at an ambient temperature of 40 °C and a chopper frequency of 4 kHz, as well as at 35 °C and 8 kHz.

- $I$  Derated output current of the 8200 motec
- $I_r$  Rated output current of the 8200 motec at a chopper frequency of 4 kHz and 8 kHz
- $f$  Output frequency of the 8200 motec [Hz]

Note: Torque reduction of self-ventilated motors (refer to page 3-29).



### Operation at increased rated power

- The restrictions described here apply to continuous operation under increased load.
- Typical applications:
  - Pumps with quadratic load characteristics
  - Fans
- **Advantage:**  
**Use of a more powerful motor in continuous operation**
- Operation only permitted:
  - at the specified mains voltage ranges
  - at chopper frequencies  $\leq 4$  kHz

Motor power	$P_r$ [kW]	0.75	1.1	2.2	3.0
	$P_r$ [hp]	1.0	1.5	3.0	4.0
<b>8200 motec</b>	<b>Type</b>	<b>E82MV551_4B</b>	<b>E82MV751_4B</b>	<b>E82MV152_4B</b>	<b>E82MV222_4B</b>
Mains voltage range	$V_{\text{mains}}$ [V]	3 PE 320 V AC - 0%...440 V + 0% (45 Hz - 0%...65 Hz + 0%)			
Data for operation with 3 PE AC		400 V	400 V	400 V	400 V
Rated mains current	$I_{\text{mains}}$ [A]	2.2	2.8	4.6	6.6
Rated output current	2/4 kHz* $I_{r24}$ [A]	2.1	2.9	4.6	6.7
Max. permissible output current for 60s	2/4 kHz* $I_{\text{max}24}$ [A]	2.7	3.6	5.8	8.4
Power loss (operation at $I_r$ )	$P_{\text{loss}}$ [W]	35	45	70	95
Dimensions L x W x H	[mm]	202 x 156 x 151		230 x 176 x 167	
Weight	m [kg]	2.8	2.8	4.1	4.1

\* Chopper frequency of the inverter



Note: Torque reduction of self-ventilated motors (refer to page 3-29).

### Operation at increased rated power

- The restrictions described here apply to continuous operation under increased load.
- Typical applications:
  - Pumps with quadratic load characteristics
  - Fans
- **Advantage:**  
**Use of a more powerful motor in continuous operation**
- Operation only permitted:
  - at the specified mains voltage ranges
  - at chopper frequencies  $\leq 4$  kHz

Motor power	$P_r$ [kW]	4	5.5	7.5
	$P_r$ [hp]	5.4	7.5	10.2
<b>8200 motec</b>	<b>Type</b>	<b>E82MV302_4B</b>	<b>E82MV402_4B</b>	<b>E82MV552_4B</b>
Mains voltage range	$V_{mains}$ [V]	3 PE 320 V AC - 0%...440 V + 0% (45 Hz - 0%...65 Hz + 0%)		
Data for operation with 3 PE AC		400 V	400 V	400 V
Rated mains current	$I_{mains}$ [A]	11.4	14.8	20.2
Rated output current	2/4 kHz* $I_{r24}$ [A]	8.8	11.4	15.6
Max. permissible output current for 60s	2/4 kHz* $I_{max24}$ [A]	11.0	14.2	19.5
Dimensions L x W x H	[mm]	325 x 211 x 163 (223**)		
Weight	m [kg]	9.7	9.7	9.7

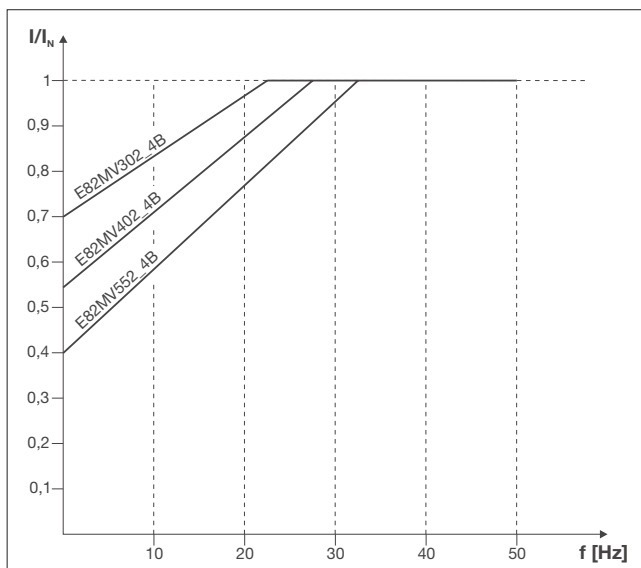
\* Chopper frequency of the inverter

\*\* For wall mounting or with additional module (E82ZMV)

### Current derating

If the 8200 motec is used under certain application conditions it may be necessary to reduce the rated output current for types E82MV302\_4B to EMV552\_4B:

8200 motec mounted on...	Current derating
...Lenze motor/geared motor with separate fan	not required
...Lenze motor/geared motor with integral fan	see Fig. 1
...Lenze motor/geared motor, with integral fan and additional module E82ZMV	not required
...non-Lenze motor/geared motor $\Rightarrow$ additional module E82ZMV must always be fitted	not required
...a wall (wall mounting) $\Rightarrow$ additional module E82ZMV must always be fitted	not required



**Fig. 1:**

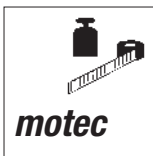
Derating of the rated output current in continuous operation at an ambient temperature of 40 °C and a chopper frequency of 4 kHz.

$I$  Derated output current of the 8200 motec

$I_r$  Rated output current of the 8200 motec at a chopper frequency of 4 kHz

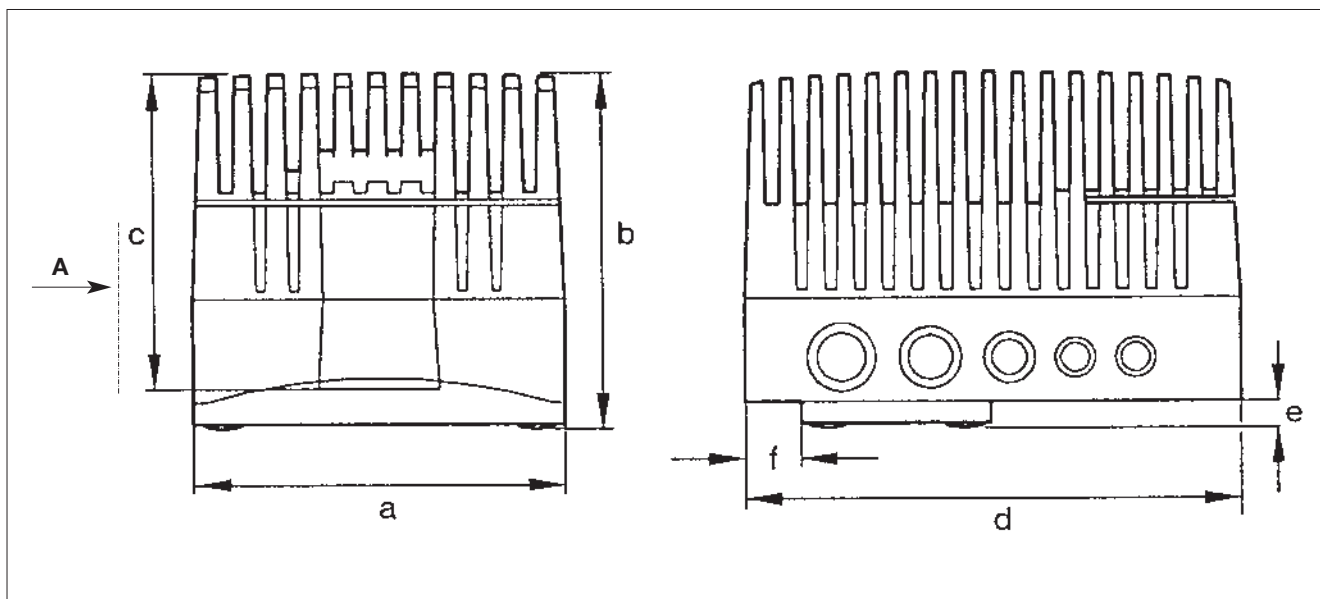
$f$  Output frequency of the 8200 motec [Hz]

Note: Torque reduction of self-ventilated motors (refer to page 3-29).



# Mechanical installation - 8200 motec

## Dimensions



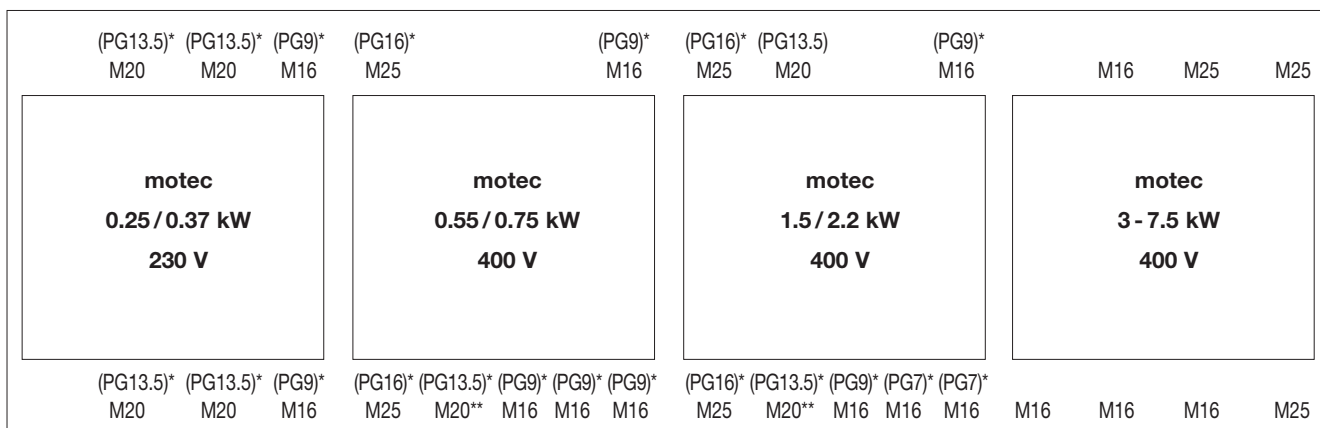
	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]
<b>E82MV251_2B</b>	138	100 (135)*	90	190	7	12
<b>E82MV371_2B</b>	138	100 (135)*	90	190	7	12
<b>E82MV551_4B</b>	156	151	135	202	15	26
<b>E82MV751_4B</b>	156	151	135	202	15	26
<b>E82MV152_4B</b>	176	167	151	230	15	26
<b>E82MV222_4B</b>	176	167	151	230	15	26
<b>E82MV302_4B</b>	211	163 (223**)	148	325	15	-
<b>E82MV402_4B</b>	211	163 (223**)	148	325	15	-
<b>E82MV552_4B</b>	211	163 (223**)	148	325	15	-
<b>E82MV752_4B</b>	211	163 (223**)	148	325	15	-

4

\* With additional terminal cradle (with Bus I/O and brake rectifier)

\*\* For wall mounting or with an additional module (type E82ZMV, IP54, dimensions L x B x H [mm]: 325 x 211 x 60), see also page 4-17

### Arrangement of cable glands (view from above onto the carrier housing)



Notes:

\* Arrangement of the PG cable glands before conversion to metric glands

\*\* Cable glands without internal threads

- Characteristics of metric cable glands

• with internal thread (except\*\*)

• motec 0.55-2.2 kW with sealing plug

• motec 0.25-0.37 kW with rupture points





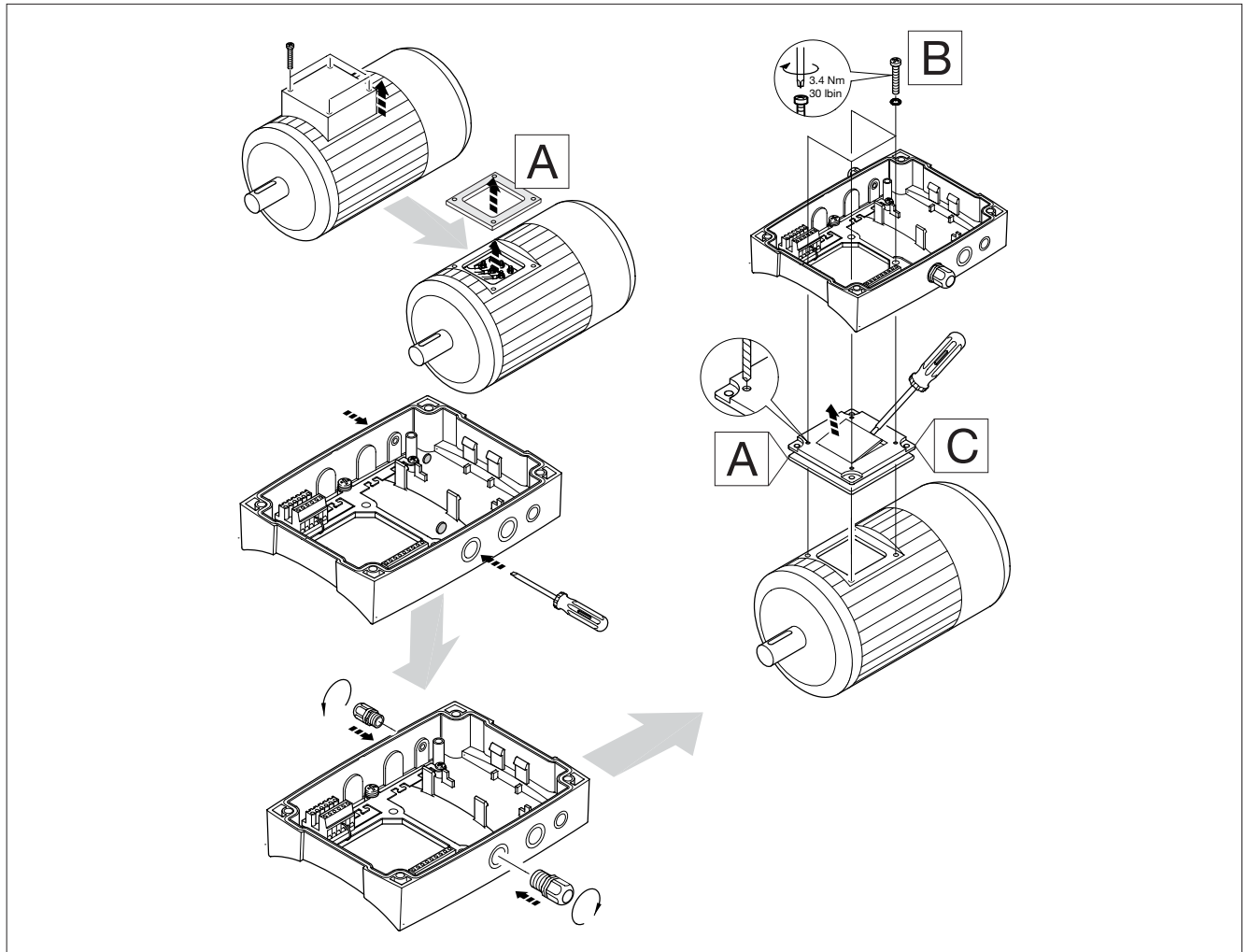
### Compact drive

The Lenze drive system with the 8200 motec and geared motor/AC motor is supplied completely assembled and wired ready for use. It takes just a few steps to connect

the drive ready for power-up.

The sketch below shows how easy it is to assemble the 8200 motec on a motor, e.g. for the purposes of retrofitting.

### Schematic sketch for motec 0.25/0.37 kW, 230 V



Remove the terminal box seal **A** and motor terminal board. If necessary, extend the motor cable.

Fit the enclosure cradle onto the motor.

- If you need to ensure clearance, use the spacer plate **C** and terminal box seal **A** supplied.
- The degree of protection can only be ensured if the unit is sealed carefully.
- The fastening used must ensure a permanent mechanical connection **B**, e.g. by means of the use of serrated lock washers.

#### Note about cable glands:

- motec 0.55 - 2.2 kW with sealing caps (see page 4-20)
- motec 0.25/0.37 kW with rupture joints

#### Tip:

Adaptor plates are available for mounting the 8200 motec on motors with hole patterns which do not correspond to the Lenze standard.\*)

Type	for 8200 motec	Outside dimensions [mm]	Hole pattern for 8200 motec [mm]
EJ0047	0.55 - 2.2 kw	85 x 85 x 15	73 (M5)
EJ0048	0.25/0.37 kW 0.55 - 2.2 kw	120 x 120 x 15	68 (M5)

\*) The plates are designed to be drilled by the user in accordance with the motor to be adapted.



## Mechanical installation - 8200 motec

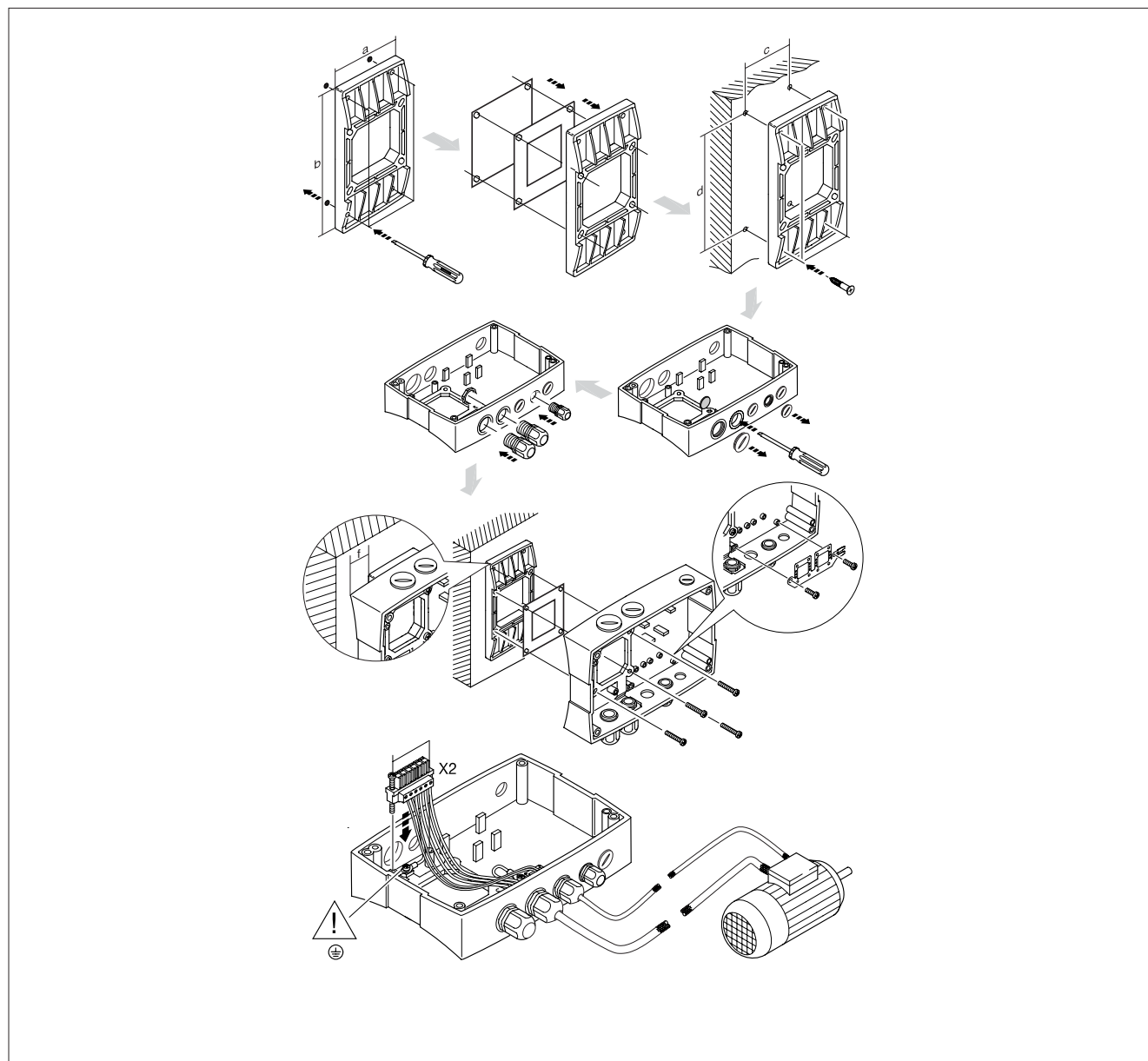
### Wall mounting

#### Wall mounting for optimum accessibility

The thermally independent concept of the 8200 motec allows the frequency inverter to be mounted on a wall or the machine stand for optimum accessibility.

No separate accessories are required for wall mounting (with motec 0.25-2.2 kW).

#### Schematic diagram for motec 1.5/2.2 kW, 400 V



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8200 motec	Dimensions of spacer and wall plate [mm]		Bore pattern Dimensions [mm]		Gap f [mm]*
	a	b	c	d	
0.25/0.37 kW	85	110	71	96	12
0.55/0.75 kW	85	152	61	120	26
1.5/2.2 kW	85	172	61	140	26

\* Refer also to Dimensions (⇒ page 4-20)

**Note:** For the 8200 motec 3-7.5 kW additional accessories are required for wall mounting.

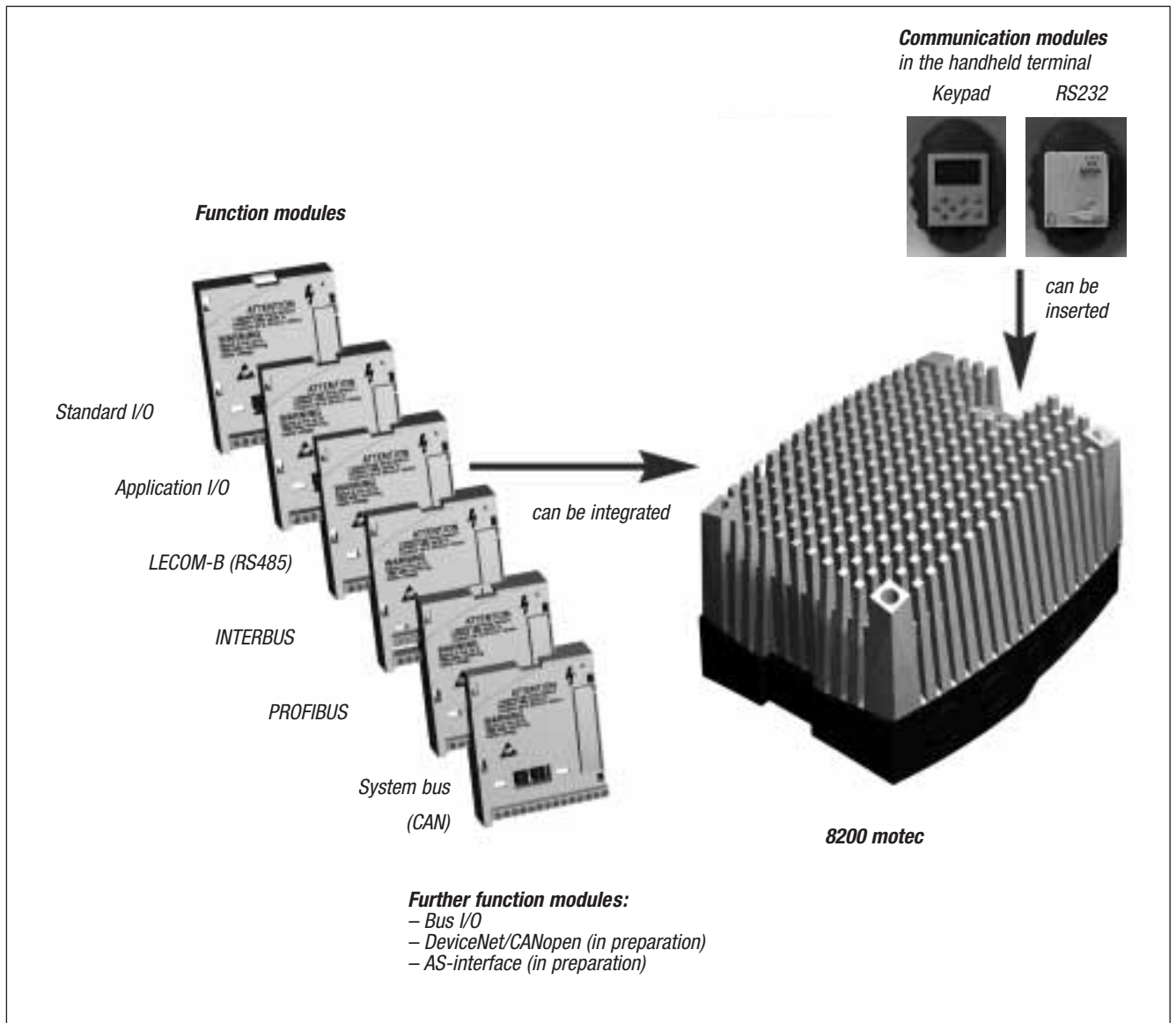


### Function and communication modules

The features of the 8200 motec inverter can be expanded with a whole range of modules. The large number of available combinations of frequency inverters and

application-specific modules ensures a high level of flexibility, providing solutions for a wide variety of drive and automation tasks.

### Overview: 8200 motec with function/communication modules



**Important:**

The following pages list the criteria which are used to select the modules (selection guide).



# Control and operation - 8200 motec

## Selection guide

### a) Operation/control via keypad and/or control terminals (control terminals = analog/digital inputs/outputs)



HVAC



Materials handling



Printing



<b>Solution: 8200 motec</b>	With keypad Without function module	With Standard I/O function module	With Application I/O function module	<b>Option Keypad</b>
<b>Features</b>	All of the features of the 8200 motec, e.g.: – Motor protection through PTC input – Fault message output via relay – Integrated filters (EMC)	<b>+</b> – Various analog/digital inputs/outputs – Bipolar setpoint preselection – etc.	<b>+</b> – Additional analog/digital inputs/outputs – etc.	– Password protection – Copying of settings – Suitable for handheld operation (IP55) or for installation in control cabinet door (IP55) (optional) – Key settings (10 parameters) can be made <b>quickly and easily</b>
<b>Application examples</b>	<b>Conveyor belt with variable speed</b>	<b>Conveyor belt controlled via PLC</b>	<b>Conveyor belt with master speed and additional speed, controlled via PLC</b>	<b>“On-site” access to only a few adjustment settings</b>
<b>Advantages</b>	– Simple and reliable speed adjustment – Display of operating data – No further measures required	– <b>Module for the most common applications</b>	– Versatile module for demanding applications – Optimised speed adaptation	– Easy to operate – No unpermitted or incorrect operation – Individual collation of required adjustment options
<b>Tip</b>	– Use a hand terminal (handheld keypad) and connection cable (IP55)	– Preselection of up to 12 fixed speeds on-site e.g. via a control panel	– Preselection of up to 28 fixed speeds on-site e.g. via a control panel – Output of time delayed messages or signals to the PLC	

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### b) Control via fieldbus, operation via keypad

Automation

8200 motec -  
the ideal partner

<b>Solution:</b> 8200 motec	With <b>LECOM-B</b> (RS 485) function module	With <b>system bus (CAN)</b> function module	With <b>INTERBUS</b> function module	With <b>PROFIBUS-DP</b> function module
<b>Features</b>	<ul style="list-style-type: none"> <li>- Quick and easy connection to the bus system</li> <li>- Application-specific assignment of process data and control/status words possible</li> <li>- All parameters (code digits) can be accessed via the bus system</li> <li>- Terminal available on the function module for inhibiting/enabling the frequency inverter</li> </ul>			
<b>Advantages</b>	<ul style="list-style-type: none"> <li>- Flexible adaptation to the bus structure</li> <li>- Parameters can be set during bus operation, e.g. via keypad or PC with Global Drive Control parameter setting software</li> <li>- Drive can be stopped without affecting bus communication</li> </ul>			
<b>Tip</b>	<p>Application example: Actuation of the relay output via the bus (e.g. actuation of a warning lamp via the relay without affecting the frequency inverter)</p> <ul style="list-style-type: none"> <li>- Possibility of remote parameter setting</li> <li>- Operation possible with and without the master</li> <li>- Bus connection with 8200 vector, 8200 motec, 9300 servo inverters</li> </ul>			

**Note:** DeviceNet/CANopen function modules, AS-Interface in preparation

### c) Control via fieldbus and/or control terminals, operation via keypad

<b>Solution:</b> 8200 motec	<b>Bus I/O and LECOM-B (RS485)</b> function module	<b>Bus I/O and CAN system bus</b> function module	<b>Bus I/O and INTERBUS</b> function module	<b>Bus I/O and PROFIBUS-DP</b> function module
<b>Features</b>	<p>Bus I/O: Module with digital/analog inputs/outputs Fieldbus function modules: see previous page</p>			
<b>Advantages</b>	<ul style="list-style-type: none"> <li>- Signals are accumulated for passing on via the bus module to the higher-level control system</li> <li>- Simultaneous bus and I/O operation</li> <li>- High degree of flexibility due to different bus and I/O function modules</li> </ul>			

**Note:** Bus I/O and DeviceNet/CANopen function module in preparation







## General information

The features of the 8200 motec inverter can be expanded with a whole range of modules. One of these modules each can be integrated into the inverter. The following modules are available:

### I/O function modules

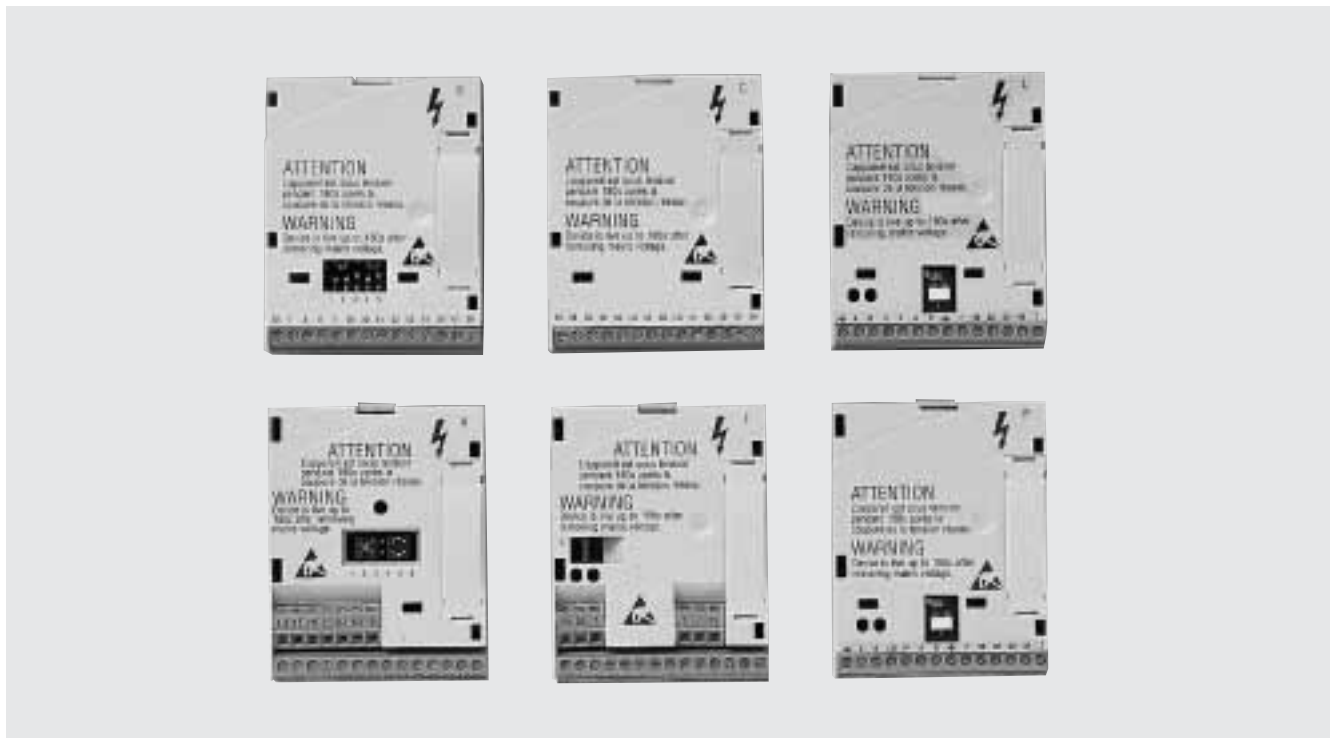
The 8200 motec frequency inverter can be expanded with an I/O function module with inputs and outputs. Thus, control functions can be directly evaluated in the inverter, e.g. the limit switch position on conveyor drives.

- Standard I/O
- Application I/O
- Bus I/O\* (not illustrated)

### Bus function modules

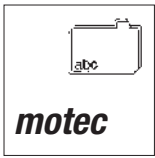
The 8200 motec frequency inverter can be easily networked with a host system. Various bus function modules are available for this process-orientated, decentralised drive solution.

- System bus (CAN)
- LECOM-B (RS485)
- INTERBUS
- PROFIBUS-DP
- DeviceNet/CANopen (in preparation)
- AS-Interface (in preparation, not in conjunction with Bus I/O)



Function module overview

\* In addition a bus function module should always be selected (see also page 4-25 "Control via fieldbus and/or control terminals, Operation via keypad")



# 8200 motec function modules

## I/O function modules

### Standard I/O (type E82ZAFS001)

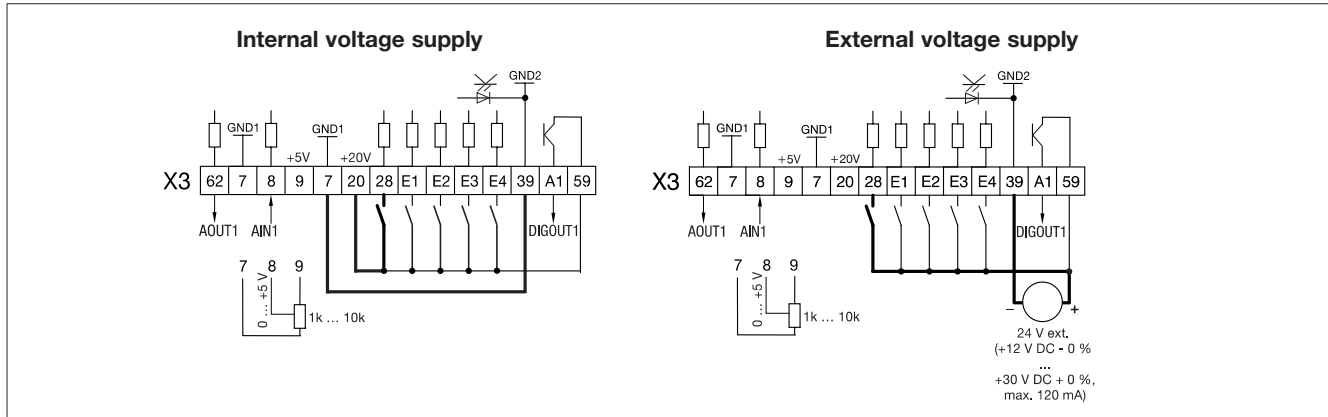
The Standard I/O function module is integrated into the 8200 motec. It is mounted in the carrier housing (terminal box) of the 8200 motec.

### Standard I/O available input/output terminals:




Analog IN	Analog OUT	Digital IN	Digital OUT
1	1	4*	1

\* includes 1 frequency input (0...10 kHz)

### Terminal assignment



— Minimum wiring required for operation

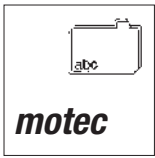
<b>Electrical connection</b>	Screw terminals
<b>Connection options</b>	 Rigid: 1.5 mm <sup>2</sup> (AWG 16)
	Flexible:
	 1.0 mm <sup>2</sup> (AWG 18)
	 0.5 mm <sup>2</sup> (AWG 20)
<b>Tightening torques</b>	0.5...0.6 Nm (4.4...5.3 lbf in)



### Standard I/O (type E82ZAFS001)

X3	Signal type	Function (bold = Lenze setting)	Level	Technical data		
8	Analog input	Actual or setpoint value input	0 ... +5 V <b>0 ... +10 V</b> -10 V ... +10 V 0 ... +20 mA +4 ... +20 mA +4 ... +20 mA (monitored for open circuit)	Resolution: 10-bit Linearity error: ±0.5% Temperature sensitivity: 0.3% (0 ... +60°C) Input resistance – Voltage signal: > 50 kΩ – Current signal: 250 Ω		
62	Analog output	<b>Output frequency</b>	0 ... +10 V	Resolution: 10-bit Linearity error: ±0.5% Temp. sensitivity: 0.3% (0 ... +60°C) Load capacity: max. 2 mA		
28		Controller inhibit	1 = START	Input resistance: 3.3 kΩ 1 = High (+12...+30 V) 0 = Low (0...+3 V)  (PLC level, HTL)		
E1 <sup>1)</sup>	Digital inputs	<b>Activation of fixed frequencies (JOG)</b>			E1	E2
E2		<b>JOG1 = 20 Hz</b>	JOG1		1	0
		<b>JOG2 = 30 Hz</b>	JOG2		0	1
		<b>JOG3 = 40 Hz</b>	JOG3		1	1
E3		<b>DC brake (DCB)</b>	1 = DCB active			
E4	<b>Reversal of direction of rotation</b>		E4			
	<b>Clock./counter-clock. rotation (CW/CCW)</b>	CW	0			
		CCW	1			
A1	Digital output	<b>Ready for operation</b>	0/+20 V with internal DC 0/+24 V with external DC	Load capacity: 10 mA 50 mA		
9	–	Internal, stabilised DC supply for setpoint value potentiometer	+5.2 V (reference: X3/7)	Load capacity: max. 10 mA		
20	–	Internal DC supply for actuation of the digital inputs and outputs	+20 V (reference: X3/7)	Max. load capacity: $\sum I = 40$ mA		
59	–	DC supply for A1	+20 V (internal, bridge to X3/20) +24 V (external)			
7	–	GND1, reference potential for analog signals	–	Isolated to GND2		
39	–	GND2, reference potential for digital signals	–	Isolated to GND1		

1) optional 0...10 kHz frequency input



# 8200 motec function modules

## I/O function modules

### Application I/O (type E82ZAF001)

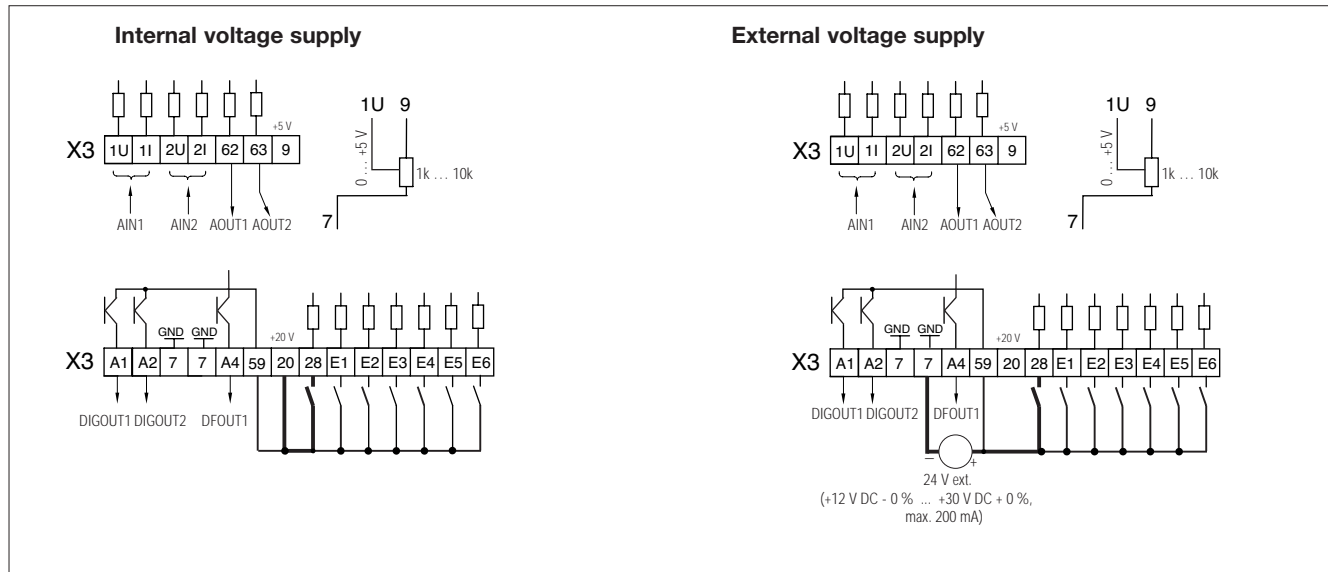
The Application I/O function module is integrated into the 8200 motec. It is mounted in the carrier housing (terminal box) of the 8200 motec.

### Application I/O available input/output terminals:

Analog IN	Analog OUT	Digital IN	Digital OUT	Frequency OUT
2	2	6*	2	1

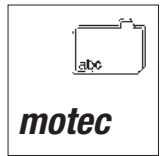
\* Includes an optional 0...100 kHz frequency input, single-track or two-track

### Terminal assignment



Electrical connection	Screw terminals
Connection options	Rigid: 1.5 mm <sup>2</sup> (AWG 16)
	Flexible:
	1.0 mm <sup>2</sup> (AWG 18)
	0.5 mm <sup>2</sup> (AWG 20)
Tightening torques	0.5...0.6 Nm (4.4...5.3 lbf in)

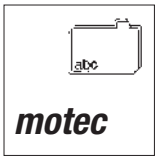
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### Application I/O (type E82ZAFA001)

X3	Signal type	Function (bold = Lenze setting)	Level	Technical data		
1U/ 2U	Analog inputs	Actual or setpoint value inputs (master reference voltage)	0 ... +5 V <b>0 ... +10 V</b> -10 V ... +10 V	Resolution: 10-bit Linearity error: ±0.5% Temp. sensitivity: 0.3% (0 ... +60°C)  Input resistance – Voltage signal: > 50 kΩ – Current signal: 250 Ω		
1I/2I		Actual or setpoint value inputs (master reference current)	0 ... +20 mA +4 ... +20 mA +4 ... +20 mA (monitored for open circuit)			
62	Analog outputs	<b>Output frequency</b>	<b>0 ... +10 V</b>	Resolution: 10-bit Linearity error: ±0.5% Temp. sensitivity: 0.3% (0 ... +60°C)  Load capacity: (0...+10 V): max. 2 mA RL (0/4...20 mA) ≤ 500 Ω		
63		Motor current				
28		Controller inhibit	1 = START	Input resistance: 3 kΩ 1 = High (+12...+30 V) 0 = Low (0...+3 V)  (PLC level, HTL)		
E1 <sup>1)</sup>	Digital inputs	<b>Activation of fixed frequencies (JOG)</b>			E1	E2
E2 <sup>1)</sup>		<b>JOG1 = 20 Hz</b>	JOG1		1	0
		<b>JOG2 = 30 Hz</b>	JOG2		0	1
		<b>JOG3 = 40 Hz</b>	JOG3		1	1
E3		<b>DC brake (DCB)</b>	1 = DCB active			
E4		Reversal of direction of rotation			E4	
		Clock./counter-clock. rotation (CW/CCW)	CW		0	
			CCW		1	
E5		<b>Not pre-configured</b>	–			
E6		<b>Not pre-configured</b>	–			
A1	Digital outputs	<b>Ready for operation</b>	0/+20 V with internal DC 0/+24 V with external DC			
A2		<b>Not pre-configured</b>				
A4	Frequency output	DC bus voltage	HIGH: +18 V...24 V (HTL) LOW: 0		0...10 kHz Load capacity: max. 5 mA	
9	–	Internal, stabilised DC supply for setpoint value potentiometer	+5.2 V		Load capacity: max. 10 mA	
20	–	Internal DC supply for actuation of the digital inputs and outputs	+20 V		Load capacity: max. 70 mA	
59	–	DC supply for X3/A1 and X3/A2	+20 V (internal, bridge to X3/20) +24 V (external)			
7	–	GND1, reference potential	–			

1) Optional 0...100 kHz frequency input, single-track or two-track



# 8200 motec function modules

## I/O function modules

### Bus I/O (type E82ZAFB001 for motec 0.55-2.2 kW, 400 V type E82ZMFB001 for motec 0.25/0.37 kW, 230 V)

The Bus I/O function module is integrated into the 8200 motec. It is mounted in the carrier housing (terminal box) of the 8200 motec. Bus communications are possible in conjunction with a bus function module (e.g. system bus (CAN), LECOM-B, INTERBUS, PROFIBUS-DP, DeviceNet/CANopen) in addition to the I/O functionality (terminal signals).

As well as the drive functions, system data (e.g. evaluation of limit switches) can be transmitted via the bus to the host.

**Note:**

- Please note the change in overall height on the Bus I/O for 0.25/0.37 kW (dimension b\* - see page 4-20).
- Always select an additional bus function module when ordering the Bus I/O.

**Bus I/O available input/output terminals:**

Analog IN	Analog OUT	Digital IN	Digital OUT
1	1	4*	1




\* Includes 1 frequency input (0...10 kHz)



4

Bus I/O motec 0.25-0.37 kW, 230 V

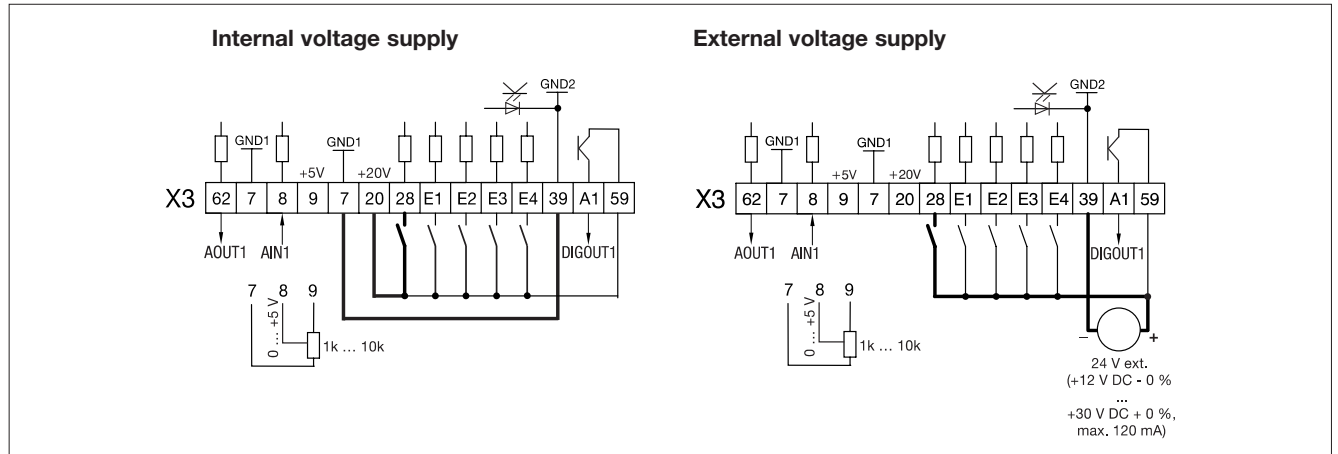
Wiring example: motec 0.55 kW/400 V with Bus I/O, bus function module and mains loop terminal

<b>Electrical connection</b>	Screw terminals
<b>Connection options</b>	 Rigid: 1.5 mm <sup>2</sup> (AWG 16)
	Flexible:
	 1.0 mm <sup>2</sup> (AWG 18)
	 0.5 mm <sup>2</sup> (AWG 20)
<b>Tightening torques</b>	0.5...0.6 Nm (4.4...5.3 lbf in)



**Bus I/O (type E82ZAFB001 for motec 0.55-2.2 kW, 400 V  
type E82ZMFB001 for motec 0.25/0.37 kW, 230 V)**

### Terminal assignment

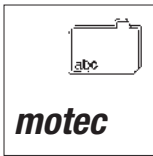


Minimum wiring required for operation

X3	Signal type	Function (bold = Lenze setting)	Level	Technical data		
8	Analog input	Actual or setpoint value input	0 ... +5 V <b>0 ... +10 V</b> -10 V ... +10 V 0 ... +20 mA +4 ... +20 mA +4 ... +20 mA (monitored for open circuit)	Resolution: 10-bit Linearity error: ±0.5% Temperature sensitivity: 0.3% (0 ... +60°C) Input resistance - Voltage signal: > 50 kΩ - Current signal: 250 Ω		
62	Analog output	<b>Output frequency</b>	0 ... +10 V	Resolution: 10-bit Linearity error: ±0.5% Temp. sensitivity: 0.3% (0 ... +60°C) Load capacity: max. 2 mA		
28		Controller inhibit	1 = START	Input resistance: 3.3 kΩ 1 = High (+12...+30 V) 0 = Low (0...+3 V)  (PLC level, HTL)		
E1 <sup>1)</sup>	Digital inputs	<b>Activation of fixed frequencies (JOG)</b>			E1	E2
E2		<b>JOG1 = 20 Hz</b>	JOG1		1	0
		<b>JOG2 = 30 Hz</b>	JOG2		0	1
		<b>JOG3 = 40 Hz</b>	JOG3		1	1
E3		<b>DC brake (DCB)</b>	1 = DCB active			
E4		<b>Reversal of direction of rotation</b>		E4		
		<b>Clock./counter-clock. rotation (CW/CCW)</b>	CW	0		
			CCW	1		
A1	Digital output	<b>Ready for operation</b>	0/+20 V with internal DC 0/+24 V with external DC	Load capacity: 10 mA 50 mA		
9	-	Internal, stabilised DC supply for setpoint value potentiometer	+5.2 V (reference: X3/7)	Load capacity: max. 10 mA		
20	-	Internal DC supply for actuation of the digital inputs and outputs	+20 V (reference: X3/7)	Max. load capacity: ∑ I = 40 mA		
59	-	DC supply for A1	+20 V (internal, bridge to X3/20) +24 V (external)			
7	-	GND1, reference potential for analog signals	-	Isolated to GND2		
39	-	GND2, reference potential for digital signals	-	Isolated to GND1		

1) Optional 0...10 kHz frequency input





# 8200 motec function modules

## Bus function modules

### System bus (CAN) (type E82Z AFC001)




The system bus (CAN) allows the Lenze devices to communicate with each other. With the 8200 motec the bus module is integrated into the device. This allows quick and easy connection of several motec devices to each other or to other external components, such as operating units.

#### Description

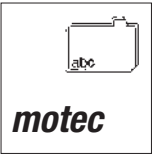
The system bus (CAN) function module is a component for the 8200 motec frequency inverter, which is used to connect the motec to the CAN (Controller Area Network) serial communications system. It can also be fitted to the motec as a retrofit or conversion. The function module expands the controller functionality, e.g. by:

- Parameter preselection/remote parameter setting
- Data transfer between inverters
- Connection to external control systems and hosts
- Possibility of connection to
  - decentralized terminal extensions
  - operating and input devices

### General data and application conditions

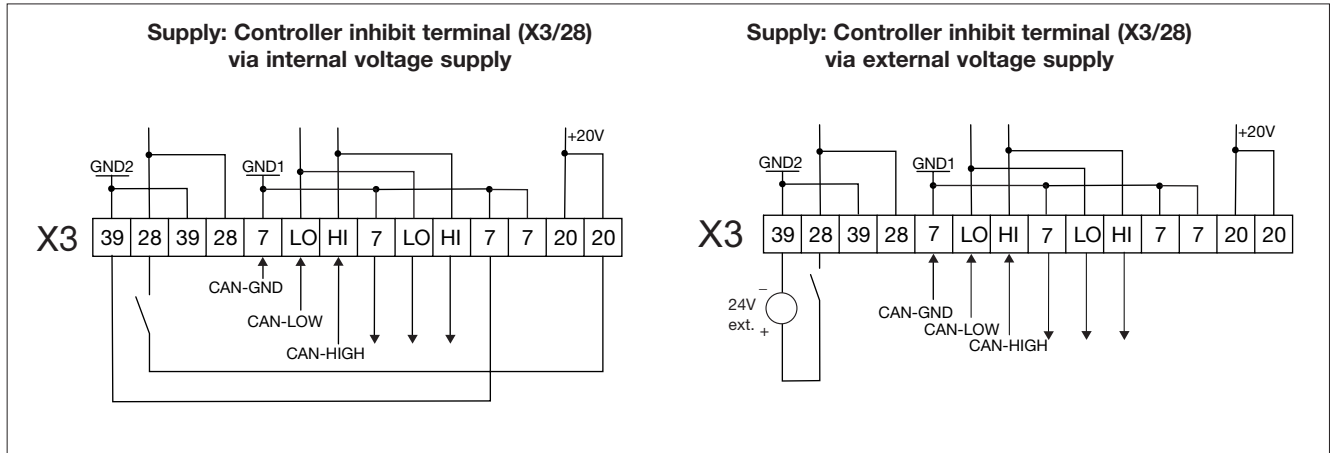
<b>Protocol</b>	Similar to CANopen (CAL based communication profile DS301)				
<b>Communication medium</b>	DIN ISO 11898				
<b>Network topology</b>	Line (terminated at both ends with 120 Ω)				
<b>System bus device</b>	Master or slave				
<b>Max. number of devices</b>	63				
<b>Baud rate [kBit/s]</b>	20	50	125	250	500
<b>Max. bus length [m]</b>	2500	1000	500	250	120
<b>Electrical connection</b>	Screw terminals				
<b>Connection options</b>	 Rigid: 1.5 mm <sup>2</sup> (AWG 16)				
	Flexible:				
	 1.0 mm <sup>2</sup> (AWG 18)				
	 0.5 mm <sup>2</sup> (AWG 20)				
<b>Tightening torques</b>	0.5...0.6 Nm (4.4...5.3 lbf in)				
<b>DC supply to the function module</b>	Internal (operation of the bus system continues in the event of failure of the motec)				
<b>Insulation voltage to reference earth/PE</b>	50 V AC				
<b>Ambient temperature</b>	Operation: -20 ... +60°C Transport: -25 ... +70°C Storage: -25 ... +60°C				
<b>Climatic conditions</b>	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)				

**Note:** Two bus terminating resistors are included with the supplied items.



### System bus (CAN) (type E82Z AFC001)

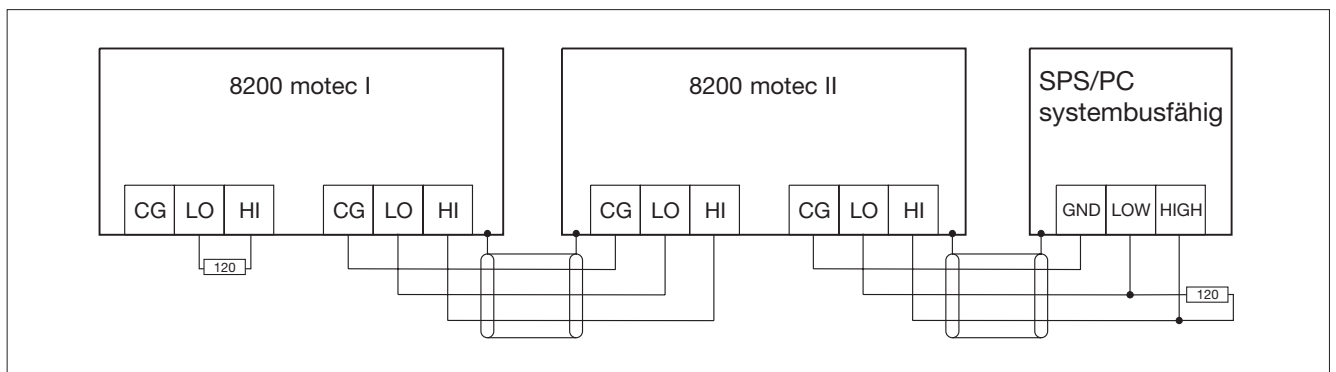
#### Terminal assignment



Terminal	Designation	Explanation
X3/39	GND 2	Reference potential for X3/28
X3/28		Controller inhibit Start = HIGH (+12 V ... +30 V) Stop = LOW (0 V ... +3 V)
X3/7	GND 1	Reference potential
X3/LO	CAN-LOW	System bus LOW (data cable)
X3/HI	CAN-HIGH	System bus HIGH (data cable)
X3/20		+ 20 V internal for controller inhibit

#### Wiring of the system bus network

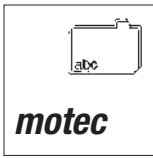
##### Basic design



#### Wiring notes

We recommend the following signal cable:

Specification system bus cable	Total length up to 300m	Total length up to 1,000 m
Cable type	LIYCY 2 x 2 x 0.5 mm <sup>2</sup> (shielded twisted pairs)	CYPIMF 2 x 2 x 0.5 mm <sup>2</sup> (shielded twisted pairs)
Cable resistance	≤ 40 Ω/km	≤ 40 Ω/km
Capacitance per unit length	≤ 130 nF/km	≤ 60 nF/km
Connection	Pair 1 (white/brown): LO and HI Pair 2 (green/yellow): GND	







# 8200 motec function modules

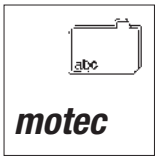
## Bus function modules

### LECOM-B (RS485) (type E82ZAFL001)

Communication via the LECOM-B function module (RS485) uses the Lenze protocol LECOM. This LECOM protocol is open to the user. It is however already fully incorporated in various systems (e.g. Simatic S5).

#### General data and application conditions

<b>Communication medium</b>	RS485 (LECOM-B)
<b>Communication protocol</b>	LECOM A/B V2.0
<b>Transfer character format</b>	7E1: 7-bit ASCII, 1 stop bit, 1 start bit, 1 parity bit (even)
<b>Baud rate [kBit/s]</b>	1200, 2400, 4800, 9600, 19200, 38400, 57600
<b>LECOM-B device</b>	Slave
<b>Network topology</b>	Without repeater: line With repeaters: line or tree
<b>Process data words (PCD) (16-bit)</b>	2 words
<b>Max. number of devices</b>	31 (= 1 bus segment) With repeaters: 90
<b>Max. cable length per bus segment</b>	1000 m (depending on baud rate and cable type used)
<b>Electrical connection</b>	Screw terminals
<b>Connection options</b>	 Rigid: 1.5 mm <sup>2</sup> (AWG 16) Flexible:  1.0 mm <sup>2</sup> (AWG 18)  0.5 mm <sup>2</sup> (AWG 20)  0.5 mm <sup>2</sup> (AWG 20)
<b>Tightening torques</b>	0.5...0.6 Nm (4.4...5.3 lbf in)
<b>DC supply to the function module</b>	<ul style="list-style-type: none"> <li>• Internal</li> <li>• External, required if               <ul style="list-style-type: none"> <li>– bus devices are to be disconnected from the mains, but communication with the master must be maintained</li> <li>– bus devices with activated bus terminating resistor are to be disconnected from the mains, but the bus system must remain active</li> <li>– supply via separate mains supply</li> <li>– +24 V DC ± 10%, max. 70 mA per function module</li> </ul> </li> </ul>
<b>Insulation voltage to reference earth/PE</b>	50 V AC
<b>Ambient temperature</b>	Operation: -20 ... +60°C Transport: -25 ... +70°C Storage: -25 ... +60°C
<b>Climatic conditions</b>	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)



### LECOM-B (RS485) (type E82ZAFL001)

#### Terminal assignment

Front view	Supply: Controller inhibit terminal (X3/28) via internal voltage supply X3/20 (+ 20 V DC)	Supply: Controller inhibit terminal (X3/28) via external + 24 V supply
Minimum wiring required for operation		

X3/	Input (I)/Output (O)	Explanation
59	I	External supply, reference X3/7
7	-	GND1, reference potential 1
39	-	GND2, reference potential for X3/28
k	-	PES, additional HF shield termination
A	I/O	T/R(A), RS485 data cable A
B	I/O	T/R(B), RS485 data cable B
CN	O	CNTR, CNTR = HIGH (+5 V) when sending data
VP	O	+5 V (can be loaded with 10 mA)
28	I	Controller inhibit <ul style="list-style-type: none"> <li>• Start = HIGH (+12 V ... +30 V)</li> <li>• Stop = LOW (0 ... +3 V)</li> </ul>
20	O	+20 V internal for controller inhibit, reference: X3/7
<b>DIP switch</b>		
DIP switch = ON		Integrated bus terminating resistor active
DIP switch = OFF		Integrated bus terminating resistor inactive

**Important:** The internal or external DC supply to the controller inhibit terminal (X3/28) is provided **independently** of the internal or external DC supply to the function module.

**Tip:** The external DC supply to the function module is provided via terminals X3/59 and X3/7. The connection diagrams shown above indicate the internal DC supply to the function module as an alternative option.



**motec**





# 8200 motec function modules

## Bus function modules

### INTERBUS (type E82ZAFI001)

INTERBUS is connected directly to the remote bus. The DRIVECOM profile 20 is supported. The module can be equipped with an external 24 V DC supply.

#### General data and application conditions

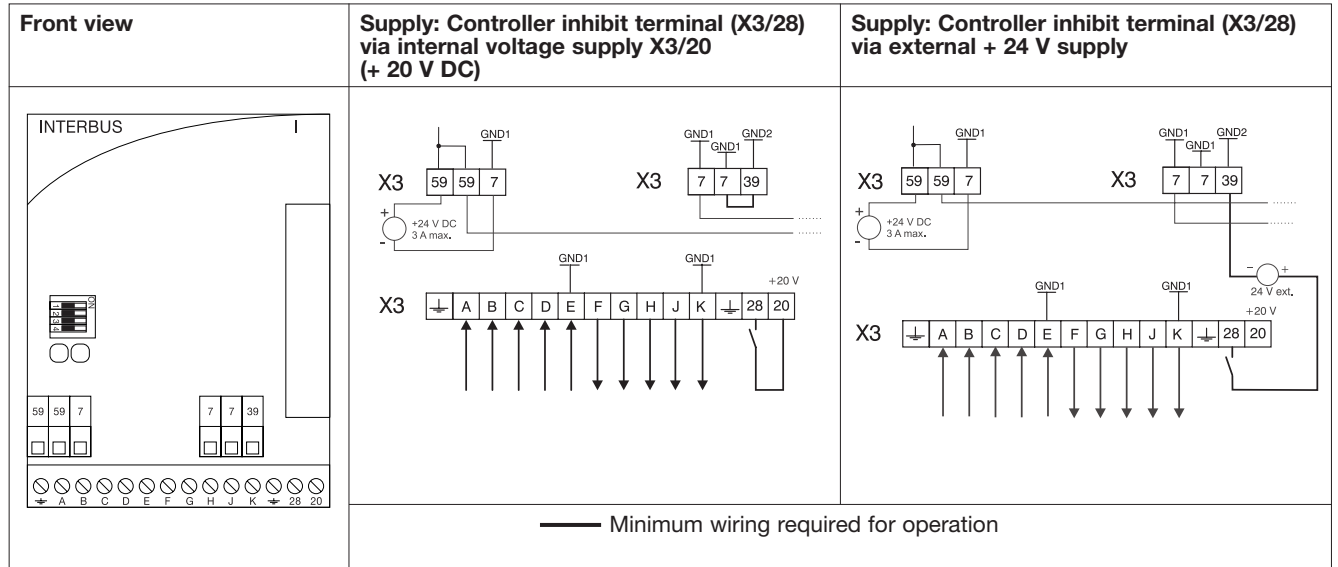
<b>Communication medium</b>	RS485
<b>Drive profile</b>	“Drive Technology 20” DRIVECOM profile or Lenze device control
<b>Baud rate [kBit/s]</b>	500
<b>INTERBUS device</b>	Slave
<b>Network topology</b>	Ring (both wires in the same bus cable)
<b>Process data words (PCD) (16-bit)</b>	1 word ... 6 words
<b>Parameter data words (PCP) (16-bit)</b>	0/1 word
<b>INTERBUS code (ID code)</b>	Decimal: 227; 3 hex: E3; 3
<b>Max. PDU length</b>	64 Bytes
<b>Supported PCP services</b>	Initiate, Abort, Status, Identify, Get-OV-Long, Read, Write
<b>Number of devices</b>	Depends on the host system (I/O range), max. 63
<b>Max. distance between 2 devices</b>	400 m
<b>Communication time</b>	<ul style="list-style-type: none"> <li>• Sum of cycle time and processing time in the fieldbus devices. The times are independent of each other.</li> <li>• Processing time in the controller: <ul style="list-style-type: none"> <li>– Parameter data and process data are independent of each other</li> <li>– Parameter data (PCP): approx. 30 ms + 20 ms tolerance</li> <li>– Process data: approx. 30 ms +2 ms tolerance</li> </ul> </li> </ul>
<b>Electrical connection</b>	Screw terminals
<b>Connection options</b>	 Rigid: 1.5 mm <sup>2</sup> (AWG 16) Flexible:  1.0 mm <sup>2</sup> (AWG 18)  0.5 mm <sup>2</sup> (AWG 20)  0.5 mm <sup>2</sup> (AWG 20)
<b>Tightening torques</b>	0.5...0.6 Nm (4.4...5.3 lbf in)
<b>DC supply to the function module</b>	<ul style="list-style-type: none"> <li>• Internal</li> <li>• External <ul style="list-style-type: none"> <li>– Required if the communication ring must not be interrupted by a bus device being switched off or failing</li> <li>– Supply via separate mains supply</li> <li>– +24 V DC ± 10%, max. 90 mA per function module</li> <li>– X3/59 can be loaded with a maximum of 3A when the supply voltage is looped through to other bus devices</li> </ul> </li> </ul>
<b>Insulation voltage to reference earth/PE</b>	50 V AC
<b>Ambient temperature</b>	Operation: -20 ... +60°C Transport: -25 ... +70°C Storage: -25 ... +60°C
<b>Climatic conditions</b>	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)

4



### INTERBUS (type E82ZAFI001)

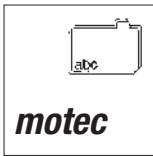
#### Terminal assignment



X3/	Input (I)/Output (O)	Explanation
59	I	External supply, reference X3/7 (external supply of the function module can be connected through, see connection diagrams)
7	–	GND1, reference potential 1
39	–	GND2, reference potential for X3/28
k	–	PES, additional HF shield termination
A	I	RS485 data cable /D01
B	I	RS485 data cable D01
C	O	RS485 data cable /DI1
D	O	RS485 data cable DI1
E	–	Reference potential - incoming cable
F	O	RS485 data cable /D02
G	O	RS485 data cable D02
H	I	RS485 data cable /DI2
J	I	RS485 data cable DI2
K	–	Reference potential - outgoing cable
28	I	Controller inhibit • Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 ... +3 V)
20	A	+20 V internal for controller inhibit, reference: X3/7

**Important:** The internal or external DC supply to the controller inhibit terminal (X3/28) is provided **independently** of the internal or external DC supply to the function module.

**Tip:** The external DC supply to the function module is provided via terminals X3/59 and X3/7 (see connection diagrams above).



# 8200 motec function modules






## Bus function modules

### PROFIBUS-DP (type E82ZAFP001)

The PROFIBUS-DP function module is a slave connection module with the PROFIBUS-DP communication profile. It networks the host and frequency inverter at high processing speeds. This allows user-friendly integration of

the 8200 motec inverter into the overall systems network. A floppy disk is supplied with the module containing a device description file to assist with project planning.

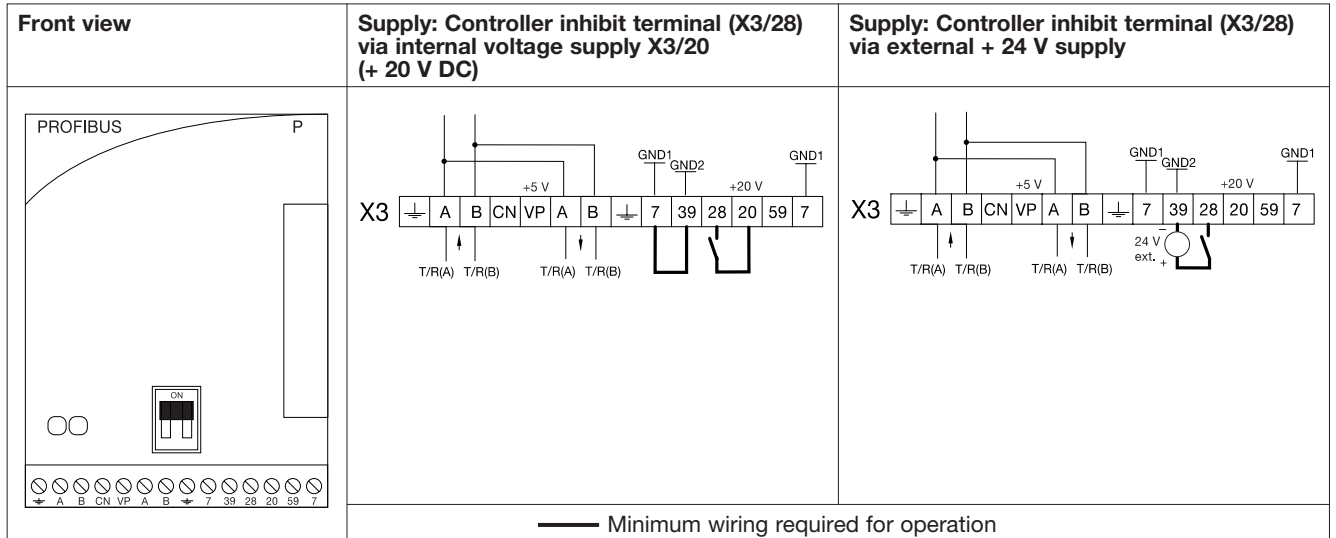
#### General data and application conditions

Communication medium	RS485
Communication profile	PROFIBUS-DP (DIN 19245 part 1 and part 3)
Drive profile	"Drive Technology 20" DRIVECOM profile or Lenze device control
Baud rate [kBit/s]	9.6 12000 (automatic detection)
PROFIBUS-DP device	Slave
Network topology	Without repeater: line With repeater: line or tree
Process data words (PCD) (16-bit)	1 word ... 10 words
DP user data length	Parameter channel (4 words) + process data words
Number of devices	Standard: 32 (= 1 bus segment) With repeaters: 125
Max. cable length per bus segment	1000 m (depending on baud rate and cable type used)
Communication time	<ul style="list-style-type: none"> <li>Sum of cycle time and processing time in the fieldbus devices. The times are independent of each other.</li> <li>Processing time in the controller: <ul style="list-style-type: none"> <li>Parameter data and process data are independent of each other</li> <li>Parameter data (PCP): approx. 30 ms + 20 ms tolerance</li> <li>Process data: approx. 30 ms +2 ms tolerance</li> </ul> </li> </ul>
Electrical connection	Screw terminals
Connection options	 Rigid: 1.5 mm <sup>2</sup> (AWG 16)  Flexible:  1.0 mm <sup>2</sup> (AWG 18)  0.5 mm <sup>2</sup> (AWG 20)  0.5 mm <sup>2</sup> (AWG 20)
Tightening torques	0.5...0.6 Nm (4.4...5.3 lbf in)
DC supply to the function module	<ul style="list-style-type: none"> <li>Internal</li> <li>External, required for <ul style="list-style-type: none"> <li>bus devices are to be disconnected from the mains, but communication with the master must be maintained</li> <li>bus devices with activated bus terminating resistor are to be disconnected from the mains, but the bus system must remain active</li> <li>supply via separate mains supply</li> <li>+24 V DC ± 10%, max. 80 mA per function module</li> </ul> </li> </ul>
Insulation voltage to reference earth/PE	50 V AC
Ambient temperature	Operation: -20 ... +60°C Transport: -25 ... +70°C Storage: -25 ... +60°C
Climatic conditions	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)



### PROFIBUS-DP (type E82ZAFP001)

#### Terminal assignment

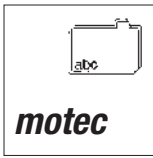


X3/	Input (I)/Output (O)	Explanation
59	I	External supply, reference X3/7
7	–	GND1, reference potential 1
39	–	GND2, reference potential for X3/28
k	–	PES, additional HF shield termination
A	I/O	T/R(A), RS485 data cable A
B	I/O	T/R(B), RS485 data cable B
CN	O	CNTR, CNTR = HIGH (+5 V) when sending data
VP	O	+5 V (can be loaded with 10 mA)
28	I	Controller inhibit • Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 ... +3 V)
20	O	+20 V internal for controller inhibit, reference: X3/7
<b>DIP switch</b>		
	DIP switch = ON	Integrated bus terminating resistor active
	DIP switch = OFF	Integrated bus terminating resistor inactive

**Important:** The internal or external DC supply to the controller inhibit terminal (X3/28) is provided **independently** of the internal or external DC supply to the function module.

**Tip:** The external DC supply to the function module is provided via terminals X3/59 and X3/7. The connection diagrams above indicate the internal DC supply to the function module as an alternative option.





# 8200 motec function modules

## Bus function modules





### DeviceNet/CANopen (type E82ZAFD001) \*

The DeviceNet/CANopen function module allows the 8200 motec to communicate with the DeviceNet or CANopen protocols via the CAN bus.

The following settings can be adjusted via a DIP switch on the front panel of the function module:

- Device address
- Baud rate
- Protocol: DeviceNet or CANopen

### General data and application conditions

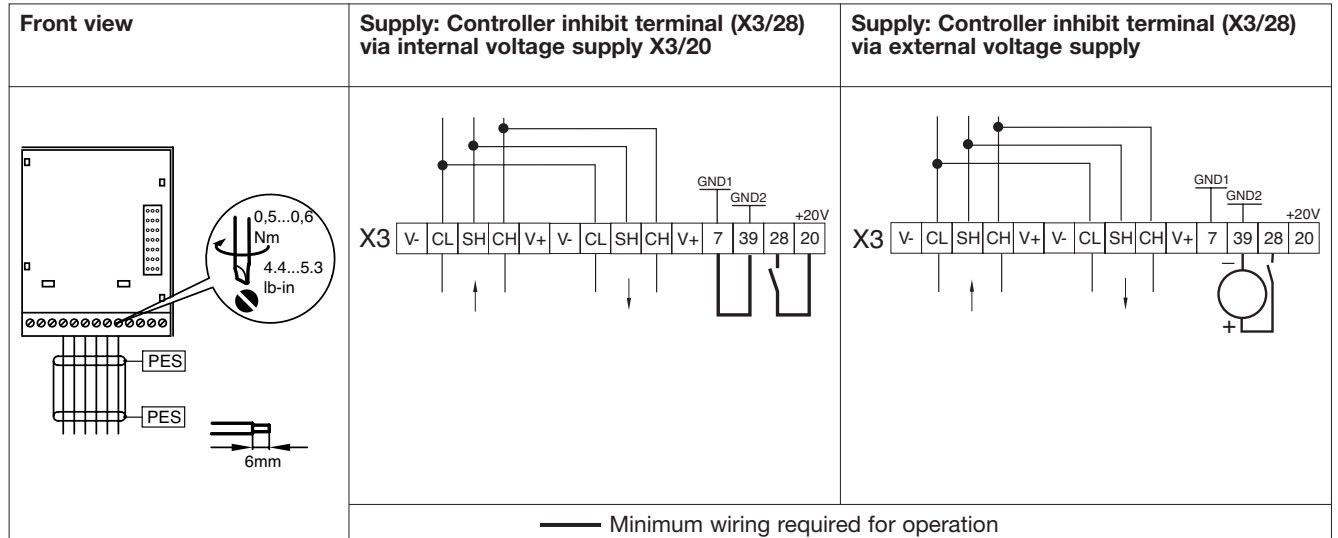
<b>Protocol</b>	CANopen or DeviceNet							
<b>Communication medium</b>	DIN ISO 11898							
<b>Network topology</b>	Line (terminated at both ends with 120 Ω)							
<b>System bus device</b>	Master or slave							
<b>Max. number of devices</b>	63							
<b>Max. cable length for CANopen</b>	Achievable data transfer rate depending on bus length:							
Baud rate [kBit/s]	10	20	50	125	250	500	1000	
L [m]	5000	2500	1000	550	250	100	25	
<b>Max. cable length for DeviceNet</b>	Achievable data transfer rate depending on bus length:							
Baud rate [kBit/s]	125		250			500		
Thin cable L [m]	100		100			100		
<b>Electrical connection</b>	Screw terminals							
<b>Connection options</b>	 Rigid: 1.5 mm <sup>2</sup> (AWG 16) Flexible:  1.0 mm <sup>2</sup> (AWG 18)  0.5 mm <sup>2</sup> (AWG 20)  0.5 mm <sup>2</sup> (AWG 20)							
<b>Tightening torques</b>	0.5...0.6 Nm (4.4...5.3 lbf in)							
<b>DC supply to the function module</b>	Internal Operation of the bus system continues in the event of failure of the drive controller							
<b>Insulation voltage to reference earth/PE</b>	50 V AC							
<b>Ambient temperature</b>	Operation: -20 ... +60°C Transport: -25 ... +70°C Storage: -25 ... +60°C							
<b>Climatic conditions</b>	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)							

\* In preparation



### DeviceNet/CANopen (type E82ZAFD001) \*

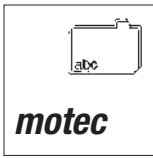
#### Terminal assignment



X3/	Designation	Explanation
V-		Reference potential for external supply voltage
CL	CAN-LOW	System bus LOW (data cable)
SH	SHIELD	Shield
CH	CAN-HIGH	System bus HIGH (data cable)
V+		External supply voltage + 24 V DC/100 mA
V-		Reference potential for external supply voltage
CL	CAN-LOW	System bus LOW (data cable)
SH	SHIELD	Shield
CH	CAN-HIGH	System bus HIGH (data cable)
V+		External supply voltage + 24 V DC/100 mA
7	GND1	Reference potential 1
39	GND2	Reference potential for X3/28
28		Controller inhibit <ul style="list-style-type: none"> <li>• Start = HIGH (+12 V...+30 V)</li> <li>• Stop = LOW (0...+ 30 V)</li> </ul> External supply to the terminal with $V(\text{ext}) = + 12 \text{ V DC} - 0\% \dots +30 \text{ V DC} + 0\%$
20		+ 20 V internal for controller inhibit, reference X3/7

**Note:** At the physically first and last bus devices the bus system must be terminated with a R = 120 Ohm resistor.

\* In preparation



# 8200 motec function modules

## Bus function modules

### AS-Interface (type E82ZAFF001) \*





The “AS-Interface” bus system has established itself for use at the lowest field level, particularly for digital signal transfer. It is designed for applications that do not necessarily require powerful fieldbus systems, but do nonetheless need to exploit the advantages of serial communication.

The advantages of this system are:

- Easy to use and set up
- Less wiring required
- Easy to integrate into existing systems
- Cost reductions

The AS-Interface function module enables the 8200 motec to be controlled with digital control signals via the AS-Interface bus system.

### General data and application conditions

Protocol/communication medium	AS-i
Network topology	Tree
Bus device	Slave
Max. number of nodes	31
Baud rate [kBit/s]	167
Cycle time [ms]	5 ms (with 31 nodes)
Max. bus length [m]	100
Electrical connection (AS-i terminal strip)	Screw terminals, 1.5 mm <sup>2</sup> (AWG 16)
Electrical connection (X3 terminal strip)	Screw terminals
Connection options (X3 terminal strip)	 Rigid: 1.5 mm <sup>2</sup> (AWG 16) Flexible:  1.0 mm <sup>2</sup> (AWG 18)  0.5 mm <sup>2</sup> (AWG 20)  0.5 mm <sup>2</sup> (AWG 20)
Tightening torques	0.5...0.6 Nm (4.4...5.3 lbf in)
DC supply to the function module	via AS-i
Insulation voltage to reference earth/PE	50 V AC (electrical isolation)
Ambient temperature	Operation: -20 ... +60°C Transport: -25 ... +70°C Storage: -25 ... +60°C
Climatic conditions	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)

\* In preparation

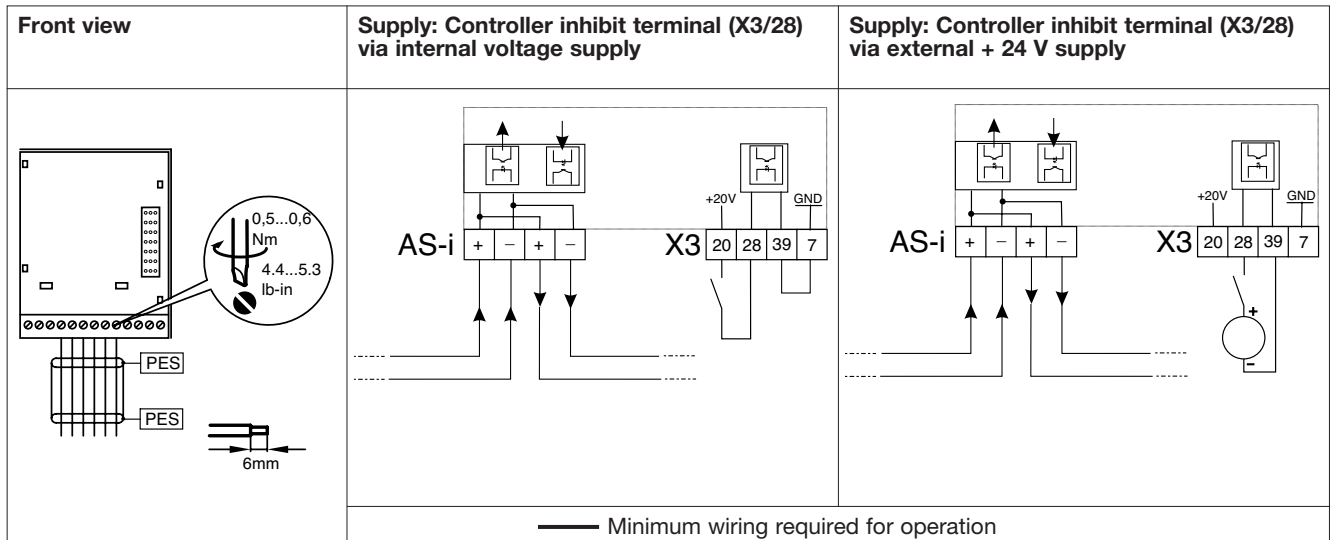
The following are available:

- 4 data bits to the 8200 motec (actuation)  
The bits can be freely assigned in the 8200 motec.  
Example:
  - Bit 1 is assigned the function “Fixed setpoint value 1”
  - Bit 2 is assigned the function “Fixed setpoint value 2”
  - Bit 3 is assigned the function “DC brake”
  - Bit 4 is assigned the function “Reversal of direction of rotation”
- 1 data bit from the 8200 motec (feedback)  
The bit can be freely assigned in the 8200 motec, e.g. with a trip error message.



### AS-Interface (type E82ZAFF001) \*

#### Terminal assignment



AS-i/	Wire colour (IEC757)	Explanation
+	BN	Please refer to the information included in the description of the AS-i system about the electrical connection of peripheral devices
-	BU	

X3/		Explanation
7	GND1	Reference potential 1
20		+ 20 V internal for controller inhibit (reference: X3/7)
28		Controller inhibit: <ul style="list-style-type: none"> <li>• Start = HIGH (+12 V...+ 30V)</li> <li>• Stop = LOW (0 V...+3 V)</li> </ul>
39	GND2	Reference potential for terminal X3/28

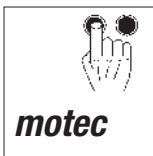
#### Wiring of the AS-i network

The wiring connects quickly and easily by means of AS-i flat cable connections (type E82ZMFF\*). On the 8200 motec it is secured in a cable inlet in the carrier housing (M16).

\* In preparation



AS-i flat cable connection (type E82ZMFF)



# 8200 motec communication modules

## Overview

### Operation, parameter setting and diagnostics

The default factory settings (Lenze standard configuration) of the 8200 motec meet the requirements of many common applications. Therefore, the drive can be put into

operation directly after installation. The communication modules keypad and LECOM-A (RS232) can be used to adapt the 8200 motec to your own specific requirements.

	Keypad*	PC interface (RS232)**
Description	Enables parameter setting of the motec using the keypad	Links the motec via the RS232 interface to a higher-level host (e.g. PC)
Function	Use the communication modules to <ul style="list-style-type: none"><li>• set the parameters for the motec</li><li>• control the motec (e.g. inhibit and enable)</li><li>• display operating data</li><li>• preselect setpoint values</li><li>• transfer parameter sets to other motec inverters</li></ul>	

**Note:**

With a PC and the RS232 interface it is also possible to set parameters using the Global Drive Control easy operating software.

\* Use a hand terminal (IP55 handheld keypad) and connection cable (⇒ page 4-48)

\*\* Use a handheld terminal with PC interface (RS232), PC system cable and connection cable (⇒ page 4-49)



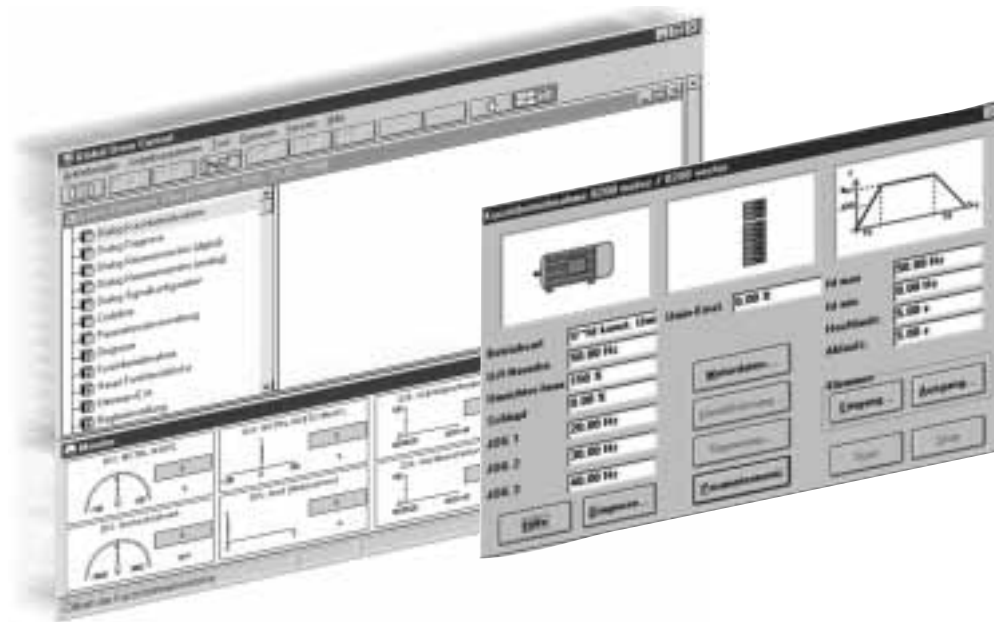
### Global Drive Control – GDC easy

The PC program Global Drive Control easy is an easy to understand and convenient tool for the operation, parameter setting and diagnostics of variable speed drives.

#### GDC easy features:

- Quick and easy set-up of the drive by means of the quick set-up function
- Easy operation even for inexperienced users thanks to extensive help functions
- User-friendly diagnostics options via several monitor windows.

The quick set-up function enables the entire drive to be set up quickly and easily, supported by self-explanatory dialogs. For this purpose a menu is automatically displayed for the frequency inverter, showing all of the operating parameters which need to be entered for the drive train. Inverter-related help functions, which describe the individual parameters in more detail, are always available.



The Global Drive Control incorporates all of the functions described here. You can also use the Global Drive Control **easy** version if you only wish to set the drive parameters:

Product feature	GDC easy	GDC
Quick set-up		
8200	✓	✓
8200 vector/motec***	✓	✓
9300 vector		✓
9300 Servo		✓
Technology functions*		✓
Code lists	✓	✓
Monitor windows	✓	✓
Function block editor		✓
Oscilloscope functions**		✓
<b>Order reference:</b>	<b>ESP-GDC2-E</b>	<b>ESP-GDC2</b>

\* For series 9300 Servo

\*\* For series 9300

\*\*\* For 8200 motec, 3-7.5 kW in preparation

#### System requirements of the Global Drive Control

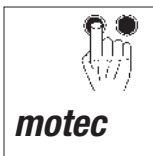
##### Hardware:

- IBM-AT or compatible PC
- CPU: 80486 or higher/Pentium
- 16 MB RAM
- 30 MB free hard drive space
- Super-VGA monitor
- CD-ROM drive
- A free serial interface for RS232/optical fibre cable or
- A free parallel interface for a system bus adapter (CAN)

##### Software:

For Global Drive Control

- Windows 3.1 x or Windows 95/98/NT 4.0 For Global Drive Control **easy**
- Windows 95/98/NT 4.0



# 8200 motec communication modules

## Keypad and accessories

### Keypad

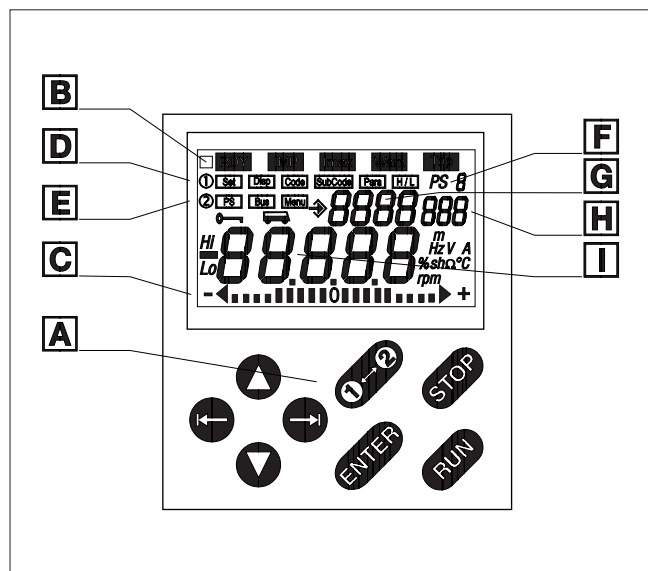
Use the keypad to adjust the frequency inverter parameters to adapt the drive to your requirements simply and easily.

#### • User-friendliness

The key settings for standard applications can be selected using the parameters provided in the User Menu. The selection of parameters in the User Menu can be made individually - password protection prevents unauthorised access.

• **Parameter set transfer** Parameter sets can be saved in the keypad in a non-volatile memory even when no voltage is applied. If several drives are in use then the keypad can be used to transfer parameter sets from one inverter to another.

• **Drive control** The drive can be controlled directly through the keypad. For this purpose the hand terminal (handheld keypad) is connected via various connection cables (2.5/5/10m) to the 8200 motec.



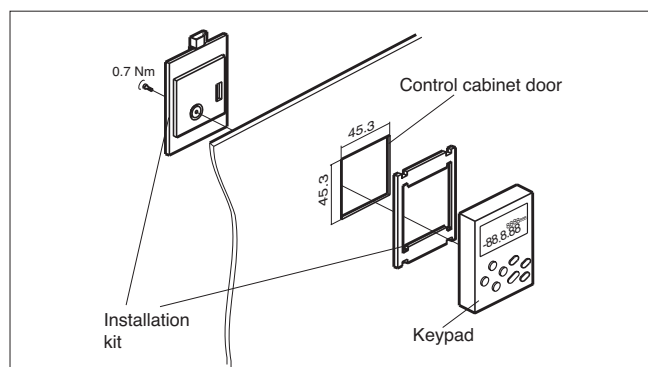
Keypad/display



Hand terminal (handheld keypad) and connecting cable

- 4
- A Function keys
  - B Status displays
  - C Bargraph display
  - D Function bar 1
  - E Function bar 2
  - F Parameters for change
  - G Code number
  - H Subcode number
  - I Parameter value with unit

### Dimensions of control cabinet installation kit



Selection	Order ref.
Keypad ***	E82ZBC
Hand terminal (handheld keypad) (IP55)	E82ZBB
Control cabinet installation kit **	E82ZBHT
2.5 m connection cable *	E82ZWL025
5 m connection cable *	E82ZWL050
10 m connection cable *	E82ZWL100

\* The connection cable is required to connect the hand terminal or control cabinet installation kit and the 8200 motec.

\*\* The additional control cabinet installation kit is required if the keypad is to be installed in the door of the control cabinet.

\*\*\* Keypad for the 8200 vector control cabinet inverter or for use with a control cabinet installation kit.



### Handheld terminal with PC interface (RS232) (type E82ZBL)

Easy parameter setting with the RS232 interface and the Global Drive parameter setting software. Communication takes place via this module using the Lenze protocol LECOM. This interface is used to set the 8200 motec frequency inverter parameters using the Global Drive Control (GDC) easy or Global Drive Control software.

Global Drive Control uses the familiar Windows user interface and is very simple to use. This ensures quick and reliable setup.

In addition, various monitor displays are available for displaying process and controller behaviour, e.g. device workloads.

<b>Protocol</b>	LECOM-A/B V2.0
<b>Communication medium</b>	RS232 (LECOM-A)
<b>Transfer character format</b>	7-bit ASCII, 1 stop bit, 1 start bit, 1 parity bit (even)
<b>Baud rate [Bit/s]</b>	1200, 2400, 4800, 9600, 19200
<b>Network topology</b>	Point to point
<b>Max. number of devices</b>	1
<b>Max. cable length</b>	15 m
<b>PC connection</b>	Sub-D socket (9-pin)
<b>Insulation voltage to reference earth/PE</b>	50 V AC
<b>Degree of protection</b>	IP20
<b>Ambient temperature</b>	Operation: 0 ... +50°C Transport: -25 ... +70°C Storage: -25 ... +55°C
<b>Humidity</b>	Humidity class F without condensation (average relative humidity 85%)

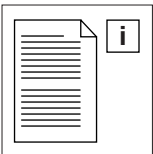
Pin assignment - 9-pin SubD socket				Basic layout
Pin	Designation	Input (I)/ Output (O)	Explanation	
1	-	-	not assigned	
2	RxD	I	"Receive data" cable	
3	TxD	O	"Send data" cable	
4	DTR	O	Sending control	
5	GND	-	Reference potential	
6	DSR	E	not assigned	
7	-	-	not assigned	
8	-	-	not assigned	
9	GND	-	Reference potential for T/R (A), T/R (B) and +5 V	

- 1) PC system cable
- 2) Connection cable
- 3) Protective cover



Handheld terminal with PC interface (RS232) (type E82ZBL) and PC system cable RS232 (EWL0048)





## Accessories for the 8200 motec

### Switch/potentiometer unit

#### Switch/potentiometer unit (type E82ZBU)

The switch/potentiometer unit (IP65 protection system) is mounted directly on the 8200 motec frequency inverter or, for enhanced accessibility, on the machine stand.

Using the switch/potentiometer unit and an I/O function module (Standard I/O, Application I/O, Bus I/O), it is

possible to preselect an analog setpoint for the frequency inverter with the integrated potentiometer. In addition, the rotary switch can be used to start, stop or reverse the direction of rotation of the drive.

**Note:**

An application example for the switch/potentiometer unit can be found on page 4-72.



Switch/potentiometer unit

#### Parts included with the delivery



1 switch/potentiometer unit, pre-assembled with a 2.5 m connection cable

1 mounting plate, 60 mm x 60 mm

4 screws (M4 x 30) for mounting the switch/potentiometer unit on the mounting plate

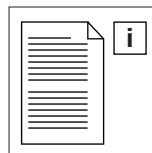
2 screws (M4 x 20) with spring washers for mounting the device to the heatsink of the 8200 motec

#### General data and application conditions

Degree of protection	IP65	
Dimensions (W x H x D)	Approx. 65 mm x 115 mm x 85 mm	
Mounting options	On the heatsink of the motec	On a wall

# Accessories for the 8200 motec

## Wiring terminals and brake rectifiers



### Selection guide

motec	Accessory (type)			
	Mains loop terminal	Fan connection terminal*	Systems terminals*	Brake rectifier*
0.25/0.37 kW, 230 V	E82ZWKN2	–	E82ZMKS** (in prep.)	E82ZMBR1**
0.55-2.2 kW, 400 V	E82ZWKN4	E82ZWKL	E82ZWKS	E82ZWBR3 or E82ZWBR1

\* Important: 1) Only one component can be used at a time in the terminal cradle of the motec.  
Example: If the system terminal E82ZWKS is used on a motec 0.55 kW, 400 V, then the brake rectifier E82ZWBR3 or E82ZWBR1 cannot be used.

2) When using the Bus I/O function module, only the mains loop terminal can be used in addition.

\*\* With the 8200 motec 0.25/0.37 kW, 230 V, the system terminals and brake rectifier accessory components are housed in an additional terminal cradle, which is mounted underneath the motec terminal cradle. Note the change in overall height (dimension b\* ⇨ page 4-20).

### Wiring terminals – general features

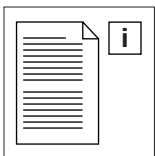
The wiring terminals enable the wiring and connection of mains and control cables in the carrier housing of the motec.

Wiring terminal	Design	Area of application
Mains loop terminal	<ul style="list-style-type: none"> <li>• 4 mm<sup>2</sup> (0.55 - 2.2 kW, 400 V)</li> <li>• 2.5 mm<sup>2</sup> (0.25 - 0.37 kW, 230 V)</li> <li>• Ensure protection is suitable for the chosen cross-section, and observe all applicable regulations</li> </ul>	Wiring and connection of mains cables (page 4-52)
Fan connection terminal	<ul style="list-style-type: none"> <li>• 2 x 2.5 mm<sup>2</sup> (plug terminals)</li> </ul>	Connection of a separate motor fan with a fan supply cable
Systems terminals	<ul style="list-style-type: none"> <li>• 12 x 1.5 mm<sup>2</sup> (plug terminals)</li> <li>• 10 x 1.5 mm<sup>2</sup> (for motec 0.25/0.37 kW)</li> </ul>	Wiring and connection of control cables

### Brake rectifiers – general features

The brake rectifier enables the control of an electromechanical motor brake with 180 V DC or 205 V DC (rated coil voltage of the brake). The switching signals are sent for example via the relay output of the frequency inverter.

Note:  
24 V DC brakes can be actuated directly via the relay output of the frequency inverter. Here, there is no requirement for a brake rectifier.  
Further information: ⇨ Braking - 8200 motec (page 4-59)



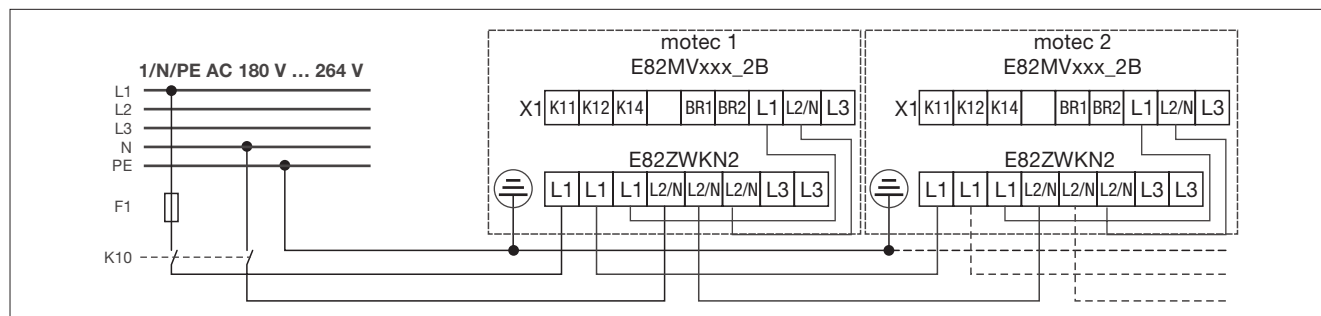
## Accessories for the 8200 motec

### Mains bus connector

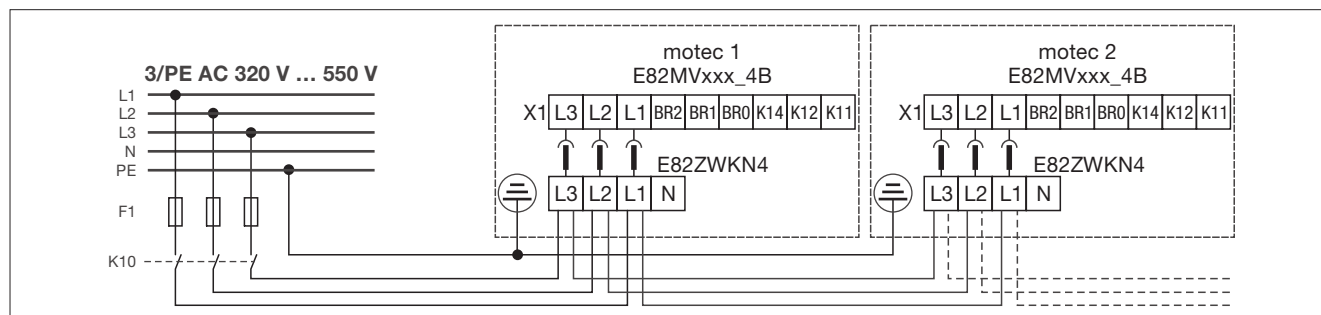
#### Mains bus connector (types E82ZWKN2/E82ZWKN4)

A “power bus” can be set up together with the mains bus connectors, i.e. the supply voltage is “smoothed” in the terminal cradles of the 8200 motec frequency inverters.

#### Schematic diagram for 8200 motec 1 ~ 230 V, 0.25...0.37 kW



#### Schematic diagram for 8200 motec 3 ~ 400 V, 0.55...2.2 kW



#### Assignment/technical data

8200 motec		Mains bus connector	
Type	Mains current [A]	Max. mains current [A]	Type
0.25 kW, 230 V 0.37 kW, 230 V	3.4 5.0	16	E82ZWKN2
0.55 kW, 400 V 0.75 kW, 400 V 1.5 kW, 400 V 2.2 kW, 400 V	1.8 2.4 3.8 5.5	24	E82ZWKN4

Tip: When using mains contactors it is possible to reduce the switch-on currents with current limiting modules (see page 4-53).



A current limiting module reduces the current peak when the 8200 motec(s) is (are) started up on the mains supply.

### Assignment

	Mains contactor [kW] with current limiting module when connecting...						
8200 motec	1 motec	2 motec	3 motec	4 motec	5 motec	6 motec	Current limiting measures
0.25 kW, 230 V 0.37 kW, 230 V	4 kW				-	-	Current limiting module Type E82ZJ004
0.55 kW, 400 V 0.75 kW, 400 V 1.5 kW, 400 V 2.2 kW, 400 V	4 kW	5.5 kW	7.5 kW	11 kW			Mains choke/filter Type EZN3A0150H024*

\* E82ZJ004 also possible (use one module per phase)

### Technical data

Type	$I_N$ [A]	m [kg]
E82ZJ004*	20	0.13
EZN3A0150H024	24	8.2

\* for DIN rail mounting to EN50022 35 x 7.5 and 35 x 15

### Dimensions

Type	Figure	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [mm]	n [mm]
E82ZJ004*	A	43	57			91		
EZN3A0150H024	B	180	120	136	67	192	7	12

\* for DIN rail mounting to EN50022 35 x 7.5 and 35 x 15

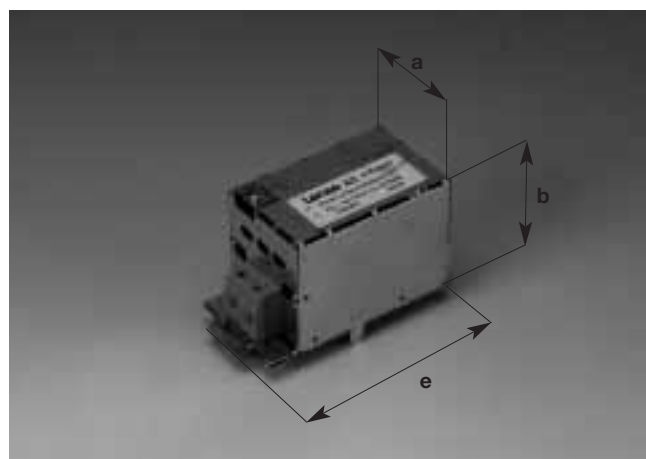


Figure A

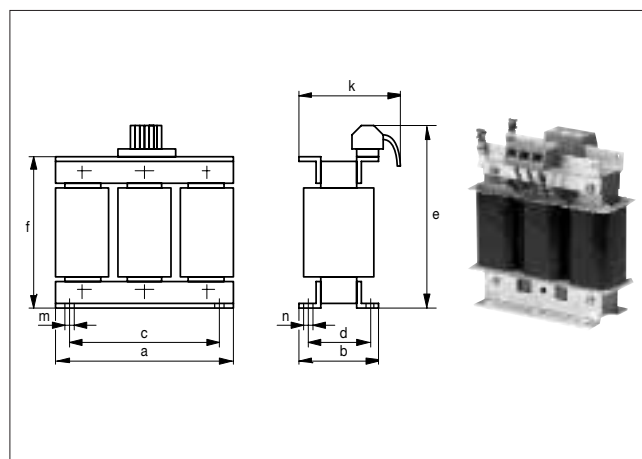
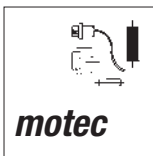


Figure B



## Accessories for the 8200 motec

### Cable protection measures

#### Fuses and cable cross-sections

Fuses or circuit-breakers can be used to protect the cables. Depending on the mains current supplies of the

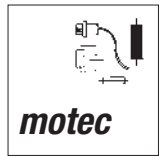
drive controllers, the following current ratings are required for the protection devices:

8200 motec  Type	Normal operation (150% overload)					Operation at increased rated power (120% overload)				
	Fuse F1, F2, F3		Circuit- breaker	Cable cross-section		Fuse F1, F2, F3		Circuit- breaker	Cable cross-section	
	VDE	UL	VDE	mm <sup>2</sup>	AWG	VDE	UL	VDE	mm <sup>2</sup>	AWG
<b>E82MV251_2B</b>	M 10A	10A	C 10A	1.0	18	M 10A	10A	C 10A	1.0	18
<b>E82MV371_2B</b>	M 10A	10A	C 10A	1.5	16	M 10A	10A	C 10A	1.5	16
<b>E82MV551_4B</b>	M 6A	5A	B 6A	1	18	M 6A	5A	B 6A	1	18
<b>E82MV751_4B</b>	M 6A	5A	B 6A	1	18	M 6A	5A	B 6A	1	18
<b>E82MV152_4B</b>	M 6A	5A	B 6A	1	18	M 10A	10A	B 10A	1.5	16
<b>E82MV222_4B</b>	M 10A	10A	B 10A	1.5	16	M 10A	10A	B 10A	1.5	16
<b>E82MV302_4B</b>	M 16A	15A	B 16A	2.5	14	M 16A	15A	B 16A	2.5	14
<b>E82MV402_4B</b>	M 20A	20A	B 20A	4.0	12	M 20A	20A	B 20A	4.0	12
<b>E82MV552_4B</b>	M 25A	25A	B 25A	4.0	10	M 32A	25A	B 32A	6.0	10
<b>E82MV752_4B</b>	M 32A	35A	B 32A	6.0	8	–	–	–	–	–

Always observe the relevant national and regional regulations.

For operation in UL approved installations, use only UL approved cables, fuses and fuse holders.

UL fuse: 240 V or 500 V...600 V,  
tripping characteristic "H" or "K5"



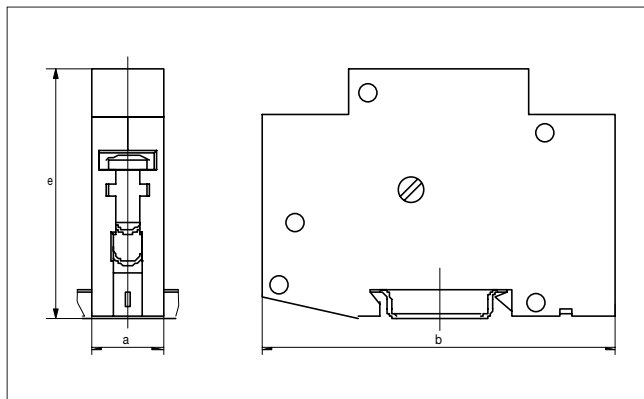
### Cable protection (circuit-breakers)

8200 motec	Circuit-breakers			
	Normal operation (150% overload)	Operation at increased rated power (120% overload)	Order ref.	Required quantity
E82MV251_2B	C 10A	C 10A	EFA1C10A	1
E82MV371_2B	C 10A	C 10A	EFA1C10A	1
E82MV551_4B	B 6A	B 6A	EFA3B06A	1
E82MV751_4B	B 6A	B 6A	EFA3B06A	1
E82MV152_4B	B 6A	B 10A	EFA3B06A*	1
E82MV222_4B	B 10A	B 10A	EFA3B10A	1
E82MV302_4B	B 16A	B 16A	EFA3B16A	1
E82MV402_4B	B 20A	B 20A	EFA3B20A	1
E82MV552_4B	B 25A	B 32A	EFA3B25A**	1
E82MV752_4B	B 32A	-	EFA3B32A	1

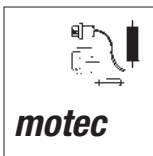
\* EFA3B10A at 120% overload

\*\* EFA3B32A at 120% overload

### Circuit-breaker dimensions



Type	a [mm]	b [mm]	e [mm]
EFA1XXXXA	17.5	80	63
EFA3BXXXXA	53	90	63



## Accessories - 8200 motec

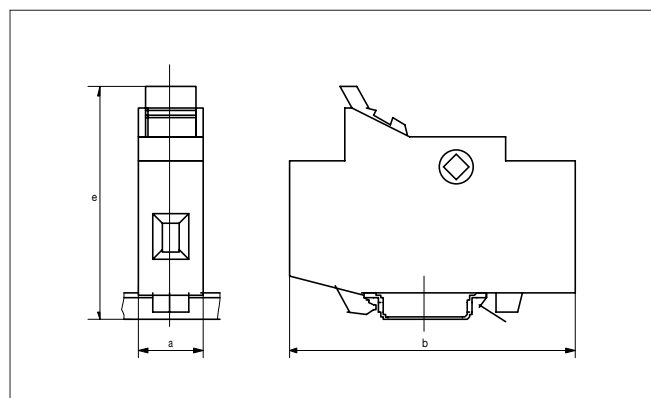
### Cable protection

#### Cable protection (fuses) with corresponding holders

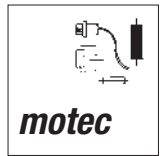
8200 motec	Rated current	Fuse		Required number	Fuse holder	
		Size	Order ref.		Order ref.	Required number
E82MV251_2B	M 10A	10 x 38	EFSM-0100AWE	1	EFH10001	1
E82MV371_2B	M 10A	10 x 38	EFSM-0100AWE	1	EFH10001	1
E82MV551_4B	M 6A	10 x 38	EFSM-0060AWE	3	EFH10001	3
E82MV751_4B	M 6A	10 x 38	EFSM-0060AWE	3	EFH10001	3
E82MV152_4B	M 6A M 10A*	10 x 38	EFSM-0060AWE EFSM-0100AWE*	3	EFH10001	3
E82MV302_4B	M 16A	10 x 38	EFSM-0160AWE	3	EFH10001	3
E82MV402_4B	M 20A	10 x 38	EFSM-0200AWE	3	EFH10001	3
E82MV552_4B	M 25A M 32A*	14 x 51	EFSM-0250AXH EFSM-0320AWH*	3	EFH10002	3
E82MV752_4B	M 32A	14 x 51	EFSM-0320AWH	3	EFH10002	3

\* at 120% overload

#### Fuse holder dimensions



Type	a [mm]	b [mm]	e [mm]	Fuse dimensions
EFH10001	17,5	81	68	10 x 38
EFH10002	26	81	68	14 x 51



European Standard EN 61000-3-2 includes limits for harmonic currents in the mains supply. Non-linear consumers (e.g. frequency inverters) generate harmonic currents, which “contaminate” the supply network and can therefore cause interference to other consumers. The aim of these standards is to secure the quality of **public** mains supply networks and to reduce loads on the mains supply.

**Important:** These standards only apply to public mains supplies. Networks with their own transformer stations (as found commonly in industrial plants) do not fall under the public domain and are therefore **not** affected by these standards. If more than one component (e.g. 8200 motec) is installed in a single device or piece of machinery, then the standards should only be applied to the **overall device**. Therefore the limits must be satisfied by any device which is to be connected to the mains supply.

The mains choke assigned below should be used to ensure that the listed 8200 motec frequency inverters conform with the limits in accordance with EN 61000-3-2:

8200 motec			Mains choke			
Type	Voltage [V]	Power [kW]	Type	Inductance [mH]	I <sub>r</sub> [A]	m [kg]
E82MV251_2B	1 x 230	0.25	ELN1-0900H005	9.0	5.0	1.0
E82MV371_2B		0.37				
E82MV551_4B	3 x 400	0.55	EZN3A1500H003	15.0	2.5	0.5
E82MV751_4B		0.75				

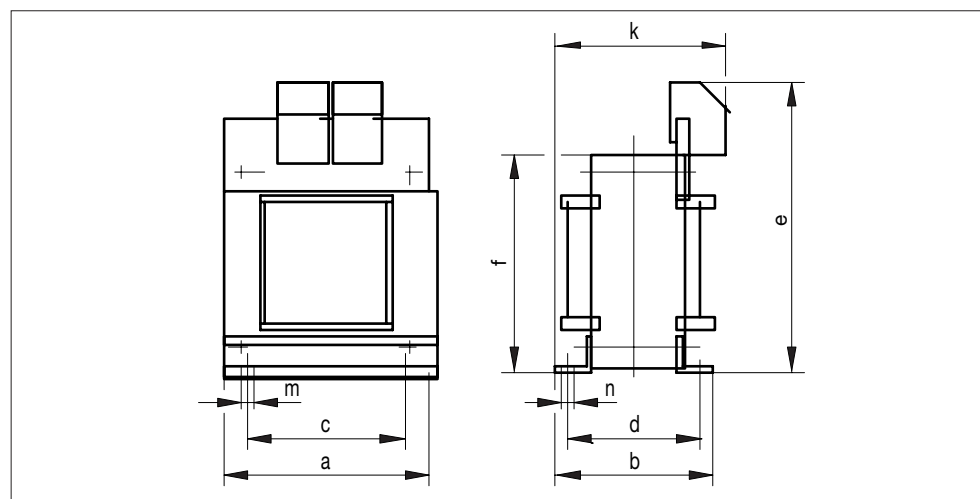
Please note:

- When using a mains choke, the maximum possible output voltage does not reach the value of the mains voltage - the typical mains voltage drop at the rated value is around 6%.
- The 8200 motec frequency inverters are “professional devices in accordance with EN 61000-3-2” <sup>1)</sup>.

<sup>1)</sup> Definition: “A device, designed for industrial use in certain professions or industries and not destined for general sale to the public. The application of the device must be specified by the manufacturer.”

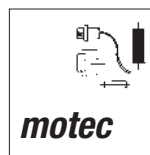
### Dimensions of the mains chokes

Order ref.	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	k [mm]	m [mm]	n [mm]
ELN1-0900H005	66	67	50	53	80	62	80	4.8	9
EZN3A1500H003	95	82	56	35	115	–	–	5	9









### Overview

Lenze three-phase motors and G-motion geared motors can be fitted with spring-operated brakes (⇒ p. 3-36).

A brake rectifier is required for the DC supply of the electromagnetic motor brakes (180 VDC, 205 VDC), and is supplied with the product as follows:

	8200 motec	Brake rectifier mounted in ...
Example 1	Mounted on the geared brake motor or the three-phase brake motor	the terminal cradle of the 8200 motec*
Example 2	For <u>wall mounting</u> + Geared brake motor or three-phase brake motor	the terminal box of the geared brake motor or the three-phase brake motor**

Important:

\* Only 6-pin brake rectifiers can be used in the terminal cradle of the 8200 motec.

\*\* Lenze brake motors (without mounted 8200 motec) are supplied as standard with 4-pin brake rectifiers.

Depending on the braking voltage (180 V DC, 205 V DC), the brake rectifiers should be used as a bridge rectifier or a one-way rectifier with a varistor in the input/output (overvoltage protection).

### Selection of brake rectifiers

The selection of the brake rectifier is made depending on the input voltage  $V_{AC}$  and the brake coil voltage rating ( $V_{coil}$ ):

Brake rectifier	Type*	Max. input voltage $V_{AC}$	Output voltage $V_{DC}$ (V)	Max. output current	Selection example
6-pin bridge rectifier	E82ZMBR1 (motec 0.25/0.37 kW, 230 V) ** E82ZWBR1 (motec 0.55-2.2 kW, 400 V)	270 V + 0%	$V_{DC} = 0.9 \times V_{AC}$	0.75 A	$V_{coil} = 205 \text{ V}_{DC} = V_{DC}$ with $V_{AC} = 230 \text{ V}$
6-pin one-way rectifier	E82ZWBR3 (motec 0.55-2.2 kW, 400 V)	460 V + 0%	$V_{DC} = 0.45 \times V_{AC}$	0.75 A	$V_{coil} = 180 \text{ V}_{DC} = V_{DC}$ with $V_{AC} = 400 \text{ V}$

4

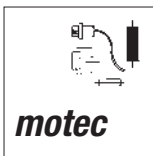


E82ZMBR1/E82ZWBR1 = bridge rectifier type 14.630.32.016

E82ZWBR3 = one-way rectifier type 14.630.33.016

\* Lenze brake motors with mounted 8200 motec frequency inverters are supplied with the required brake rectifiers already installed.

\*\* E82ZMBR1 m Brake rectifier type E82ZWBR1 is mounted in an additional terminal cradle. Please note the change in overall height (dimension b\* ⇒ page 4-20).



## Braking - 8200 motec

### Braking with three-phase brake motors

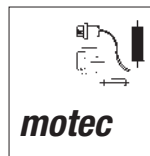
#### Activation of the brake

The brake is either DC or AC-controlled. The delay times are significantly reduced if the brake is DC-controlled. This makes it possible, for example, to brake the motor with a reproducible stopping distance. DC-controlled switching requires a spark absorber to protect the switching contact and the coil. The spark absorber is integrated into the 6-pin brake rectifiers.

We recommend the use of the relay output\* of the 8200 motec frequency inverter to switch the brake. Alternatively, the brake can also be controlled via an external control contact (e.g. PLC). The following table lists the available options for Lenze brakes. The information relates to a mains rating of 230/400 V +/-10 %.

Brake coil rated voltage	Type of rectifier	Brake size (braking torque [Nm])					
		06 (4.0)	08 (8.0)	10 (16.0)	12 (32.0)	14 (60)	16 (80)
		Corresponding motor size					
		063/071	080/090	090/100	100/112	112/132	132
180 V	One-way	<ul style="list-style-type: none"> <li>AC switching via relay output of the motec is only permissible with additional auxiliary relay</li> <li>DC switching or direct switching of a DC voltage via relay output of the motec is only permissible with additional auxiliary relay</li> </ul>					
205 V	Bridge	<ul style="list-style-type: none"> <li>AC switching permitted via the relay output of the motec</li> <li>DC switching or direct switching of a DC voltage permitted via the relay output of the motec</li> </ul>					
24 V	No rectifier required	<ul style="list-style-type: none"> <li>Direct switching of an DC voltage via relay output of the motec is permissible</li> </ul>			<ul style="list-style-type: none"> <li>Direct switching of a DC voltage via relay output of the motec is only permissible with additional auxiliary relay</li> </ul>		

\* Technical data for the relay output of the 8200 motec: 250 V AC/3 A, 24 V DC/2 A...240 V/0.22 A



### Activation of the brake

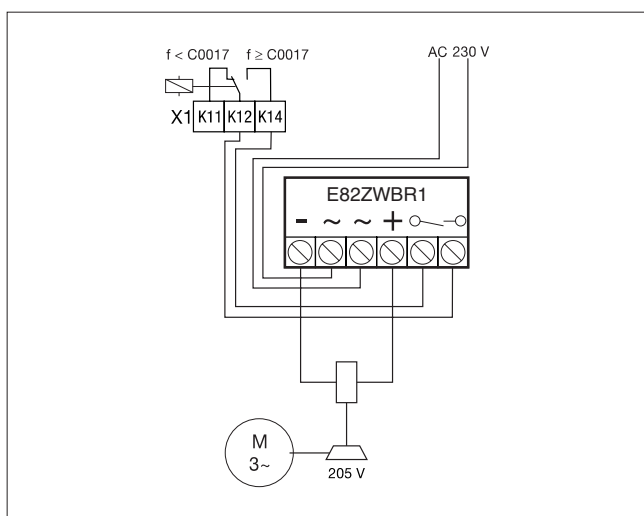
The relay must be programmed before the relay output of the 8200 motec frequency inverter can activate the electromechanical motor brake.

Example: Release/application of the brake (205 V) when an adjustable frequency threshold is exceeded/undercut. In this case the braking process can be initiated via a digital signal which leads to a quick stop of the drive.

(Programming: Use relay C0008 = 7, frequency threshold ( $Q_{min}$ ) C0017 = 3 Hz; relay terminals K12, K14 at terminal strip X1 of the 8200 motec)

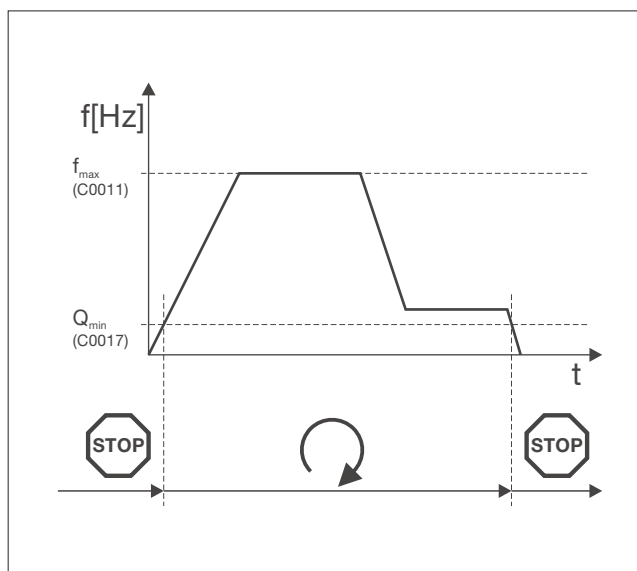
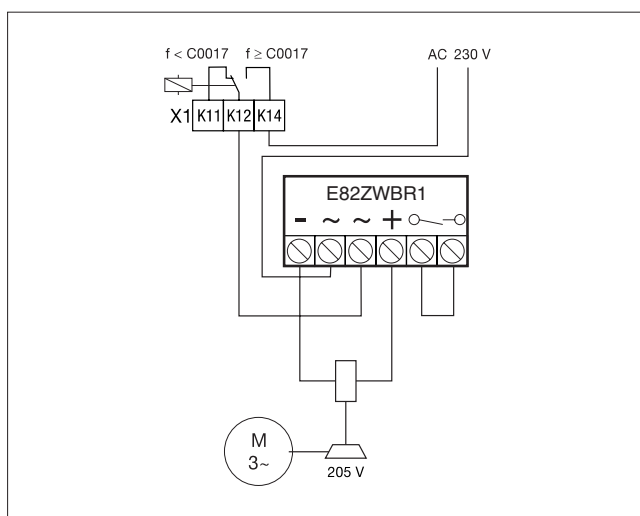
#### Schematic diagram

DC-controlled switching of the brake

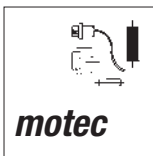


#### Schematic diagram

AC-controlled switching of the brake



Note: Application examples for the wiring of the brake rectifier can be found on page 4-76 ff.



## Braking - 8200 motec

### Braking with brake resistor

External brake resistors are required to brake high moments of inertia or for extended generator mode operation. The brake resistor converts mechanical braking energy into heat.

The brake transistor integrated into the 8200 motec frequency inverter connects the external brake resistor

when the DC bus voltage exceeds a certain switching threshold. This prevents the frequency inverter from setting a pulse inhibit because of an overvoltage, which would cause the drive to coast to standstill. Braking is always controlled when using an external brake resistor.

### Selection of brake resistors

The Lenze brake resistors recommended in the tables are appropriate for each frequency inverter (related to 150% generative power). They are suitable for most applications.

For special applications, e.g. centrifuges, hoists etc., the suitable brake resistor must meet the following requirements:

Brake resistor requirement	Application	
	with active load	with passive load
Continuous braking power [W]	$\geq P_{\max} \cdot \eta_e \cdot \eta_m \cdot \frac{t_1}{t_{\text{cycle}}}$	$\geq \frac{P_{\max} \cdot \eta_e \cdot \eta_m}{2} \cdot \frac{t_1}{t_{\text{cycle}}}$
Thermal capacity [Ws]	$\geq P_{\max} \cdot \eta_e \cdot \eta_m \cdot t_1$	$\geq \frac{P_{\max} \cdot \eta_e \cdot \eta_m}{2} \cdot t_1$
Resistance [ $\Omega$ ]	$R_{\min} \leq R \leq \frac{V_{\text{DC}}^2}{P_{\max} \cdot \eta_e \cdot \eta_m}$	

**Active load** Can move by itself without any influence of the drive (e.g. hoists, unwinders)

**Passive load** Stops by itself without any influence of the drive (e.g. horizontal traversing drives, centrifuges, fans)

$V_{\text{DC}}$  [V] Threshold for brake transistor

$P_{\max}$  [W] Maximum braking power defined by the application

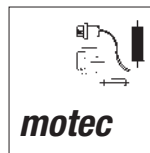
$\eta_e$  Electrical efficiency (drive controller + motor)  
Guide values: 0.54 (0.25 kW) ... 0.85 (11 kW)

$\eta_m$  Mechanical efficiency (gearbox, machine)

$t_1$  [s] Braking time

$t_{\text{cycle}}$  [s] Cycle time = time between two subsequent braking cycles (=  $t_1$  + idle time)

4

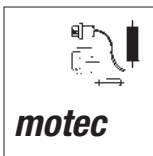


### Rating for the integrated brake transistor

Brake transistor		8200 motec, 230 V	
		E82MV251_2B	E82MV371_2B
Threshold $V_{DC}$	[V DC]	375	
Peak current $\uparrow$	[A DC]	0.85	
Max. continuous current	[A DC]	0.85	
Peak braking power at $V_{DC}$	[kW]	0.3	
Continuous braking power	[kW]	0.3	
Smallest permissible brake resistance $R_{min}$	[ $\Omega$ ]	470	
Power derating		40°C < T < 60°C: 2%/K 1000 m above sea level < h < 4000 m above sea level: 5%/1000 m	
Switch-on cycle		Max. 60 s peak brake power, followed by at least 60 s idle time	
Recommended Lenze brake resistance	Order ref.	ERBM470R110W	
Degree of protection of brake resistor		IP55	

Brake transistor		8200 motec, 400 V			
		E82MV551_4B	E82MV751_4B	E82MV152_4B	E82MV222_4B
Threshold $V_{DC}$	[V DC]	780			
Peak current $\uparrow$	[A DC]	1.8		4.0	
Max. continuous current	[A DC]	1.0		2.5	
Peak braking power at $V_{DC}$	[kW]	1.4		3.2	
Continuous braking power	[kW]	0.8		2.0	
Smallest permissible brake resistance	[ $\Omega$ ]	450		200	
Power derating		40°C < T < 60°C: 2%/K 1000 m above sea level < h < 4000 m above sea level: 5%/1000 m			
Switch-on cycle		Max. 60 s peak brake power, followed by at least 60 s idle time			
Recommended Lenze brake resistor	Order ref.	ERBM470R110W		ERBM240R220W	
Degree of protection of brake resistor		IP55			

Brake transistor		8200 motec, 400 V			
		E82MV302_4B	E82MV402_4B	E82MV552_4B	E82MV752_4B
Threshold $V_{DC}$	[V DC]	780			
Peak current $\uparrow$	[A DC]	7.8	7.8	11.4	16.5
Max. continuous current	[A DC]	3.8	5.1	7.0	9.6
Peak braking power at $V_{DC}$	[kW]	6.1	6.1	8.9	12.9
Continuous braking power	[kW]	3.0	4.0	5.5	7.5
Smallest permissible brake resistance	[ $\Omega$ ]	100	100	68	47
Power derating		40°C < T < 60°C: 2%/K 1000 m above sea level < h < 4000 m above sea level: 5%/1000 m			
Switch-on cycle		Max. 60 s peak brake power, followed by at least 60 s idle time			
Recommended Lenze brake resistance	Order ref.	ERBD180R300W	ERBD100R600W	ERBD100R600W	ERBD047R01K2
Degree of protection of brake resistor		IP20			



## Braking - 8200 motec

### Braking with brake resistor

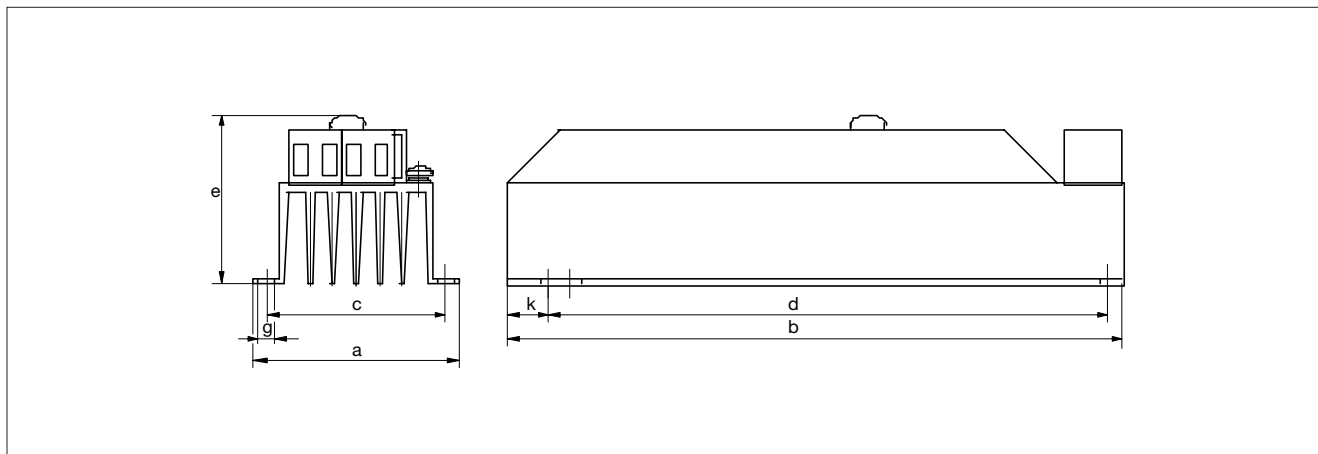
#### Rating for the brake resistors

Lenze brake resistors							
Order ref.	R	Braking power		Thermal capacity	Switch-on cycle	Cable cross-section	
	[ $\Omega$ ]	Peak [kW]	Continuous [kW]	[kWs]		[mm <sup>2</sup> ]	AWG
ERBM470R110W	470	1.3	0.11	16.5	1:10 max. 15 s braking with peak braking power, followed by at least 150 s recovery time	1.5	16
ERBM240R220W	240	2.5	0.22	33		1.5	16
ERBD180R300W	180	3.0	0.3	45		1.0	18
ERBD100R600W	100	5.5	0.6	90		1.0	18
ERBD047R01K2	47	11.5	1.2	180		2.5	14

Note: The brake resistors are fitted as standard with a thermostat (normally closed contact).

Further brake resistors with IP20 degree of protection can be found in the 8200 vector frequency inverter product catalog.

#### Dimensions - brake resistors ERBM... (IP55)



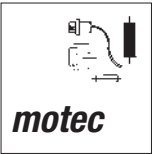
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Note: ERBM...(IP55) brake resistors come pre-assembled with a 2.5 m connection cable.

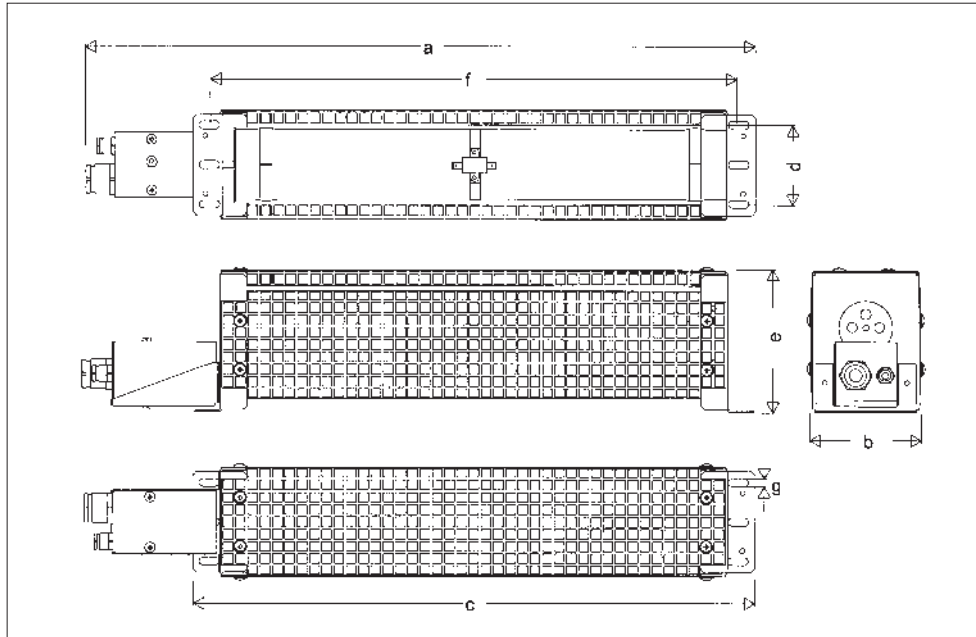
Brake resistor	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	g [mm]	k [mm]
ERBM470R110W	80	160	70	145	75	5	7.5
ERBM240R220W	80	340	70	325	75	5	7.5



ERBM... brake resistor with pre-assembled connection cable (IP55)

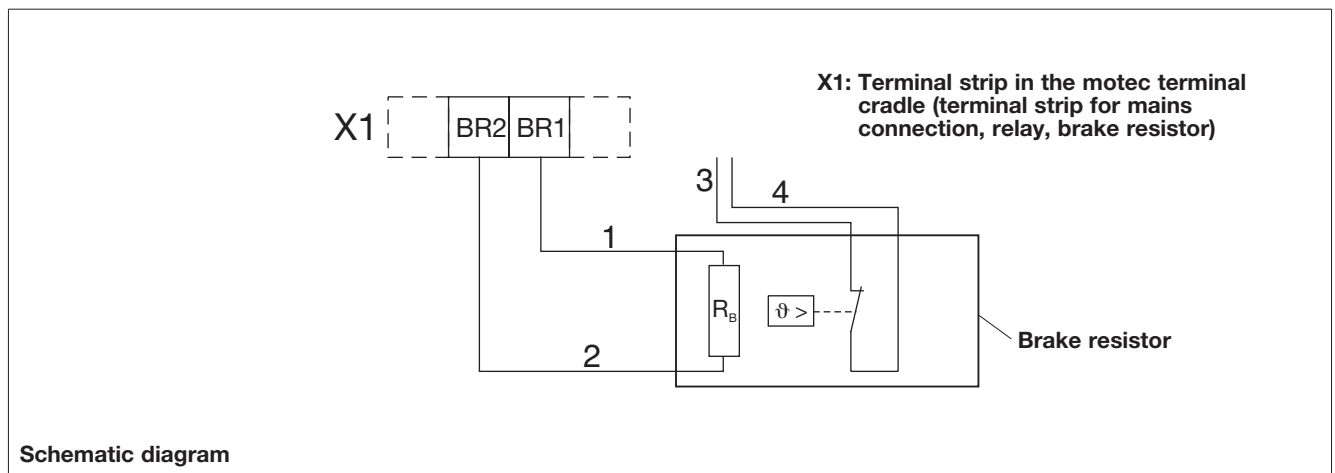


### Dimensions - brake resistors ERBD... (IP20)



Brake resistor	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	g [mm]	h [mm]
ERBD180R300W	440	89	354	64	115	326	6.5	13
ERBD100R600W	640	89	554	64	115	526	6.5	13
ERBD047R01K2	640	177	554	150	115	526	6.5	13

### Connection of a brake resistor



1, 2: Resistor

3, 4: Temperature monitoring (thermostat/normally closed contact) to be integrated, for example, into the locking of the relevant mains supply contactor.







### Overview

Accessories	Description	Type/order ref.
Function modules	Standard I/O Application I/O Bus I/O (motec 0.25/0.37 kW, 230 V) Bus I/O (motec 0.55-2.2 kW, 400 V) INTERBUS PROFIBUS-DP LECOM-B (RS 485) System bus (CAN) DeviceNet/CANopen (in preparation) AS-Interface (in preparation)	E82ZAFS001 E82ZAFSA001 E82ZMFB001 E82ZAFB001 E82ZAFI001 E82ZAFP001 E82ZAFLL001 E82ZAFCA001 E82ZAFD001 E82ZAFF001
Communication modules	Keypad <sup>1)</sup> Hand terminal* (handheld keypad) Handheld terminal* with PC interface (RS232)**	E82ZBC E82ZBB E82ZBL
Switch/potentiometer	Switch/potentiometer unit (IP65)	E82ZBU
Wiring terminals	Mains bus connector for motec 0.25/0.37 kW, 230 V Mains bus connector for motec 0.55-2.2 kW, 400 V System terminals for motec 0.25/0.37 kW, 230 V (in prep.) System terminals for motec 0.55-2.2 kW, 400 V Fan connection terminal***	E82ZWKN2 E82ZWKN4 E82ZMKS E82ZWKS E82ZWKL
Braking	Bridge rectifier for motec 0.25/0.37 kW 230 V Bridge rectifier for motec 0.55-2.2 kW, 400 V One-way rectifier*** Brake resistor 240R220W (IP55, 240 Ohm) Brake resistor 470R110W (IP55, 470 Ohm) Brake resistor 180R300W (IP20, 180 Ohm) Brake resistor 100R600W (IP20, 100 Ohm) Brake resistor 47R1K2 (IP20, 47 Ohm)	E82ZMBR1 E82ZWBR1 E82ZWBR3 ERBM240R220W ERBM470R110W ERBD180R300W ERBD100R600W ERBD047R01K2
Miscellaneous	Connection cable 2.5 m Connection cable 5.0 m Connection cable 10.0 m PC system cable RS 232 0.5 m PC system cable RS 232 5 m Control cabinet installation kit Current limiting module for motec 0.25/0.37 kW, 230 V Current limiting module for motec 0.55-2.2 kW, 400 V AS-i flat cable connection (in preparation)	E82ZWL025 E82ZWL050 E82ZWL100 EWL0048 EWL0020 E82ZBHT E82ZJ004 EZN3A0150H024 E82ZMFF
Operating instructions for 8200 motec	German English French	E82ZMVD E82ZMVU E82ZMVF
Operating instructions for fieldbus function modules (INTERBUS, PROFIBUS, LECOM-B (RS485))	German English	E82ZMVD E82ZMVF

\* Additional connection cable required

\*\* Additional PC system cable required

\*\*\* For motec 0.55-2.2 kW (400 V) only

<sup>1)</sup> Only possible combination: keypad, control cabinet installation kit and connection cable for 8200 motec



## Overview of accessories - 8200 motec

### Type-specific accessories

#### 0.25/0.37 kW (1~230 V)

Name	Type	
<b>8200 motec</b>	<b>E82MV251_2B</b>	<b>E82MV371_2B</b>
Circuit-breaker	EFA1C10A	EFA1C10A
Fuse	EFSM-0100AWE	EFSM-0100AWE
Fuse holder	EFH10001	EFH10001
Brake resistor	ERBM470R110W(IP55)	
Mains bus connector	E82ZWKN2	
System terminals	E82ZMKS (in preparation)	
Brake rectifiers	Brake rectifier E82ZMBR1	
Current limiting module	E82ZJ004	
Mains choke	ELN 1-0900H005	

#### 0.55 - 2.2 kW (3~400 V)

Name	Type			
<b>8200 motec</b>	<b>E82MV551_4B</b>	<b>E82MV751_4B</b>	<b>E82MV152_4B</b>	<b>E82MV222_4B</b>
Circuit-breaker	EFA3B06A	EFA3B06A	EFA3B06A(EFA3B10A*)	EFA3B10A
Fuse	EFSM-0060AWE	EFSM-0060AWE	EFSM-0060AWE EFSM-0100AWE*	EFSM-0100AWE
Fuse holder	EFH10001	EFH10001	EFH10001	EFH10001
Brake resistor	ERBM470R110W(IP55)		ERBM240R220W(IP55)	
Mains bus connector	E82ZWKN4			
System terminals	E82ZWKS			
Blower connection terminal	E82ZWKL			
Brake rectifiers	E82ZWBR1 (type 14.630.32.016) E82ZWBR3 (type 14.630.33.016)			
Current limiting module	EZN3A0150H024 or 3 x E82ZJ004			
Mains choke	EZN3A1500H003		-	

#### 3.0 - 7.5 kW (3~400 V)

Name	Type			
<b>8200 motec</b>	<b>E82MV302_4B</b>	<b>E82MV402_4B</b>	<b>E82MV552_4B</b>	<b>E82MV752_4B</b>
Circuit-breaker	EFA3B16A	EFA3B20A	EFA3B25A	EFA3B32A EFA3B32A*
Fuse	EFSM-0160AWE	EFSM-0200AWE	EFSM-0250AXH EFSM-0320AWH*	EFSM-0320AWH
Fuse holder	EFH10001	EFH10001	EFH10002	EFH10002
Blower module	E82ZMV (in preparation)			

\* at 120 % overload



### Possible combinations for motec 0.25/0.37 kW, 230 V

Options	Can be combined with					
	Switch/potentiometer unit	Brake resistor (IP55)	INTERBUS or PROFIBUS or LECOM-B or system bus (CAN) or DeviceNet/CANopen*** function module	Mains bus connector	Brake rectifier * or system terminals *	Hand terminal** or handheld terminal with PC interface (RS 232)**
motec with Standard I/O function module	●	●	/	●	●	●
motec with Application I/O function module	●	●		●	●	●
motec with LECOM-B (RS485) function module	●	●		●	●	●
motec with INTERBUS function module	●	●		●	●	●
motec with PROFIBUS-DP function module	●	●		●	●	●
motec with system bus (CAN) function module	●	●		●	●	●
motec with AS-Interface function module <sup>1)</sup>	●	●		●	●	●
motec with DeviceNet/CANopen function module <sup>1)</sup>	●	●		●	●	●
motec without function module	-	●		●	●	●
motec with Bus I/O function module*	●	●	●	●	-	●

\*: Please note the change in overall height.

\*\*\*: Additional connection cable E82ZWLxxx required (with PC interfaces the PC system cable EWL00xx is also required).

\*\*\*: It is essential that a bus function module is also selected (DeviceNet/CANopen in preparation).

Note: Hand terminal = handheld keypad

<sup>1)</sup> In preparation



# Overview of accessories - 8200 motec

## Possible combinations

### Possible combinations for motec 0.55-2.2 kW, 400 V

Options	Can be combined with					
	Switch/potentiometer unit	Brake resistor (IP55)	INTERBUS or PROFIBUS or LECOM-B or system bus (CAN) or DeviceNet/CANopen*** function module	Mains bus connector	Brake rectifier or system terminals or fan connection terminal	Hand terminal** or handheld terminal with PC interface (RS 232)**
motec with Standard I/O function module	●	●		●	●	●
motec with Application I/O function module	●	●		●	●	●
motec with LECOM-B (RS485) function module	●	●		●	●	●
motec with INTERBUS function module	●	●		●	●	●
motec with PROFIBUS-DP function module	●	●		●	●	●
motec with System bus (CAN) function module	●	●		●	●	●
motec with AS-Interface function module <sup>1)</sup>	●	●		●	●	●
motec with DeviceNet/CANopen function module <sup>1)</sup>	●	●		●	●	●
motec without function module	-	●		●	●	●
motec with Bus I/O function module	●	●	●	●	-	●

\*\* Additional connection cable E82ZWLxxx required (with PC interfaces the PC system cable EWL00xx is also required).

\*\*\*: It is essential that a bus function module is also selected (DeviceNet/CANopen in preparation).

Note: Hand terminal = handheld keypad

<sup>1)</sup> In preparation



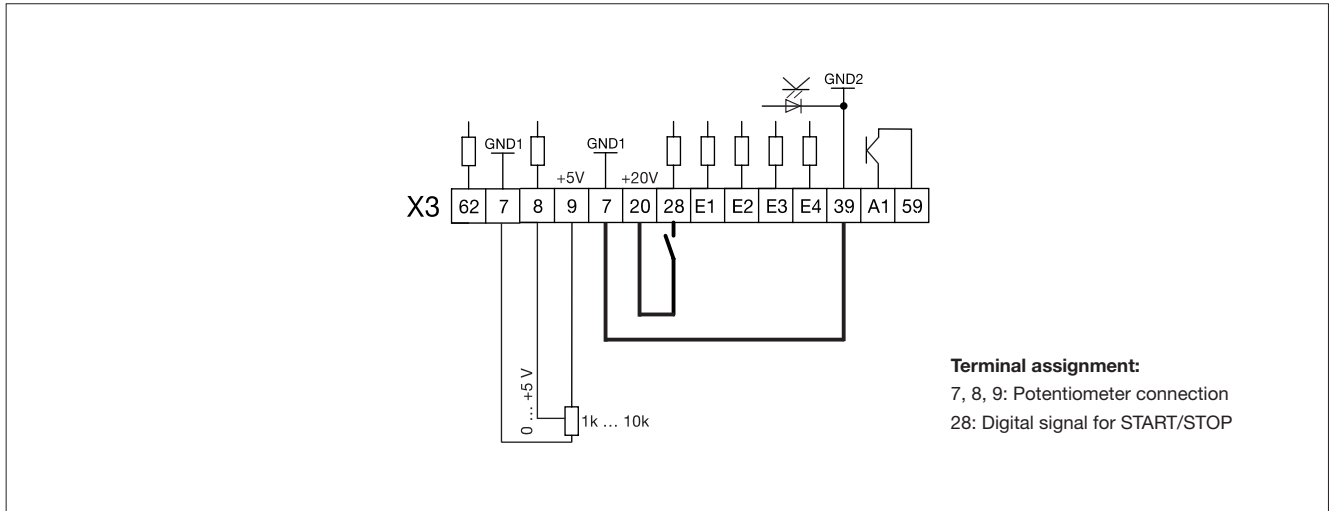
The setpoint for the 8200 motec frequency inverter is preselected using a (rotary) potentiometer. The frequency inverter is started and stopped via a digital signal.

**Required accessories for the 8200 motec:**

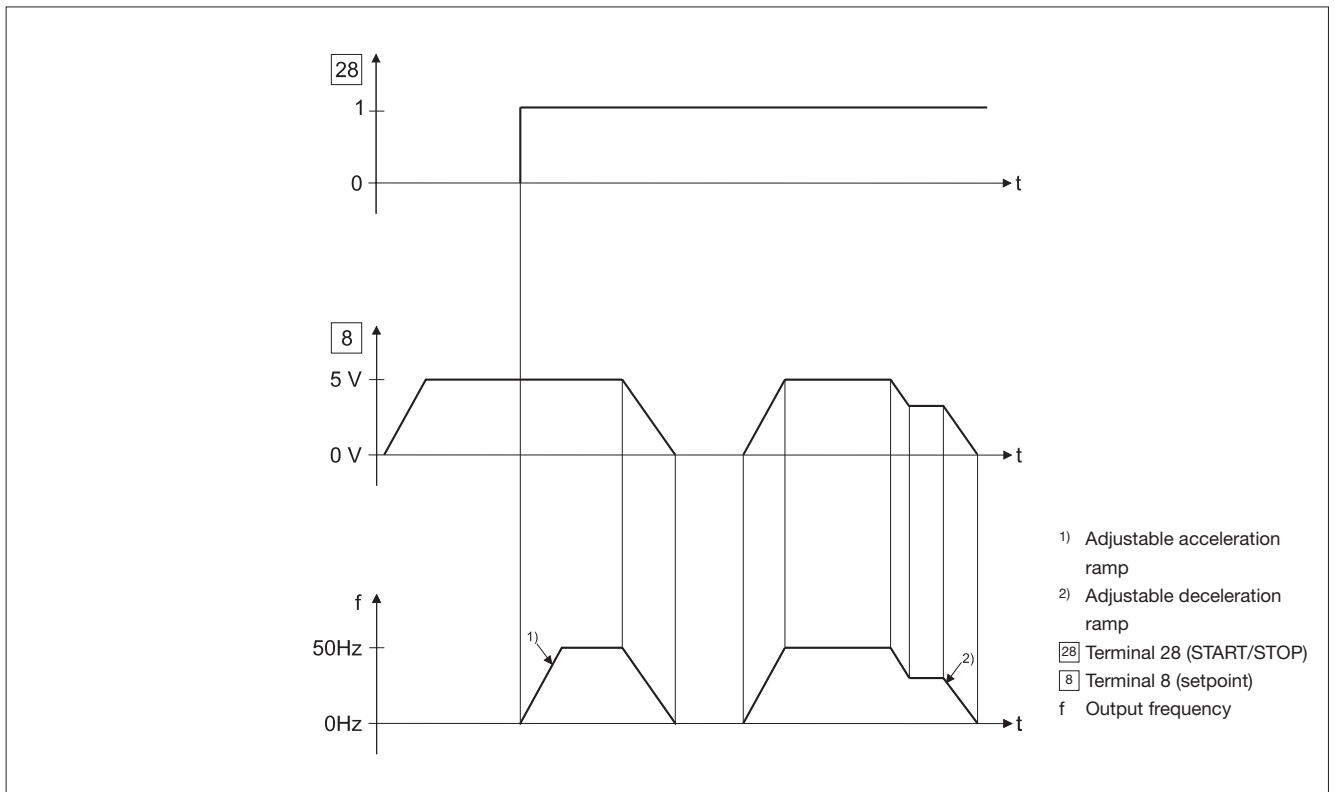
- Standard I/O function module
- Setpoint potentiometer (1 k...10 k)
- Keypad

Tip: We recommend using the switch/potentiometer unit (E82ZBU) as the setpoint potentiometer.

**Terminal assignment on the Standard I/O function module:**



**Sequence diagram:**



# Application examples

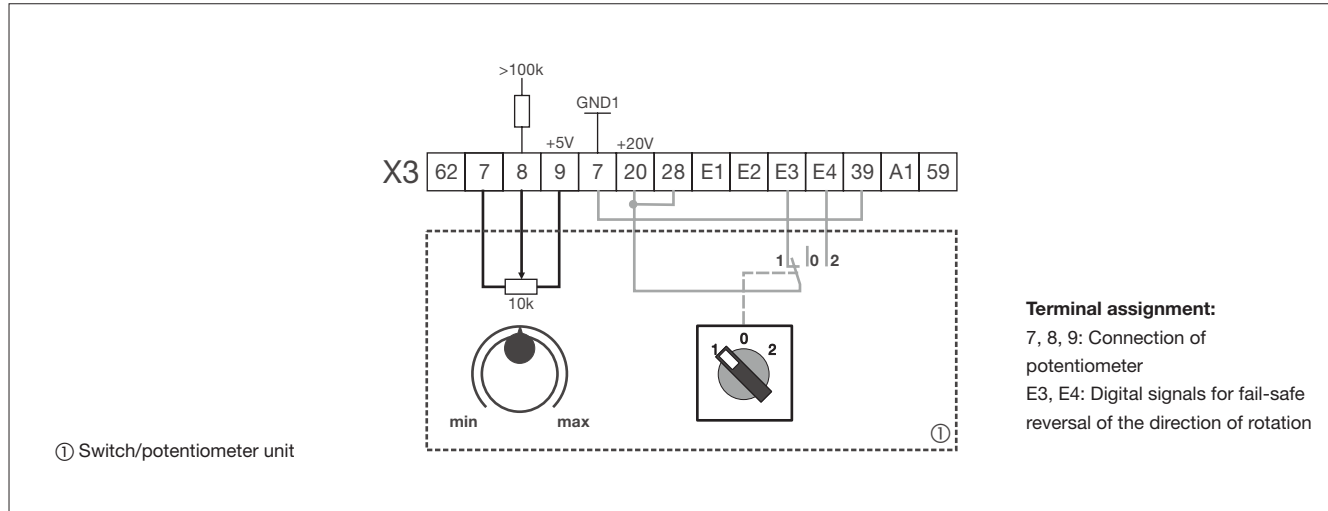
## Setpoint and direction of rotation via switch/potentiometer unit

The setpoint and direction of rotation (counter-clockwise-stop-clockwise) for the 8200 motec frequency inverter are preselected via the switch/potentiometer unit. An adjustable downward ramp controls the unit after it is switched off (stop). The reversal of the direction of rotation is fail-safe.

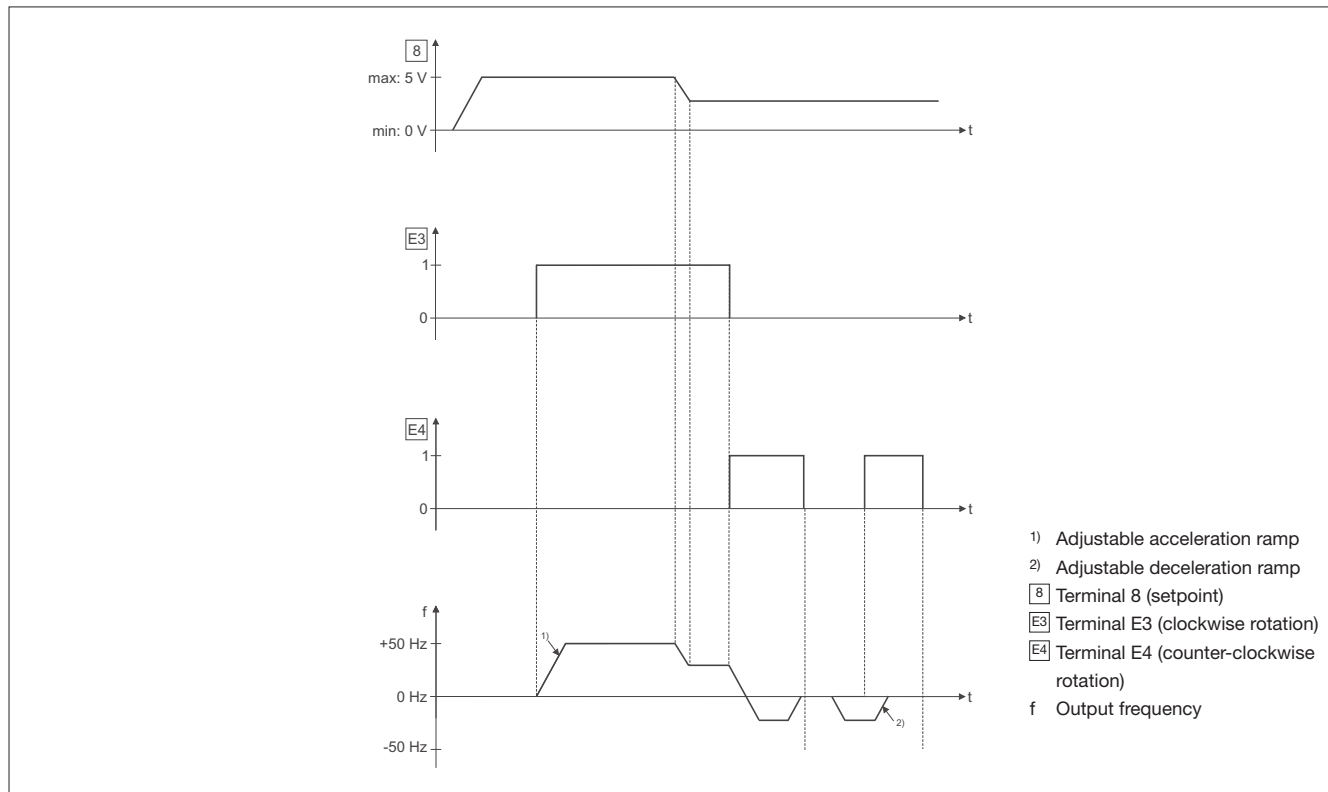
### Required accessories for the 8200 motec:

- Standard I/O function module
- Switch/potentiometer unit
- Keypad

### Terminal assignment on the Standard I/O function module:



### Sequence diagram:

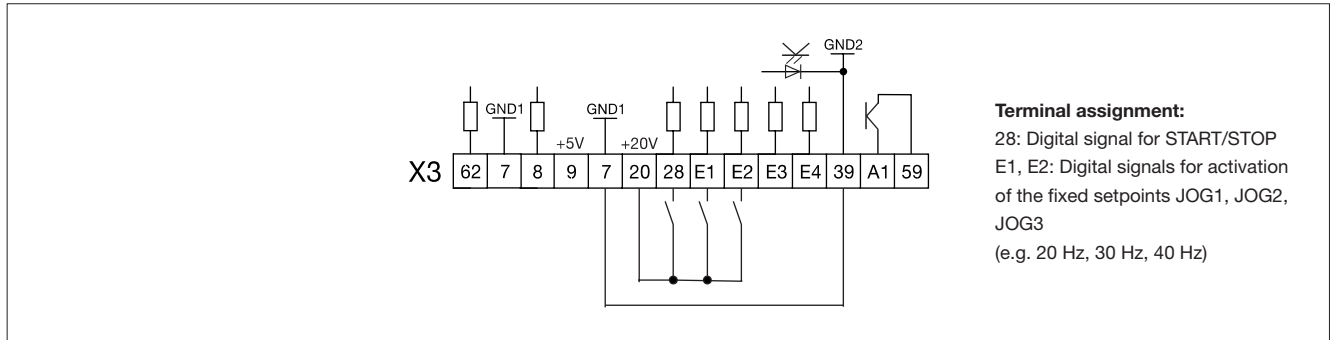


The setpoint for the 8200 motec frequency inverter is specified via three fixed setpoints (JOG). Here, the three setpoints are entered once in the 8200 motec using the keypad. These setpoints are then activated via two digital signals. The frequency inverter is started and stopped via a further digital signal.

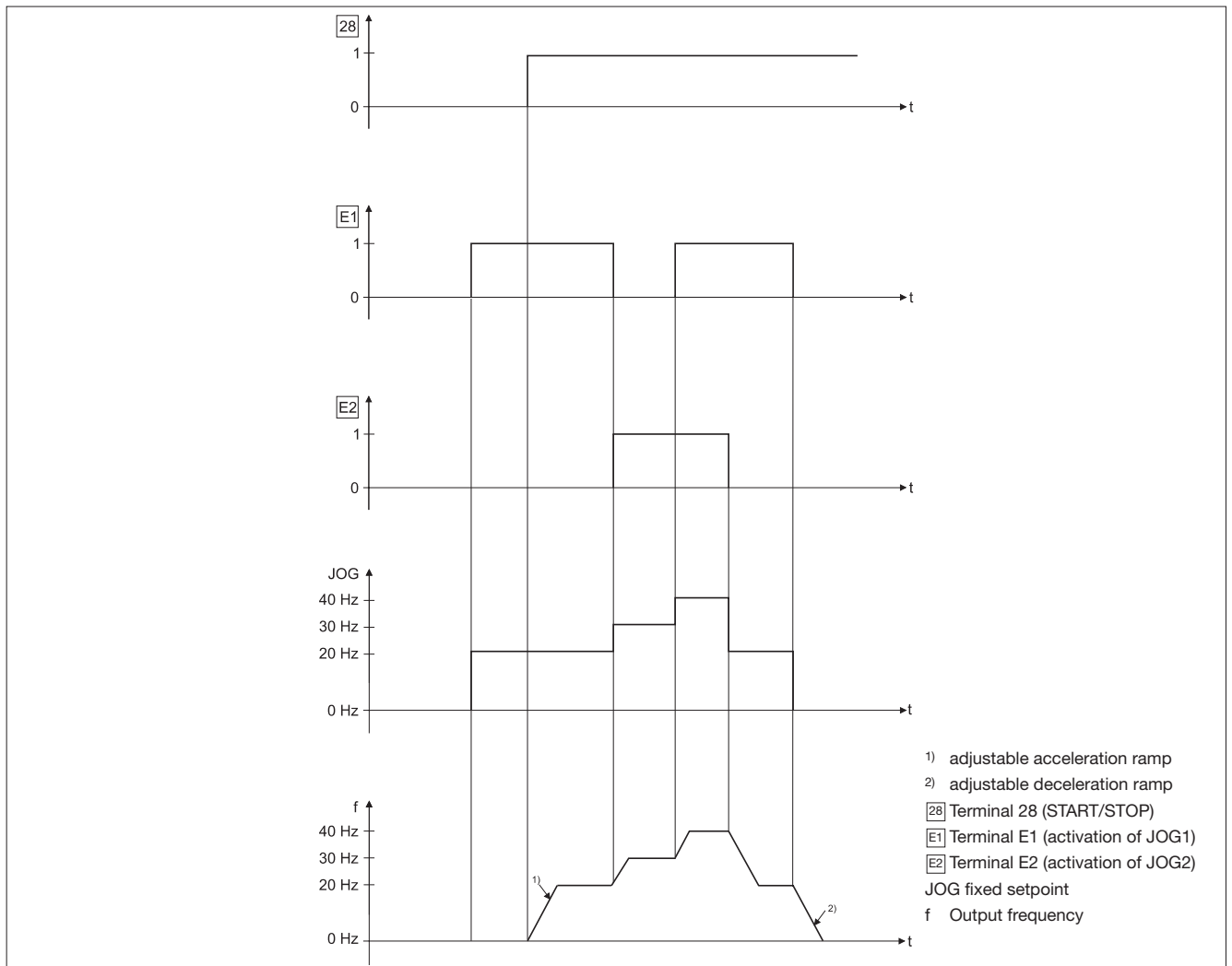
**Required accessories for the 8200 motec:**

- Standard I/O function module
- Keypad

### Terminal assignment on the Standard I/O function module:



### Sequence diagram:







## Application examples

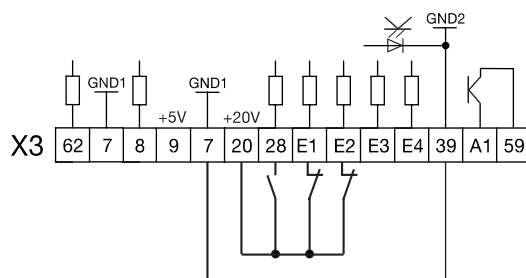
### Setpoint preselection via the UP/DOWN function

The setpoint for the 8200 motec frequency inverter is preselected via two digital signals (UP and DOWN) (fail-safe). For this the signals can be generated for example with a simple push button. The frequency inverter is started and stopped via a further digital signal.

#### Required accessories for the 8200 motec:

- Standard I/O function module
- Keypad

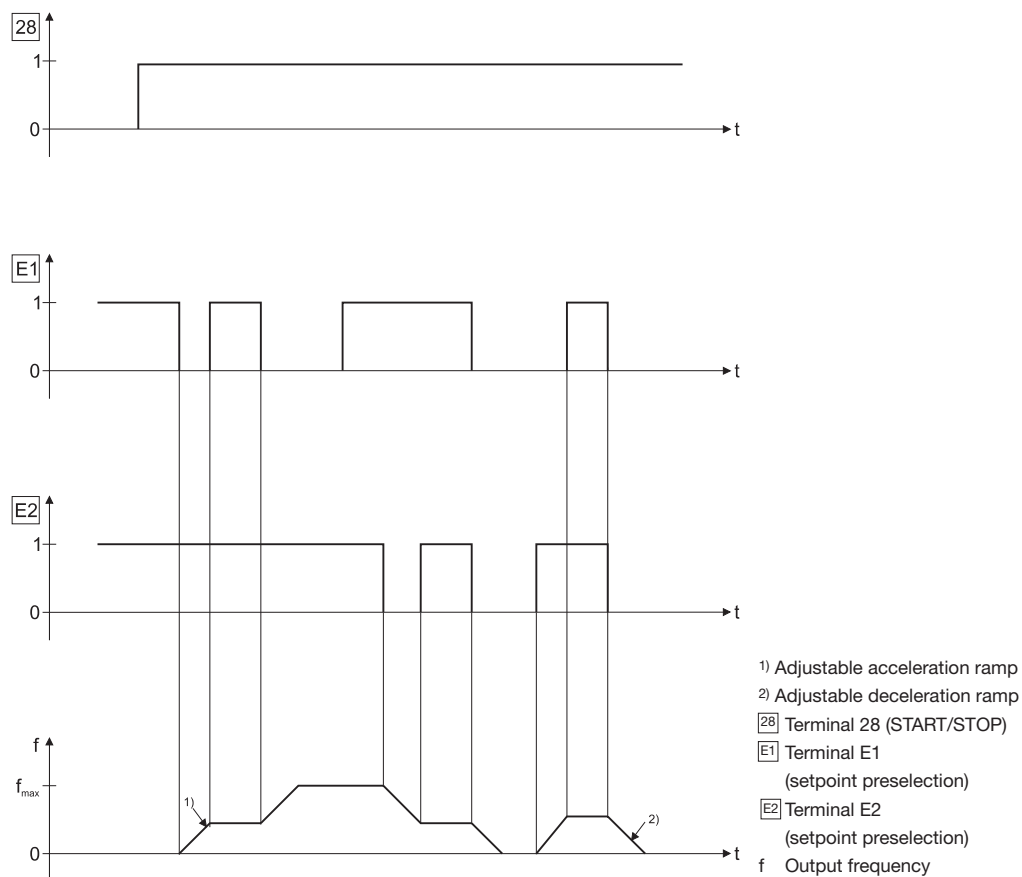
#### Terminal assignment on the Standard I/O function module:



#### Terminal assignment:

28: Digital signal for START/STOP E1, E2:  
Digital signals for setpoint preselection (UP/DOWN) via push button (normally closed contact)

#### Sequence diagram:





The setpoint for the 8200 motec frequency inverter is preselected via the ▲ and ▼ keys on the keypad. A reversal of the direction of rotation is possible here. The frequency inverter is started and stopped via the **RUN** and **STOP** keys.

**Required accessories for the 8200 motec:**  
– Keypad

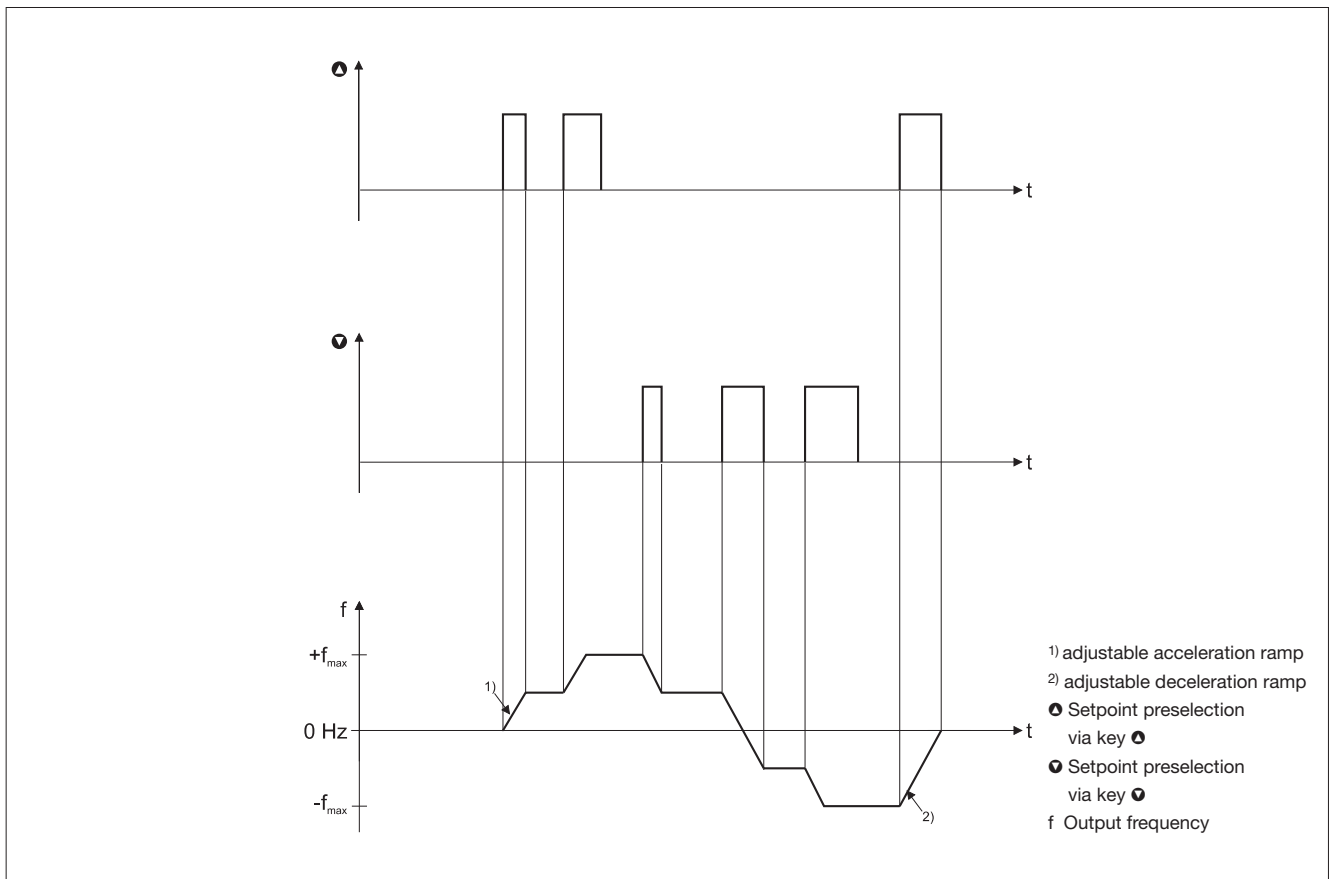
### Selection of the setpoint:

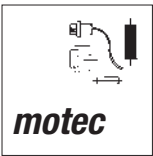
The setpoint is selected using the **[Set]** function

▲ 0....+50 Hz ⇒ 
  
 ▼ 0....- 50 Hz ⇒

**Note:**  
The setpoint is saved when the mains supply is connected.

### Sequence diagram:





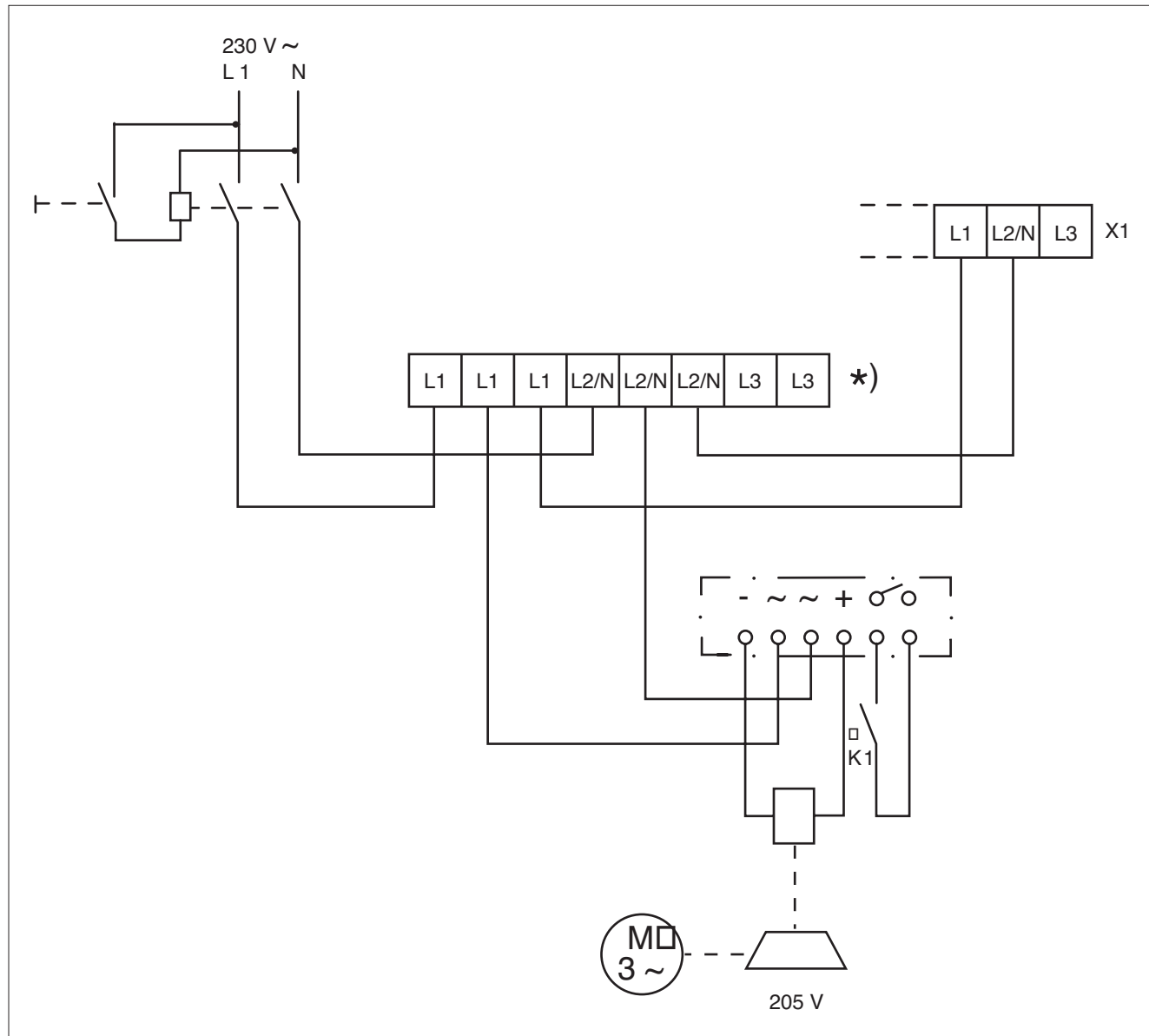
# Application examples

## Brake rectifier wiring principle

### Example circuit: 8200 motec, 0.25/0.37 kW, motor-mounted

8200 motec 0.25/0.37 kW, motor-mounted, brake coil voltage rating 205 V, bridge rectifier E82ZMBR1

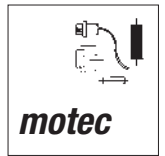
(14.630.32.016) is DC-controlled and located in the motec.



K1: Control contact, e.g. relay output of the motec (terminals K12, K14 on terminal strip X1) or a PLC

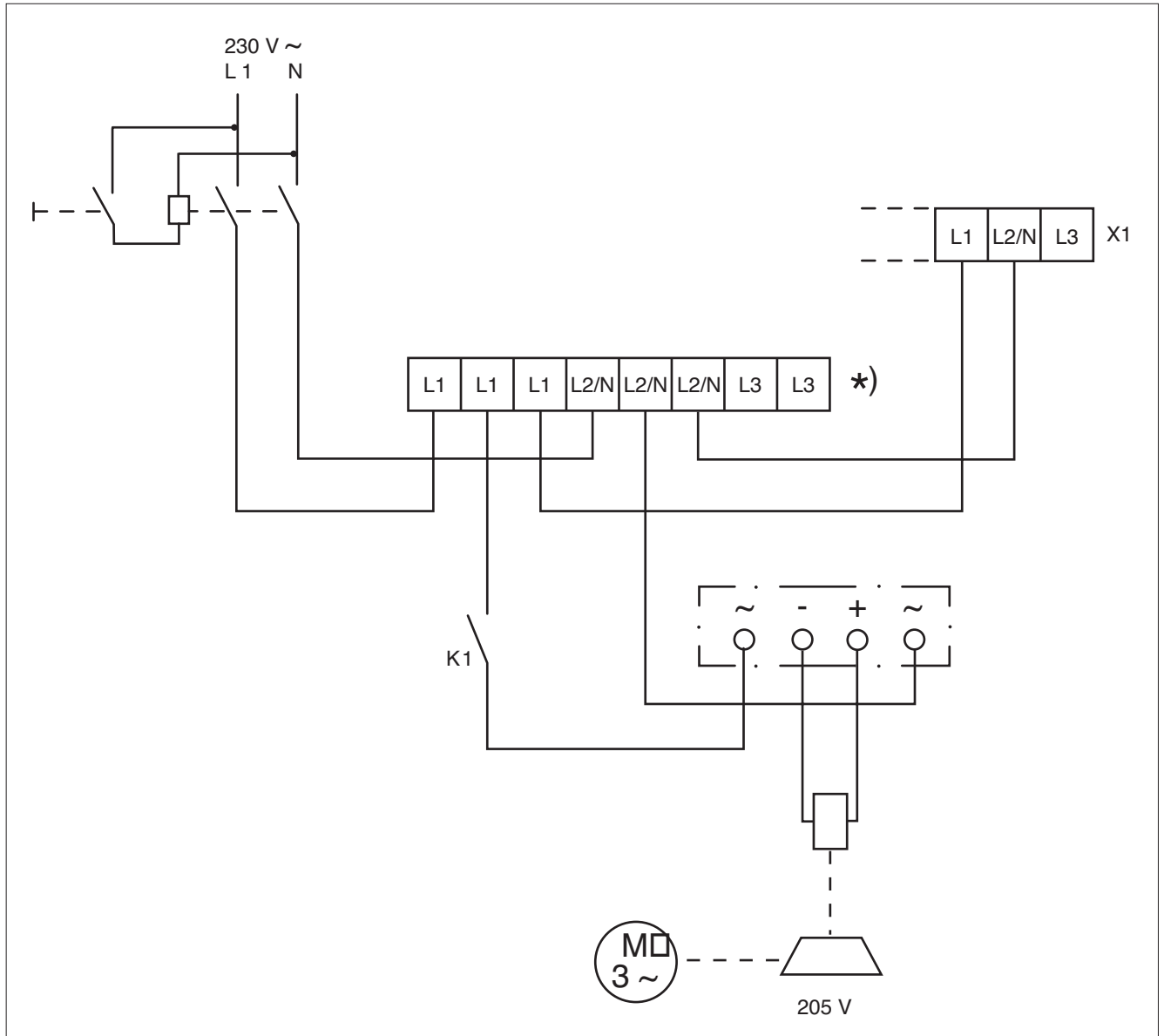
\*) Tip: Use mains bus connector (E82ZWKN2) for the brake rectifier wiring.

X1: Terminal strip of the 8200 motec



### Example circuit: 8200 motec, 0.25/0.37 kW, wall-mounted

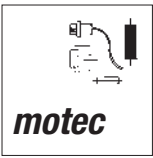
8200 motec 0.25/0.37 kW, wall-mounted, brake coil voltage rating 205 V, bridge rectifier (4-pin) is AC-controlled and located in the motor terminal box.



K1: Control contact, e.g. relay output of the motec (terminals K12, K14 on terminal strip X1) or a PLC

\*) Tip: Use mains bus connector (E82ZWKN2) for the brake rectifier wiring.

X1: Terminal strip of the 8200 motec



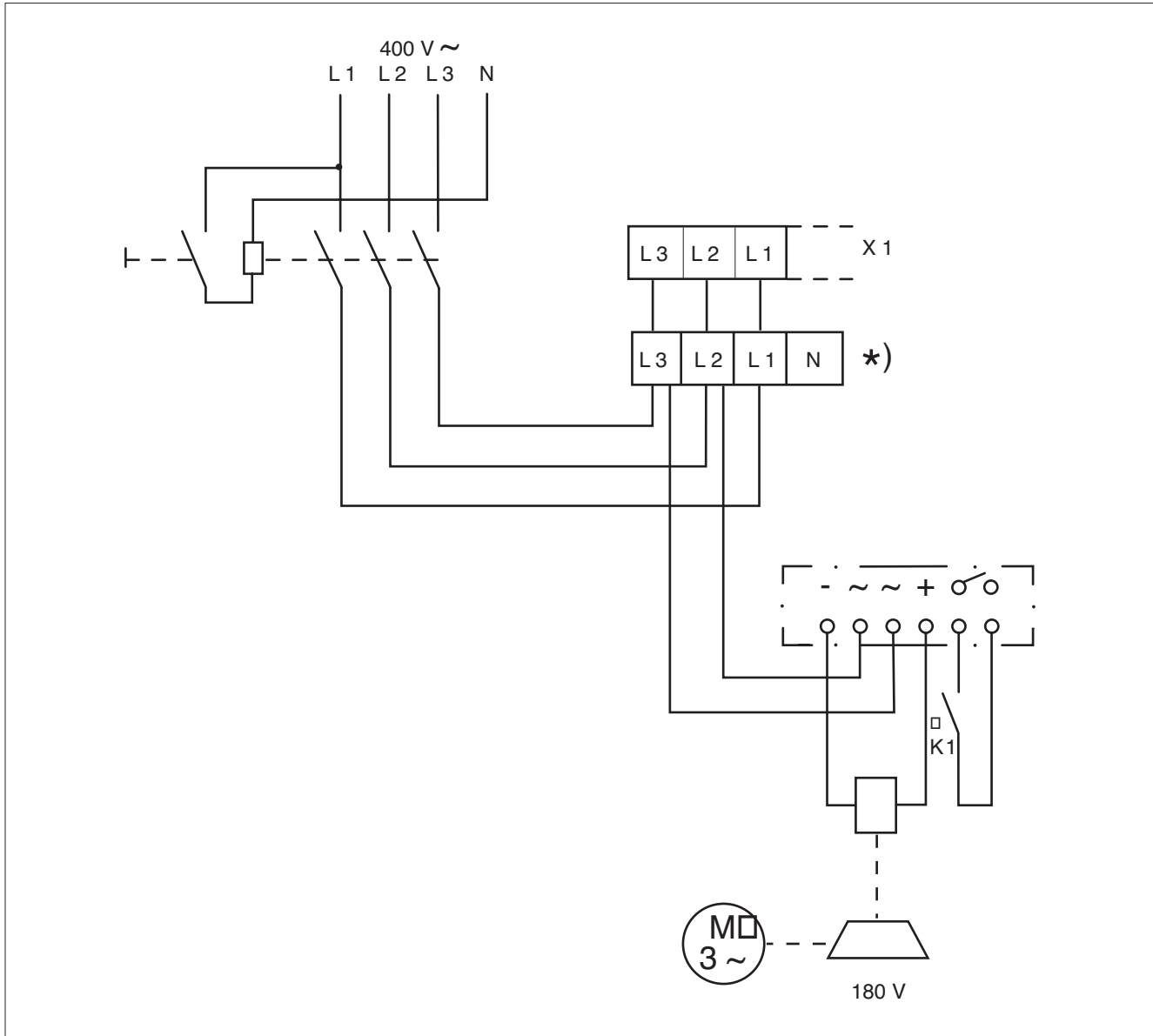
## Application examples

### Brake rectifier wiring principle

#### Example circuit: 8200 motec, 0.55...2.2 kW, motor or wall-mounted

8200 motec 0.55...2.2 kW, motor or wall-mounted, brake coil voltage rating 180 V, one-way rectifier E82ZWBR3 (14.630.33.016) is DC-controlled and located in the motec

(with wall mounting this can also be in the motor terminal box).



K1: Control contact, e.g. relay output of the motec (terminals K12, K14 on terminal strip 1) or a PLC

\*) Tip: Use mains bus connector (E82ZWKN2) for the brake rectifier wiring.

X1: Terminal strip of the 8200 motec



A centrifugal pump (quadratic load characteristic) is to maintain constant pressure in a pipe system (e.g. water supply for private households or industrial plants).

### Boundary conditions

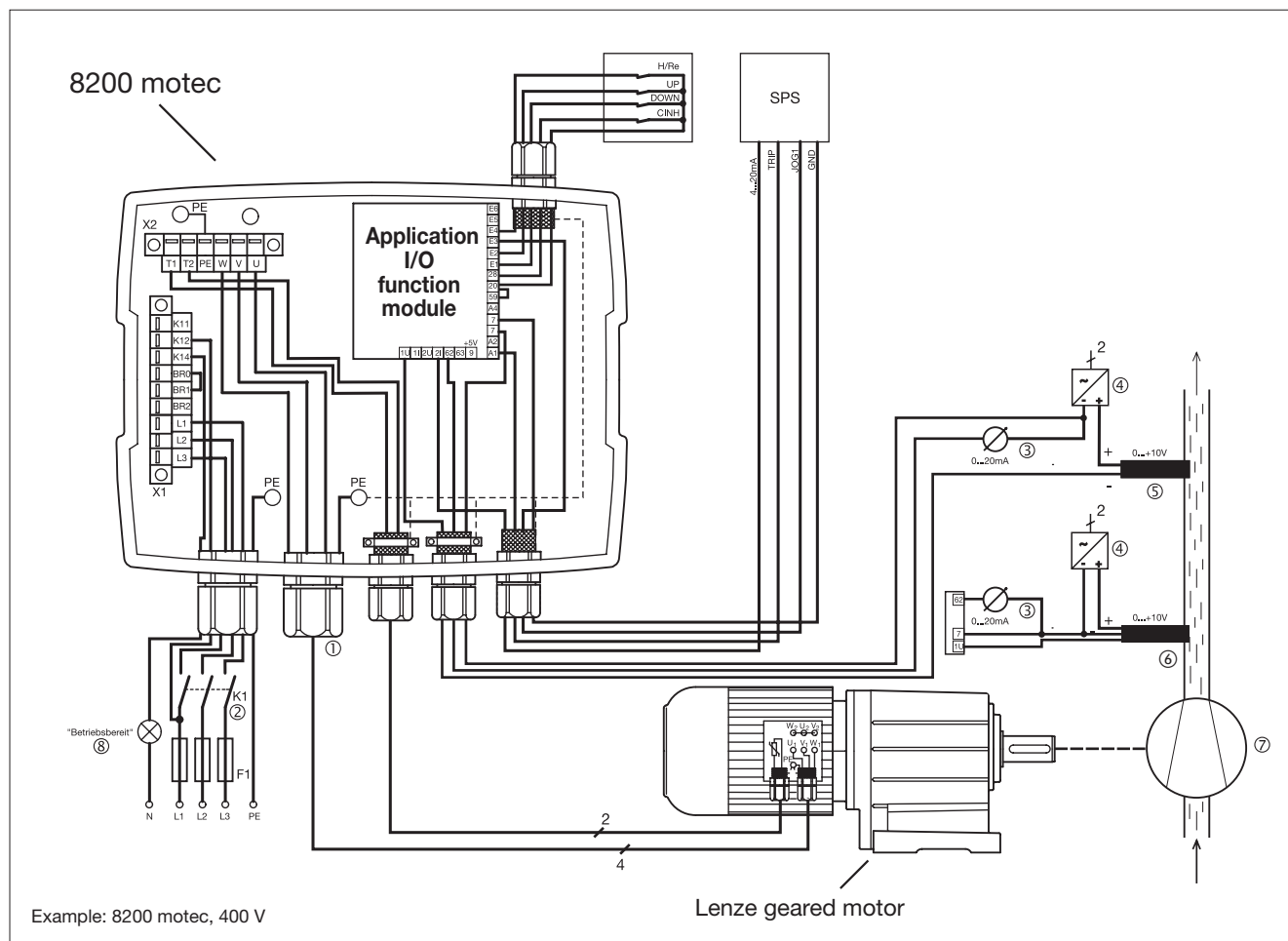
- PLC operation (preselection of the pressure setpoint, night-time pressure reduction)
- On-site set-up is possible
- During the night the pressure is reduced, and the pump then operates at an unregulated, low constant speed
- Under no operating circumstances must the pump be operated at an output frequency of less than 10 Hz (running dry)
- Avoidance of pressure surges in the water network
- Avoidance of mechanical resonance at an output frequency of approx. 30 Hz
- Overheating protection for the motor
- Collective fault messaging to the PLC
- On-site display of readiness for operation and the actual pressure value
- On-site facility for stopping the pump

- Required drive components:
  - Lenze geared motor/three-phase AC motor
  - 8200 motec frequency inverter with Application I/O function module

### Utilised functions

- Internal process controller for the pressure control
  - pressure setpoint from the PLC (4 ... 20 mA)
  - actual pressure reading from the sensor (0 ... 10 V)
- Manual/remote switchover for on-site set-up
  - Manual: Pressure setpoint entered via a push button with motor potentiometer function (UP/DOWN)
  - Remote: pressure setpoint from the PLC
- Fixed speed (JOG) for the pressure reduction during the night (activated via the PLC)
- Protection against running dry (setpoint-independent minimum speed)
- Smooth and jerk-free starting action with S-ramps
- Masking of mechanical resonances with a cancelling frequency
- PTC motor monitoring
- Trip error message via a digital output
- Readiness for operation signalled via a relay output
- Configurable analog output for actual pressure value
- Electric device lock

### Basic circuit for a pressure control system



- 4
- ① Metal cable glands
  - ② Mains contactor
  - ③ Analog display instrument for actual pressure values
  - ④ External power supply unit
  - ⑤ 2-wire pressure sensor
  - ⑥ 3-wire pressure sensor
  - ⑦ Pump
  - ⑧ Lamp on = ready for operation
- For ⑤, ⑥: only use one pressure sensor

Further details on this application example can be found in the Operating Instructions for the 8200 motec.

Dancer position control is used in ongoing processes to give constant material tension. In the example described, the continuous material speed  $v_2$  is synchronised with the line speed  $v_1$ .

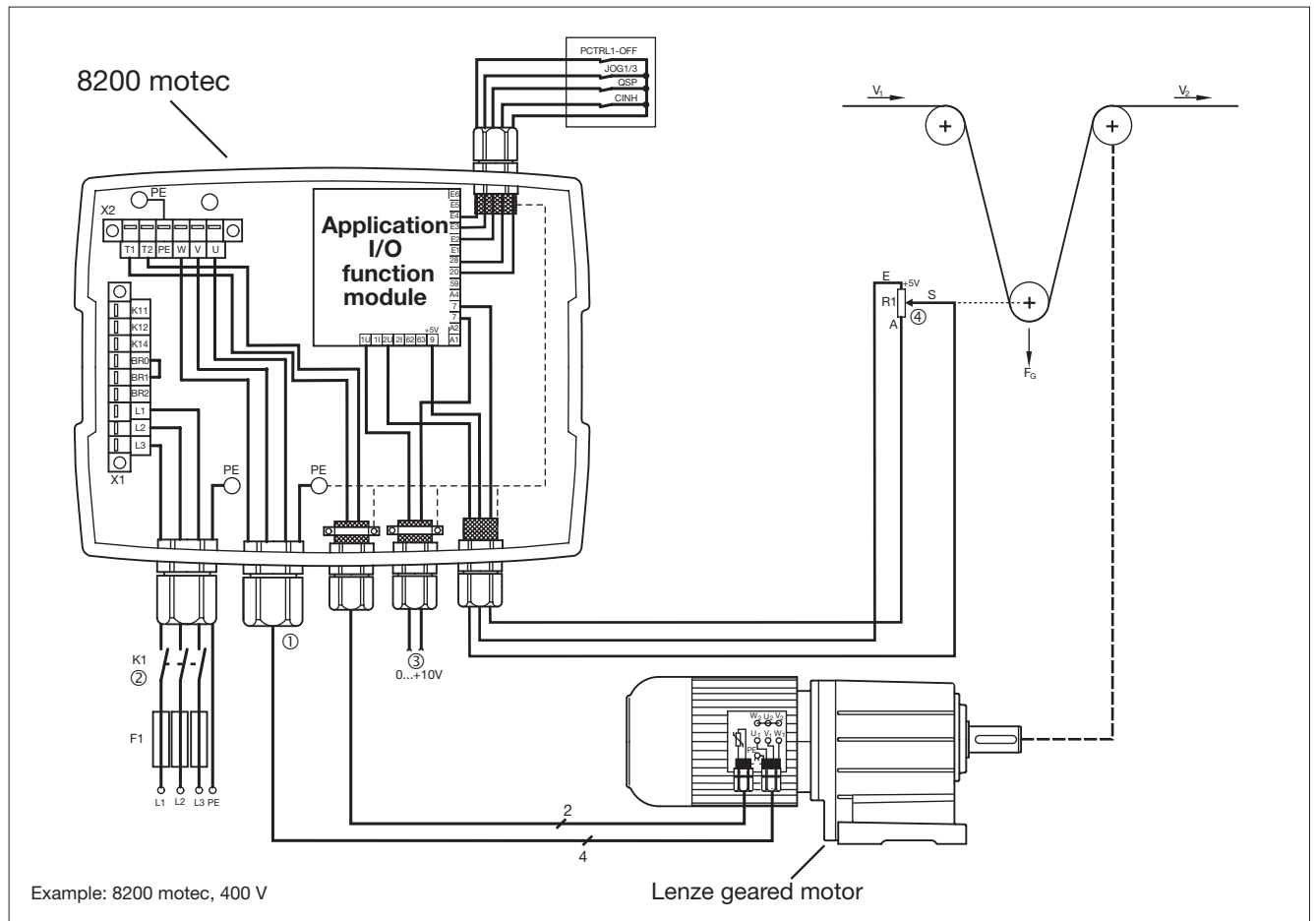
Required drive components

- Lenze geared motor/three-phase AC motor
- 8200 motec frequency inverter with Application I/O function module

### Utilised functions

- Internal process controller as a position controller
- Preselection of the line speed  $v_1$  via analog input at the function module (terminal 1U)
- Actual dancer position value from the dancer potentiometer via an analog input at the function module (terminal 2U)
- Set-up speed via digital input at the function module (fixed speed/JOG via E3)
- Dancer controller shut-off via X3/E4 (external), possibly also internally via an adjustable frequency threshold

### Basic circuit for a dancer position control system



- ① Metal cable glands
- ② Mains contactor
- ③ Master setpoint  $\sim V_1$
- ④ Dancer potentiometer

Further details on this application example can be found in the Operating Instructions for the 8200 motec.

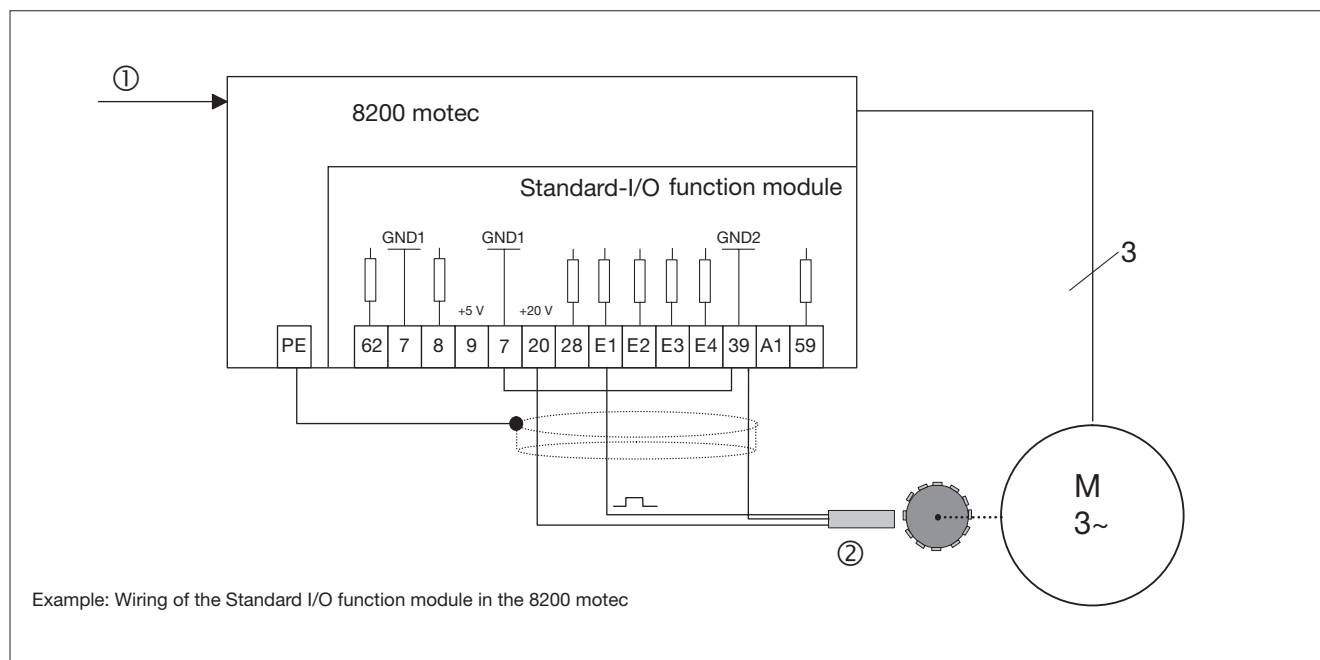


Rotational speed control with an inductive single-track, 3-wire sensor. The aim of the rotational speed controller is to counter the deviation of the actual rotational speed from the setpoint speed, which arises as a result of the effects of loads (motive and generative) on the system. The inductive sensor measures the rotational speed by sensing for example a gear wheel, a metallic fan wheel or a cam. This inductive sensing can take place either directly on the motor or inside the machine.

### Utilised functions

- Internal process controller for rotational speed control
- Input of rotational speed setpoint, e.g. via a hand terminal (handheld keypad)
- Actual rotational speed value as a sequence of pulses via a digital input (configured as a frequency input)
- DC braking if the setpoint drops below an adjustable threshold

### Rotational speed control with a 3-wire sensor



- ① Setpoint input via keypad
- ② 3-wire sensor

4

Further details on this application example can be found in the Operating Instructions for the 8200 motec.



If the 8200 is wall-mounted, it is possible to connect several motors in parallel to the 8200 motec in the “V/f characteristic control” operating mode.

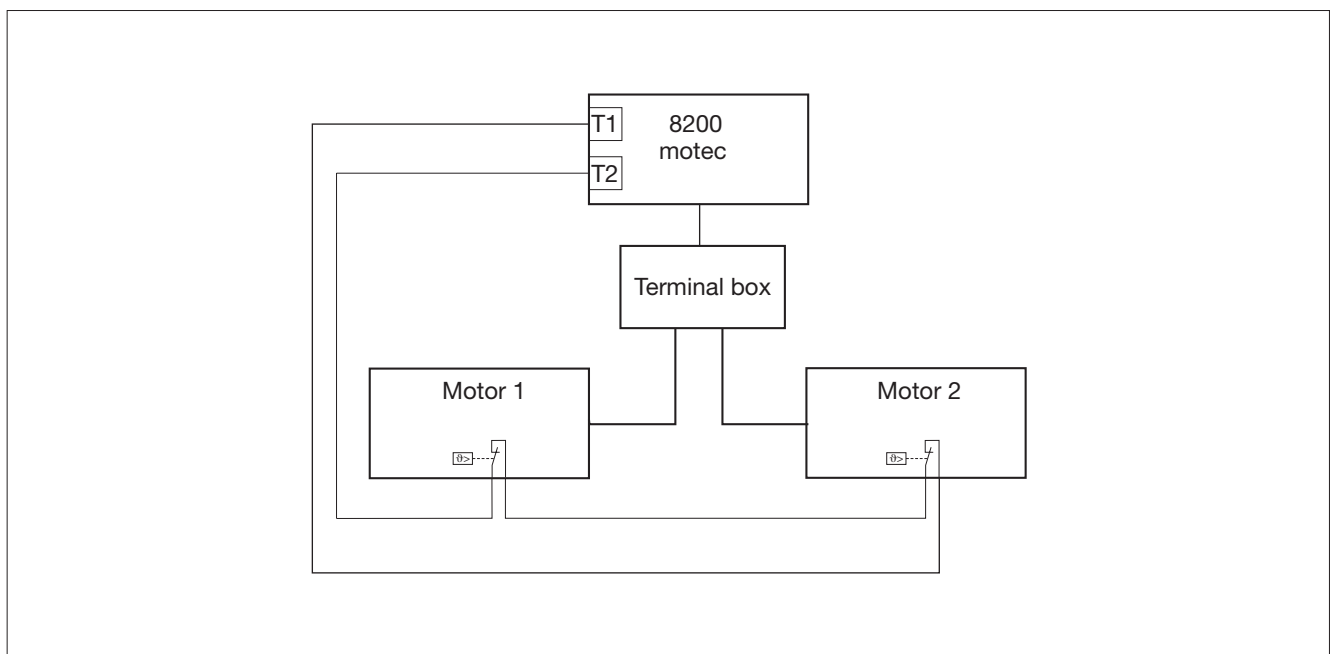
The total sum of individual motor power ratings must not exceed the power rating of the motec.

### Installation information

- The wiring is connected in parallel outside the motec, e.g. in a terminal box.
- All motors must be equipped with thermostats (normally closed contact), which are connected in series to X2/T1 and X2/T2.
- Only use screened cables. Ensure there is wide contact between the screen and PE.
- The resulting cable lengths must not exceed  $l_{res} = 1$  m (noise suppression level B) or  $l_{res} = 10$  m (noise suppression level A):

$$l_{res} = \text{Sum of all motor cable lengths} \times \sqrt{\text{number of motor cables}}$$

### Basic design of a group drive



Further details on this application example can be found in the Operating Instructions for the 8200 motec.

Two refrigeration compressors supply several cooling consumers, which are switched on and off at irregular intervals.

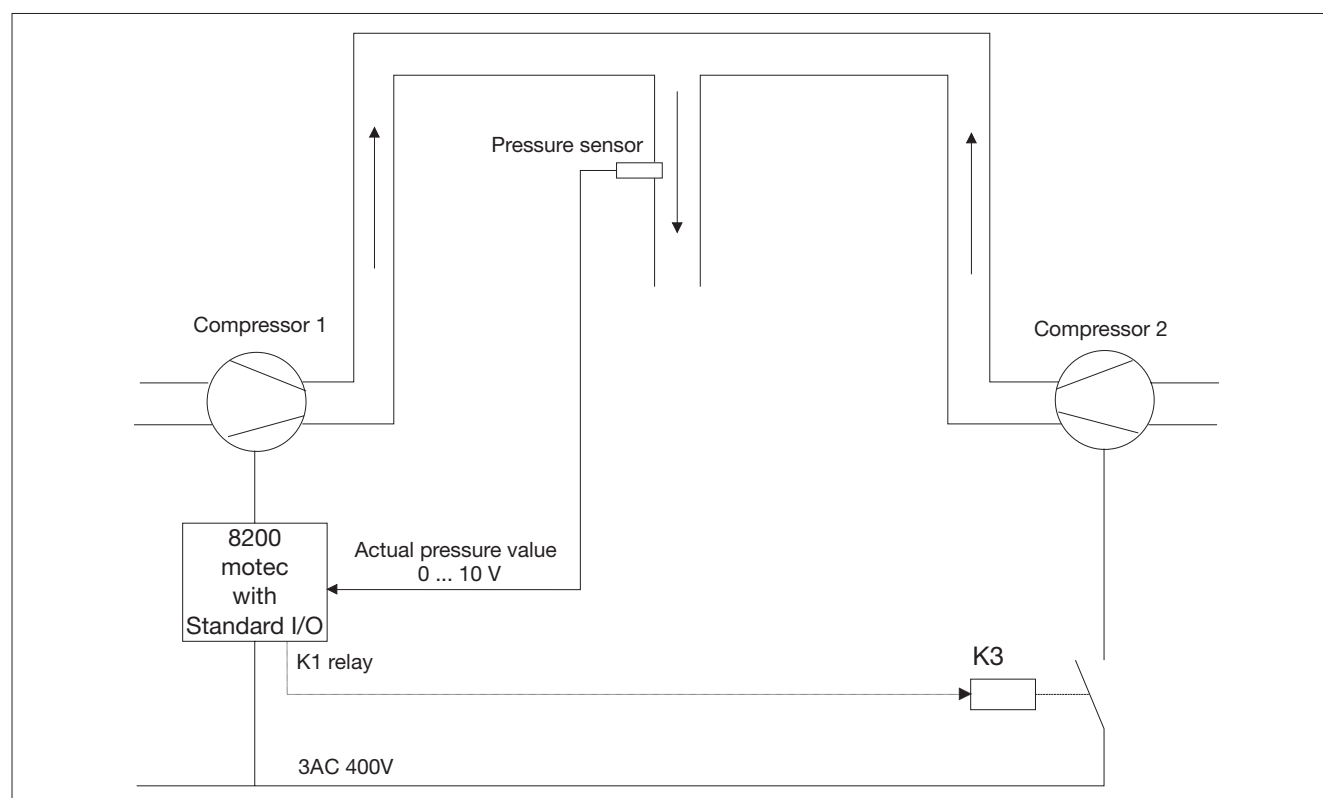
#### Conditions

- Compressor 1 is regulated with an 8200 motec.
- Compressor 2 has a fixed connection to the network and is switched on or off by the 8200 motec depending on the cooling requirements.
- The selection of the pressure setpoint of the refrigeration process is fixed in the 8200 motec.

#### Utilised functions

- Controller release/inhibit function for starting and stopping
- Internal process controller for pressure control
- Fixed frequency
- Programmable relay output K1
- Adjustable switching thresholds
- Parameter set switchover

#### The principle of sequential switching



Tip: When using the Application I/O function module, time delays at relay output K1 may render the otherwise necessary external time delay element unnecessary – the time delay element prevents compressor 2 from switching on during temporary fluctuations in actual value.

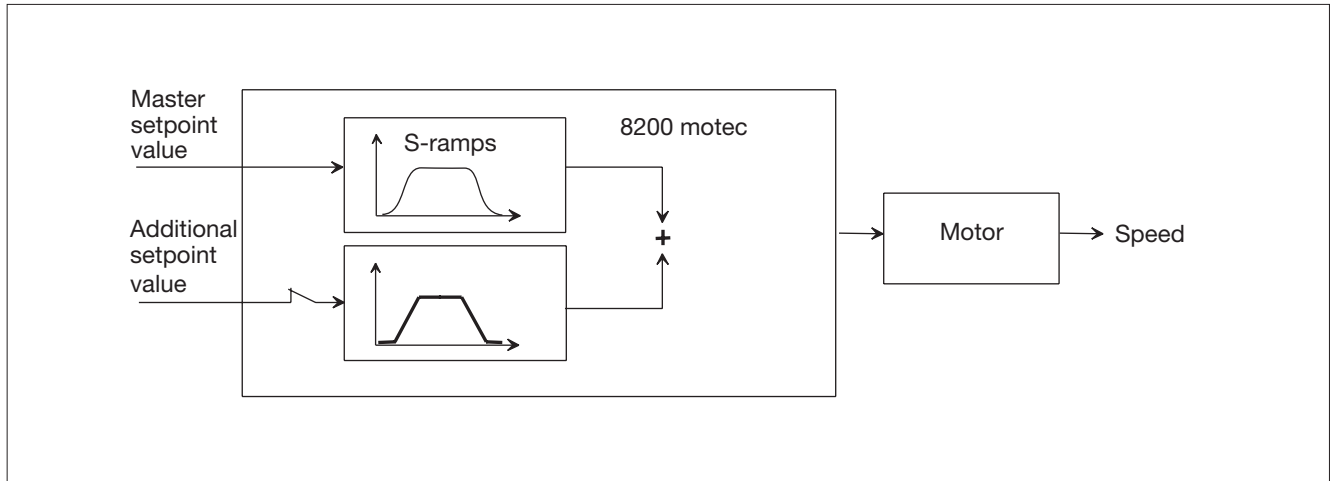
Further details on this application example can be found in the Operating Instructions for the 8200 motec.



Conveyor systems, pumps etc. are often operated at a basic speed which can be increased as required. Here, the speed is implemented by the 8200 motec by preselection of a master setpoint and an additional setpoint. These setpoints may originate from different sources (e.g. PLC and setpoint potentiometer).

The 8200 motec adds the two analog setpoints and then increases the speed of the motor accordingly. The acceleration and deceleration ramps for both setpoints are variable and can be adjusted to ensure smooth acceleration. In addition, the master setpoint ramps can be set to an S-layout.

### Block diagram for setpoint summation



Further details on this application example can be found in the Operating Instructions for the 8200 motec.



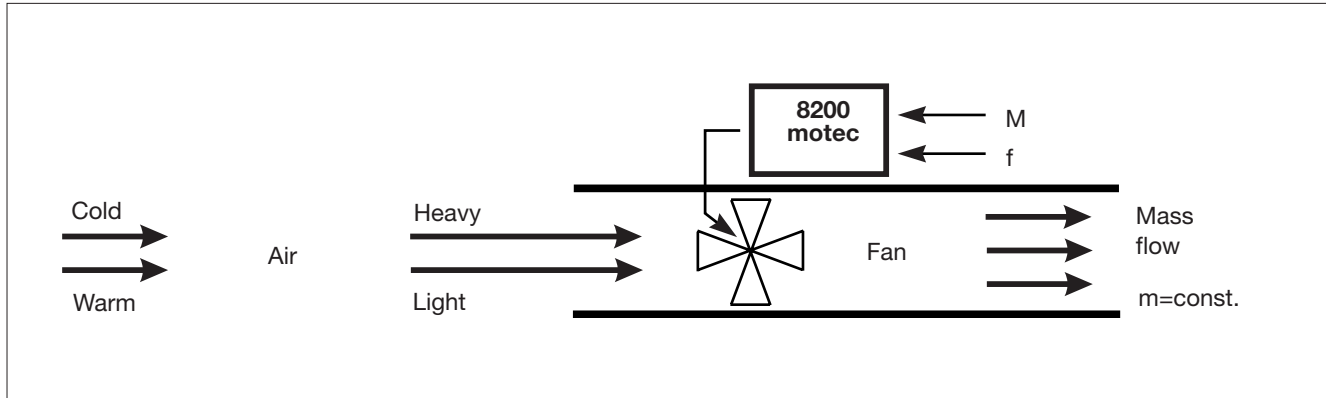
## Application examples

### Power control

Power control (torque limitation) is used for example to ensure a constant flow of mass when media which change their specific gravity are moved - usually air at different temperatures. Here, a torque limit and a rotational speed setpoint are preselected for the motec.

Automatic adaptation of the rotational speed ensures that the torque limit is adhered to when the specific gravity changes, provided that the value of the rotational speed setpoint is selected high enough to not have a limiting effect.

#### The principle of power control demonstrated with a fan



Further details on this application example can be found in the Operating Instructions for the 8200 motec.

## The 8200 motec as an alternative to a mechanical variable speed drive

Example: Screw conveyor (eccentric screw pump) with paddle shaft.

These pumps achieve constant delivery flow at an almost constant delivery pressure, which is proportional to the speed of the screw conveyor.

The paddle shafts in the feed hopper allow continuous feed of the material which is being conveyed, or be pushed in, or they can be used to mix in additional materials (e.g. the addition of quick lime to sewage sludge for sludge conditioning).

The speed of the screw conveyor and the paddle shafts is adjusted separately and steplessly. 8200 motec frequency

inverters can be used as an alternative to mechanical variable speed drives.

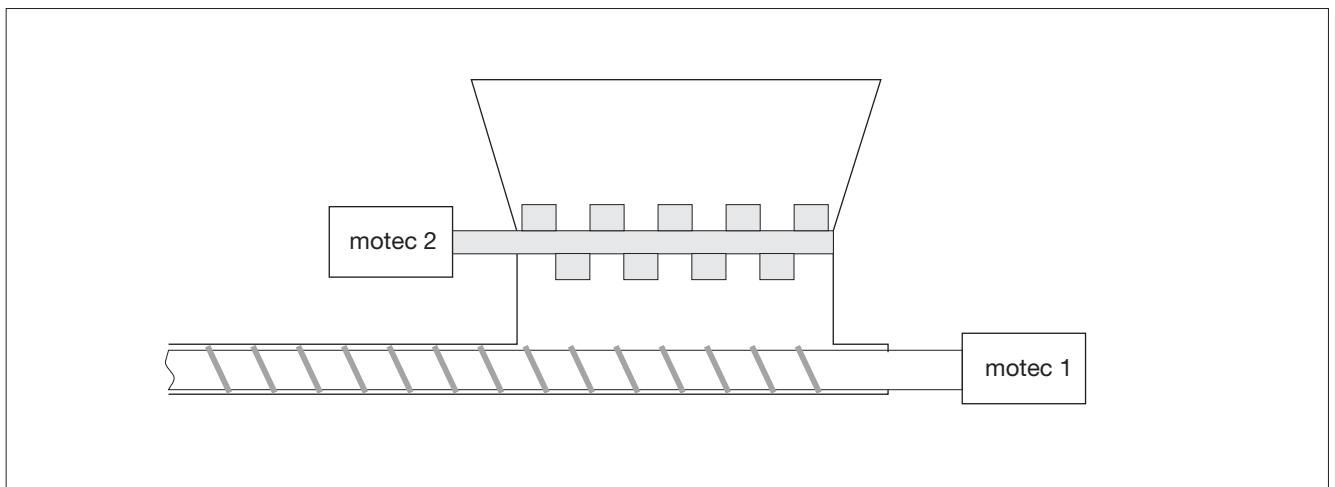
### Conditions

Due to process constraints the motor of the paddle shaft drive should always run at half the speed of the screw conveyor.

### Required components

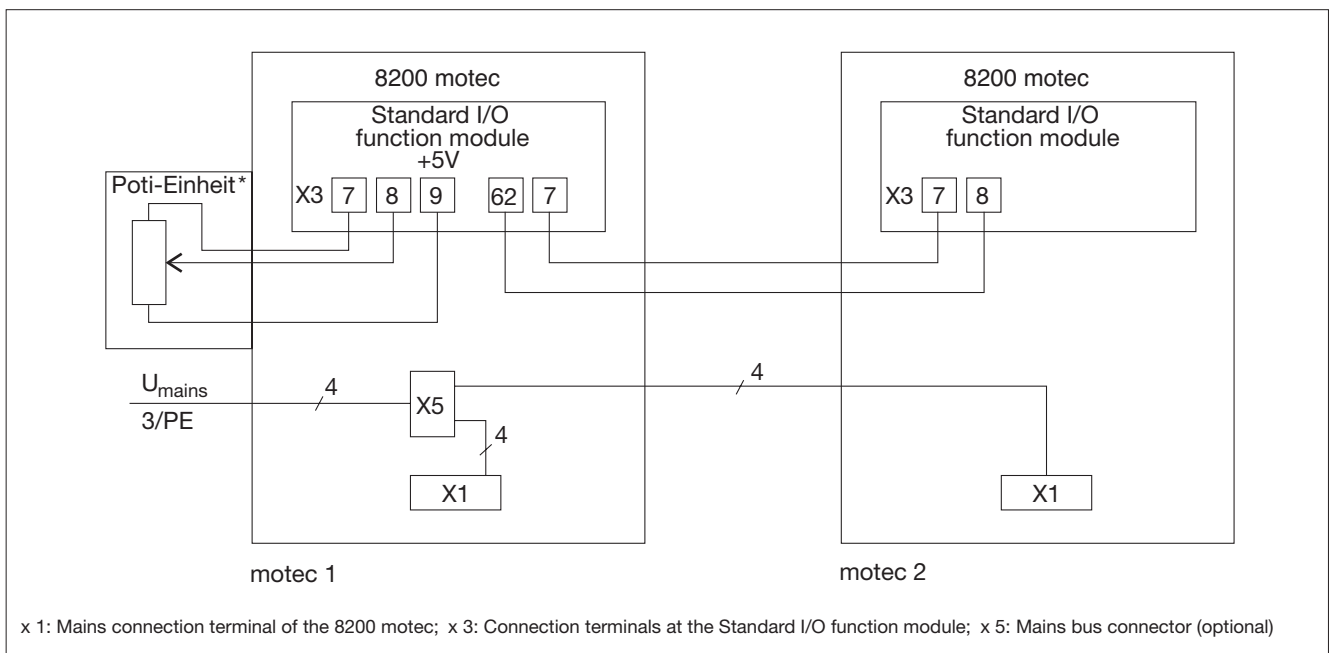
- Two motec units with Standard I/O (motec 1 and motec 2)
- One potentiometer unit for motec 1\*

### Feed screw with 8200 motec - principle



motec 1: Paddle shaft drive motec  
2: Screw conveyor drive

### Wiring of drive controllers for a screw conveyor with a paddle shaft



\* Use a switch/potentiometer unit (type E82ZBU) (see page 4-50)



## ***Fax order***

Cover sheet for general details _____	5-3
Helical geared motors with 8200 motec _____	5-4
Low-profile geared motors with 8200 motec _____	5-5
Bevel-geared motors with 8200motec _____	5-6
Helical-bevel geared motors with 8200 motec _____	5-7
Helical-worm geared motors with 8200 motec _____	5-8
8200 motec frequency inverter _____	5-10

## ***Notes***

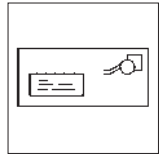
_____	5-12
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## ***Lenze worldwide***

_____	5-14
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# FAX ORDER

Page\_\_ of\_\_

to the Lenze sales office

**Fax no.** \_\_\_\_\_

**From**

**Customer no.**

\_\_\_\_\_  
Company

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\_\_\_\_\_  
Street

\_\_\_\_\_  
Order no.

\_\_\_\_\_  
Town/postcode

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date      Signature

\_\_\_\_\_  
Department

\_\_\_\_\_  
Phone no.

**Delivery address** (if different)

\_\_\_\_\_  
Street

\_\_\_\_\_  
Town/postcode

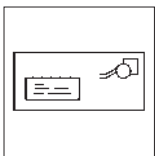
**Invoicing address** (if different)

\_\_\_\_\_  
Street

\_\_\_\_\_  
Town/postcode

**Requested delivery date** \_\_\_\_\_

**Despatch information** \_\_\_\_\_



# Fax order form G motion motec

## Helical geared motors with 8200 motec

Customer no.

Page\_\_ of\_\_

Order no.

Quantity i =

1       A    R  
 2   **E** **V**    B    K      Motor frame size      motec frequency inverters  
 3       C    L            **E82MV**      **B**

Complete the fax order form for the 8200 motec

### Additional information

Dimensions

K  L  
Flange a2 =  mm

Position of the system modules

motec  
 2    3    4    5

Mounting position

A    B    C    D    E    F

Colour

Standard  
GST 03    Not painted (aluminium housing)  
GST 04...14    Paint finish RAL 9018       Grey primer

### Options

Special lubricant

CLP-HC 320       CLP-H1 220

Special paint finish

RAL

Bearing for output shaft, GST

Reinforced bearing (frame size 04 to 14)

Shaft seals

Viton

Ventilation

Ventilation units for frame size 05 to 07       Compensating tank for frame size 09 to 14 in mounting position C

### Motor options

Combination

<input type="checkbox"/> External blower	<input type="checkbox"/> Backstop + integral fan
<input type="checkbox"/> Brake + integral fan	<input type="checkbox"/> Backstop + integral fan + handwheel
<input type="checkbox"/> Brake + external blower	<input type="checkbox"/> Backstop + integral fan + 2nd shaft end
<input type="checkbox"/> Brake + integral fan + handwheel	<input type="checkbox"/> Integral fan + handwheel
<input type="checkbox"/> Brake + integral fan + 2nd shaft end	<input type="checkbox"/> integral fan + 2nd shaft end

External blower

1~       3~

Spring-loaded brake

Brake size

Connecting voltage

V (AC/DC)

Brake options

Hand release with lever      in position       2    3    4    5

Backstop

Direction of rotation **clockwise** (looking towards fan cover)       Direction of rotation **anti-clockwise** (looking towards fan cover)

Motor protection

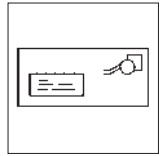
PTC

Additional options

Condensate bore       Canopy       CSA/UL

# Fax order **G motion motec**

## Low-profile geared motors with 8200 motec



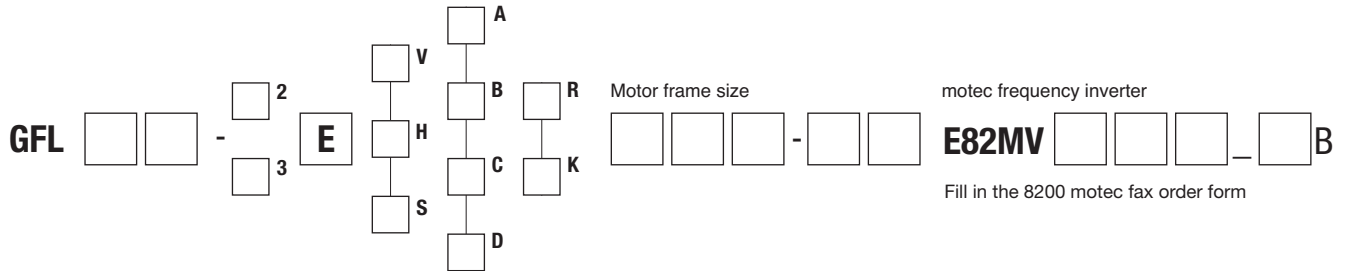
Customer no.

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Page\_\_ out of\_\_

Order no.

Quantity  i =



### Other order details

Dimensions

H  S  
Hollow shaft dH7 =  mm

K  
Flange a2 =  mm

Position of the system modules  
(mark undesignated spaces with a 0)

Shaft:  0  6  
Foot:  0  3  4

Terminal box:  
 2  3  4  5

Mounting position

A  B  C  D  E  F

Colour

RAL 9018 coating

Grey primary coating

### Options

Special lubricant

CLP-HC 320

CLP-H1 220

Special coating

RAL

Shaft seals

Viton

Accessories

Rubber buffer set for torque plate

Assembly kit for hollow shaft retention

Shrink disc cover

Compensating tank for size 09...14 in mounting position C

Ventilation

Ventilation elements for size 05...07

### Motor options

Combination

Separate fan

Backstop + integral fan

Brake + integral fan

Backstop + integral fan + handwheel

Brake + separate fan

Backstop + integral fan + 2nd shaft end

Brake + integral fan + handwheel

Integral fan + handwheel

Brake + integral fan + 2nd shaft end

Integral fan + 2nd shaft end

Separate fan

1~

3~

Spring-operated brake

Brake size

Connection voltage

V (AC/DC)

Brake options

Manual release with lever

in position

2  3  4  5

Backstop

Direction of rotation **clockwise**  
(viewed looking onto the fan cover)

Direction of rotation **counter-clockwise**  
(viewed looking onto the fan cover)

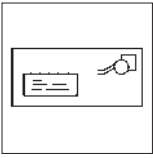
Motor protection

PTC

Further options

Condensation drain hole

Protective cover  CSA/UL



# Fax order G-motion motec

## Bevel geared motors with 8200 motec

Customer no.

--	--	--	--	--	--	--	--

Page\_\_ out of\_\_

Order no.

Quantity    i =

GKR 04 - 2E

V  
H  
S

A  
B

R  
K

Motor frame size  -

motec frequency inverter **E82MV**  -  B

Fill in the 8200 motec fax order form

**Other order details**

**Dimensions**

H S    Hollow shaft dH7 =  mm

K    Flange a2 =  mm

**Position of system modules**  
(mark undesignated spaces with a 0)

Shaft: 0 3 5 3+5

Foot: 0 3 5 3+5

Terminal box: 2 3 4 5

**Mounting position**

A B C D E F

**Colour**

**Standard coatings**

Uncoated (aluminium housing)     RAL 9018 coating     Grey primary coating

**Options**

**Special lubricant**     CLP-HC 320     CLP-H1 220

**Special coating**    RAL

**Shaft seals**     Viton

**Accessories**     Rubber buffer set for torque plate     Shrink disc cover

Torque plate - pitch circle                       Assembly kit for hollow shaft retention

2nd output shaft end

**5**

**Motor options**     Separate fan     Backstop + integral fan

**Combination**     Brake + integral fan     Backstop + integral fan + handwheel

Brake + separate fan     Backstop + integral fan + 2nd shaft end

Brake + integral fan + handwheel     Integral fan + handwheel

Brake + integral fan + 2nd shaft end     Integral fan + 2nd shaft end

**Separate fan**     1~     3~

**Spring-operated brake**

  Brake size   

  Brake options     Manual release with lever    Connection voltage  V (AC/DC)

Low noise design    in position 2 3 4 5

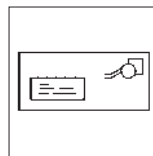
**Backstop**     Direction of rotation **clockwise**     Direction of rotation **counter-clockwise**

                          (viewed looking onto the fan cover)    (viewed looking onto the fan cover)

**Motor protection**     PTC

**Further options**     Condensation drain hole     Protective cover     CSA/UL

**Fax order G motion motec**  
**Helical-bevel geared motors with 8200 motec**



Customer no.

Page \_\_\_ out of \_\_\_

Order no. \_\_\_\_\_

Quantity i =

GKS  - <sup>3</sup>  
<sup>4</sup> **E** <sup>V</sup>  
<sup>H</sup> <sup>A</sup> <sup>R</sup>  
<sup>S</sup> <sup>B</sup> <sup>K</sup> Motor frame size  -  motec frequency inverter  
**E82MV**  -  **B**  
 Fill in the 8200 motec fax order form

**Other order details**

**Dimensions**

**H**  **S** Hollow shaft dH7 =  mm  
 **K** Flange a2 =  mm

**Position of system modules**  
 (mark undesignated spaces with a 0)

Shaft 0 3 5 3+5 Flange 0 3 5 3+5 Terminal box 2 3 4 5

**Mounting position**

A B C D E F

**Colour**

RAL 9018 coating  Grey primary coating

**Options**

**Special lubricant**

CLP-HC 320  CLP-H1 220

**Special coating**

RAL

**Shaft seals**

Viton

**Accessories**

Torque plate - housing foot  Shrink disc cover  
 Torque plate - pitch circle  Jet-proof hollow shaft cover  
 2nd output shaft end  Assembly kit for hollow shaft retention

**Ventilation**

Ventilation elements for size 05...07  Compensating tank for size 09...14 in mounting pos. C

**Motor options**

<input type="checkbox"/> Separate fan	<input type="checkbox"/> Backstop + integral fan
<input type="checkbox"/> Brake + integral fan	<input type="checkbox"/> Backstop + integral fan + handwheel
<input type="checkbox"/> Brake + separate fan	<input type="checkbox"/> Backstop + integral fan + 2nd shaft end
<input type="checkbox"/> Brake + integral fan + handwheel	<input type="checkbox"/> Integral fan + handwheel
<input type="checkbox"/> Brake + integral fan + 2nd shaft end	<input type="checkbox"/> Integral fan + 2nd shaft end

**Separate fan**

1~  3~

**Spring-operated brake**

Brake size

Connection voltage

V (AC/DC)

Brake options

Manual release with lever

in position

<sup>2</sup> <sup>3</sup> <sup>4</sup> <sup>5</sup>

**Backstop**

Low noise design  
 Direction of rotation **clockwise**  
 (viewed looking onto the fan cover)

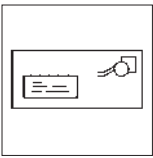
Direction of rotation **counter-clockwise**  
 (viewed looking onto the fan cover)

**Motor protection**

PTC

**Further options**

Condensation drain hole  Protective cover  CSA/UL



**Fax order G $\square\square$  motion motec**  
**Helical-worm geared motors with 8200 motec**

Customer no.

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Order no. \_\_\_\_\_

Quantity  i =

GSS  - <sup>2</sup>  
<sup>3</sup> **E** <sup>V</sup>  
<sup>H</sup> <sup>A</sup> <sup>R</sup> Motor frame size motec frequency inverter  
<sup>B</sup> <sup>K</sup>  -  **E82MV**  -  **B**  
 Fill in the 8200 motec fax order form

**Other order details**

**Dimensions**  
<sup>H</sup> <sup>S</sup>  
 Hollow shaft dH7 =  mm <sup>K</sup>  
 Flange a2 =  mm

**Position of system modules**  
 (mark undesignated spaces with a 0)  
 Shaft: <sup>0</sup> <sup>3</sup> <sup>5</sup> <sup>3+5</sup> Flange: <sup>0</sup> <sup>3</sup> <sup>5</sup> <sup>3+5</sup> Terminal box: <sup>2</sup> <sup>3</sup> <sup>4</sup> <sup>5</sup>

**Mounting position**  
<sup>A</sup> <sup>B</sup> <sup>C</sup> <sup>D</sup> <sup>E</sup> <sup>F</sup>

**Colour**  
 RAL 9018 coating  Grey primary coating

**Options**

**Special lubricant**  
 CLP-HC 320  CLP-H1 220

**Special coating**  
 RAL

**Shaft seals**  
 Viton

**Accessories**  
 Torque plate - housing foot  Shrink disc cover  
 Torque plate - pitch circle  Jet-proof hollow shaft cover  
 2nd output shaft end  Assembly kit for hollow shaft retention

**Ventilation**  
 Ventilation elements for size 05...07

5

**Motor options**

**Combination**  
 Separate fan  Backstop + integral fan  
 Brake + integral fan  Backstop + integral fan + handwheel  
 Brake + separate fan  Backstop + integral fan + 2nd shaft end  
 Brake + integral fan + handwheel  Integral fan + handwheel  
 Brake + integral fan + 2nd shaft end  Integral fan + 2nd shaft end

**Separate fan**  
 1~  3~

**Spring-operated brake**  
 Brake size  Connection voltage  V (AC/DC)  
 Brake options  Manual release with lever in position <sup>2</sup> <sup>3</sup> <sup>4</sup> <sup>5</sup>  
 Low noise design

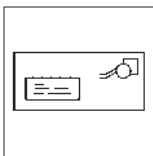
**Backstop**  
 Direction of rotation **clockwise**  Direction of rotation **counter-clockwise**  
 (viewed looking onto the fan cover) (viewed looking onto the fan cover)

**Motor protection**  
 PTC

**Further options**  
 Condensation drain hole  Protective cover  CSA/UL







# Fax order G-motion motec

## 8200 motec frequency inverter

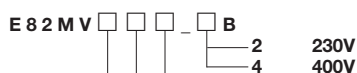
Customer no.

Page\_\_ out of\_\_

Order no.

### Frequency inverter

#### 8200 motec



Power		
2	5	1 = 0.25 kW
3	7	1 = 0.37 kW
5	5	1 = 0.55 kW
7	5	1 = 0.75 kW
1	5	2 = 1.5 kW
2	2	2 = 2.2 kW
3	0	2 = 3.0 kW
4	0	2 = 4.0 kW
5	5	2 = 5.5 kW
7	5	2 = 7.5 kW

Quantity

- E82MV251\_2B
- E82MV371\_2B
- E82MV551\_4B
- E82MV751\_4B
- E82MV152\_4B
- E82MV222\_4B
- E82MV302\_4B\*\*
- E82MV402\_4B\*\*
- E82MV552\_4B\*\*
- E82MV752\_4B\*\*

→ If the unit is wall mounted or mounted on a **non** Lenze motor then order the additional fan assembly type E82ZMV (Accessories)

### Function modules

#### Quantity I/O function modules

- Standard I/O E82ZAFS001
- Application I/O E82ZAF001
- Bus I/O for motec E82ZAFB001: (also order a bus module)
- Bus I/O for motec E82ZMFB001 (also order a bus function module)

#### Quantity Bus function modules

- LECOM-B (RS485) E82ZAF001
- INTERBUS E82ZAF001
- PROFIBUS-DP E82ZAFP001
- System bus (CAN) E82Z AFC001
- DeviceNet/CANopen E82ZAFD001\*\*
- AS-Interface E82ZAFF001\*\*

### Communication modules

#### Quantity

- Hand terminal\* (handheld keypad) E82ZBB
- Keypad E82ZBC

#### Quantity PC interface RS232

- Handheld terminal with PC interface\* E82ZBL
- PC systems cable RS232, **0.5 m** EWL0048
- PC systems cable RS232, **5 m** EWL0020
- PC parameter setting software
- Global Drive Control GDCeasy ESP-GDC2-E

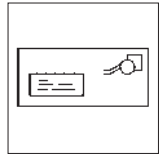
5

\* Additional connection cable E82ZWLxx required (with PC interfaces the PC system cable EWL00xx is also required)

#### Quantity Connection cable for hand terminal/handheld terminal with PC interface

- Connection cable for hand terminal **2.5 m** E82ZWL025
- Connection cable for hand terminal **5 m** E82ZWL050
- Connection cable for hand terminal **10 m** E82ZWL100

\*\* In preparation



Customer no.

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### Accessories

Quantity	Wiring terminals	Quantity	Braking		
<input type="text"/>	Fan connection terminal* (for separate motor fan) 2 x 2.5 mm <sup>2</sup>	E82ZWKL	<input type="text"/>	Brake rectifier for motec 0.55-2.2 kW 400 V (bridge rectifier) max. 270 V AC	E82ZWBR1
<input type="text"/>	System terminals 10 x 1.5 mm <sup>2</sup> for motec 0.25/0.37 kW 230 V	E82ZMKS	<input type="text"/>	Brake rectifier for motec 0.25/0.37 kW 230 V (bridge rectifier) max. 270 V AC	E82ZMBR1
<input type="text"/>	System terminals 12 x 1.5 mm <sup>2</sup> for motec 0.55-2.2 kW 400 V	E82ZWKS	<input type="text"/>	Brake rectifier* (one-way rectifier) max. 480 V AC	E82ZWBR3
<input type="text"/>	Mains bus connector for motec 0.25/0.37 kW 230 V	E82ZWKN2			
<input type="text"/>	Mains bus connector for motec 0.55-2.2 kW 400 V	E82ZWKN4			

Quantity	Switches/potentiometers	Quantity	Braking		
<input type="text"/>	Switch/potentiometer unit	E82ZBU	<input type="text"/>	Brake resistor for motec 1.5/2.2 kW (IP55)	ERBM240R220W
			<input type="text"/>	Brake resistor for motec 0.25-0.75 kW (IP55)	ERBM470R110W

Quantity	Current limiting module	Quantity	Additional module		
<input type="text"/>	Current limiting module for motec 0.25/0.37 kW 230 V	E82ZJ004	<input type="text"/>	Fan module for motec 3-7.5 kW (IP54)	E82ZMV**
<input type="text"/>	Current limiting module for motec 0.55-2.2 kW 400 V	EZN3A0150H024			

### Cable protection:

Quantity	Circuit-breakers (p. 4-55)	Quantity	Fuses (p. 4-56)
<input type="text"/>	Description <input type="text"/>	<input type="text"/>	Description <input type="text"/>

Quantity	Fuse holders (p. 4-56)
<input type="text"/>	Description <input type="text"/>

Quantity	Operating Instructions:
<input type="text"/>	8200 motec English EDB82MVU (German EDB82MVD, French EDB82MVF)
<input type="text"/>	Fieldbus function modules English EDB82ZAU (German EDB82ZAD, French EDB82ZAF)

### Other

Quantity	Description	Quantity	Description
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

\* Not for motec 0.25/0.37 kW 230 V

\*\* In preparation



## Notes





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