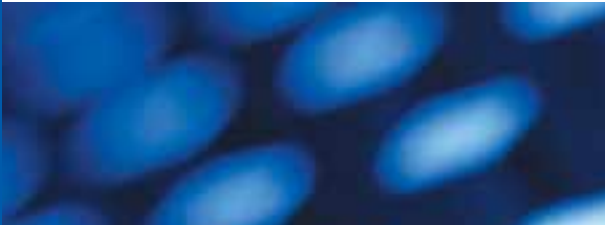
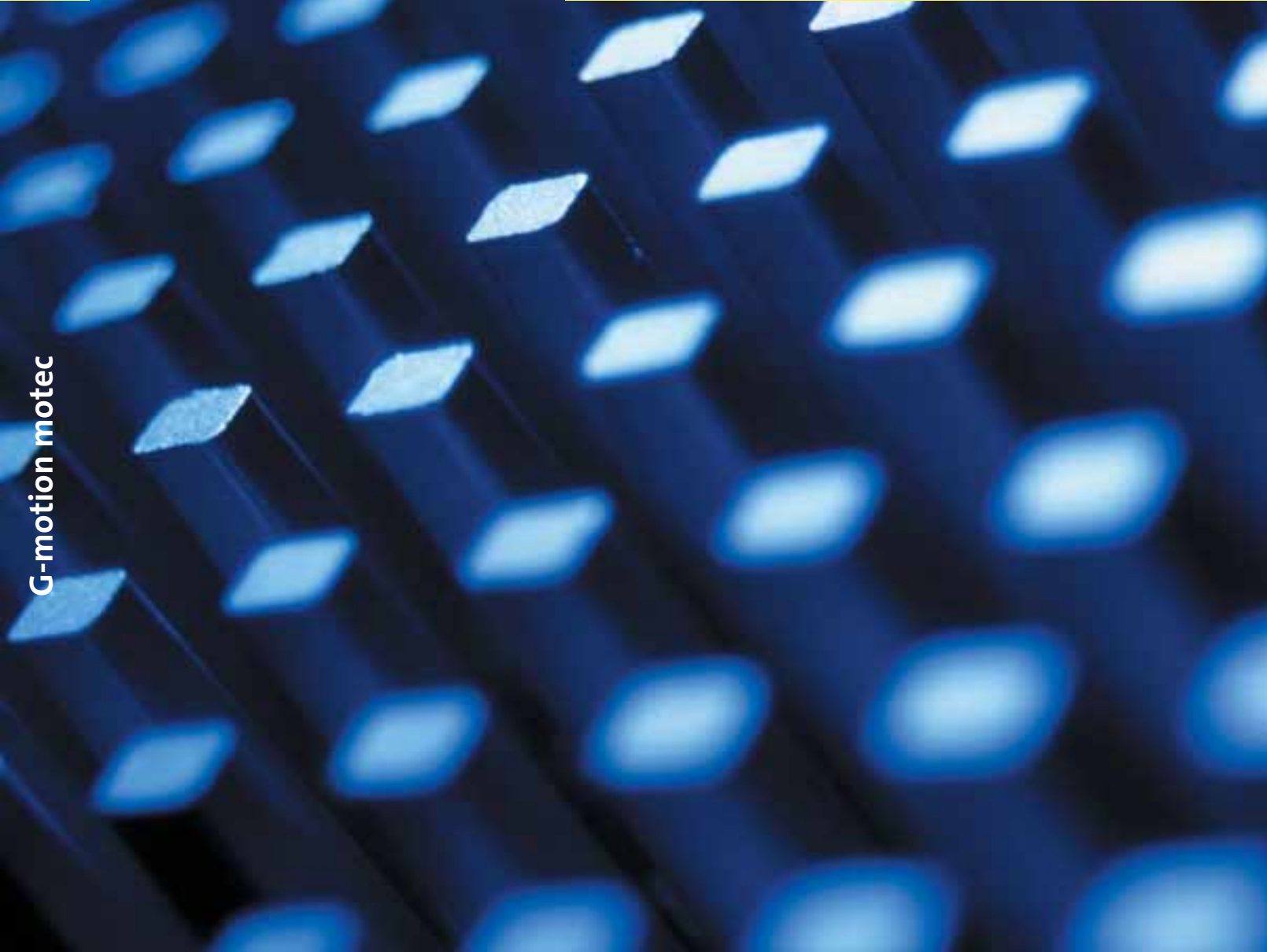


Geared motors

with integrated frequency inverter



G-motion motec



G-motion motec

No matter which drive solution you imagine, we make your dreams come true.

True to our slogan (one stop shopping) we offer you a complete programme of electronic and mechanical drive systems which is distinguished by reliability and efficiency.

The scope of our programme includes frequency inverters, servo controllers, variable-speed drives, speed reduction gearboxes, motors, brakes, clutches, decentralised I/O and operator and display units.



Many well-known companies use Lenze products in various applications.

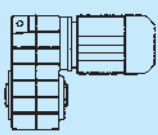
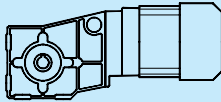
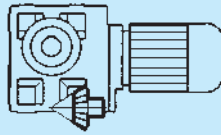
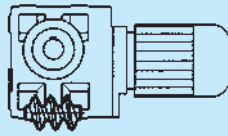
Gearbox type	Gearbox size	No. of stages	Version (input)	Version (output)	Motor frame size	Frequency inverter 8200 motec
G S T	1 2 - 1		E	V	1 2 3 4 5 6	E82MV 1 2 3 - 1 B
G S T	Helical gearboxes		Three-phase AC geared motor with integrated 8200 motec	Solid shaft		2 5 1 = 0.25 kW
G F L	Shaft-mounted helical gearboxes (low-profile gearboxes)			Hollow shaft	R Without flange	3 7 1 = 0.37 kW
G K R	Bevel gearboxes			Hollow shaft with shrink disc	K With circular flange (through holes)	5 5 1 = 0.55 kW
G K S	Helical-bevel gearboxes				L With circular flange (threaded holes)	7 5 1 = 0.75 kW
G S S	Helical-worm gearboxes				A Foot mounting with centring	1 5 2 = 1.5 kW
					B Foot mounting without centring	2 2 2 = 2.2 kW
					C No foot, with centring	3 0 2 = 3.0 kW
					D No foot, no centring	4 0 2 = 4.0 kW
						5 5 2 = 5.5 kW
						7 5 2 = 7.5 kW

Mounting position (A-F) and position of system elements (1-6)

Product key

Geared motors with 8200 motec

Type designation

Geared motor	Gearbox size								No. of stages
	03	04	05	06	07	09	11	14	
GST 		•	•	•	•	•			1
	•	•	•	•	•	•	•	•	2
			•	•	•	•	•	•	3
GFL 		•	•	•	•	•	•	•	2
			•	•	•	•	•	•	3
GKR 	•	•	•	•					2
GKS 		•	•	•	•	•	•	•	3
			•	•	•	•	•	•	4
GSS 		•	•	•	•				2
			•	•	•				3

Notes on ordering, example order, fax order form see chapter 1

Lenze

An introduction

Lenze is the competent partner for your application. Lenze is not only a supplier for single components but also offers solutions for complete drive systems including planning, execution and commissioning.

Furthermore, a worldwide service and distribution network lets you engage a qualified customer advisory service and an after sales service that is fast and extensive.

Our quality assurance system for design, production, sales and service is certified according to DIN ISO 9001 : 2000. Our environmental management system is also certified to DIN EN ISO 14001.

Our customers set the standards for measuring the quality of our products. Our task is to meet your requirements, since customer orientation is a Lenze principle demanding the best quality.

See for yourself.



A worldwide service –

Our team of experts provides reliable and professional assistance.

A true system

Drive and automation technology

Products which are setting the pace in terms of technology and complete drive solutions for machine and system production - just what Lenze is all about. We provide our customers with frequency and servo inverters with powers up to 400 kW. We support both central control cabinet solutions and decentralised drive concepts, e.g. with motor inverters with IP65 type of protection.

Both standard three-phase AC motors and synchronous and asynchronous servo motors are available to complement the various controllers, all of which can be combined with various types of gearboxes. Human Machine Interfaces, decentralised I/O systems and modules for fieldbus interfacing are also available for exchanging information.

Lenze boasts extensive application know-how in all manner of industries. This knowledge has been applied in the design of the controller and PC software, providing an efficient means of implementing numerous standard applications using simple parameter settings.

An all-round service comprising component selection advice, training, commissioning support and even a helpline which can be accessed all over the world and independent system engineering completes the offer.

Human Machine Interface



Keypad XT



Card modules



IP20 I/O system



*Drive control
Drive PLC*



*smd
frequency inverter*



Geared motors



9300 servo inverter



ECS servo system for multi-axis application



Communication modules



PC software



Software packages



9300 vector frequency inverter



8200 vector frequency inverter



8200 motec motor inverter



starttec motor starter



Servo motors



Small drives



Brakes and clutches



Geared motors | The range

A proven and versatile range of geared motors in all popular types of gearbox: G-motion

The G-motion range of geared motors, which are supplied with a wide range of functions as standard, can now be complemented with motor and output options giving users wide-ranging possibilities.

Gearbox types

The gearboxes are available as:

- ▶ Helical gearboxes
- ▶ Shaft-mounted helical gearboxes
- ▶ Bevel gearboxes
- ▶ Helical-bevel gearboxes
- ▶ Helical-worm gearboxes
- ▶ Servo planetary gearboxes

Speeds

A wide ratio range and precise spacing of the gearbox ratios enable the actual drive to be matched closely to the process parameters required.

Integrated three-phase AC motors

- ▶ 4-pole 0.06 to 45 kW
- ▶ 2-pole 0.28 to 9.2 kW
- ▶ 6-pole 0.18 to 0.55 kW
- ▶ Synchronous servo motors 0.25 to 10 kW
- ▶ Asynchronous servo motors 0.8 to 20.3 kW

G-motion^{const} / G-motion^{atex}

Geared motors and gearboxes with constant output speeds

- ▶ Power range 0.06 to 45 kW
- ▶ Torque range ≤ 12000 Nm



G-motion motec

Geared motors with built-in 8200 motec frequency inverter

- ▶ Power range 0.12 to 7.5 kW
- ▶ Torque range ≤ 12000 Nm



G-motion servo MC/MD

Geared motors with dynamics

- ▶ Power range 0.25 to 20.3 kW
- ▶ Torque range ≤ 12000 Nm

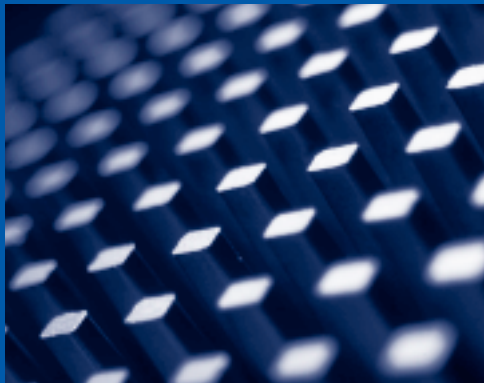
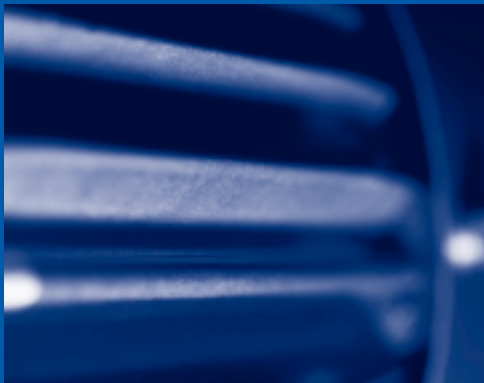
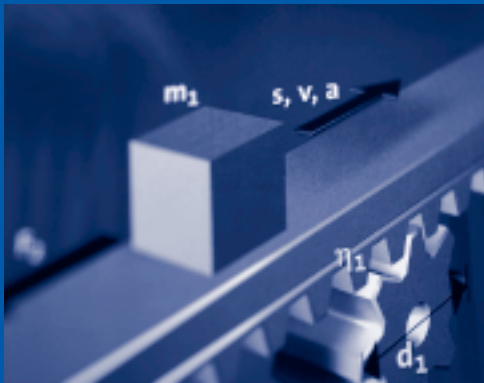


G-motion m-var

Geared motors with mechanical speed control

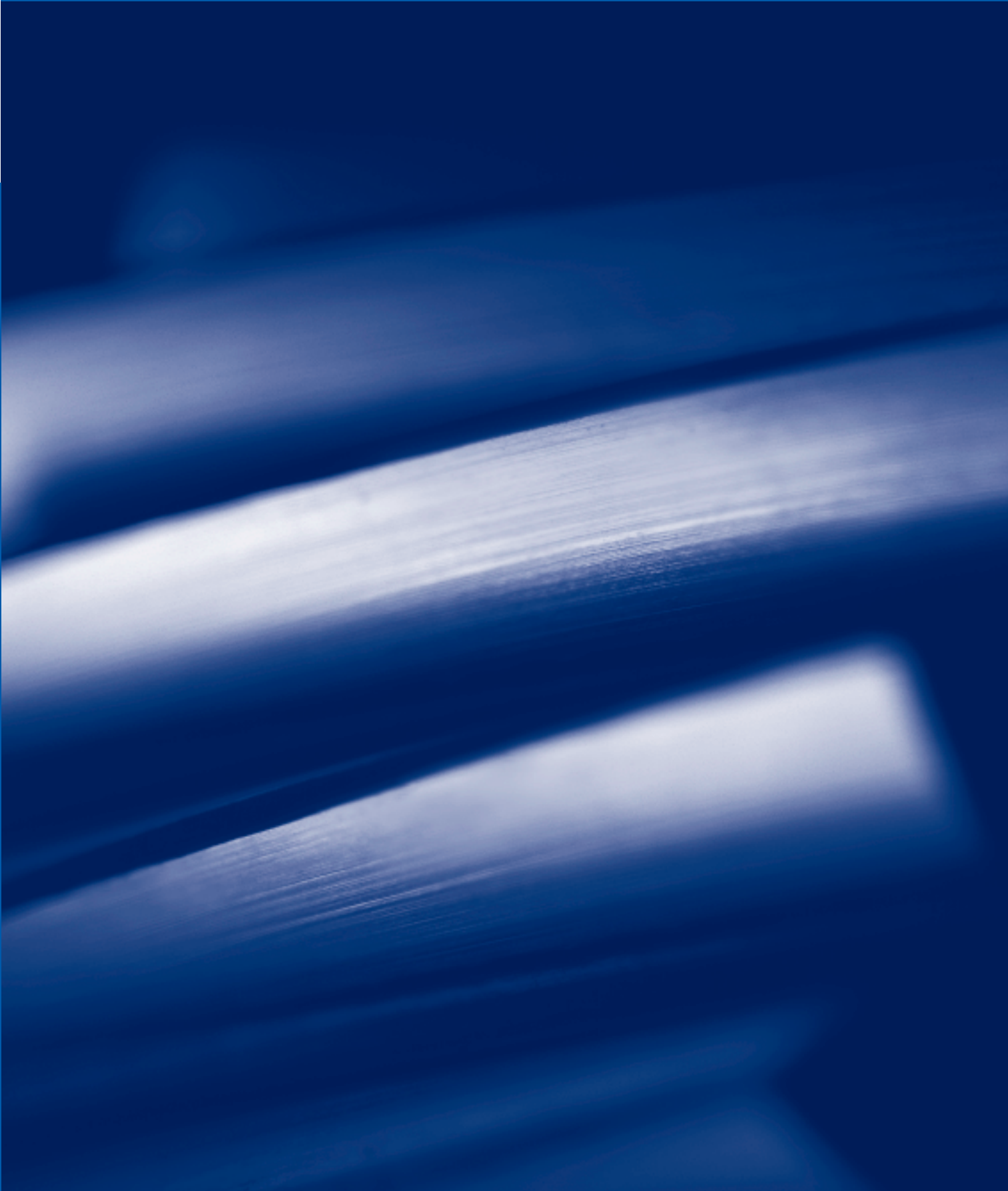
- ▶ Power range 0.25 to 45 kW
- ▶ Torque range ≤ 12000 Nm





Contents | G-motion motec

Product key, mounting positions	Front inside cover	
General	1-1	1
Drive dimensioning	2-1	2
Helical gearboxes	3-1	3
Shaft-mounted helical gearboxes (low-profile gearboxes)	4-1	4
Bevel gearboxes	5-1	5
Helical-bevel gearboxes	6-1	6
Helical-worm gearboxes	7-1	7
Motors	8-1	8
8200 motec	9-1	9
Lenze worldwide	10-1	10



General | G-motion motec

Overview _____ 1-2

Product information _____ 1-4

List of abbreviations _____ 1-5

Definitions _____ 1-6

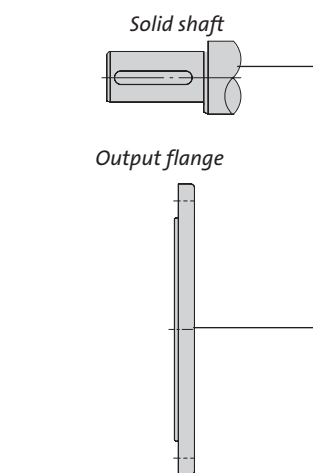
Ordering data _____ 1-7

Ordering example _____ 1-8

Fax orders _____ 1-10

Geared motors with built-in frequency inverter for variable output speeds and extensive functions. Numerous gearbox variations and motor options.

1



Helical geared motor

GST

0.12 to 7.5 kW

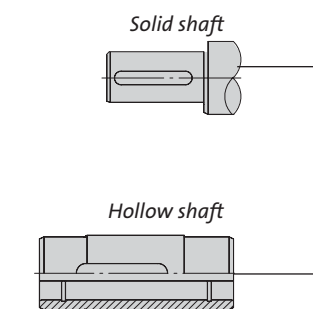
Parallel-axial solid shaft geared motors with foot and flange mounting. As on all other models, the optimised tooth geometry ensures that the gearboxes run particularly smoothly.



Shaft-mounted helical geared motor (low-profile geared motor) GFL

0.12 to 7.5 kW

Recommended for use as shaft-mounted geared motor with hollow shaft. Play-free connections and high teeth quality minimise backlash.

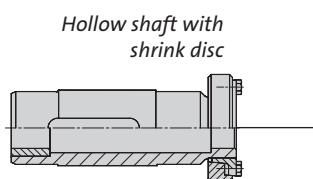


Bevel geared motor

GKR

0.12 to 5.5 kW

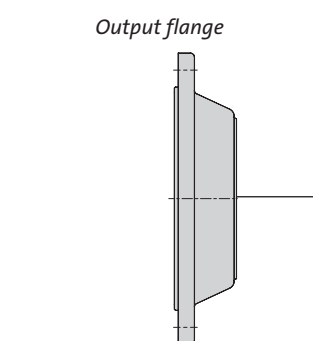
High-efficiency solid shaft or hollow shaft right-angle geared motors. Precise output speeds thanks to bevel gears in the range $i=3.5$ to 75.



Helical-bevel geared motor GKS

0.12 to 7.5 kW

Solid shaft or hollow shaft right-angle geared motors. Pinpoint output speeds are possible due to the ratio range (5 to 1400), which has been carefully stepped.



Helical-worm geared motor

GSS

0.12 to 7.5 kW

High power density right-angle geared motors. These motors can easily be integrated into the machine thanks to mounting surfaces on three sides of the gearbox and output pitch circle.



This **G-motion motec** catalogue contains geared motors with built-in 8200 motec frequency inverters.

- ▶ Geared motors 0.12 to 7.5 kW
- ▶ 8200 motec 0.25 to 7.5 kW

The geared motors can be chosen from comprehensive selection tables. To help you make your selection, the output speeds and output torques are listed both for the typical inverter base frequency of 50 Hz and with the inclusion of minimum and maximum output values.

The 8200 motec chapter contains additional product information about distributed drive solutions.

1

Fit for every drive task, even in distributed applications. Whether you need a solution for simple drive tasks or a drive which can meet complex function requirements, the 8200 motec range of rugged frequency inverters and the starttec motor starter, along with accessories tailored to meet relevant requirements, are bound to be able to provide you with a drive ideal for your application. Purchasing a Lenze geared motor which is pre-assembled and ready for connection will reduce the time and money you have to spend on project planning and installation. For more information about Lenze geared motors with starttec motor starters, see the G-motion const catalogue.

Complete products supplied as standard with everything you need to make operation, diagnostics and communication easy. Developed specifically for use in day-to-day operations, the product range is part of our field-proven system comprising expert advice, training, support service and much more - features that really pay off.



New in this catalogue:

▶ Motors

New 4-pole motors in the power range
2.2 ... 7.5 kW



Abbreviations used in this catalog:

α		Angle of radial force	M_{cont}	[Nm]	Continuous torque
c		Load capacity of gearboxes/geared motors	M_{stall}	[Nm]	Stall torque of motor
d_w	[mm]	Effective diameter of the transmission element	M_l		Maximum torque factor
$\cos \varphi$		Power factor of the motor	M_{max}	[Nm]	Maximum torque
$\cos \varphi_{Nr}$		Power factor of asynchronous motors	M_{perm}	[Nm]	Permissible torque
F_a	[N]	Applied axial force	n_1	[rpm]	Input speed
$F_{a perm}$	[N]	Permissible axial force	n_2	[rpm]	Output speed
$F_{a Tab}$	[N]	Table value of axial force	n_r	[rpm]	Rated speed
f_{ch}	[kHz]	Switching frequency	n_{max}	[rpm]	Maximum speed
f_d	[Hz]	Field frequency	P_1	[kW]	Input power
F_l		Mass acceleration factor	P_2	[kW]	Output power
f_{max}	[Hz]	Set maximum frequency	P_{DC}	[kW]	Power that can additionally be drawn from the DC bus in power-adaptive motor operation
f_r	[Hz]	Rated frequency	P_r	[kW]	Rated power
F_r	[N]	Applied radial force	P_V	[kW]	Inverter power loss
$F_{r Tab}$	[N]	Table value of radial force	R	[Ω]	Resistance
$F_{r perm}$	[N]	Permissible radial force	S_r	[kW]	Inverter output power
f_w		Additional load factor of applied radial force	T_A	[$^{\circ}C$]	Ambient temperature during operation
f_{α}		Effective direction factor of applied radial force	U_{DC}	[V]	DC-supply voltage
f_z		Additional radial force factor of transmission element	$U_{DC bus}$	[V]	DC-bus voltage
i		Ratio	U_M	[V]	Output voltage
φ		Ratio step	U_r	[V]	Rated voltage
η		Mechanical efficiency	U_{mains}	[V]	Mains voltage
I_0	[A]	Continuous standstill current	IP		International protection code
I_A	[A]	Motor starting current	IEC		International Electrotechnical Commission
I_{max}	[A]	Maximum output current	DIN		Deutsches Institut für Normung
I_r	[A]	Rated current	VDE		Verband deutscher Elektrotechniker
I_{mains}	[A]	Rated mains current	$USDA$		United States Department of Agriculture
I_{PE}	[mA]	Leakage current	$NEMA$		National Electrical Manufacturers Association
J_{ext}	[kgm ²]	Moment of inertia of the machine to be driven, reduced to the motor shaft	AC		Alternating current/voltage
J_{load}	[kgm ²]	Moment of inertia of loaded machine	DC		Direct current/voltage
J_{mot}	[kgm ²]	Moment of inertia of motor	EMC		Electromagnetic compatibility
J_A	[kgm ²]	Moment of inertia of drive reduced to the input shaft	EN		European standard
J_B	[kgm ²]	Moment of inertia of the brake	CE		Communauté Européenne
k		Application factor (according to DIN 3990)	IM		International Mounting Code
L	[mH]	Inductance	GL		Germanischer Lloyd
m	[kg]	Mass			
M_0	[Nm]	Continuous standstill torque			
M_1	[Nm]	Input torque			
M_2	[Nm]	Output torque			
M_r	[Nm]	Rated torque			
M_A	[Nm]	Starting torque of motor			
M_B	[Nm]	Holding torque of brake			

General information about the data provided in this catalogue

Ratings, torques and speeds

The ratings, torques and speeds specified in this catalogue are rounded values and are valid under the following conditions:

- ▶ Running time/day = 8 h (100% DT)
- ▶ Duty class I at 10 switching operations/h
- ▶ Mounting positions and models in this catalogue
- ▶ Standard lubricant
- ▶ $f_{\text{mains}} = 50 \text{ Hz}$ constant
- ▶ $T_{\text{amb}} = 20^\circ\text{C}$ for gearboxes
40°C for motors (in accordance with EN 60034)
- ▶ Installation height $< = 1000 \text{ m}$ above mean sea level

The rated power specified for motors and geared motors applies to operating mode S1 in accordance with EN 60034.

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

Parameter 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 component (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.

Application factor k (corresponding to DIN 3990)

Takes into account the influence of temporally variable loads which are actually present during the anticipated operating time of gearboxes and geared motors.

k is determined by:

- ▶ The type of load
- ▶ The load intensity
- ▶ Temporal factors



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 complete ordering data. Use the checklist below and the order information to help you.

Checklist

In order to receive the correct products in good time, please provide the following information:

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

How to order

Please use this step-by-step guide and the fax form to ensure that you provide all the necessary information in the correct format. It makes ordering your tailor-made drive extremely easy:

- ▶ Make a copy of the fax order form.
See chapter 10.
- ▶ Enter the order data.
- ▶ Post or fax the form to your Lenze sales office.
A list of Lenze sales offices can be found at the end of this catalogue.

A step-by-step guide to ordering your drive

- Cross-reference
- Result

1. Dimension the drive system

- Drive dimensioning, dimensioning (chapter 2)

2. Specify the type designation

- **Product key** (fold-out page),
selection table (chapters 3 to 7)
- Gearbox type, gearbox size, number of stages
Example: GST 07-2
- Drive design, motor frame size,
8200 motec frequency inverter
Example: E, 090C32. E82MV152_4B

3. Specify the ratio

- **Selection table** (chapters 3 to 7)
Example: $i = 56.250$

4. Specify the output design

- **Product key** (fold-out page),
drive dimensioning, gearbox designs (chapter 2)
- Solid shaft, housing with foot, without flange
Example: V, B, R

5. Specify the mounting position and the position of system elements

- **Product key** (fold-out page)
Example: Mounting position A
8200 motec in position 2

6. Specify the colour

- **Drive dimensioning, gearbox designs** (chapter 2)
Example: RAL 7012 paint

7. Specify the gearbox options

- **Drive dimensioning, gearbox designs** (chapter 2)
Example: Gearbox with ventilation

8. Specify the motor options

- **Motors** (chapter 8)
Example: Separate fan 3~
- **Product key** (fold-out page)
Example: Separate fan terminal box in position 5

9. Specify the 8200 motec options

- 8200 motec (chapter 9)

A step-by-step guide to ordering your drive

Quantity $i =$ **56.250**

GST **07** - **X**² **E** **V** **X**^B **K** **090C32** **E82MV** **152** - **4** **B**
 Motor frame size 8200 motec frequency inverter
 Complete the fax order form for the 8200 motec!

Additional ordering data

Dimensions, output

K **L**

Flange a2 = mm

Mounting position

A **B** **C** **D** **E** **F**
X ☐ ☐ ☐ ☐ ☐ ☐

Position of system elements

8200 motec
 2 3 4 5
X ☐ ☐ ☐

Colour

Standard
 GST 03 ☐ Not painted (aluminium housing)
 GST 04...14 **X** RAL 7012 paint (papyrus white) ☐ Grey primer

Options

Ventilation

X Ventilation units for size 05...07 ☐ Reservoir for size 09...14 in mounting position C

Motor options

Combination

X Separate fan ☐ Brake + integral fan ☐ Brake + separate fan

Separate fan

☐ 1~ 3~ **X**
 Terminal box for separate fan in position 2 3 4 5 **X**

The terminal box and 8200 motec cannot be in the same position!

8200 motec options

To the Lenze sales office

Page __ of __

☐ Order

☐ Quotation

Fax no. _____

From

Customer no.

Company

Street/PO box

Order no.

Town/Postcode

Name

Date Signature

Department

Tel. no.

Delivery address (if different)

Street:

Town/Postcode

Invoice to (if different)

Street/PO box

Town/Postcode

Requested delivery date _____

Despatch information _____

Customer no.

Order no.

	Quantity	i =	

GST

 -

E **V**

B

K

L

C

L

Motor frame size

C

E82MV

 -

B

8200 motec frequency inverter

Complete the fax order form for the 8200 motec!

Additional ordering data

Dimensions, output

K	L	

Flange a2 =

 mm

Mounting position

A	B	C	D	E	F
☐	☐	☐	☐	☐	☐

Position of system elements

8200 motec	2	3	4	5
☐	☐	☐	☐	☐

Colour

Standard	☐	Not painted (aluminium housing)	☐	Grey primer
GST 03	☐	RAL 7012 paint (papyrus white)	☐	
GST 04...14	☐		☐	

Options

Special lubricant

☐	CLP-HC 320 (synthetic)	☐	CLP-HC 220 (lubricant approved for use in the food industry)

Special paint finish

RAL	<table border="1"><tr><td></td></tr></table>		GST 03	☐	Grey primer

Output shaft bearing

☐	Reinforced bearing (size 04 ... 14)

Shaft sealing rings

☐	Viton

Ventilation

☐	Ventilation units for size 05...07	☐	Reservoir for size 09...14 in mounting position C

Motor options

Combination

☐	Separate fan	☐	Brake + separate fan
☐	Brake + integral fan	☐	Brake + integral fan + handwheel
☐	Brake + integral fan + 2nd shaft end	☐	Integral fan + handwheel
☐	Integral fan + 2nd shaft end		

Separate fan

☐	1~	☐	3~
		☐	2
		☐	3
		☐	4
		☐	5

Terminal box for separate fan in position

The terminal box and 8200 motec cannot be in the same position!

Spring-operated brake

Brake size	<table border="1"><tr><td></td></tr></table>		Supply voltage	<table border="1"><tr><td></td></tr></table> V (AC/DC)	

Brake option

☐	Manual release with lever	in position	☐	2
☒	Low-noise design		☐	3
☐	PTC		☐	4
☐	Protection cover		☐	5

The manual release lever and 8200 motec cannot be in the same position!

Motor protection

Additional options

☐	UL approval cURus	☐	Condensation drain hole

General

Fax order form for shaft-mounted helical geared motors with 8200 motec

Customer no.

Page __

Order no.

	Quantity	i =	

GFL

 -

	2
	3

E

	V
	H
	S

	A
	B
	C
	D

	R
	K

Motor frame size

C

8200 motec frequency inverter **E82MV**

 -

B

Complete the fax order form for the 8200 motec!

Additional ordering data

Dimensions, output

H **S** Hollow shaft dH7 =

 mm

K Flange a2 =

 mm

Mounting position

 A B C D E F

Position of system elements
(mark non-fixed positions
with 0)

Shaft
0 6 1

Foot
0 3 4

8200 motec
2 3 4 5

Colour

 RAL 7012 paint (papyrus white)

 Grey primer

Options

Special lubricant

 CLP-HC 320 (synthetic)

 CLP-HC 220
(lubricant approved for use in the food industry)

Special paint finish

RAL

 Grey primer

Shaft sealing rings

 Viton

Accessories

 Rubber buffer set for torque plate

 Mounting set for hollow shaft circlip

 Shrink disc cover

Ventilation

 Ventilation units
for size 05...07

 Reservoir for
size 09...14 in mounting position C

Motor options

Combination

 Separate fan

 Brake + integral fan

 Brake + integral fan + 2nd shaft end

 Integral fan + 2nd shaft end

 Brake + separate fan

 Brake + integral fan + handwheel

 Integral fan + handwheel

Separate fan

 1~

 3~

Terminal box for separate fan in position

2 3 4 5

The terminal box and 8200 motec cannot be in the same position!

Spring-operated brake

Brake size

Supply voltage

 V (AC/DC)

Brake option

 Manual release with lever

 Low-noise design

in position

2 3 4 5

The manual release lever and 8200 motec cannot be in the same position!

Motor protection

 PTC

Additional options

 Protection cover

 UL approval cURus

 Condensation drain hole

General

Fax order form for helical-bevel geared motors with 8200 motec

Customer no.

Page

Order no.

 Quantity i =

GKS - ³ ⁴ **E** ^V ^H ^A ^R ^B ^K Motor frame size **C** **E82MV** - **B**

8200 motec frequency inverter

Complete the fax order form for the 8200 motec!

Additional ordering data

Dimensions, output

☐ **H** ☐ **S** Hollow shaft dH7 = mm ☐ **K** Flange a2 = mm

Mounting position

☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F**

Position of system elements
(mark non-fixed positions
with 0)

Shaft ☐ 0 ☐ 3 ☐ 5 ☐ 8 Flange ☐ 0 ☐ 3 ☐ 5 ☐ 8 8200 motec ☐ 2 ☐ 3 ☐ 4 ☐ 5

Colour

☐ RAL 7012 paint (papyrus white) ☐ Grey primer

Options

Special lubricant

☐ CLP-HC 320 (synthetic) ☐ CLP-HC 220 (lubricant approved for use in the food industry)

Special paint finish

RAL

Shaft sealing rings

☐ Viton

Accessories

☐ Torque plate on housing foot ☐ Shrink disc cover
☐ Torque plate pitch circle ☐ Hoseproof torque plate
☐ 2nd output shaft ☐ Mounting set for hollow shaft circlip
☐ Ventilation units for size 05 ...07 ☐ Reservoir for size 09...14 in mounting position C

Motor options

Combination

☐ Separate fan ☐ Brake + separate fan
☐ Brake + integral fan ☐ Brake + integral fan + handwheel
☐ Brake + integral fan + 2nd shaft end ☐ Integral fan + handwheel
☐ Integral fan + 2nd shaft end

Separate fan

☐ 1~ ☐ 3~
☐ 2 ☐ 3 ☐ 4 ☐ 5

Terminal box for separate fan in position

The terminal box and 8200 motec cannot be in the same position!

Spring-operated brake

Brake size

Supply voltage

 V (AC/DC)

Brake option

☐ Manual release with lever in position ☐ 2 ☐ 3 ☐ 4 ☐ 5

☒ Low-noise design

The manual release lever and 8200 motec cannot be in the same position!

Motor protection

☐ PTC

Additional options

☐ Protection cover ☐ Condensation drain hole
☐ UL approval cURus

Customer no.

Page __

Order no.

 Quantity i =

GSS - ²
³ **E** ^V
^H ^A ^R
^S ^B ^K Motor frame size **C**
E82MV - **B** 8200 motec frequency inverter
 Complete the fax order form for the 8200 motec!

Additional ordering data

Dimensions, output

☐ **H** ☐ **S** Hollow shaft dH7 = mm ☐ **K** Flange a2 = mm

Mounting position

☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F**

Position of system elements
(mark non-fixed positions
with 0)

Shaft 0 3 5 8 Flange 0 3 5 8 8200 motec 2 3 4 5
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Colour

☐ RAL 7012 paint (papyrus white) ☐ Grey primer

Options

Special lubricant

☐ CLP-HC 220 (lubricant approved for use in the food industry)

Special paint finish

RAL

Shaft sealing rings

☐ Viton

Accessories

☐ Torque plate on housing foot ☐ Shrink disc cover
☐ Torque plate pitch circle ☐ Hoseproof torque plate
☐ 2nd output shaft ☐ Mounting set for hollow shaft circlip

Ventilation

☐ Ventilation units for
size 05 ...07

Motor options

Combination

☐ Separate fan ☐ Brake + separate fan
☐ Brake + integral fan ☐ Brake + integral fan + handwheel
☐ Brake + integral fan + 2nd shaft end ☐ Integral fan + handwheel
☐ Integral fan + 2nd shaft end

Separate fan

☐ 1~ ☐ 3~
 Terminal box for separate fan in position

Spring-operated brake

Brake size

Supply voltage

 V (AC/DC)

Brake option

☐ Manual release with lever in position
☒ Low-noise design

The manual release lever and 8200 motec cannot be in the same position!

Motor protection

☐ PTC

Additional options

☐ Protection cover ☐ Condensation drain hole
☐ UL approval cURus

Fax order form for 8200 motec

Fax order form for 8200 motec

Page __

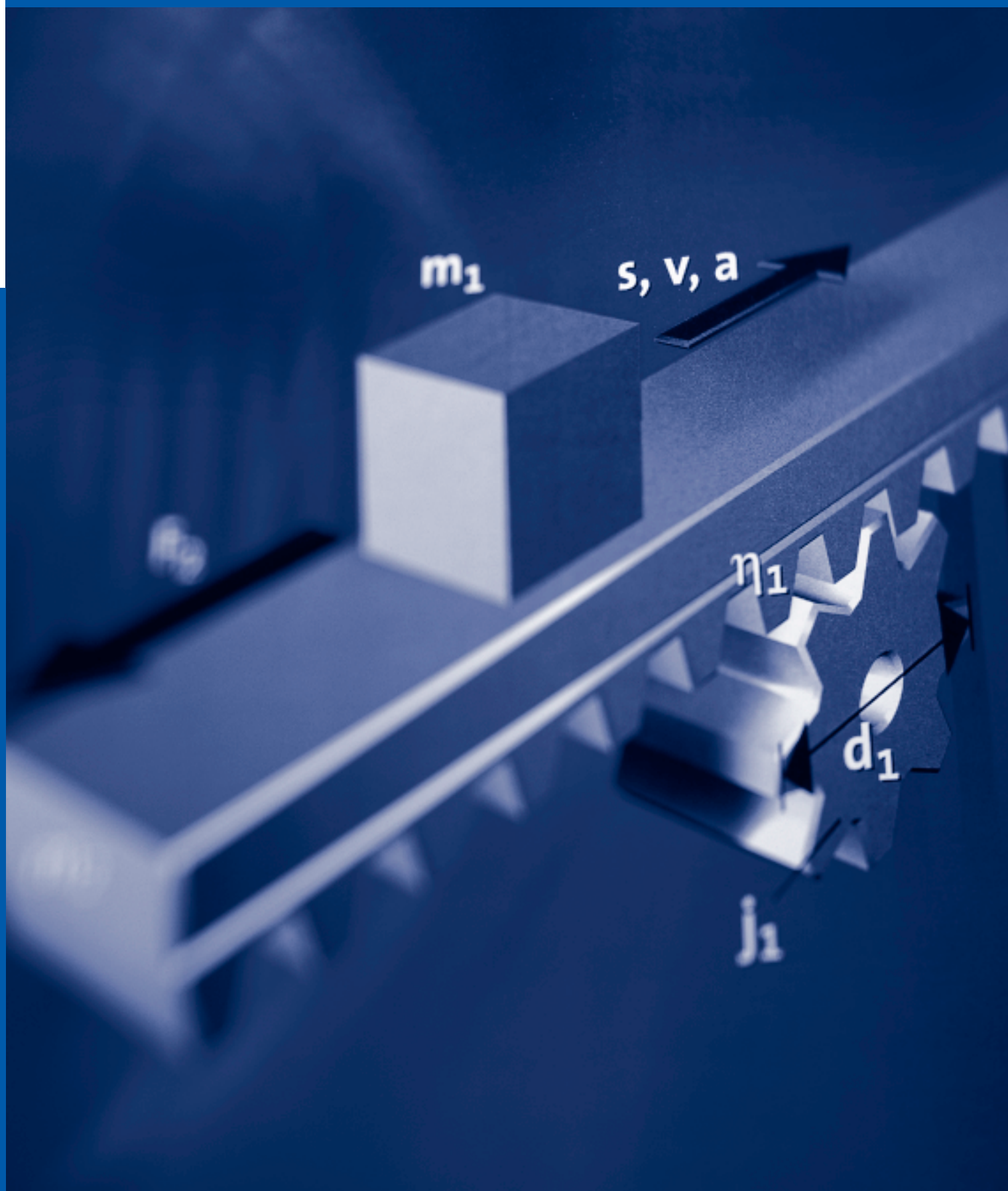
Order no. _____

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www.Lenze.com

Should you have any further questions, please visit us on the Internet at www.Lenze.com, where you can access more detailed information about products for drive technology and automation.





Drive dimensioning | G-motion motec

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Motor versions

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Drive dimensioning

Dimensioning

The electronic variable speed drive motors in the selection tables, comprising a geared motor and an 8200 motec frequency inverter, are listed for a rated point of 50 Hz and reference points of 5 Hz - 14.5 Hz - 20 Hz (30 Hz for motor frame size 080C42) and 87 Hz.

In the power range between 3 and 7.5 kW on motors with integral fans, you may need to take into account additional current derating of the 8200 motec (see chapter 8200 motec – Basic inverters).

If you are using the 8200 motec fan module E82ZMV or a separate fan, current derating is not required.

Frequency inverter parameter settings:

- U/f base frequency = 50 Hz (C0015 = 50 Hz)
- Setting on adjustment range (C0010 = 14.5 Hz; C0011 = 87 Hz)
- More detailed information about parameters appears in the frequency inverter operating instructions.

See chapter 8200 motec for additional technical data.

Adjustment and frequency ranges

Adjustment range	1:2.5	1:1.67 *	1:3.5	1:6	1:10	1:17.4
Frequency range	20...50 Hz	30...50 Hz	14.5...50 Hz	14.5...87 Hz	5...50 Hz	5...87 Hz
Motor cooling	Integral fan				Separate fan	
Rated motor torque	constant					
	reduced					
	x	x			x	
			x ¹⁾	x ¹⁾		x
The reduced value is			14.5 Hz	87 Hz		87 Hz

¹⁾ Only for use with 8200 motec fan module in power range 3...7.5 kW

Torque characteristic

Motor cooling	Frequency	Torque characteristic
Integral fan	14.5 Hz...20 Hz	Increases linearly proportional to 14.5...20 Hz
	14.5 Hz...30 Hz	Increases linearly proportional to 14.5...20...30 Hz
	20 Hz...50 Hz	Constant
	30 Hz...50 Hz *	Constant
	> 50 Hz	Decreases proportionally (50/f) from 50 Hz at constant motor power (field weakening mode)
Separate fan	5 Hz...50 Hz	Constant
	> 50 Hz	Decreases proportionally (50/f) from 50 Hz at constant motor power (field weakening mode)

* Only for motor frame size 080C42



How the operating mode affects rated data

The operating mode is important when selecting a motor. For example, the temperature rise on a motor subject to short-term load will be lower than that on a motor subject to long-term load. Operating modes S1 to S8 have been defined in accordance with EN 60034.

Continuous operation S1

The operating time at rated power is long enough for the machine to reach steady-state temperature. The motor operates continuously at rated power.

Short-term operation S2

In comparison with the subsequent pause, the operating time is too short for the machine to reach steady-state temperature. During the subsequent lengthy pause, the motor cools down to the initial temperature.

Intermittent operation S3. S4. S5

Cycles of the same type combine to form a sequence. The cycle time is usually 10 minutes.

- ▶ S3: The start-up current is not significant for the temperature rise of the motor.
- ▶ S4: The start-up current contributes to the temperature rise of the motor.
- ▶ S5: The start-up current and braking current contribute to the temperature rise of the motor.

Continuous operation with intermittent loading S6

The motor continues to be ventilated during the no-load phases, enabling it to cool down.

Uninterrupted operation with acceleration and braking S7

The motor runs almost without pauses.

Uninterrupted operation S8 with pole-changing

The machine runs constantly under load but with frequent speed variation.

Drive dimensioning

Dimensioning

Power reduction

Effect of the installation height

How the installation height above mean sea level affects rated power				
H [m]	≤ 1000	2000	3000	4000
$\frac{P_h}{P_r}$	1	0.95	0.90	0.85

Effect of the ambient operating temperature

How the ambient operating temperature T_{amb} affects rated power					
T_{amb} [°C]	≤ 40	45	50	55	60
$\frac{P_{\vartheta}}{P_r}$	1	0.88	0.75	0.63	0.5

Calculating the reduced power P_{red}

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

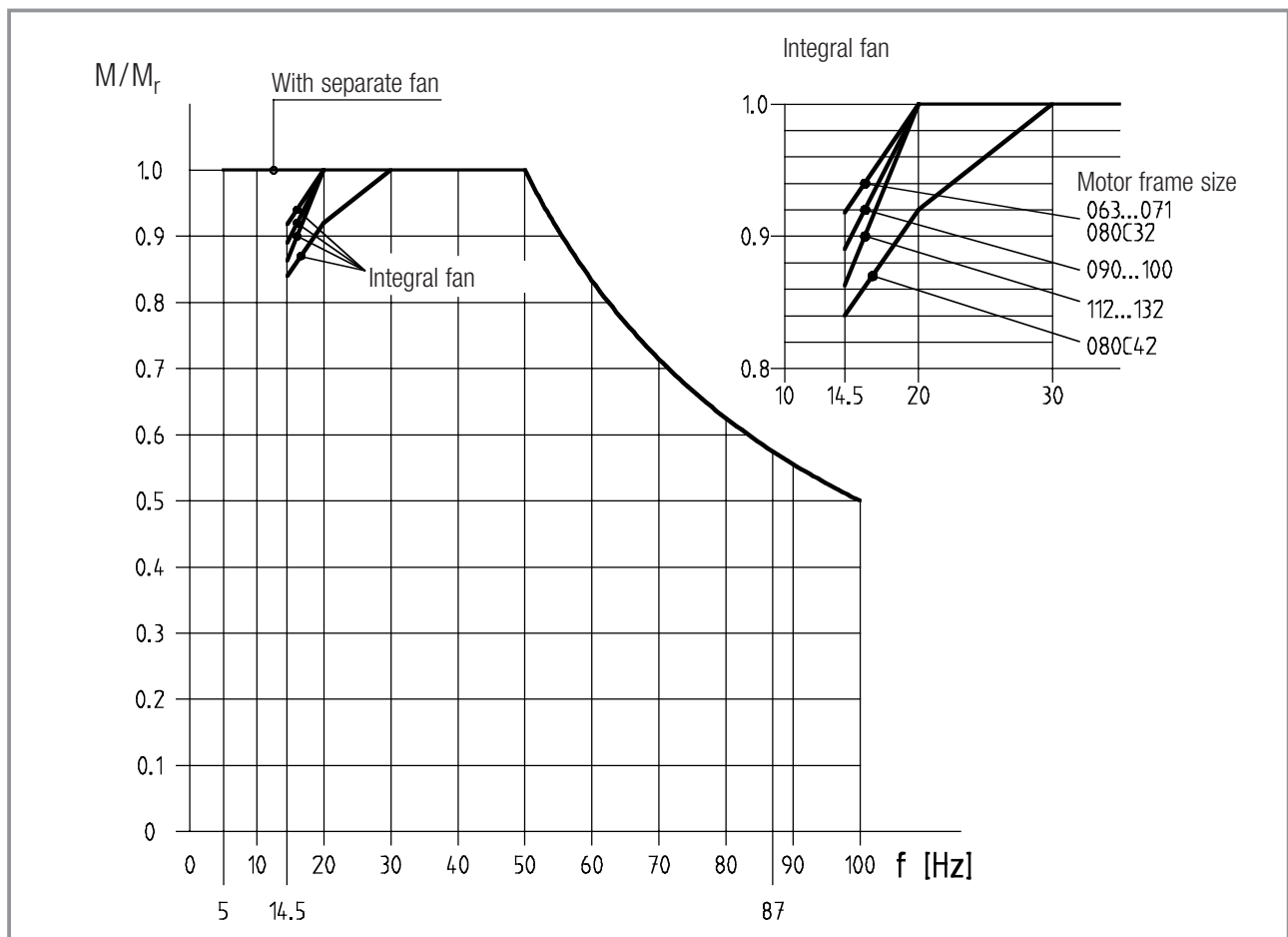
Torque derating

The cooling of motors with integral fans is determined by the shaft speed, as the integral fan is connected to the motor shaft. In conjunction with the 8200 motec frequency inverter, the motors can cover a variable speed or frequency range. At low 8200 motec output frequencies, the air flow of the integral fan is not entirely sufficient to dissipate the prevailing heat loss of the motor at rated torque (M_r).

The torque (M) that can be drawn from the motor should therefore be reduced below 20 (30 Hz).

The torques indicated in the selection tables already take account of this required torque reduction of the motor.

The following dependency is valid for the various motor frame sizes:





Thermal power limit

The permissible gearbox continuous power is restricted by:

- ▶ The mechanical rating, defined by the material strength of the individual components or
- ▶ The thermal power limit, defined by the heat balance.

The thermal power limit may be lower than the mechanical rating indicated in the selection tables.

The thermal power limit is determined by:

- ▶ Losses in the lubricant. These are determined by the mounting position and the circumferential speed of the gears.
- ▶ The load and the speed
- ▶ The ambient conditions: temperature, air circulation, heat input or dissipation via shafts and the substructure

Please contact Lenze

- ▶ If you are using the following gearbox model, size and ratio combinations at input speed $n_1 > 1500$ rpm:

Gearbox model	Gearbox sizes	Ratios $i \leq$
Helical gearboxes GST	07, 09, 11, 14	10
Shaft-mounted helical gearboxes (low-profile gearboxes) GFL	09, 11, 14	16
Helical-bevel gearboxes GKS	09, 11, 14	25

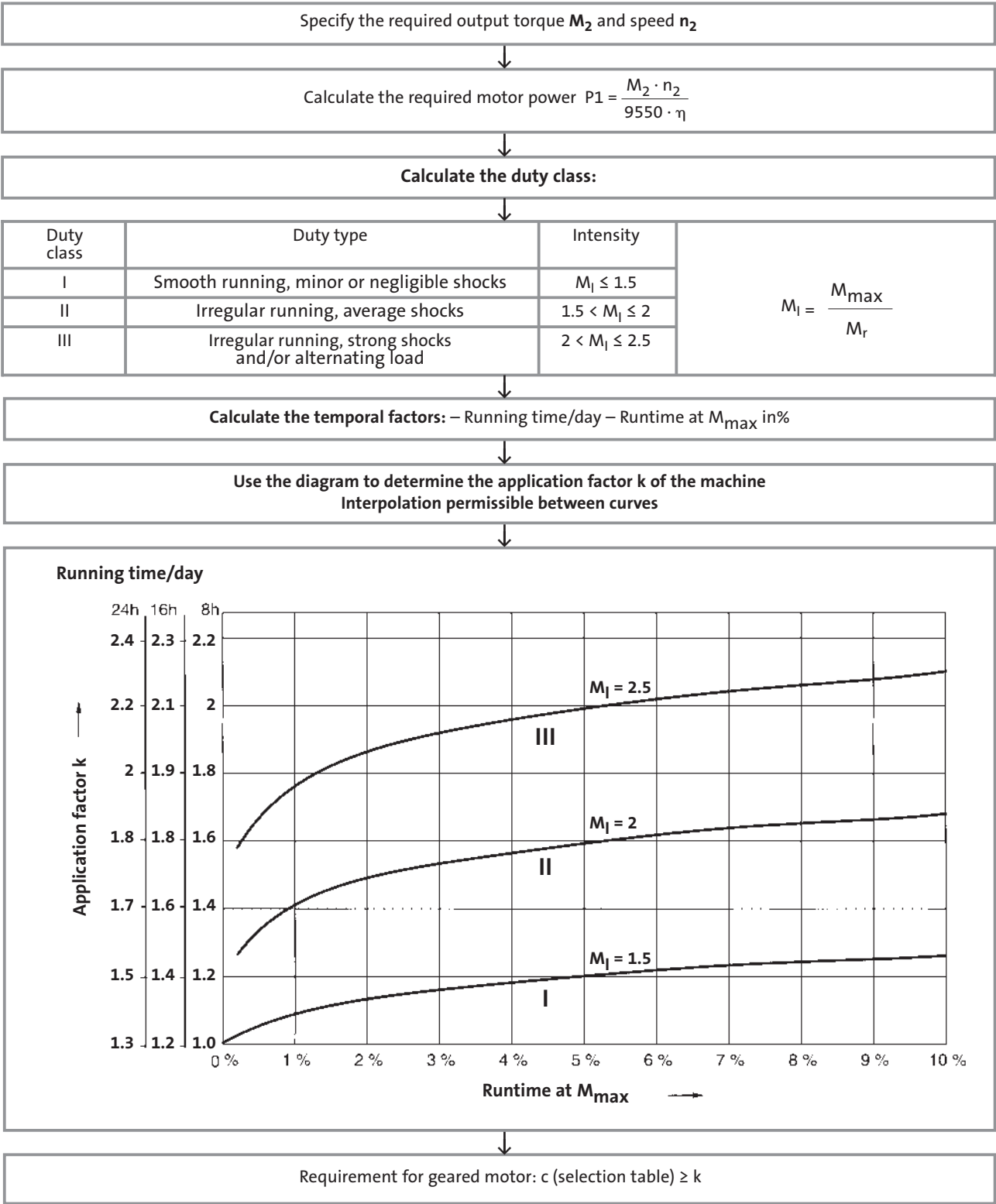
... or if the input speeds n_1 listed are exceeded:

Drive size		
Drive-end design E	063 ... 100	112 ... 132
n_1 For mounting positions A, B, E, F	4000 rpm	3000 rpm
n_1 For mounting positions C, D	3000 rpm	1500 rpm

Possible ways of extending the range of operation

What to do	
Increase the permissible temperature range of the gearbox	▶ Synthetic lubricant (option) ▶ Shaft sealing rings made from FP material/Viton (option)
Reduce the power loss	▶ Synthetic lubricant (option) ▶ Reduce the amount of lubricant used
Increase the heat dissipation	▶ Possible air convection on the machine/system ▶ Fan cooling (for example pneumatic supply line of the driving motor) ▶ Oil cooling

1. Calculating the required load capacity





2. Calculating the axial and radial forces applied to the gearbox shaft

Work out the axial and radial forces applied
Approximate calculation of radial forces:

↓

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

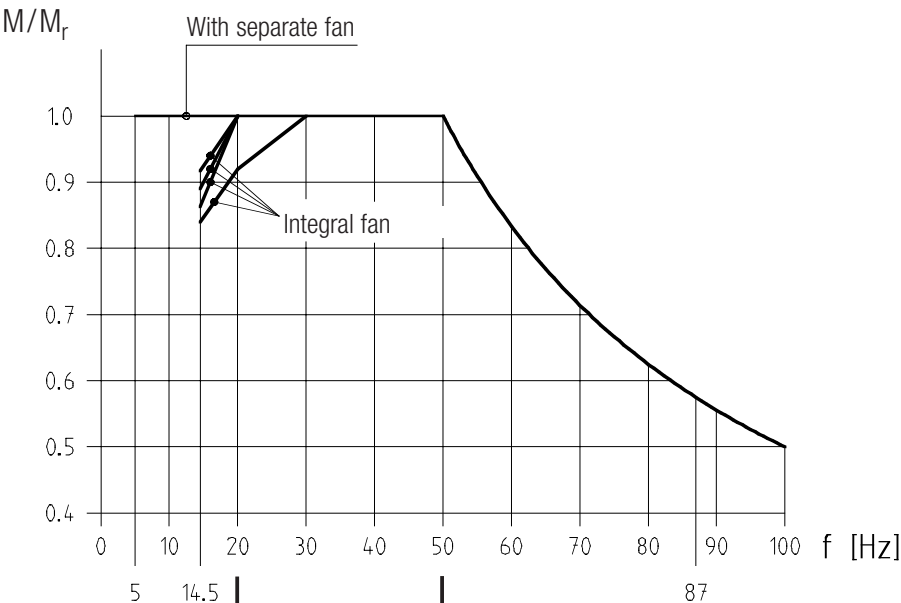
f_z	Transmission element
1.12	Gears
1.25 ... 1.4	Chain wheels
1.5	Toothed belt pulleys
1.5 ... 2.0	V-belt pulleys depending on pretension

↓

Requirement:

- ▶ $F_{rperm} \geq F_r$
(F_{rperm} taken from Gearbox specific data)
- ▶ $F_{aperm} \geq F_a$
(F_{aperm} taken from Gearbox specific data)

Torque characteristic and selection tables



5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor		8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]				

P₁ = 0.75 kW

5.0	140	14	124	20	50	140	1.1	87	80	28.333	GST05 - 2E □□□ 080C32	E82MV 751_4B
5.0	140	14	124	20	50	140	2.3	87	80	28.333	GST06 - 2E □□□ 080C32	E82MV 751_4B



General data

		GST	GFL	GKR	GKS	GSS
Housing	Version	Cuboid				
	Material	Aluminium/Cast iron				
Solid shaft	Version	With featherkey to DIN 6885				
	Tolerance	k6 (d ≤ 50 mm) m6 (d > 50 mm)				
	Material	Tempered steel C45/42CrMo4				
Hollow shaft	Version	– –	H: With keyway S: Smooth			
	Tolerance	–	Bore H7			
	Material	–	Tempered steel C45			
Toothed parts	Version	Optimised tooth flanks and profile geometry Ground tooth flanks				
	Material	Case-hardened steel				
Shaft-hub connection		1st stage/prestage/helical (bevel) gearbox: friction-type connection Output stage (= 2nd, 3rd or 4th stage): friction-type or positive-fit connection				
Shaft sealing rings	Version	With dust protection lip				
	Material	NB/FP				
Bearings	Version	Ball bearing/tapered-roller bearing depending on size and version				
Lubricants	Version	In accordance with DIN 51502				
	Fill volumes	Depends on the mounting position ⇨ Operating Instructions				
Mechanical efficiency	At rated torque	0.95 ≤ η ≤ 0.97	0.95 ≤ η ≤ 0.97	0.95 ≤ η ≤ 0.96	0.92 ≤ η ≤ 0.95	0.75 ≤ η ≤ 0.90 ► Dependent on transmission ratio ► At n ₁ = 1400 rpm ► Housing at operating temperature and teeth run in
Noise		Does not exceed the emission values specified in VDI Guideline 2159				

Drive dimensioning

Gearbox versions

Basic versions

Gearbox type	Gearbox size	No. of stages	Input design	Output design										Ventilation units	Lubri- cants		Colour						
				Shafts [mm]			Housing				Flange [mm]				Possible combinations Housing with flange	Mineral CLP 460	Synthetic CLP PG 460	Paint RAL 7012 (papyrus white)	Grey primer				
				Solid shaft	Hollow shaft	Hollow shaft with shrink disc	Foot mounting with centring and pitch circle	Foot mounting without centring	With centring and pitch circle	With pitch circle	Without flange	With flange (through holes)	With flange (threaded holes)										
Product key			V	H	S	A	B	C	D	R	K	L											
GST	03	2	E	14x28 20x40				●	●		●	120/140 160		AR AL BR CR CK	●		1)						
	04	1	E	16x32				●	●		●	120/140 160											
		2		20x40			●	●	●		120/140 160	120/140											
	05	1		20x40				●	●		●	120/140 160/200											
		2/3		25x50			●	●	●		120/140 160/200	120/140 160											
	06	1		25x50				●	●		●	160/200											
		2/3		30x60			●	●	●		160/200	160/200											
	07	1		30x60				●	●		●	200/250											
		2/3		40x80			●	●	●		200/250	200/250											
	09	1		40x80				●	●		●	250/300											
		2/3		50x100			●	●	●		250/300	250/300											
	11	2/3		60x120			●	●	●		300/350	300/350											
2/3		80x160		●	●	●	350/400	350/400															
GFL	04	2	E	25x50	25/30	25/30	Feet in position 3 or 4 Centring and pitch circle in position 6	Feet in position 3 or 4 Pitch circle in position 6	Centring and pitch circle in position 6	Pitch circle in position 6	●	160		AR BR CR CK DR	●		●						
	05	2/3		30x60	30/35	35					●	200											
	06	2/3		40x80	40/45	40					●	200 only H+S 250											
	07	2/3		50x100	50/55	50					●	250/300											
	09	2/3		60x120	60/70	65					●	350											
	11	2/3		80x160	70/80	80					●	400/450											
	14	2/3		100x200	100	100					●	450											
GKR	03	2	E	20x40	18/20	20	Feet in position 4+6 Centring and pitch circle in position 3+5	Feet in position 4+6 Pitch circle in position 3+5			●	110/120		AR BR AK	●		1)						
	04	2		20x40	20/25	20					●	120/160											
	05	2		30x60	30/35	30/35					●	160/200											
	06	2		35x70	40/45	40					●	200/250											
GKS	04	3	E	25x50	25/30	25/30	Feet in position 2+4+6 Centring and pitch circle in position 3+5	Feet in position 2+4+6 Pitch circle in position 3+5			●	160		AR BR AK	●		●						
	05	3/4		30x60	30/35	35					●	200											
	06	3/4		40x80	40/45	40					●	200 only H+S 250											
	07	3/4		50x100	50/55	50					●	250/300											
	09	3/4		60x120	60/70	65					●	350											
	11	3/4		80x160	70/80	80					●	400/450											
	14	3/4		100x200	100	100					●	450											
GSS	04	2	E	25x50	25/30	25/30	Feet in position 2+4+6 Centring and pitch circle in position 3+5	Feet in position 2+4+6 Pitch circle in position 3+5			●	160		AR BR AK			●						
	05	2/3		30x60	30/35	35					●	200											
	06	2/3		40x80	40/45	40					●	200 only H+S 250											
	07	2/3		50x100	50/55	50					●	250/300											

1) Not painted (aluminium housing)



Options

				Shaft			Options							Lubricants		Colour			
Gearbox type	Gearbox size	No. of stages	Input design	2nd solid shaft end	Reinforced shaft bearing	Shaft sealing ring FP (Viton)	Rubber buffer set	Torque plate on pitch circle	Torque plate on housing foot	Hoseproof hollow shaft cover	Shrink disc cover	Ventilation units	Reservoir (ventilation) for mounting position C	Synthetic CLP HC 320	Approved for use in the food industry CLP HC 220	Special paint to RAL number	Grey primer		
Product key				V															
GST	03	2	E														●		
	04	1	E																
		2			●														
	05	1																	
		2/3			●														
	06	1			●	●													
		2/3			●														
	07	1			●														
		2/3			●														
	09	1																	
	2/3	●																	
	11	2/3			1)								●						
	14	2/3			1)								●						
GFL	04	2	E																
	05	2/3																	
	06	2/3																	
	07	2/3			2)	●	●				●				●	●	●		
	09	2/3												●					
	11	2/3												●					
	14	2/3										●							
GKR	03	2	E	●			●	●											
	04	2					●	●							●	●	●	●	
	05	2						●	●	●	●								
	06	2						●	●	●									
GKS	04	3	E	●	2)	●		●											
	05	3/4						●											
	06	3/4						●						●					
	07	3/4						●	●	●	●	●	●						
	09	3/4													●				
	11	3/4													●				
	14	3/4										●							
GSS	04	2	E	●	2)	●		●	●	●	●				3)				
	05	2/3															●	●	
	06	2/3																	
	07	2/3																	

1) Standard bearing

2) On request

3) Torque derating required: $M_2 \text{ perm.} = M_2 \cdot 0.8$

Gearboxes with ventilation

Gearbox sizes 03 to 07

Ventilation does not need to be provided on size 03/04 and GKR 05/06 gearboxes.

If you are using gearbox sizes 05 to 07 you will not need to provide special means of ventilation in most cases. In borderline cases, e.g. at input speeds > 2000 rpm we recommend the use of ventilation units, which we can supply separately.

Gearbox sizes 09 to 14

Ventilation units are always supplied with these gearbox sizes.

Special precautions for mounting position C (motor on top)

We recommend the use of an oil compensation reservoir for gearbox sizes 09 to 14 in this mounting position.

For diagram and dimensions see Technical data, ventilation (chapter 3-7). The oil compensator can be ordered as an option.

It is not required at high ratios or low input speeds.

Please contact Lenze if this affects your application.



Lubricants

Lenze gearboxes and geared motors are supplied ready for operation and filled with a lubricant appropriate for the drive and design in question. You must indicate the mounting position and design on your order in order to ensure that the correct amount of lubricant is supplied.

The lubricants listed in the lubricant table on the following page have been approved for use in Lenze drives. Special lubricants have to be used e. g. if products are held in storage for long periods of time or in the event of extraordinary operating conditions.

Please note the following key for the lubricant table when selecting lubricants:

- CLP = Mineral oil
- CLP PG = Polyglycol oil
- CLP HC = Synthetic hydrocarbons/poly-alpha-olefin oil
- CLP E = Diester oil (water pollution class WGK 1)
- 1) = Currently, we do not have any performance test data for the lubricants listed for lubricating worm gearboxes. When using these oils, the permissible torque values in the catalogue should be reduced by 20%.
- 2) = Polyglycol oils cannot be mixed with other types of oil.
- 3) = At ambient temperatures above 40°C, please contact Lenze to discuss the exact application conditions.
- = Oils approved for use in the food processing industry (approval to USDA-H1)
- = Bio oil (lubricant for forestry, farming and water management) (water pollution class 1)
- = Note critical starting performance at low temperatures. At temperatures below -25°C, special measures are required for the motor bearing and NBR shaft sealing rings.
- = Lenze lubricants used during factory assembly

Drive dimensioning

Gearbox versions

Lubricant table

	Ambient temperature			DIN 51517-3: CLP ISO 12925-1: CKC/CKD						
	-50	0°C	+50			GST, GFL, GKS, GKR				GSS
 Shell	0		+40		CLP	VG 460	Omala 460			
	-25		+50 ³⁾		CLP HC	VG 320	Omala HD 320			
	-10		+50 ³⁾		CLP HC	VG 460	Cassida Fluid GL 460			
	-20		+40		CLP HC	VG 220	Cassida Fluid GL 220			
	-20		+40		CLP PG	VG 220				Tivela S 220 ²⁾
	-20		+40		CLP PG	VG 460				Tivela S 460 ²⁾
	-40	0			CLP HC	VG 46	Cassida HF 46			
	-20		+40		CLP PG	VG 320				Cassida Fluid WG 320 ^{1) 2)}
	-20		+50 ³⁾		CLP E	VG 320	Omala EPB 320			Omala EPB 320 ¹⁾
 KLÜBER	0		+40		CLP	VG 460	Klüberoil GEM1 460			
	-25		+50 ³⁾		CLP HC	VG 320	Klübersynth EG 4-320			
	-20		+40		CLP PG	VG 460				Klübersynth GH 6-460 ²⁾
	-20		+40		CLP PG	VG 220				Klübersynth GH 6-220 ²⁾
	-30	0			CLP PG	VG 32				Klübersynth GH 6-32 ^{1) 2)}
	-40	0			CLP HC	VG 46	Klüber Summit HySyn FG-46			
	-20		+40		CLP HC	VG 220	Klüberoil 4 UH1-220 N			
	-20		+40		CLP PG	VG 320				Klübersynth UH1 6-320 ^{1) 2)}
	-20		+50 ³⁾		CLP E	VG 320	Klübersynth GEM 2-320			Klübersynth GEM 2-320 ¹⁾
 FUCHS	-25		+50 ³⁾		CLP HC	VG 320	Renolin Unisyn CLP 320			
	-20		+40		CLP E	VG 320	Plantogear 320 S			Plantogear 320 S ¹⁾
	-20		+40		CLP PG	VG 460				Renolin PG 460 ^{1) 2)}
	0		+40		CLP	VG 460	Renolin CLP 460			
 ARAL	-10		+50 ³⁾		CLP HC	VG 460	Eural Gear 460			
	-25		+40		CLP HC	VG 220	Eural Gear 220			
	-20		+40		CLP PG	VG 460				Degol GS 460 ^{1) 2)}
	0		+40		CLP	VG 460	Degol BG 460			
 Eni	-25		+50 ³⁾		CLP HC	VG 320	Degol PAS 320			
	0		+40		CLP	VG 460	Blasia 460			
 Energol	-25		+50 ³⁾		CLP HC	VG 320	Blasia SX 320			
	0		+40		CLP	VG 460	Energol GR-XP 460			
 Castrol	-20		+50 ³⁾		CLP HC	VG 320	Energol HTX 320			
	0		+40		CLP	VG 460	Alpha MW 460			
	0		+40		CLP	VG 460	Alpha SP 460			
	-20		+40		CLP PG	VG 460	Alpha PG 460 ²⁾			Alpha PG 460 ^{1) 2)}
 FALCON	0		+40		CLP	VG 460	Falcon CLP 460			
	-20		+40		CLP PG	VG 460				Polydea PGLP 460 ^{1) 2)}
	-20		+50 ³⁾		CLP E	VG 320	Ergon ELP 320			Ergon ELP 320 ^{1) 2)}
	0		+40		CLP	VG 460	Spartan EP 460			
 Esso	-20		+40		CLP PG	VG 460				Glycolube 460 ^{1) 2)}
	-25		+50 ³⁾		CLP HC	VG 320	Spartan Synthetic EP 320			
	0		+40		CLP	VG 460	Mobilgear 634			
	-20		+40		CLP PG	VG 460				Mobil Glygoyle HE 460 ^{1) 2)}
 LUBCON	-20		+50 ³⁾		CLP HC	VG 320	Mobilgear SHC XMP 320			
	0		+40		CLP	VG 460	Turmogearoil 460 OM			
	-25		+50 ³⁾		CLP HC	VG 320	Turmofluid GV 320			
	-20		+40		CLP PG	VG 460				Turmopoloil 460 EP ¹⁾
	-20		+40		CLP PG	VG 220				Turmopoloil 220 EP ¹⁾
	-40	0			CLP HC	VG 46	Turmofluid GV 46			
	-20		+40		CLP HC	VG 220	Turmosynthoil GV 220			
	-20		+40		CLP PG	VG 460				Turmosynthoil PG 460 ^{1) 2)}
	-20		+50 ³⁾		CLP E	VG 320	Turmofluid Biolube CLP 320			Turmofluid Biolube CLP 320 ¹⁾
	0		+40		CLP	VG 460	Optigear BM 460			
 Tribol	-25		+50 ³⁾		CLP HC	VG 320	Optigear Synthetic A 320			
	0		+40		CLP	VG 460	Tribol 1100/460			
	-20		+40		CLP PG	VG 460				Tribol 800/460 ^{1) 2)}
	-25		+40		CLP HC	VG 320	Tribol 1510/320			
	-20		+40		CLP	VG 220	Food Proof 1810/220			
	-20		+50 ³⁾		CLP PG	VG 460				Food Proof 1800/460 ^{1) 2)}



Roller bearing grease

The roller bearings on Lenze motors and gearboxes are filled with the following greases in the factory:

	Ambient temperature	Manufacturer	Type
Gearbox roller bearings GST, GFL, GKS, GKR	-30 ... +50°C -30 ... +80°C -40 ... +60°C	Fuchs Klüber Klüber	Renolit H 443 Petamo 133N Microlube GHY 72
Gearbox roller bearings GSS	-30 ... +80°C -15 ... +60°C	Klüber Klüber	Petamo 133N Klüberplex BE 11-462
Motor roller bearings	-30 ... +70°C	Lubcon	Thermoplex 2TML
	-40 ... +80°C	Klüber	Asonic GHY 72
Special greases for gearbox roller bearings			
Low-temperature grease, note critical starting performance at low temperatures	-40 ... +80°C	Klüber	Asonic GHY 72
Bio grease (lubricant for forestry, farming and water management)	-40 ... +50°C	Fuchs	Plantogel 0120S

General data

Standards	The motors meet the requirements of applicable DIN and IEC standards. CE conformance with the Low-Voltage Directive Optional UL approval in accordance with cURus
Operating mode	Designed for operating mode S1 (continuous operation with constant load at rated power)
Enclosure	IP55 (self-ventilated)
Temperature class (EN 60034)	Insulation system to temperature class F
Insulation resistance	Maximum voltage amplitude $\hat{U} = 1.5 \text{ kV}$ Maximum rate of voltage rise $du/dt = 5 \text{ kV}/\mu\text{s}$
Temperature monitoring	Temperature sensor (NC contact)
Temperature range	-20 ... +40°C without power derating
Installation height	Up to 1000 m above mean sea level without power derating
Bearing	Deep-groove ball bearing with 2 covers



Basic versions

Motor frame size	063	071	080	090	100	112	132
Versions							
4-pole	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22 112C32	132C22
Mech. integrated with Lenze gearbox	●	●	●	●	●	●	●
Cooling							
Integral fan	●	●	●	●	●	●	●
Enclosure							
IP55	●	●	●	●	●	●	●
Motor protection							
Temperature class F	●	●	●	●	●	●	●
Temperature sensor: Thermal contact (NC contact)	●	●	●	●	●	●	●

Options (note possible combinations)

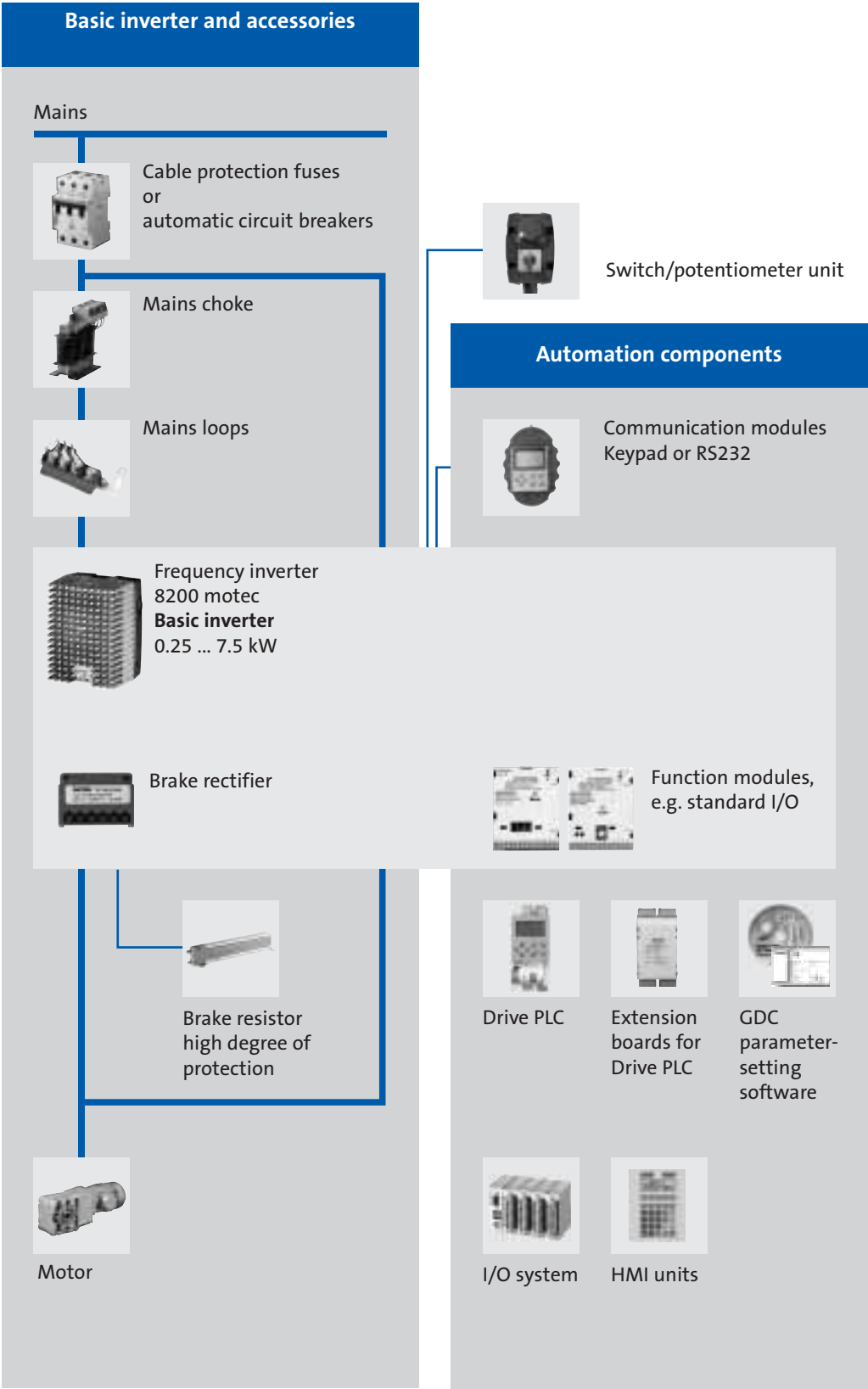
Cooling							
Separate fan	●	●	●	●	●	●	●
Motor protection							
Temperature sensor PTC thermistor	PTC	PTC	PTC	PTC	PTC	PTC	PTC
Holding systems							
Spring-operated brake, low-noise Mains or 24 V DC connection	●	●	●	●	●	●	●
Additional options							
Handwheel		●	●	●	●	●	●
Condensation drain hole	●	●	●	●	●	●	●
Protection cover, integral fan		●	●	●	●	●	●
Protection cover, separate fan	●	●	●	●	●	●	●
2nd shaft end (in acc. with definition)		●	●	●	●	●	●
UL approval cURus	●	●	●	●	●	●	●

Possible combinations for options

Motor frame size	063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22 112C32	132C22
Possible combinations							
Separate fan	●	●	●	●	●	●	●
Brake + integral fan	●	●	●	●	●	●	●
Brake + separate fan	●	●	●	●	●	●	●
Brake + integral fan + handwheel/ 2nd shaft end		●	●	●	●	●	●
Integral fan + handwheel/ 2nd shaft end		●	●	●	●	●	●

Configuration aid

Option		Function	Possible applications
Cooling	Separate fan	Operation at rated torque at low speeds	► Wide operational speed range with rated torque
Motor protection	Thermal contact NC contact	Protects the motor against thermal overload	► Monitoring the motor winding temperature ► Switching a motor relay
	Temperature sensor PTC thermistor	Protects the motor against thermal overload	► PTCs operate in conjunction with a control unit ► Unlike the thermal contact, can be reset quickly.
Holding systems	Spring-operated brake	Brakes the motor	► Decelerating loads ► Holding loads ► Braking torque available in de-energised state
Additional options	Condensation drain hole	Drains condensation	► Operation in extreme climatic conditions ► Outdoor installation
	Protection cover	Protects against foreign matter falling into the fan cover	► Protecting the air inlet opening against foreign matter if the drive is installed vertically with the motor shaft downwards





Helical gearboxes | G-motion motec

Technical data

Permissible radial and axial forces

Output	3-2
Output backlash	3-4
Ventilation	3-6
Position of ventilation, oil filler plug and oil drain plug	3-6
Reservoir for mounting position C	3-8
Weights	3-9

Selection tables

Geared motors with 8200 motec	3-11

Dimensions

Geared motors with 8200 motec	3-40
Further dimensions	3-56
Output design VAR	3-56
Output design VAL	3-57

Technical data - Helical gearboxes

Permissible radial and axial forces - Output

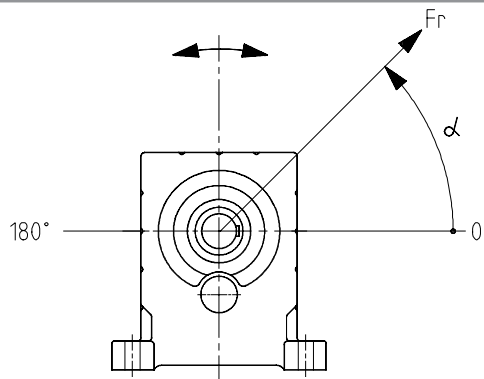
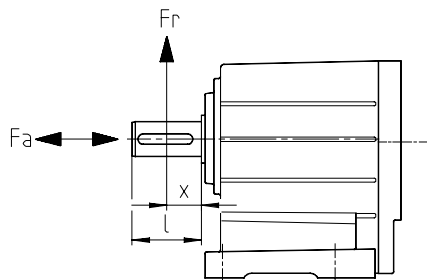
Permissible radial force

$$F_{rperm} = f_w \cdot f_\alpha \cdot F_{rTab} \leq f_w \cdot F_{rmax}$$

Permissible axial force

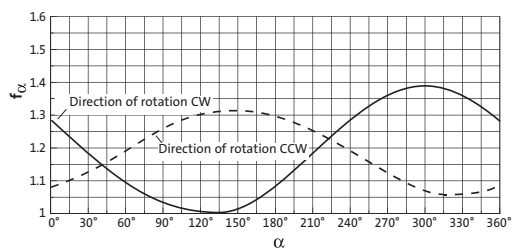
$$F_{aperm} = F_{aTab} \quad \text{if } F_r = 0$$

Contact Lenze

if F_r and $F_a \neq 0$

 f_α

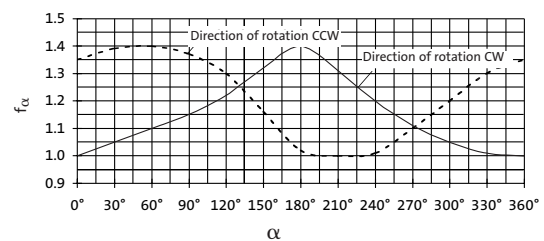
Effective direction factor f_α at output shaft

1-stage helical gearbox GST □□-1


 f_α

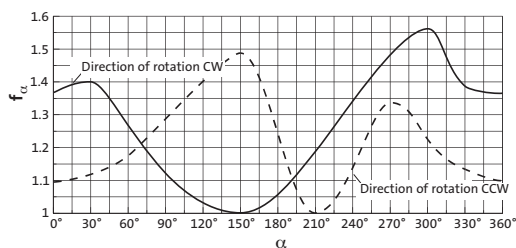
Effective direction factor f_α at output shaft

2-stage helical gearbox GST 03 - 2


 f_α

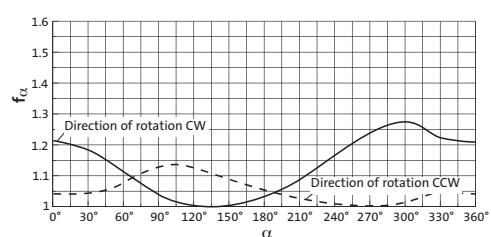
Effective direction factor f_α at output shaft

2 and 3-stage helical gearbox GST 04...09 - 2, 3


 f_α

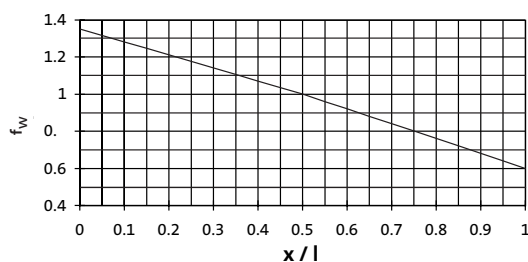
Effective direction factor f_α at output shaft

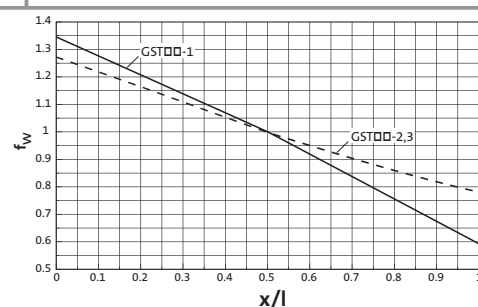
2 and 3-stage helical gearbox GST 11...14 - 2, 3


 f_w

Additional load factor f_w at output shaft

2-stage helical gearbox GST 03 - 2


 f_w

Additional load factor f_w at output shaft




GST□□-1

V□□	Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$									
n_2 [rpm]	GST 04		GST 05		GST 06		GST 07		GST 09	
	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_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$															
n_2 [rpm]	GST 03		GST 04		GST 05		GST 06		GST 07		GST 09		GST 11		GST 14	
	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

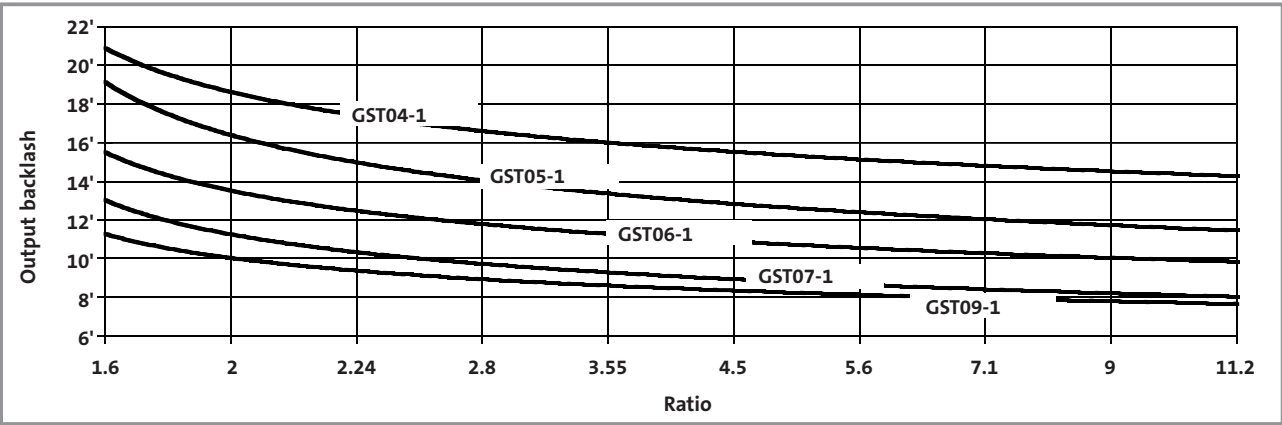
V□□	Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$												GST 11		GST 14	
n_2 [rpm]	GST 04		GST 05		GST 06		GST 07		GST 09							
	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]						
400	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	—						

The standard bearing
is a
reinforced bearing.

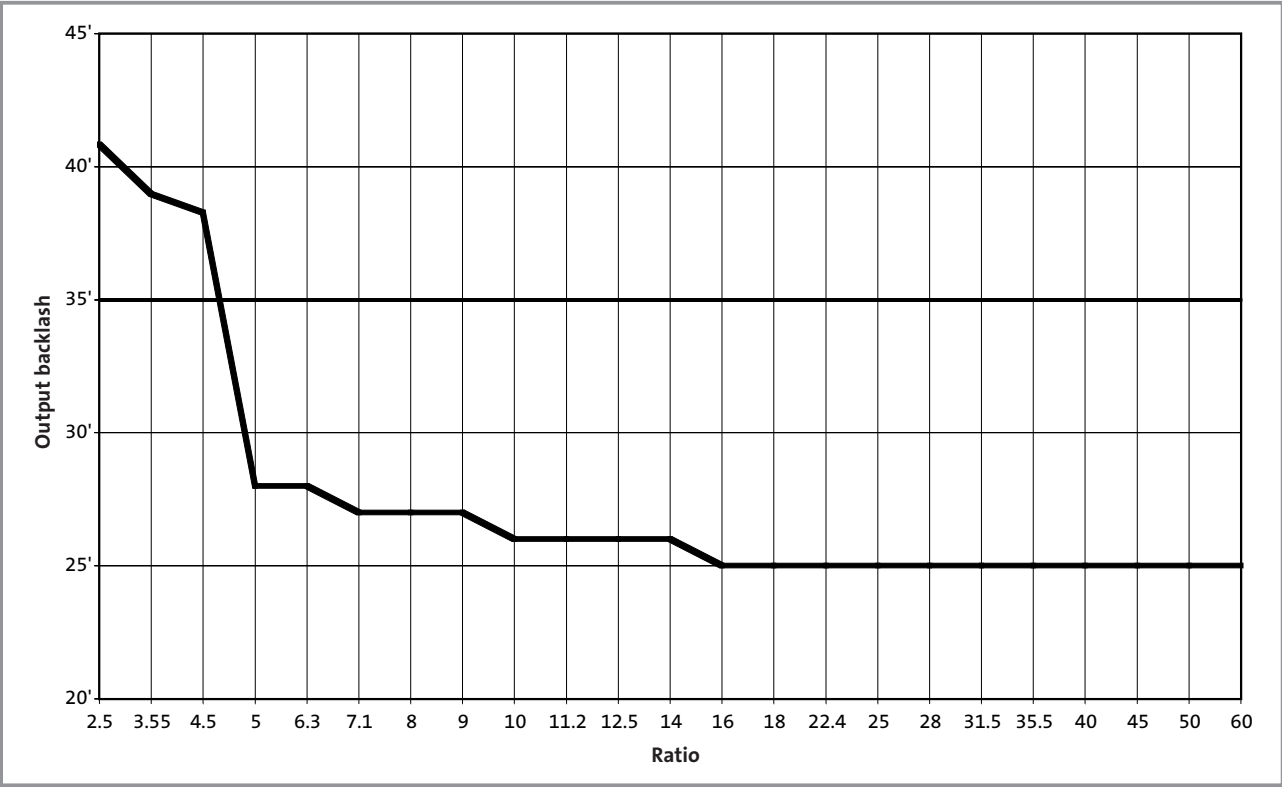
Technical data - Helical gearboxes

Output backlash in angular minutes

GST□□-1



GST 03 - 2

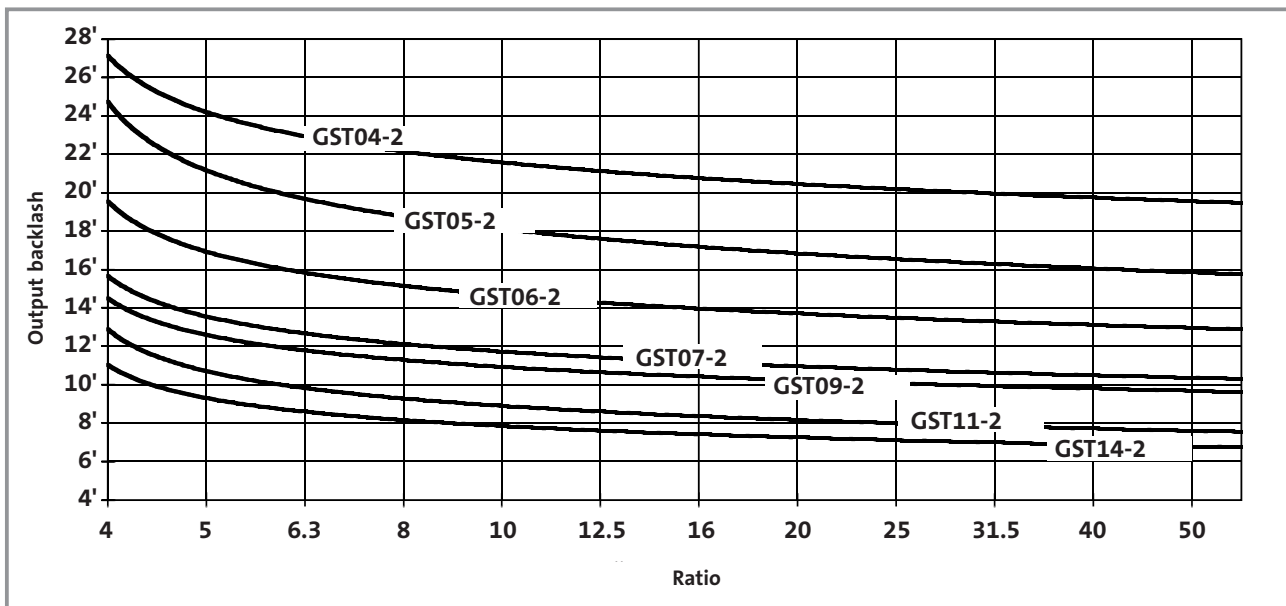


Technical data - Helical gearboxes

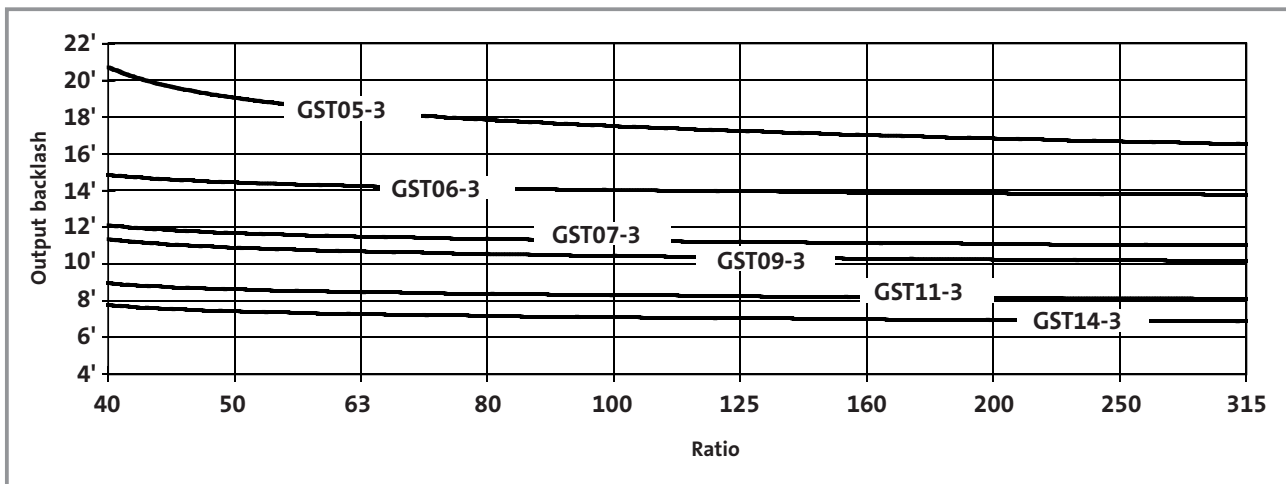
Output backlash in angular minutes



GST 04 ... 14-2

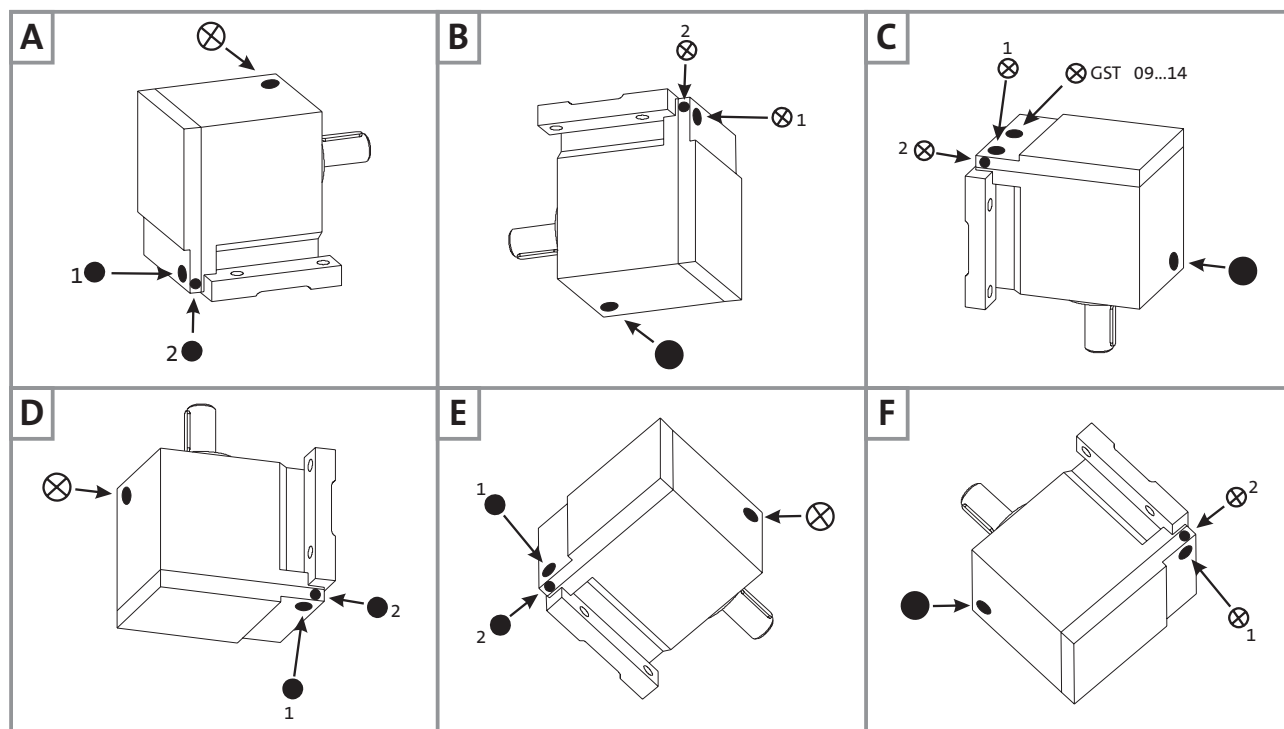


GST 05 ... 14-3

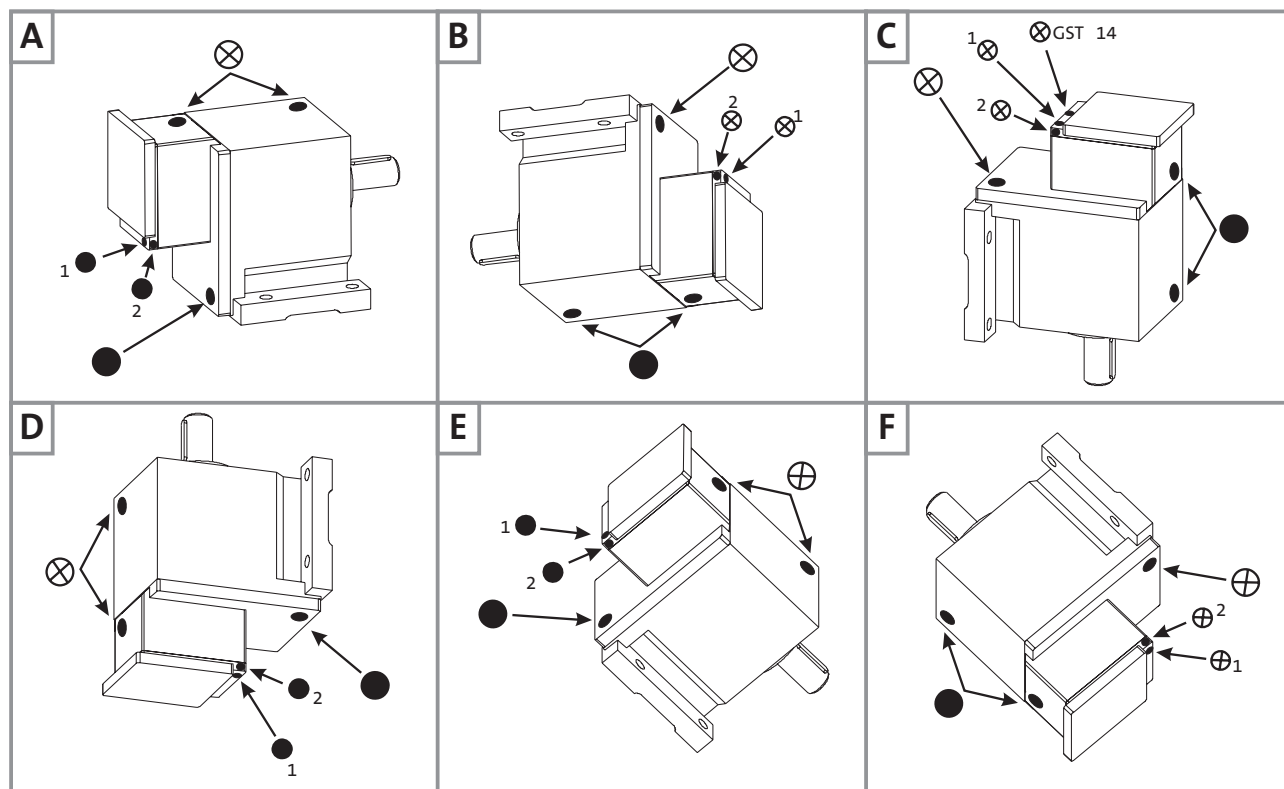


Position of ventilation, oil filler plug and oil drain plug

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



Helical gearboxes GST 05 ... 14-3



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

Pos. 1 or 2 depending on version
 (see table on page 3-7)



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

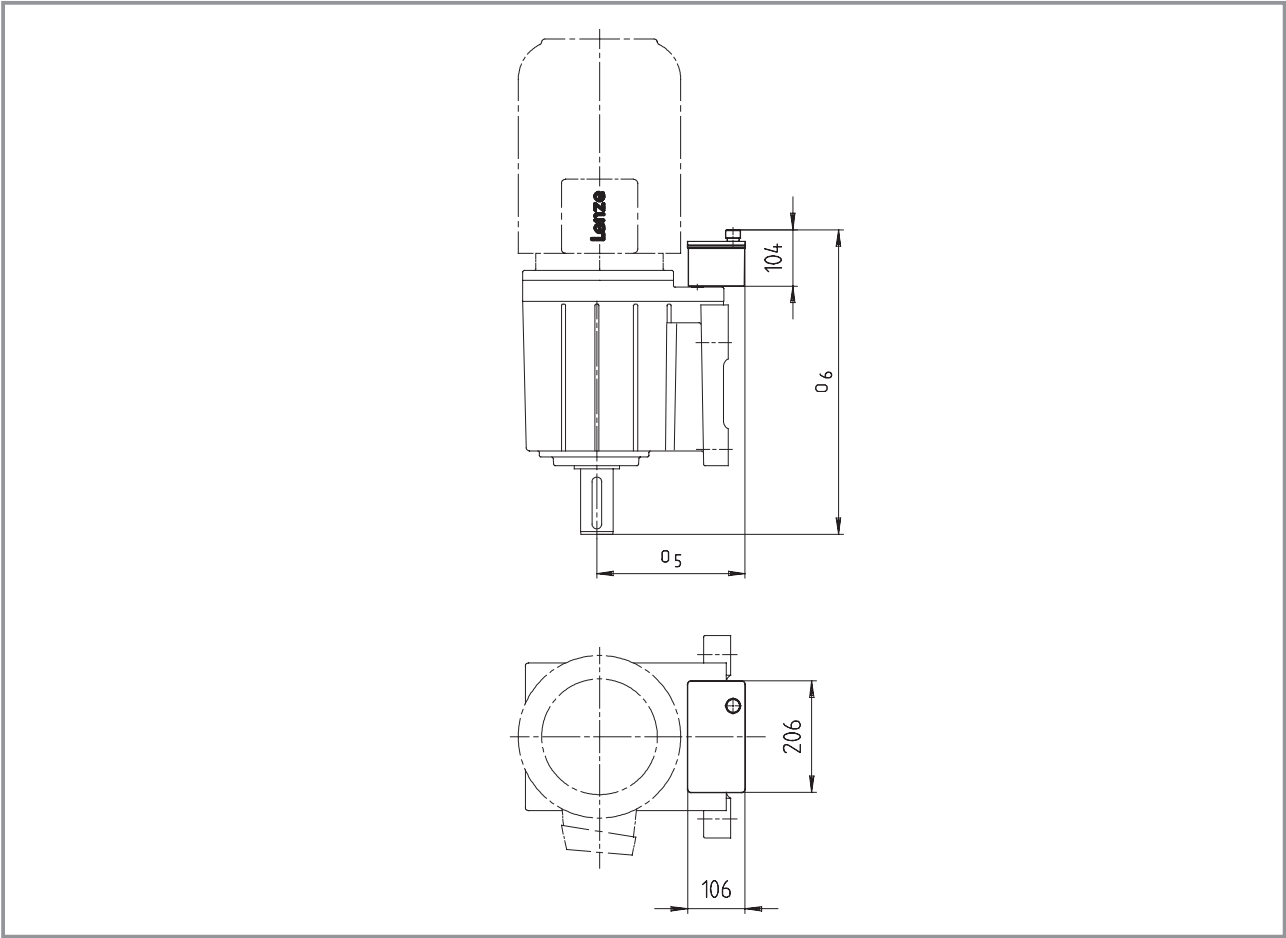
On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

Helical gearboxes

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

Reservoir for mounting position C

Helical gearboxes GST



Helical gearboxes GST □□-2 E		Motor frame size / Drive size		
		090 / 100	112	132
09	o ₅	206	226	245
	o ₆	477	477	477
11	o ₅	208	230	254
	o ₆	536	540	540
14	o ₅		252	282
	o ₆		640	640

8200 motec cannot be in position 4.



Helical gearboxes GST □□-1

Geared motors GST□□-1E VBR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	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	37	43			
06	18	20	21	26	27	35	42	47	56	63	
07				35	37	44	51	57	65	72	102
09						58	65	71	79	86	117

Geared motors GST□□-1E VCR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	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	36	42			
06	16	18	19	24	25	33	40	46	54	61	
07				32	33	41	48	53	62	69	99
09						54	61	67	75	82	112

Helical gearboxes GST □□-2

Geared motors GST□□-2E VAR VBR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	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					
06	25	27	28	32	33	41	48	54	62	69	114
07				47	49	56	63	69	77	84	
09						83	90	96	104	111	
11							136	142	149	156	186
14									241	248	275

Geared motors GST□□-2E VCR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	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					
06	22	24	25	29	31	38	45	51	60	67	
07				43	44	51	58	64	73	80	109
09						74	81	87	95	102	133
11							121	127	134	141	171
14									213	220	247

Note the additional weights on page 3-10.

Weights in [kg] with oil capacity for mounting position A. All data is approximate

Helical gearboxes GST □□-3

Geared motors GST□□-3E VAR VBR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	251	371	551	751	152	152	222	302	402	552	752
05	18	20	21	26	28						
06	28	30	31	36	38	44					
07	48	50	51	55	57	64					
09	80	82	83	87	89	96	103	109	117	124	
11				142	143	150	157	163	172	179	208
14						256	263	269	277	284	315

Geared motors GST□□-3E VCR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	251	371	551	751	152	152	222	302	402	552	752
05	17	19	20	25	26						
06	25	28	29	34	35	41					
07	43	45	46	51	52	59	66	72			
09	71	73	74	79	80	88	95	100	109	116	
11				127	128	135	142	148	157	164	193
14						228	235	241	249	256	287

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 capacity for mounting position A. All data is approximate

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 3-40 onwards														

P₁ = 0.12 kW

64	2	184	1.6	254	636	2	5.4	1107	1	2.240	GST04 - 1E □□□ 063C12	E82MV 251_2B
50	2	145	2	200	499	2	5.0	868	1.3	2.857	GST04 - 1E □□□ 063C12	E82MV 251_2B
32	4	94	3.1	130	324	4	5.5	564	2	4.400	GST04 - 1E □□□ 063C12	E82MV 251_2B
25	5	73	4	101	252	5	4.6	438	2.6	5.667	GST04 - 1E □□□ 063C12	E82MV 251_2B
20	6	58	5.1	79	198	6	4.0	345	3.3	7.182	GST04 - 1E □□□ 063C12	E82MV 251_2B
16	7	46	6.3	63	158	7	3.3	276	4.1	9.000	GST04 - 1E □□□ 063C12	E82MV 251_2B
12	9	35	8.4	48	120	9	1.7	209	5.4	11.857	GST04 - 1E □□□ 063C12	E82MV 251_2B
22	5	65	4.4	89	223	5	5.4	387	2.9	6.400	GST04 - 2E □□□ 063C12	E82MV 251_2B
20	5	59	4.8	82	204	5	5.4	355	3.1	6.982	GST03 - 2E □□□ 063C12	E82MV 251_2B
18	6	53	5.4	73	182	6	5.2	316	3.5	7.840	GST03 - 2E □□□ 063C12	E82MV 251_2B
16	7	46	6.2	64	160	7	4.7	278	4	8.935	GST03 - 2E □□□ 063C12	E82MV 251_2B
14	8	41	7	57	142	8	4.4	247	4.5	10.033	GST03 - 2E □□□ 063C12	E82MV 251_2B
12	9	36	7.9	50	125	9	4.0	217	5.1	11.429	GST03 - 2E □□□ 063C12	E82MV 251_2B
11	10	32	8.9	44	111	10	3.8	193	5.8	12.833	GST03 - 2E □□□ 063C12	E82MV 251_2B
9.6	12	28	10.3	38	96	12	3.4	167	6.7	14.836	GST03 - 2E □□□ 063C12	E82MV 251_2B
8.6	13	25	11.6	34	86	13	3.2	149	7.5	16.660	GST03 - 2E □□□ 063C12	E82MV 251_2B
7.5	15	22	13.2	30	75	15	2.8	130	8.5	19.013	GST03 - 2E □□□ 063C12	E82MV 251_2B
7.4	15	21	13.4	29	74	15	4.7	128	8.7	19.360	GST04 - 2E □□□ 063C12	E82MV 251_2B
6.7	17	19	14.8	27	67	17	2.7	116	9.6	21.350	GST03 - 2E □□□ 063C12	E82MV 251_2B
5.8	19	17	17	23	58	19	2.3	101	11	24.595	GST03 - 2E □□□ 063C12	E82MV 251_2B
5.2	22	15	19	21	52	22	2.1	90	12	27.618	GST03 - 2E □□□ 063C12	E82MV 251_2B
5.0	22	15	20	20	50	22	2.9	88	13	28.333	GST04 - 2E □□□ 063C12	E82MV 251_2B
4.5	25	13	22	18	45	25	1.8	77	14	32.000	GST03 - 2E □□□ 063C12	E82MV 251_2B
4.5	25	13	22	18	45	25	2.9	78	14	31.600	GST04 - 2E □□□ 063C12	E82MV 251_2B
4.0	28	12	25	16	40	28	1.6	69	16	35.933	GST03 - 2E □□□ 063C12	E82MV 251_2B
4.0	28	12	25	16	40	28	2.3	69	16	35.909	GST04 - 2E □□□ 063C12	E82MV 251_2B
3.4	32	10	29	14	34	32	1.4	60	19	41.455	GST03 - 2E □□□ 063C12	E82MV 251_2B
3.6	31	10	27	14	36	31	2.4	63	18	39.600	GST04 - 2E □□□ 063C12	E82MV 251_2B
3.1	36	8.9	32	12	31	36	1.2	53	21	46.550	GST03 - 2E □□□ 063C12	E82MV 251_2B
3.2	35	9.2	31	13	32	35	1.9	55	20	45.000	GST04 - 2E □□□ 063C12	E82MV 251_2B
2.7	41	7.8	37	11	27	41	1.1	47	24	52.909	GST03 - 2E □□□ 063C12	E82MV 251_2B
2.7	41	7.9	36	11	27	41	1.7	48	23	52.171	GST04 - 2E □□□ 063C12	E82MV 251_2B
2.4	46	7	41	9.6	24	46	1.0	42	27	59.413	GST03 - 2E □□□ 063C12	E82MV 251_2B
2.4	46	7	41	9.6	24	46	1.4	42	27	59.286	GST04 - 2E □□□ 063C12	E82MV 251_2B
2.3	49	6.5	43	9.0	23	49	3.0	39	28	63.467	GST05 - 3E □□□ 063C12	E82MV 251_2B
2.0	55	5.8	49	8.0	20	55	3.1	35	31	71.238	GST05 - 3E □□□ 063C12	E82MV 251_2B
1.8	62	5.1	55	7.0	18	62	2.4	31	36	80.952	GST05 - 3E □□□ 063C12	E82MV 251_2B
1.6	71	4.5	63	6.2	16	71	2.4	27	41	91.746	GST05 - 3E □□□ 063C12	E82MV 251_2B
1.2	89	3.6	80	4.9	12	89	1.9	21	51	116.277	GST05 - 3E □□□ 063C12	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 3-40 onwards													

P₁ = 0.12 kW

1.1	96	3.3	85	4.6	11	96	1.6	20	55	124.667	GST05 - 3E □□□ 063C12	E82MV 251_2B
1.0	112	2.8	100	3.9	9.8	112	1.5	17	64	145.714	GST05 - 3E □□□ 063C12	E82MV 251_2B
0.9	123	2.6	110	3.6	8.9	123	1.2	15	71	160.556	GST05 - 3E □□□ 063C12	E82MV 251_2B
0.9	123	2.6	110	3.6	8.9	123	2.8	15	71	160.556	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.8	138	2.3	122	3.2	8.0	138	1.2	14	79	179.067	GST05 - 3E □□□ 063C12	E82MV 251_2B
0.8	138	2.3	122	3.2	8.0	138	2.7	14	79	179.067	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.7	148	2.2	131	3.0	7.4	148	1.2	13	85	191.973	GST05 - 3E □□□ 063C12	E82MV 251_2B
0.7	156	2	139	2.8	7.0	156	2.2	12	90	203.485	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.6	173	1.8	153	2.5	6.4	173	1.0	11	99	224.400	GST05 - 3E □□□ 063C12	E82MV 251_2B
0.6	178	1.8	158	2.5	6.2	178	2.1	11	102	231.733	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.6	196	1.6	174	2.2	5.6	196	1.8	10	113	255.000	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.5	223	1.4	199	2.0	4.9	223	1.7	9	128	290.400	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.4	254	1.3	226	1.7	4.3	254	1.4	8	146	330.000	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.4	294	1.1	262	1.5	3.7	294	1.3	6	169	382.590	GST06 - 3E □□□ 063C12	E82MV 251_2B
0.3	334	1	297	1.3	3.3	334	1.1	6	192	434.762	GST06 - 3E □□□ 063C12	E82MV 251_2B

P₁ = 0.18 kW

61	3	177	2.5	244	609	3	3.4	1060	1.6	2.240	GST04 - 1E □□□ 063C32	E82MV 251_2B
48	4	139	3.2	191	478	4	3.2	831	2	2.857	GST04 - 1E □□□ 063C32	E82MV 251_2B
31	6	90	4.9	124	310	6	3.5	540	3.1	4.400	GST04 - 1E □□□ 063C32	E82MV 251_2B
24	7	70	6.3	96	241	7	2.9	419	4	5.667	GST04 - 1E □□□ 063C32	E82MV 251_2B
19	9	55	7.9	76	190	9	2.6	331	5.1	7.182	GST04 - 1E □□□ 063C32	E82MV 251_2B
15	11	44	9.9	61	152	11	2.1	264	6.4	9.000	GST04 - 1E □□□ 063C32	E82MV 251_2B
12	15	33	13.1	46	115	15	1.1	200	8.5	11.857	GST04 - 1E □□□ 063C32	E82MV 251_2B
53	3	152	2.8	210	526	3	5.7	915	1.8	2.597	GST03 - 2E □□□ 063C32	E82MV 251_2B
40	4	116	3.7	160	400	4	4.6	696	2.4	3.413	GST03 - 2E □□□ 063C32	E82MV 251_2B
31	5	91	4.7	125	313	5	3.9	544	3.1	4.368	GST03 - 2E □□□ 063C32	E82MV 251_2B
26	7	75	5.8	103	257	7	4.1	447	3.7	5.312	GST03 - 2E □□□ 063C32	E82MV 251_2B
23	7	66	6.5	92	229	7	3.9	398	4.2	5.965	GST03 - 2E □□□ 063C32	E82MV 251_2B
20	9	57	7.6	78	196	9	3.5	340	4.9	6.982	GST03 - 2E □□□ 063C32	E82MV 251_2B
17	10	50	8.5	70	174	10	3.3	303	5.5	7.840	GST03 - 2E □□□ 063C32	E82MV 251_2B
15	11	44	9.7	61	153	11	3.0	266	6.3	8.935	GST03 - 2E □□□ 063C32	E82MV 251_2B
14	12	39	10.9	54	136	12	2.8	237	7	10.033	GST03 - 2E □□□ 063C32	E82MV 251_2B
12	14	35	12.4	48	119	14	2.5	208	8	11.429	GST03 - 2E □□□ 063C32	E82MV 251_2B
11	16	31	14	43	106	16	2.4	185	9	12.833	GST03 - 2E □□□ 063C32	E82MV 251_2B
11	15	31	13.7	43	109	15	3.2	189	8.8	12.571	GST04 - 2E □□□ 063C32	E82MV 251_2B
9.2	18	27	16	37	92	18	2.2	160	10	14.836	GST03 - 2E □□□ 063C32	E82MV 251_2B
9.6	18	28	16	38	96	18	3.2	166	10	14.286	GST04 - 2E □□□ 063C32	E82MV 251_2B
8.2	20	24	18	33	82	20	2.0	143	12	16.660	GST03 - 2E □□□ 063C32	E82MV 251_2B
7.2	23	21	21	29	72	23	1.8	125	13	19.013	GST03 - 2E □□□ 063C32	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes

Geared motors with 8200 motec



Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
				20 Hz	50 Hz		50 Hz					
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
										Dimensions see page 3-40 onwards		

P₁ = 0.18 kW

7.1	24	20	21	28	71	24	3.0	123	14	19.360	GST04 - 2E □□□ 063C32	E82MV 251_2B
6.4	26	19	23	26	64	26	1.7	111	15	21.350	GST03 - 2E □□□ 063C32	E82MV 251_2B
6.2	27	18	24	25	62	27	2.3	108	15	22.000	GST04 - 2E □□□ 063C32	E82MV 251_2B
5.6	30	16	27	22	56	30	1.5	97	17	24.595	GST03 - 2E □□□ 063C32	E82MV 251_2B
5.5	31	16	27	22	55	31	2.3	95	18	24.933	GST04 - 2E □□□ 063C32	E82MV 251_2B
4.9	34	14	30	20	49	34	1.3	86	19	27.618	GST03 - 2E □□□ 063C32	E82MV 251_2B
4.8	35	14	31	19	48	35	1.8	84	20	28.333	GST04 - 2E □□□ 063C32	E82MV 251_2B
4.3	39	12	35	17	43	39	1.2	74	22	32.000	GST03 - 2E □□□ 063C32	E82MV 251_2B
4.3	39	13	34	17	43	39	1.9	75	22	31.600	GST04 - 2E □□□ 063C32	E82MV 251_2B
3.8	44	11	39	15	38	44	1.0	66	25	35.933	GST03 - 2E □□□ 063C32	E82MV 251_2B
3.8	44	11	39	15	38	44	1.5	66	25	35.909	GST04 - 2E □□□ 063C32	E82MV 251_2B
3.3	51	9.5	45	13	33	51	0.9	57	29	41.455	GST03 - 2E □□□ 063C32	E82MV 251_2B
3.5	48	10	43	14	35	48	1.5	60	28	39.600	GST04 - 2E □□□ 063C32	E82MV 251_2B
3.0	55	8.8	49	12	30	55	1.2	53	32	45.000	GST04 - 2E □□□ 063C32	E82MV 251_2B
2.6	64	7.6	57	10	26	64	1.1	46	37	52.171	GST04 - 2E □□□ 063C32	E82MV 251_2B
2.3	72	6.7	64	9.2	23	72	0.9	40	42	59.286	GST04 - 2E □□□ 063C32	E82MV 251_2B
2.2	76	6.2	68	8.6	22	76	1.9	37	44	63.467	GST05 - 3E □□□ 063C32	E82MV 251_2B
1.9	86	5.6	76	7.7	19	86	2.0	33	49	71.238	GST05 - 3E □□□ 063C32	E82MV 251_2B
1.7	97	4.9	87	6.8	17	97	1.5	29	56	80.952	GST05 - 3E □□□ 063C32	E82MV 251_2B
1.7	97	4.9	87	6.8	17	97	3.2	29	56	80.952	GST06 - 3E □□□ 063C32	E82MV 251_2B
1.5	110	4.3	98	6.0	15	110	1.5	26	63	91.746	GST05 - 3E □□□ 063C32	E82MV 251_2B
1.2	140	3.4	125	4.7	12	140	1.2	20	80	116.277	GST05 - 3E □□□ 063C32	E82MV 251_2B
1.2	132	3.6	118	5.0	12	132	2.8	22	76	109.707	GST06 - 3E □□□ 063C32	E82MV 251_2B
1.1	150	3.2	134	4.4	11	150	1.0	19	86	124.667	GST05 - 3E □□□ 063C32	E82MV 251_2B
1.1	150	3.2	134	4.4	11	150	2.3	19	86	124.667	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.9	175	2.7	156	3.7	9.4	175	1.0	16	101	145.714	GST05 - 3E □□□ 063C32	E82MV 251_2B
1.0	170	2.8	151	3.9	9.7	170	2.2	17	98	141.289	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.9	193	2.5	172	3.4	8.5	193	1.8	15	111	160.556	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.8	216	2.2	192	3.0	7.6	216	1.7	13	124	179.067	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.7	245	1.9	218	2.7	6.7	245	1.4	12	141	203.485	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.6	279	1.7	248	2.4	5.9	279	1.3	10	160	231.733	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.5	307	1.6	273	2.1	5.4	307	1.1	9	176	255.000	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.5	350	1.4	311	1.9	4.7	350	1.1	8	201	290.400	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.4	397	1.2	353	1.7	4.1	397	0.9	7	228	330.000	GST06 - 3E □□□ 063C32	E82MV 251_2B
0.4	460	1	410	1.4	3.6	460	0.8	6	265	382.590	GST06 - 3E □□□ 063C32	E82MV 251_2B

P₁ = 0.25 kW

86	3	248	2.4	343	856	3	4.5	1490	1.6	1.600	GST04 - 1E □□□ 063C42	E82MV 251_2B
67	4	194	3.1	268	669	4	5.2	1164	2	2.048	GST04 - 1E □□□ 063C42	E82MV 251_2B
61	4	177	3.4	245	612	4	4.5	1064	2.2	2.240	GST05 - 1E □□□ 063C42	E82MV 251_2B
48	5	139	4.4	192	480	5	4.8	834	2.8	2.857	GST04 - 1E □□□ 063C42	E82MV 251_2B
39	6	114	5.3	157	391	6	4.2	681	3.5	3.500	GST04 - 1E □□□ 063C42	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan															
Motor cooling with integral fan															
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec			
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂						
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]						
Dimensions see page 3-40 onwards															
P ₁ = 0.25 kW															
31	8	90	6.7	125	311	8	3.3	542	4.3	4.400	GST04 - 1E □□□ 063C42	E82MV 251_2B			
24	10	70	8.7	97	242	10	2.6	421	5.6	5.667	GST04 - 1E □□□ 063C42	E82MV 251_2B			
19	12	55	11	76	191	12	2.0	332	7.1	7.182	GST04 - 1E □□□ 063C42	E82MV 251_2B			
15	15	44	13.7	61	152	15	1.2	265	8.9	9.000	GST04 - 1E □□□ 063C42	E82MV 251_2B			
15	15	45	13.6	62	154	15	2.8	268	8.8	8.900	GST05 - 1E □□□ 063C42	E82MV 251_2B			
15	15	45	13.6	62	154	15	3.2	268	8.8	8.900	GST06 - 1E □□□ 063C42	E82MV 251_2B			
12	20	35	17	48	120	20	1.4	210	11	11.375	GST05 - 1E □□□ 063C42	E82MV 251_2B			
12	19	35	17	49	122	19	2.6	212	11	11.250	GST06 - 1E □□□ 063C42	E82MV 251_2B			
53	4	153	3.9	211	528	4	4.1	918	2.5	2.597	GST03 - 2E □□□ 063C42	E82MV 251_2B			
46	5	134	4.4	185	464	5	4.5	807	2.9	2.956	GST04 - 2E □□□ 063C42	E82MV 251_2B			
40	6	116	5.1	161	401	6	3.3	698	3.3	3.413	GST03 - 2E □□□ 063C42	E82MV 251_2B			
34	7	98	6.1	135	338	7	4.5	588	3.9	4.053	GST04 - 2E □□□ 063C42	E82MV 251_2B			
31	7	91	6.6	125	314	7	2.8	546	4.2	4.368	GST03 - 2E □□□ 063C42	E82MV 251_2B			
26	9	75	8	103	258	9	3.0	449	5.2	5.312	GST03 - 2E □□□ 063C42	E82MV 251_2B			
23	10	68	8.8	94	234	10	5.2	407	5.7	5.850	GST04 - 2E □□□ 063C42	E82MV 251_2B			
23	10	67	9	92	230	10	2.8	400	5.8	5.965	GST03 - 2E □□□ 063C42	E82MV 251_2B			
20	12	57	10.5	78	196	12	2.5	341	6.8	6.982	GST03 - 2E □□□ 063C42	E82MV 251_2B			
17	13	51	11.8	70	175	13	2.4	304	7.6	7.840	GST03 - 2E □□□ 063C42	E82MV 251_2B			
15	15	44	13.4	61	153	15	2.2	267	8.7	8.935	GST03 - 2E □□□ 063C42	E82MV 251_2B			
14	17	40	15.1	55	137	17	2.0	238	9.7	10.033	GST03 - 2E □□□ 063C42	E82MV 251_2B			
12	19	35	17	48	120	19	1.8	209	11	11.429	GST03 - 2E □□□ 063C42	E82MV 251_2B			
12	19	35	17	49	122	19	3.2	213	11	11.200	GST04 - 2E □□□ 063C42	E82MV 251_2B			
11	22	31	19	43	107	22	1.7	186	12	12.833	GST03 - 2E □□□ 063C42	E82MV 251_2B			
11	21	32	19	44	109	21	3.3	190	12	12.571	GST04 - 2E □□□ 063C42	E82MV 251_2B			
9.2	25	27	22	37	92	25	1.6	161	14	14.836	GST03 - 2E □□□ 063C42	E82MV 251_2B			
9.6	24	28	21	38	96	24	2.5	167	14	14.286	GST04 - 2E □□□ 063C42	E82MV 251_2B			
8.2	28	24	25	33	82	28	1.5	143	16	16.660	GST03 - 2E □□□ 063C42	E82MV 251_2B			
8.9	26	26	23	36	89	26	2.7	155	15	15.400	GST04 - 2E □□□ 063C42	E82MV 251_2B			
7.2	32	21	29	29	72	32	1.3	125	18	19.013	GST03 - 2E □□□ 063C42	E82MV 251_2B			
7.8	30	23	26	31	78	30	2.1	136	17	17.500	GST04 - 2E □□□ 063C42	E82MV 251_2B			
7.1	33	21	29	28	71	33	2.1	123	19	19.360	GST04 - 2E □□□ 063C42	E82MV 251_2B			
6.4	36	19	32	26	64	36	1.2	112	21	21.350	GST03 - 2E □□□ 063C42	E82MV 251_2B			
6.2	37	18	33	25	62	37	1.7	108	21	22.000	GST04 - 2E □□□ 063C42	E82MV 251_2B			
5.6	42	16	37	22	56	42	1.1	97	24	24.595	GST03 - 2E □□□ 063C42	E82MV 251_2B			
5.5	42	16	38	22	55	42	1.7	96	24	24.933	GST04 - 2E □□□ 063C42	E82MV 251_2B			
5.0	47	14	42	20	50	47	1.0	86	27	27.618	GST03 - 2E □□□ 063C42	E82MV 251_2B			
4.8	48	14	43	19	48	48	1.3	84	28	28.333	GST04 - 2E □□□ 063C42	E82MV 251_2B			
4.8	48	14	43	19	48	48	3.1	84	28	28.333	GST05 - 2E □□□ 063C42	E82MV 251_2B			
4.3	54	12	48	17	43	54	0.8	74	31	32.000	GST03 - 2E □□□ 063C42	E82MV 251_2B			
4.3	53	13	48	17	43	53	1.4	75	31	31.600	GST04 - 2E □□□ 063C42	E82MV 251_2B			
4.3	55	12	49	17	43	55	3.0	74	31	32.267	GST05 - 2E □□□ 063C42	E82MV 251_2B			
3.8	61	11	54	15	38	61	1.1	66	35	35.909	GST04 - 2E □□□ 063C42	E82MV 251_2B			
3.7	62	11	55	15	37	62	2.4	65	36	36.667	GST05 - 2E □□□ 063C42	E82MV 251_2B			

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 3-40 onwards														

P₁ = 0.25 kW

3.5	67	10	60	14	35	67	1.1	60	38	39.600	GST04 - 2E □□□ 063C42	E82MV 251_2B
3.5	66	10	59	14	35	66	2.5	61	38	39.160	GST05 - 2E □□□ 063C42	E82MV 251_2B
3.5	66	10	59	14	35	66	3.2	61	38	39.160	GST06 - 2E □□□ 063C42	E82MV 251_2B
3.0	76	8.8	68	12	30	76	0.9	53	44	45.000	GST04 - 2E □□□ 063C42	E82MV 251_2B
3.1	75	8.9	67	12	31	75	2.0	54	43	44.500	GST05 - 2E □□□ 063C42	E82MV 251_2B
3.1	75	8.9	67	12	31	75	3.2	54	43	44.500	GST06 - 2E □□□ 063C42	E82MV 251_2B
2.7	85	7.9	75	11	27	85	1.4	48	49	50.050	GST05 - 2E □□□ 063C42	E82MV 251_2B
2.8	84	8	74	11	28	84	2.6	48	48	49.500	GST06 - 2E □□□ 063C42	E82MV 251_2B
2.4	96	7	86	9.6	24	96	1.4	42	55	56.875	GST05 - 2E □□□ 063C42	E82MV 251_2B
2.4	95	7.1	85	9.8	24	95	2.6	42	55	56.250	GST06 - 2E □□□ 063C42	E82MV 251_2B
2.4	94	7	84	9.7	24	94	1.6	42	54	56.667	GST05 - 3E □□□ 063C42	E82MV 251_2B
2.2	106	6.3	94	8.6	22	106	1.4	38	61	63.467	GST05 - 3E □□□ 063C42	E82MV 251_2B
2.0	113	5.9	100	8.1	20	113	3.2	35	65	67.760	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.9	119	5.6	106	7.7	19	119	1.4	33	68	71.238	GST05 - 3E □□□ 063C42	E82MV 251_2B
2.0	117	5.7	104	7.8	20	117	3.1	34	67	70.156	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.7	135	4.9	120	6.8	17	135	1.1	29	77	80.952	GST05 - 3E □□□ 063C42	E82MV 251_2B
1.7	135	4.9	120	6.8	17	135	2.5	29	77	80.952	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.5	153	4.3	136	6.0	15	153	1.1	26	88	91.746	GST05 - 3E □□□ 063C42	E82MV 251_2B
1.6	145	4.6	129	6.3	16	145	2.5	27	84	87.267	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.4	165	4	147	5.5	14	165	0.9	24	95	99.167	GST05 - 3E □□□ 063C42	E82MV 251_2B
1.4	165	4	147	5.5	14	165	2.0	24	95	99.167	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.2	194	3.4	172	4.7	12	194	0.9	21	111	116.277	GST05 - 3E □□□ 063C42	E82MV 251_2B
1.3	183	3.6	163	5.0	13	183	2.1	22	105	109.707	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.1	208	3.2	185	4.4	11	208	1.6	19	119	124.667	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.0	235	2.8	209	3.9	9.7	235	1.6	17	135	141.289	GST06 - 3E □□□ 063C42	E82MV 251_2B
1.0	232	2.9	206	3.9	9.8	232	3.0	17	133	139.211	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.9	267	2.5	238	3.4	8.5	267	1.3	15	154	160.556	GST06 - 3E □□□ 063C42	E82MV 251_2B
0.9	263	2.5	234	3.5	8.7	263	2.7	15	151	158.194	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.8	298	2.2	265	3.1	7.7	298	1.3	13	171	179.067	GST06 - 3E □□□ 063C42	E82MV 251_2B
0.8	300	2.2	267	3.0	7.6	300	2.4	13	172	180.156	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.7	339	2	302	2.7	6.7	339	1.0	12	195	203.485	GST06 - 3E □□□ 063C42	E82MV 251_2B
0.7	341	1.9	303	2.7	6.7	341	2.1	12	196	204.722	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.6	386	1.7	343	2.4	5.9	386	1.0	10	222	231.733	GST06 - 3E □□□ 063C42	E82MV 251_2B
0.6	394	1.7	351	2.3	5.8	394	1.8	10	226	236.622	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.5	425	1.6	378	2.1	5.4	425	0.8	9	244	255.000	GST06 - 3E □□□ 063C42	E82MV 251_2B
0.6	414	1.6	368	2.2	5.5	414	1.7	10	238	248.458	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.5	420	1.6	374	2.2	5.4	420	3.2	9	241	252.167	GST09 - 3E □□□ 063C42	E82MV 251_2B
0.5	448	1.5	399	2.0	5.1	448	1.6	9	257	268.889	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.4	544	1.2	484	1.7	4.2	544	1.3	7	312	326.333	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.4	544	1.2	484	1.7	4.2	544	3.0	7	312	326.333	GST09 - 3E □□□ 063C42	E82MV 251_2B
0.4	611	1.1	544	1.5	3.7	611	1.2	6	351	367.033	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.4	605	1.1	538	1.5	3.8	605	2.6	7	347	363.000	GST09 - 3E □□□ 063C42	E82MV 251_2B
0.3	695	1	618	1.3	3.3	695	1.0	6	399	417.083	GST07 - 3E □□□ 063C42	E82MV 251_2B
0.3	687	1	611	1.3	3.3	687	2.4	6	395	412.500	GST09 - 3E □□□ 063C42	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂ 20 Hz	n ₂ 50 Hz	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]	50 Hz	[rpm]	[Nm]				
Dimensions see page 3-40 onwards													
P ₁ = 0.37 kW													
88	4	256	3.5	353	881	4	4.0	1533	2.3	1.600	GST04 - 1E □□□ 071C32	E82MV 371_2B	
69	5	200	4.5	275	689	5	4.5	1198	2.9	2.048	GST04 - 1E □□□ 071C32	E82MV 371_2B	
63	6	183	4.9	252	630	6	4.0	1095	3.2	2.240	GST05 - 1E □□□ 071C32	E82MV 371_2B	
49	7	143	6.3	197	494	7	3.5	859	4.1	2.857	GST04 - 1E □□□ 071C32	E82MV 371_2B	
40	9	117	7.7	161	403	9	2.9	701	5	3.500	GST04 - 1E □□□ 071C32	E82MV 371_2B	
32	11	93	9.7	128	321	11	2.3	558	6.2	4.400	GST04 - 1E □□□ 071C32	E82MV 371_2B	
25	14	72	12.4	100	249	14	1.8	433	8	5.667	GST04 - 1E □□□ 071C32	E82MV 371_2B	
25	14	72	12.4	100	249	14	3.2	433	8	5.667	GST05 - 1E □□□ 071C32	E82MV 371_2B	
20	18	57	16	79	196	18	1.4	342	10	7.182	GST04 - 1E □□□ 071C32	E82MV 371_2B	
19	18	56	16	77	192	18	2.6	335	10	7.333	GST05 - 1E □□□ 071C32	E82MV 371_2B	
19	18	56	16	77	192	18	3.2	335	10	7.333	GST06 - 1E □□□ 071C32	E82MV 371_2B	
16	22	45	20	63	157	22	1.0	273	13	9.000	GST04 - 1E □□□ 071C32	E82MV 371_2B	
16	22	46	20	63	158	22	1.9	276	13	8.900	GST05 - 1E □□□ 071C32	E82MV 371_2B	
16	22	46	20	63	158	22	2.8	276	13	8.900	GST06 - 1E □□□ 071C32	E82MV 371_2B	
12	28	36	25	50	124	28	1.1	216	16	11.375	GST05 - 1E □□□ 071C32	E82MV 371_2B	
13	28	36	25	50	125	28	2.2	218	16	11.250	GST06 - 1E □□□ 071C32	E82MV 371_2B	
54	6	157	5.6	217	543	6	2.8	945	3.6	2.597	GST03 - 2E □□□ 071C32	E82MV 371_2B	
48	7	138	6.4	191	477	7	4.0	830	4.1	2.956	GST04 - 2E □□□ 071C32	E82MV 371_2B	
41	8	120	7.4	165	413	8	2.3	719	4.8	3.413	GST03 - 2E □□□ 071C32	E82MV 371_2B	
32	11	94	9.5	129	323	11	2.0	562	6.1	4.368	GST03 - 2E □□□ 071C32	E82MV 371_2B	
27	13	77	11.5	106	265	13	2.1	462	7.4	5.312	GST03 - 2E □□□ 071C32	E82MV 371_2B	
24	15	69	12.9	95	236	15	2.0	411	8.3	5.965	GST03 - 2E □□□ 071C32	E82MV 371_2B	
20	17	59	15.1	81	202	17	1.7	351	9.8	6.982	GST03 - 2E □□□ 071C32	E82MV 371_2B	
20	17	58	15.2	80	200	17	3.3	348	9.8	7.040	GST04 - 2E □□□ 071C32	E82MV 371_2B	
18	19	52	17	72	180	19	1.7	313	11	7.840	GST03 - 2E □□□ 071C32	E82MV 371_2B	
18	19	51	17	71	176	19	3.0	307	11	8.000	GST04 - 2E □□□ 071C32	E82MV 371_2B	
16	22	46	19	63	158	22	1.5	275	12	8.935	GST03 - 2E □□□ 071C32	E82MV 371_2B	
16	22	45	19	63	157	22	2.9	272	13	9.010	GST04 - 2E □□□ 071C32	E82MV 371_2B	
14	24	41	22	56	141	24	1.4	245	14	10.033	GST03 - 2E □□□ 071C32	E82MV 371_2B	
14	24	41	21	57	143	24	2.7	249	14	9.856	GST04 - 2E □□□ 071C32	E82MV 371_2B	
12	28	36	25	49	123	28	1.3	215	16	11.429	GST03 - 2E □□□ 071C32	E82MV 371_2B	
13	27	37	24	50	126	27	2.2	219	16	11.200	GST04 - 2E □□□ 071C32	E82MV 371_2B	
11	31	32	28	44	110	31	1.2	191	18	12.833	GST03 - 2E □□□ 071C32	E82MV 371_2B	
11	31	33	27	45	112	31	2.3	195	18	12.571	GST04 - 2E □□□ 071C32	E82MV 371_2B	
9.5	36	28	32	38	95	36	1.1	165	21	14.836	GST03 - 2E □□□ 071C32	E82MV 371_2B	
9.9	35	29	31	39	99	35	1.8	172	20	14.286	GST04 - 2E □□□ 071C32	E82MV 371_2B	
9.8	35	28	31	39	98	35	3.2	171	20	14.356	GST05 - 2E □□□ 071C32	E82MV 371_2B	
8.5	41	25	36	34	85	41	1.0	147	23	16.660	GST03 - 2E □□□ 071C32	E82MV 371_2B	
9.2	37	27	33	37	92	37	1.9	159	22	15.400	GST04 - 2E □□□ 071C32	E82MV 371_2B	
8.7	39	25	35	35	87	39	3.2	152	23	16.190	GST05 - 2E □□□ 071C32	E82MV 371_2B	
7.4	46	22	41	30	74	46	0.9	129	27	19.013	GST03 - 2E □□□ 071C32	E82MV 371_2B	
8.1	43	23	38	32	81	43	1.5	140	24	17.500	GST04 - 2E □□□ 071C32	E82MV 371_2B	
7.3	47	21	42	29	73	47	1.5	127	27	19.360	GST04 - 2E □□□ 071C32	E82MV 371_2B	
6.6	52	19	46	26	66	52	0.9	115	30	21.350	GST03 - 2E □□□ 071C32	E82MV 371_2B	
6.4	54	19	48	26	64	54	1.2	112	31	22.000	GST04 - 2E □□□ 071C32	E82MV 371_2B	
6.2	55	18	49	25	62	55	2.6	108	32	22.778	GST05 - 2E □□□ 071C32	E82MV 371_2B	

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 3-40 onwards														

P₁ = 0.37 kW

5.7	61	16	54	23	57	61	1.2	98	35	24.933	GST04 - 2E □□□ 071C32	E82MV 371_2B
5.7	61	16	54	23	57	61	2.7	98	35	24.933	GST05 - 2E □□□ 071C32	E82MV 371_2B
5.0	69	14	61	20	50	69	0.9	87	40	28.333	GST04 - 2E □□□ 071C32	E82MV 371_2B
5.0	69	14	61	20	50	69	2.1	87	40	28.333	GST05 - 2E □□□ 071C32	E82MV 371_2B
4.5	77	13	68	18	45	77	0.9	78	44	31.600	GST04 - 2E □□□ 071C32	E82MV 371_2B
4.4	78	13	70	17	44	78	2.1	76	45	32.267	GST05 - 2E □□□ 071C32	E82MV 371_2B
4.4	78	13	70	17	44	78	3.2	76	45	32.267	GST06 - 2E □□□ 071C32	E82MV 371_2B
3.9	89	11	79	15	39	89	1.7	67	51	36.667	GST05 - 2E □□□ 071C32	E82MV 371_2B
3.9	89	11	79	15	39	89	3.2	67	51	36.667	GST06 - 2E □□□ 071C32	E82MV 371_2B
3.6	95	10	85	14	36	95	1.7	63	55	39.160	GST05 - 2E □□□ 071C32	E82MV 371_2B
3.6	95	10	85	14	36	95	2.8	63	55	39.160	GST06 - 2E □□□ 071C32	E82MV 371_2B
3.2	108	9.2	96	13	32	108	1.4	55	62	44.500	GST05 - 2E □□□ 071C32	E82MV 371_2B
3.2	108	9.2	96	13	32	108	2.8	55	62	44.500	GST06 - 2E □□□ 071C32	E82MV 371_2B
2.8	122	8.2	108	11	28	122	1.1	49	70	50.050	GST05 - 2E □□□ 071C32	E82MV 371_2B
2.9	120	8.3	107	11	29	120	2.2	50	69	49.500	GST06 - 2E □□□ 071C32	E82MV 371_2B
2.5	138	7.2	123	9.9	25	138	1.1	43	79	56.875	GST05 - 2E □□□ 071C32	E82MV 371_2B
2.5	137	7.3	122	10	25	137	2.2	44	79	56.250	GST06 - 2E □□□ 071C32	E82MV 371_2B
2.5	136	7.2	121	10.0	25	136	1.1	43	78	56.667	GST05 - 3E □□□ 071C32	E82MV 371_2B
2.2	152	6.4	135	8.9	22	152	1.0	39	87	63.467	GST05 - 3E □□□ 071C32	E82MV 371_2B
2.1	162	6	144	8.3	21	162	2.2	36	93	67.760	GST06 - 3E □□□ 071C32	E82MV 371_2B
2.0	171	5.7	152	7.9	20	171	1.0	34	98	71.238	GST05 - 3E □□□ 071C32	E82MV 371_2B
2.0	168	5.8	150	8.0	20	168	2.1	35	97	70.156	GST06 - 3E □□□ 071C32	E82MV 371_2B
1.7	194	5.1	173	7.0	17	194	1.7	30	111	80.952	GST06 - 3E □□□ 071C32	E82MV 371_2B
1.6	209	4.7	186	6.5	16	209	1.8	28	120	87.267	GST06 - 3E □□□ 071C32	E82MV 371_2B
1.4	238	4.1	211	5.7	14	238	1.4	25	136	99.167	GST06 - 3E □□□ 071C32	E82MV 371_2B
1.3	263	3.7	234	5.2	13	263	1.4	22	151	109.707	GST06 - 3E □□□ 071C32	E82MV 371_2B
1.3	268	3.7	239	5.0	13	268	2.6	22	154	111.915	GST07 - 3E □□□ 071C32	E82MV 371_2B
1.1	299	3.3	266	4.5	11	299	1.1	20	172	124.667	GST06 - 3E □□□ 071C32	E82MV 371_2B
1.1	305	3.2	271	4.4	11	305	2.3	19	175	127.176	GST07 - 3E □□□ 071C32	E82MV 371_2B
1.0	338	2.9	301	4.0	10.0	338	1.1	17	194	141.289	GST06 - 3E □□□ 071C32	E82MV 371_2B
1.0	333	2.9	297	4.0	10	333	2.1	18	192	139.211	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.9	385	2.5	342	3.5	8.8	385	0.9	15	221	160.556	GST06 - 3E □□□ 071C32	E82MV 371_2B
0.9	379	2.6	337	3.6	8.9	379	1.9	16	218	158.194	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.8	429	2.3	382	3.1	7.9	429	0.9	14	246	179.067	GST06 - 3E □□□ 071C32	E82MV 371_2B
0.8	431	2.3	384	3.1	7.8	431	1.6	14	248	180.156	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.8	438	2.2	390	3.1	7.7	438	3.2	13	252	182.844	GST09 - 3E □□□ 071C32	E82MV 371_2B
0.7	490	2	436	2.8	6.9	490	1.4	12	282	204.722	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.7	498	2	443	2.7	6.8	498	3.2	12	286	207.778	GST09 - 3E □□□ 071C32	E82MV 371_2B
0.6	567	1.7	504	2.4	6.0	567	1.2	10	326	236.622	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.6	567	1.7	504	2.4	6.0	567	2.8	10	326	236.622	GST09 - 3E □□□ 071C32	E82MV 371_2B
0.6	595	1.6	530	2.3	5.7	595	1.2	10	342	248.458	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.6	604	1.6	537	2.2	5.6	604	2.7	10	347	252.167	GST09 - 3E □□□ 071C32	E82MV 371_2B
0.5	644	1.5	573	2.1	5.2	644	1.1	9	370	268.889	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.5	644	1.5	573	2.1	5.2	644	2.5	9	370	268.889	GST09 - 3E □□□ 071C32	E82MV 371_2B
0.4	782	1.3	696	1.7	4.3	782	0.9	8	449	326.333	GST07 - 3E □□□ 071C32	E82MV 371_2B
0.4	782	1.3	696	1.7	4.3	782	2.1	8	449	326.333	GST09 - 3E □□□ 071C32	E82MV 371_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan															
Motor cooling with integral fan															
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec			
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂						
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]						
Dimensions see page 3-40 onwards															
P ₁ = 0.37 kW															
0.4	879	1.1	782	1.5	3.8	879	0.8	7	505	367.033	GST07 - 3E □□□ 071C32	E82MV 371_2B			
0.4	869	1.1	774	1.6	3.9	869	1.9	7	500	363.000	GST09 - 3E □□□ 071C32	E82MV 371_2B			
0.3	988	1	879	1.4	3.4	988	1.6	6	568	412.500	GST09 - 3E □□□ 071C32	E82MV 371_2B			
P ₁ = 0.55 kW															
88	6	255	5.2	351	878	6	3.3	1528	3.4	1.600	GST04 - 1E □□□ 071C42	E82MV 551_4B			
69	8	199	6.7	274	686	8	3.0	1194	4.3	2.048	GST04 - 1E □□□ 071C42	E82MV 551_4B			
63	8	182	7.3	251	627	8	3.0	1091	4.7	2.240	GST04 - 1E □□□ 071C42	E82MV 551_4B			
49	11	143	9.4	197	492	11	2.4	856	6	2.857	GST04 - 1E □□□ 071C42	E82MV 551_4B			
40	13	116	11.5	161	401	13	1.9	698	7.4	3.500	GST04 - 1E □□□ 071C42	E82MV 551_4B			
32	16	93	14.4	128	319	16	1.5	556	9.3	4.400	GST04 - 1E □□□ 071C42	E82MV 551_4B			
31	17	89	14.9	123	308	17	3.2	537	9.6	4.556	GST05 - 1E □□□ 071C42	E82MV 551_4B			
25	21	72	19	99	248	21	1.2	431	12	5.667	GST04 - 1E □□□ 071C42	E82MV 551_4B			
25	21	72	19	99	248	21	2.6	431	12	5.667	GST05 - 1E □□□ 071C42	E82MV 551_4B			
25	21	72	19	99	248	21	3.2	431	12	5.667	GST06 - 1E □□□ 071C42	E82MV 551_4B			
19	27	56	24	77	192	27	1.7	333	16	7.333	GST05 - 1E □□□ 071C42	E82MV 551_4B			
19	27	56	24	77	192	27	2.9	333	16	7.333	GST06 - 1E □□□ 071C42	E82MV 551_4B			
16	33	46	29	63	158	33	1.3	275	19	8.900	GST05 - 1E □□□ 071C42	E82MV 551_4B			
16	33	46	29	63	158	33	2.4	275	19	8.900	GST06 - 1E □□□ 071C42	E82MV 551_4B			
12	41	36	37	50	125	41	1.4	217	24	11.250	GST06 - 1E □□□ 071C42	E82MV 551_4B			
54	9	157	8.4	216	541	9	1.9	941	5.4	2.597	GST03 - 2E □□□ 071C42	E82MV 551_4B			
41	12	119	11	165	412	12	1.6	716	7.1	3.413	GST03 - 2E □□□ 071C42	E82MV 551_4B			
35	15	101	13.1	139	347	15	3.1	603	8.4	4.053	GST04 - 2E □□□ 071C42	E82MV 551_4B			
32	16	93	14.1	129	322	16	1.3	560	9.1	4.368	GST03 - 2E □□□ 071C42	E82MV 551_4B			
31	17	89	14.8	123	307	17	2.9	535	9.5	4.571	GST04 - 2E □□□ 071C42	E82MV 551_4B			
26	19	77	17	106	265	19	1.4	460	11	5.312	GST03 - 2E □□□ 071C42	E82MV 551_4B			
27	19	79	17	108	271	19	2.7	471	11	5.187	GST04 - 2E □□□ 071C42	E82MV 551_4B			
24	21	70	19	96	240	21	2.5	418	12	5.850	GST04 - 2E □□□ 071C42	E82MV 551_4B			
24	22	68	19	94	236	22	1.3	410	12	5.965	GST03 - 2E □□□ 071C42	E82MV 551_4B			
22	23	64	21	88	220	23	2.4	382	13	6.400	GST04 - 2E □□□ 071C42	E82MV 551_4B			
20	25	58	23	80	201	25	1.2	350	15	6.982	GST03 - 2E □□□ 071C42	E82MV 551_4B			
20	26	58	23	80	200	26	2.2	347	15	7.040	GST04 - 2E □□□ 071C42	E82MV 551_4B			
18	28	52	25	72	179	28	1.1	312	16	7.840	GST03 - 2E □□□ 071C42	E82MV 551_4B			
18	29	51	26	70	176	29	2.0	306	17	8.000	GST04 - 2E □□□ 071C42	E82MV 551_4B			
16	32	46	29	63	157	32	1.0	274	19	8.935	GST03 - 2E □□□ 071C42	E82MV 551_4B			
16	33	45	29	62	156	33	1.9	271	19	9.010	GST04 - 2E □□□ 071C42	E82MV 551_4B			
14	36	41	32	56	140	36	0.9	244	21	10.033	GST03 - 2E □□□ 071C42	E82MV 551_4B			
14	36	41	32	57	143	36	1.8	248	21	9.856	GST04 - 2E □□□ 071C42	E82MV 551_4B			
12	41	36	37	49	123	41	0.9	214	24	11.429	GST03 - 2E □□□ 071C42	E82MV 551_4B			
13	41	36	36	50	125	41	1.5	218	23	11.200	GST04 - 2E □□□ 071C42	E82MV 551_4B			
13	41	36	36	50	125	41	3.1	218	23	11.200	GST05 - 2E □□□ 071C42	E82MV 551_4B			
11	47	32	41	44	110	47	0.8	190	27	12.833	GST03 - 2E □□□ 071C42	E82MV 551_4B			
11	46	32	41	45	112	46	1.5	194	26	12.571	GST04 - 2E □□□ 071C42	E82MV 551_4B			
11	47	31	42	43	108	47	2.9	188	27	13.016	GST05 - 2E □□□ 071C42	E82MV 551_4B			

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 3-40 onwards														

P₁ = 0.55 kW

9.8	52	29	46	39	98	52	1.2	171	30	14.286	GST04 - 2E □□□ 071C42	E82MV 551_4B
9.8	52	28	46	39	98	52	2.7	170	30	14.356	GST05 - 2E □□□ 071C42	E82MV 551_4B
9.1	56	26	50	36	91	56	1.2	159	32	15.400	GST04 - 2E □□□ 071C42	E82MV 551_4B
8.7	59	25	52	35	87	59	2.5	151	34	16.190	GST05 - 2E □□□ 071C42	E82MV 551_4B
8.0	64	23	56	32	80	64	1.0	140	36	17.500	GST04 - 2E □□□ 071C42	E82MV 551_4B
8.0	64	23	56	32	80	64	2.2	140	36	17.500	GST05 - 2E □□□ 071C42	E82MV 551_4B
7.3	70	21	62	29	73	70	1.0	126	40	19.360	GST04 - 2E □□□ 071C42	E82MV 551_4B
7.0	73	20	65	28	70	73	2.2	122	42	20.044	GST05 - 2E □□□ 071C42	E82MV 551_4B
6.2	83	18	74	25	62	83	1.7	107	47	22.778	GST05 - 2E □□□ 071C42	E82MV 551_4B
5.6	90	16	80	23	56	90	1.8	98	52	24.933	GST05 - 2E □□□ 071C42	E82MV 551_4B
5.6	90	16	80	23	56	90	3.2	98	52	24.933	GST06 - 2E □□□ 071C42	E82MV 551_4B
5.0	103	14	91	20	50	103	1.4	86	59	28.333	GST05 - 2E □□□ 071C42	E82MV 551_4B
5.0	103	14	91	20	50	103	3.1	86	59	28.333	GST06 - 2E □□□ 071C42	E82MV 551_4B
4.4	117	13	104	17	44	117	1.4	76	67	32.267	GST05 - 2E □□□ 071C42	E82MV 551_4B
4.4	117	13	104	17	44	117	2.9	76	67	32.267	GST06 - 2E □□□ 071C42	E82MV 551_4B
3.8	133	11	118	15	38	133	1.1	67	76	36.667	GST05 - 2E □□□ 071C42	E82MV 551_4B
3.8	133	11	118	15	38	133	2.4	67	76	36.667	GST06 - 2E □□□ 071C42	E82MV 551_4B
3.6	142	10	126	14	36	142	1.2	62	82	39.160	GST05 - 2E □□□ 071C42	E82MV 551_4B
3.6	142	10	126	14	36	142	2.4	62	82	39.160	GST06 - 2E □□□ 071C42	E82MV 551_4B
3.2	161	9.2	144	13	32	161	0.9	55	93	44.500	GST05 - 2E □□□ 071C42	E82MV 551_4B
3.2	161	9.2	144	13	32	161	2.0	55	93	44.500	GST06 - 2E □□□ 071C42	E82MV 551_4B
2.8	180	8.2	160	11	28	180	1.4	49	103	49.500	GST06 - 2E □□□ 071C42	E82MV 551_4B
2.5	204	7.2	182	10	25	204	1.4	43	117	56.250	GST06 - 2E □□□ 071C42	E82MV 551_4B
2.1	242	6	215	8.3	21	242	1.5	36	139	67.760	GST06 - 3E □□□ 071C42	E82MV 551_4B
2.2	233	6.3	207	8.6	22	233	3.0	38	134	65.079	GST07 - 3E □□□ 071C42	E82MV 551_4B
2.0	251	5.8	223	8.0	20	251	1.4	35	144	70.156	GST06 - 3E □□□ 071C42	E82MV 551_4B
2.0	251	5.8	223	8.0	20	251	2.8	35	144	70.156	GST07 - 3E □□□ 071C42	E82MV 551_4B
1.7	289	5	257	7.0	17	289	1.1	30	166	80.952	GST06 - 3E □□□ 071C42	E82MV 551_4B
1.8	285	5.1	254	7.0	18	285	2.5	31	164	79.762	GST07 - 3E □□□ 071C42	E82MV 551_4B
1.6	312	4.7	277	6.4	16	312	1.2	28	179	87.267	GST06 - 3E □□□ 071C42	E82MV 551_4B
1.6	307	4.7	273	6.5	16	307	2.3	28	177	85.983	GST07 - 3E □□□ 071C42	E82MV 551_4B
1.4	354	4.1	315	5.7	14	354	0.9	25	204	99.167	GST06 - 3E □□□ 071C42	E82MV 551_4B
1.4	349	4.2	311	5.8	14	349	2.0	25	201	97.708	GST07 - 3E □□□ 071C42	E82MV 551_4B
1.3	392	3.7	349	5.1	13	392	1.0	22	225	109.707	GST06 - 3E □□□ 071C42	E82MV 551_4B
1.3	400	3.6	356	5.0	13	400	1.8	22	230	111.915	GST07 - 3E □□□ 071C42	E82MV 551_4B
1.1	454	3.2	404	4.4	11	454	1.6	19	261	127.176	GST07 - 3E □□□ 071C42	E82MV 551_4B
1.0	497	2.9	443	4.0	10	497	1.4	18	286	139.211	GST07 - 3E □□□ 071C42	E82MV 551_4B
1.0	505	2.9	449	4.0	9.9	505	3.2	17	290	141.289	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.9	565	2.6	503	3.6	8.9	565	1.3	15	325	158.194	GST07 - 3E □□□ 071C42	E82MV 551_4B
0.9	574	2.5	510	3.5	8.8	574	2.8	15	330	160.556	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.8	644	2.3	573	3.1	7.8	644	1.1	14	370	180.156	GST07 - 3E □□□ 071C42	E82MV 551_4B
0.8	653	2.2	581	3.1	7.7	653	2.5	13	375	182.844	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.7	731	2	651	2.7	6.9	731	1.0	12	420	204.722	GST07 - 3E □□□ 071C42	E82MV 551_4B
0.7	742	2	661	2.7	6.8	742	2.2	12	427	207.778	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.6	845	1.7	752	2.4	5.9	845	0.8	10	486	236.622	GST07 - 3E □□□ 071C42	E82MV 551_4B
0.6	845	1.7	752	2.4	5.9	845	1.9	10	486	236.622	GST09 - 3E □□□ 071C42	E82MV 551_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
										Dimensions see page 3-40 onwards			

P₁ = 0.55 kW

0.6	901	1.6	802	2.2	5.6	901	1.8	10	518	252.167	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.5	961	1.5	855	2.1	5.2	961	1.7	9	552	268.889	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.4	1166	1.2	1038	1.7	4.3	1166	1.4	7	670	326.333	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.4	1297	1.1	1154	1.5	3.9	1297	1.2	7	745	363.000	GST09 - 3E □□□ 071C42	E82MV 551_4B
0.3	1474	1	1312	1.4	3.4	1474	1.1	6	847	412.500	GST09 - 3E □□□ 071C42	E82MV 551_4B

P₁ = 0.75 kW

88	8	256	7.1	353	881	8	2.4	1533	4.6	1.600	GST04 - 1E □□□ 080C32	E82MV 751_4B
69	10	200	9.1	275	689	10	2.2	1198	5.9	2.048	GST04 - 1E □□□ 080C32	E82MV 751_4B
63	11	183	10	252	630	11	2.2	1095	6.4	2.240	GST04 - 1E □□□ 080C32	E82MV 751_4B
49	14	143	12.7	197	494	14	1.7	859	8.2	2.857	GST04 - 1E □□□ 080C32	E82MV 751_4B
40	18	117	16	161	403	18	1.4	701	10	3.500	GST04 - 1E □□□ 080C32	E82MV 751_4B
40	18	117	16	161	403	18	3.1	701	10	3.500	GST05 - 1E □□□ 080C32	E82MV 751_4B
32	22	93	20	128	321	22	1.1	558	13	4.400	GST04 - 1E □□□ 080C32	E82MV 751_4B
31	23	90	20	124	310	23	2.4	539	13	4.556	GST05 - 1E □□□ 080C32	E82MV 751_4B
25	28	72	25	100	249	28	0.9	433	16	5.667	GST04 - 1E □□□ 080C32	E82MV 751_4B
25	28	72	25	100	249	28	1.9	433	16	5.667	GST05 - 1E □□□ 080C32	E82MV 751_4B
25	28	72	25	100	249	28	2.9	433	16	5.667	GST06 - 1E □□□ 080C32	E82MV 751_4B
19	37	56	33	77	192	37	1.3	335	21	7.333	GST05 - 1E □□□ 080C32	E82MV 751_4B
19	37	56	33	77	192	37	2.6	335	21	7.333	GST06 - 1E □□□ 080C32	E82MV 751_4B
19	37	56	33	77	192	37	2.9	335	21	7.333	GST07 - 1E □□□ 080C32	E82MV 751_4B
16	45	46	40	63	158	45	0.9	276	26	8.900	GST05 - 1E □□□ 080C32	E82MV 751_4B
16	45	46	40	63	158	45	1.9	276	26	8.900	GST06 - 1E □□□ 080C32	E82MV 751_4B
16	45	46	40	63	158	45	2.5	276	26	8.900	GST07 - 1E □□□ 080C32	E82MV 751_4B
13	56	36	50	50	125	56	1.1	218	32	11.250	GST06 - 1E □□□ 080C32	E82MV 751_4B
13	56	36	50	50	125	56	2.0	218	32	11.250	GST07 - 1E □□□ 080C32	E82MV 751_4B
48	15	138	13	191	477	15	2.7	830	8.4	2.956	GST04 - 2E □□□ 080C32	E82MV 751_4B
42	16	123	14.6	169	423	16	2.5	736	9.4	3.333	GST04 - 2E □□□ 080C32	E82MV 751_4B
35	20	101	18	139	348	20	2.3	605	11	4.053	GST04 - 2E □□□ 080C32	E82MV 751_4B
31	23	89	20	123	308	23	2.1	537	13	4.571	GST04 - 2E □□□ 080C32	E82MV 751_4B
27	26	79	23	109	272	26	2.0	473	15	5.187	GST04 - 2E □□□ 080C32	E82MV 751_4B
24	29	70	26	96	241	29	1.8	419	17	5.850	GST04 - 2E □□□ 080C32	E82MV 751_4B
22	32	64	28	88	220	32	1.7	383	18	6.400	GST04 - 2E □□□ 080C32	E82MV 751_4B
20	35	58	31	80	200	35	1.6	348	20	7.040	GST04 - 2E □□□ 080C32	E82MV 751_4B
19	36	56	32	78	195	36	3.0	339	21	7.238	GST05 - 2E □□□ 080C32	E82MV 751_4B
18	39	51	35	71	176	39	1.5	307	23	8.000	GST04 - 2E □□□ 080C32	E82MV 751_4B
17	40	50	36	69	173	40	2.9	301	23	8.163	GST05 - 2E □□□ 080C32	E82MV 751_4B
16	44	45	40	63	157	44	1.4	272	26	9.010	GST04 - 2E □□□ 080C32	E82MV 751_4B
16	44	45	40	63	157	44	2.7	272	26	9.010	GST05 - 2E □□□ 080C32	E82MV 751_4B
14	49	41	43	57	143	49	1.3	249	28	9.856	GST04 - 2E □□□ 080C32	E82MV 751_4B
14	49	41	44	56	141	49	2.5	245	28	10.000	GST05 - 2E □□□ 080C32	E82MV 751_4B
13	55	37	49	50	126	55	1.1	219	32	11.200	GST04 - 2E □□□ 080C32	E82MV 751_4B
13	55	37	49	50	126	55	2.3	219	32	11.200	GST05 - 2E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 3-40 onwards														

P₁ = 0.75 kW

11	62	33	55	45	112	62	1.1	195	36	12.571	GST04 - 2E □□□ 080C32	E82MV 751_4B
11	64	31	57	43	108	64	2.1	188	37	13.016	GST05 - 2E □□□ 080C32	E82MV 751_4B
9.9	70	29	63	39	99	70	0.9	172	40	14.286	GST04 - 2E □□□ 080C32	E82MV 751_4B
9.8	71	28	63	39	98	71	2.0	171	41	14.356	GST05 - 2E □□□ 080C32	E82MV 751_4B
9.2	76	27	68	37	92	76	0.9	159	44	15.400	GST04 - 2E □□□ 080C32	E82MV 751_4B
8.7	80	25	71	35	87	80	1.9	152	46	16.190	GST05 - 2E □□□ 080C32	E82MV 751_4B
8.1	86	23	77	32	81	86	1.6	140	50	17.500	GST05 - 2E □□□ 080C32	E82MV 751_4B
7.0	99	20	88	28	70	99	1.6	122	57	20.044	GST05 - 2E □□□ 080C32	E82MV 751_4B
6.2	112	18	100	25	62	112	1.3	108	65	22.778	GST05 - 2E □□□ 080C32	E82MV 751_4B
6.2	112	18	100	25	62	112	2.8	108	65	22.778	GST06 - 2E □□□ 080C32	E82MV 751_4B
5.7	123	16	109	23	57	123	1.3	98	71	24.933	GST05 - 2E □□□ 080C32	E82MV 751_4B
5.7	123	16	109	23	57	123	2.9	98	71	24.933	GST06 - 2E □□□ 080C32	E82MV 751_4B
5.0	140	14	124	20	50	140	1.1	87	80	28.333	GST05 - 2E □□□ 080C32	E82MV 751_4B
5.0	140	14	124	20	50	140	2.3	87	80	28.333	GST06 - 2E □□□ 080C32	E82MV 751_4B
4.4	159	13	142	17	44	159	1.0	76	91	32.267	GST05 - 2E □□□ 080C32	E82MV 751_4B
4.4	159	13	142	17	44	159	2.3	76	91	32.267	GST06 - 2E □□□ 080C32	E82MV 751_4B
4.4	159	13	142	17	44	159	2.9	76	91	32.267	GST07 - 2E □□□ 080C32	E82MV 751_4B
3.9	181	11	161	15	39	181	0.8	67	104	36.667	GST05 - 2E □□□ 080C32	E82MV 751_4B
3.9	181	11	161	15	39	181	1.8	67	104	36.667	GST06 - 2E □□□ 080C32	E82MV 751_4B
3.9	181	11	161	15	39	181	2.9	67	104	36.667	GST07 - 2E □□□ 080C32	E82MV 751_4B
3.6	193	10	172	14	36	193	0.9	63	111	39.160	GST05 - 2E □□□ 080C32	E82MV 751_4B
3.6	193	10	172	14	36	193	1.9	63	111	39.160	GST06 - 2E □□□ 080C32	E82MV 751_4B
3.6	193	10	172	14	36	193	2.5	63	111	39.160	GST07 - 2E □□□ 080C32	E82MV 751_4B
3.2	219	9.2	195	13	32	219	1.5	55	126	44.500	GST06 - 2E □□□ 080C32	E82MV 751_4B
3.2	219	9.2	195	13	32	219	2.5	55	126	44.500	GST07 - 2E □□□ 080C32	E82MV 751_4B
2.9	244	8.3	217	11	29	244	1.1	50	140	49.500	GST06 - 2E □□□ 080C32	E82MV 751_4B
2.9	244	8.3	217	11	29	244	2.0	50	140	49.500	GST07 - 2E □□□ 080C32	E82MV 751_4B
2.5	277	7.3	247	10	25	277	1.1	44	159	56.250	GST06 - 2E □□□ 080C32	E82MV 751_4B
2.5	277	7.3	247	10	25	277	2.0	44	159	56.250	GST07 - 2E □□□ 080C32	E82MV 751_4B
2.1	329	6	293	8.3	21	329	1.1	36	189	67.760	GST06 - 3E □□□ 080C32	E82MV 751_4B
2.2	316	6.3	281	8.7	22	316	2.2	38	182	65.079	GST07 - 3E □□□ 080C32	E82MV 751_4B
2.0	341	5.8	303	8.0	20	341	1.1	35	196	70.156	GST06 - 3E □□□ 080C32	E82MV 751_4B
2.0	341	5.8	303	8.0	20	341	2.1	35	196	70.156	GST07 - 3E □□□ 080C32	E82MV 751_4B
1.7	393	5.1	350	7.0	17	393	0.8	30	226	80.952	GST06 - 3E □□□ 080C32	E82MV 751_4B
1.8	387	5.1	345	7.1	18	387	1.8	31	223	79.762	GST07 - 3E □□□ 080C32	E82MV 751_4B
1.6	424	4.7	377	6.5	16	424	0.9	28	243	87.267	GST06 - 3E □□□ 080C32	E82MV 751_4B
1.6	417	4.8	371	6.6	16	417	1.7	29	240	85.983	GST07 - 3E □□□ 080C32	E82MV 751_4B
1.4	474	4.2	422	5.8	14	474	1.5	25	273	97.708	GST07 - 3E □□□ 080C32	E82MV 751_4B
1.3	543	3.7	484	5.0	13	543	1.3	22	312	111.915	GST07 - 3E □□□ 080C32	E82MV 751_4B
1.2	551	3.6	491	5.0	12	551	2.9	22	317	113.585	GST09 - 3E □□□ 080C32	E82MV 751_4B
1.1	617	3.2	549	4.4	11	617	1.2	19	355	127.176	GST07 - 3E □□□ 080C32	E82MV 751_4B
1.1	627	3.2	558	4.4	11	627	2.6	19	360	129.074	GST09 - 3E □□□ 080C32	E82MV 751_4B
1.0	676	2.9	601	4.0	10	676	1.0	18	388	139.211	GST07 - 3E □□□ 080C32	E82MV 751_4B
1.0	686	2.9	610	4.0	10.0	686	2.4	17	394	141.289	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.9	768	2.6	683	3.6	8.9	768	0.9	16	441	158.194	GST07 - 3E □□□ 080C32	E82MV 751_4B
0.9	779	2.5	694	3.5	8.8	779	2.1	15	448	160.556	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.8	875	2.3	778	3.1	7.8	875	0.8	14	503	180.156	GST07 - 3E □□□ 080C32	E82MV 751_4B
0.8	888	2.2	790	3.1	7.7	888	1.8	13	510	182.844	GST09 - 3E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz	50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 3-40 onwards													

P₁ = 0.75 kW

0.7	1009	2	898	2.7	6.8	1009	1.6	12	580	207.778	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.7	1009	2	898	2.7	6.8	1009	2.8	12	580	207.778	GST11 - 3E □□□ 080C32	E82MV 751_4B
0.6	1149	1.7	1022	2.4	6.0	1149	1.4	10	660	236.622	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.6	1149	1.7	1022	2.4	6.0	1149	2.3	10	660	236.622	GST11 - 3E □□□ 080C32	E82MV 751_4B
0.6	1224	1.6	1089	2.2	5.6	1224	1.3	10	703	252.167	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.6	1224	1.6	1089	2.2	5.6	1224	2.3	10	703	252.167	GST11 - 3E □□□ 080C32	E82MV 751_4B
0.5	1305	1.5	1162	2.1	5.2	1305	1.2	9	750	268.889	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.5	1305	1.5	1162	2.1	5.2	1305	2.2	9	750	268.889	GST11 - 3E □□□ 080C32	E82MV 751_4B
0.4	1584	1.3	1410	1.7	4.3	1584	1.0	8	910	326.333	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.4	1584	1.3	1410	1.7	4.3	1584	1.8	8	910	326.333	GST11 - 3E □□□ 080C32	E82MV 751_4B
0.4	1762	1.1	1568	1.6	3.9	1762	0.9	7	1013	363.000	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.4	1762	1.1	1568	1.6	3.9	1762	1.5	7	1013	363.000	GST11 - 3E □□□ 080C32	E82MV 751_4B
0.3	2002	1	1782	1.4	3.4	2002	0.8	6	1151	412.500	GST09 - 3E □□□ 080C32	E82MV 751_4B
0.3	2002	1	1782	1.4	3.4	2002	1.4	6	1151	412.500	GST11 - 3E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				30 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
										Dimensions see page 3-40 onwards				

P₁ = 1.1 kW

87	12	252	10	521	869	12	1.6	1512	6.8	1.600	GST04 - 1E □□□ 080C42	E82MV 152_4B
68	15	197	12.8	407	679	15	1.5	1181	8.8	2.048	GST04 - 1E □□□ 080C42	E82MV 152_4B
62	17	180	14	372	621	17	1.5	1080	9.6	2.240	GST04 - 1E □□□ 080C42	E82MV 152_4B
62	17	180	14	372	621	17	3.2	1080	9.6	2.240	GST05 - 1E □□□ 080C42	E82MV 152_4B
49	21	141	18	292	487	21	1.2	847	12	2.857	GST04 - 1E □□□ 080C42	E82MV 152_4B
49	21	141	18	292	487	21	2.5	847	12	2.857	GST05 - 1E □□□ 080C42	E82MV 152_4B
40	26	115	22	238	397	26	1.0	691	15	3.500	GST04 - 1E □□□ 080C42	E82MV 152_4B
40	26	115	22	238	397	26	2.1	691	15	3.500	GST05 - 1E □□□ 080C42	E82MV 152_4B
31	34	88	28	183	305	34	1.6	531	19	4.556	GST05 - 1E □□□ 080C42	E82MV 152_4B
31	34	88	28	183	305	34	3.1	531	19	4.556	GST06 - 1E □□□ 080C42	E82MV 152_4B
25	42	71	35	147	245	42	1.3	427	24	5.667	GST05 - 1E □□□ 080C42	E82MV 152_4B
25	42	71	35	147	245	42	2.5	427	24	5.667	GST06 - 1E □□□ 080C42	E82MV 152_4B
25	42	72	35	149	249	42	3.1	433	24	5.583	GST07 - 1E □□□ 080C42	E82MV 152_4B
19	55	55	46	114	190	55	1.8	330	31	7.333	GST06 - 1E □□□ 080C42	E82MV 152_4B
19	55	55	46	114	190	55	2.9	330	31	7.333	GST07 - 1E □□□ 080C42	E82MV 152_4B
16	66	45	56	94	156	66	1.3	272	38	8.900	GST06 - 1E □□□ 080C42	E82MV 152_4B
16	66	45	56	94	156	66	2.3	272	38	8.900	GST07 - 1E □□□ 080C42	E82MV 152_4B
12	84	36	70	74	124	84	1.4	215	48	11.250	GST07 - 1E □□□ 080C42	E82MV 152_4B
47	22	136	18	282	470	22	1.8	818	12	2.956	GST04 - 2E □□□ 080C42	E82MV 152_4B
47	22	136	18	282	470	22	2.9	818	12	2.956	GST05 - 2E □□□ 080C42	E82MV 152_4B
42	24	121	21	250	417	24	1.7	726	14	3.333	GST04 - 2E □□□ 080C42	E82MV 152_4B
42	24	121	21	250	417	24	3.2	726	14	3.333	GST05 - 2E □□□ 080C42	E82MV 152_4B
34	30	99	25	206	343	30	1.5	597	17	4.053	GST04 - 2E □□□ 080C42	E82MV 152_4B
34	30	99	25	206	343	30	2.7	597	17	4.053	GST05 - 2E □□□ 080C42	E82MV 152_4B
30	34	88	28	182	304	34	1.4	529	19	4.571	GST04 - 2E □□□ 080C42	E82MV 152_4B
30	34	88	28	182	304	34	2.7	529	19	4.571	GST05 - 2E □□□ 080C42	E82MV 152_4B
27	38	78	32	161	268	38	1.3	466	22	5.187	GST04 - 2E □□□ 080C42	E82MV 152_4B
27	38	78	32	161	268	38	2.4	466	22	5.187	GST05 - 2E □□□ 080C42	E82MV 152_4B
24	43	69	36	143	238	43	1.2	413	25	5.850	GST04 - 2E □□□ 080C42	E82MV 152_4B
24	43	69	36	143	238	43	2.4	413	25	5.850	GST05 - 2E □□□ 080C42	E82MV 152_4B
22	47	63	39	130	217	47	1.2	378	27	6.400	GST04 - 2E □□□ 080C42	E82MV 152_4B
22	47	63	39	130	217	47	2.2	378	27	6.400	GST05 - 2E □□□ 080C42	E82MV 152_4B
20	52	57	43	118	197	52	1.1	344	30	7.040	GST04 - 2E □□□ 080C42	E82MV 152_4B
19	53	56	45	115	192	53	2.0	334	30	7.238	GST05 - 2E □□□ 080C42	E82MV 152_4B
17	59	50	49	104	174	59	1.0	302	34	8.000	GST04 - 2E □□□ 080C42	E82MV 152_4B
17	60	49	50	102	170	60	1.9	296	34	8.163	GST05 - 2E □□□ 080C42	E82MV 152_4B
15	66	45	55	93	154	66	0.9	268	38	9.010	GST04 - 2E □□□ 080C42	E82MV 152_4B
15	66	45	55	93	154	66	1.8	268	38	9.010	GST05 - 2E □□□ 080C42	E82MV 152_4B
14	72	41	61	85	141	72	0.9	245	42	9.856	GST04 - 2E □□□ 080C42	E82MV 152_4B
14	73	40	62	83	139	73	1.7	242	42	10.000	GST05 - 2E □□□ 080C42	E82MV 152_4B
12	82	36	69	74	124	82	1.6	216	47	11.200	GST05 - 2E □□□ 080C42	E82MV 152_4B
11	95	31	80	64	107	95	1.4	186	55	13.016	GST05 - 2E □□□ 080C42	E82MV 152_4B
11	92	32	77	66	111	92	3.2	192	53	12.571	GST06 - 2E □□□ 080C42	E82MV 152_4B
9.7	105	28	88	58	97	105	1.3	168	60	14.356	GST05 - 2E □□□ 080C42	E82MV 152_4B
9.7	105	28	88	58	97	105	2.9	169	60	14.286	GST06 - 2E □□□ 080C42	E82MV 152_4B
8.6	119	25	100	52	86	119	1.3	149	68	16.190	GST05 - 2E □□□ 080C42	E82MV 152_4B
9.0	113	26	95	54	90	113	2.8	157	65	15.400	GST06 - 2E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan								Motor cooling with integral fan											
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Helical geared motor			8200 motec		Dimensions see page 3-40 onwards			
n ₂	M ₂	n ₂	M ₂	n ₂ 30 Hz	n ₂ 50 Hz	M ₂	c 50 Hz	n ₂	M ₂										
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]										
P ₁ = 1.1 kW																			
7.9	128	23	108	48	79	128	1.1	138	74	17.500	GST05 - 2E □□□ 080C42	E82MV 152_4B							
7.9	128	23	108	48	79	128	2.4	138	74	17.500	GST06 - 2E □□□ 080C42	E82MV 152_4B							
6.9	147	20	123	42	69	147	1.1	121	84	20.044	GST05 - 2E □□□ 080C42	E82MV 152_4B							
6.9	147	20	123	42	69	147	2.4	121	84	20.044	GST06 - 2E □□□ 080C42	E82MV 152_4B							
6.1	167	18	140	37	61	167	0.9	106	96	22.778	GST05 - 2E □□□ 080C42	E82MV 152_4B							
6.1	167	18	140	37	61	167	1.9	106	96	22.778	GST06 - 2E □□□ 080C42	E82MV 152_4B							
5.6	183	16	154	33	56	183	0.9	97	105	24.933	GST05 - 2E □□□ 080C42	E82MV 152_4B							
5.6	183	16	154	33	56	183	2.0	97	105	24.933	GST06 - 2E □□□ 080C42	E82MV 152_4B							
5.7	180	16	151	34	57	180	3.1	98	104	24.567	GST07 - 2E □□□ 080C42	E82MV 152_4B							
4.9	208	14	175	29	49	208	1.5	85	119	28.333	GST06 - 2E □□□ 080C42	E82MV 152_4B							
5.0	205	14	172	30	50	205	3.1	87	118	27.917	GST07 - 2E □□□ 080C42	E82MV 152_4B							
4.3	237	12	199	26	43	237	1.5	75	136	32.267	GST06 - 2E □□□ 080C42	E82MV 152_4B							
4.3	237	12	199	26	43	237	2.9	75	136	32.267	GST07 - 2E □□□ 080C42	E82MV 152_4B							
3.8	269	11	226	23	38	269	1.2	66	155	36.667	GST06 - 2E □□□ 080C42	E82MV 152_4B							
3.8	269	11	226	23	38	269	2.6	66	155	36.667	GST07 - 2E □□□ 080C42	E82MV 152_4B							
3.6	287	10	241	21	36	287	1.3	62	165	39.160	GST06 - 2E □□□ 080C42	E82MV 152_4B							
3.6	287	10	241	21	36	287	2.3	62	165	39.160	GST07 - 2E □□□ 080C42	E82MV 152_4B							
3.1	326	9.1	274	19	31	326	1.0	54	188	44.500	GST06 - 2E □□□ 080C42	E82MV 152_4B							
3.1	326	9.1	274	19	31	326	2.2	54	188	44.500	GST07 - 2E □□□ 080C42	E82MV 152_4B							
2.8	363	8.1	305	17	28	363	1.4	49	209	49.500	GST07 - 2E □□□ 080C42	E82MV 152_4B							
2.5	412	7.2	346	15	25	412	1.4	43	237	56.250	GST07 - 2E □□□ 080C42	E82MV 152_4B							
2.4	419	7	352	14	24	419	4.5	42	241	57.968	GST11 - 3E □□□ 080C42	E82MV 152_4B							
2.1	470	6.2	395	13	21	470	1.5	37	270	65.079	GST07 - 3E □□□ 080C42	E82MV 152_4B							
2.0	507	5.7	426	12	20	507	1.4	34	291	70.156	GST07 - 3E □□□ 080C42	E82MV 152_4B							
1.9	519	5.6	436	12	19	519	2.8	34	298	71.867	GST09 - 3E □□□ 080C42	E82MV 152_4B							
1.7	576	5.1	484	10	17	576	1.2	30	331	79.762	GST07 - 3E □□□ 080C42	E82MV 152_4B							
1.7	590	4.9	495	10	17	590	2.7	30	339	81.667	GST09 - 3E □□□ 080C42	E82MV 152_4B							
1.6	621	4.7	522	9.7	16	621	1.1	28	357	85.983	GST07 - 3E □□□ 080C42	E82MV 152_4B							
1.5	676	4.3	567	8.9	15	676	2.4	26	388	93.541	GST09 - 3E □□□ 080C42	E82MV 152_4B							
1.4	706	4.1	593	8.5	14	706	1.0	25	406	97.708	GST07 - 3E □□□ 080C42	E82MV 152_4B							
1.4	716	4.1	602	8.4	14	716	2.2	24	412	99.167	GST09 - 3E □□□ 080C42	E82MV 152_4B							
1.2	808	3.6	679	7.4	12	808	0.9	22	465	111.915	GST07 - 3E □□□ 080C42	E82MV 152_4B							
1.2	820	3.5	689	7.3	12	820	2.0	21	471	113.585	GST09 - 3E □□□ 080C42	E82MV 152_4B							
1.1	932	3.1	783	6.5	11	932	1.7	19	536	129.074	GST09 - 3E □□□ 080C42	E82MV 152_4B							
1.1	932	3.1	783	6.5	11	932	3.0	19	536	129.074	GST11 - 3E □□□ 080C42	E82MV 152_4B							
1.0	1020	2.9	857	5.9	9.8	1020	1.6	17	586	141.289	GST09 - 3E □□□ 080C42	E82MV 152_4B							
0.9	1062	2.7	892	5.7	9.5	1062	2.5	16	610	146.993	GST11 - 3E □□□ 080C42	E82MV 152_4B							
0.9	1160	2.5	974	5.2	8.7	1160	1.4	15	666	160.556	GST09 - 3E □□□ 080C42	E82MV 152_4B							
0.9	1143	2.5	960	5.3	8.8	1143	2.5	15	657	158.194	GST11 - 3E □□□ 080C42	E82MV 152_4B							
0.8	1321	2.2	1109	4.6	7.6	1321	1.2	13	759	182.844	GST09 - 3E □□□ 080C42	E82MV 152_4B							
0.8	1301	2.2	1093	4.6	7.7	1301	2.1	13	748	180.156	GST11 - 3E □□□ 080C42	E82MV 152_4B							
0.7	1501	1.9	1260	4.0	6.7	1501	1.1	12	862	207.778	GST09 - 3E □□□ 080C42	E82MV 152_4B							
0.7	1501	1.9	1260	4.0	6.7	1501	1.9	12	862	207.778	GST11 - 3E □□□ 080C42	E82MV 152_4B							
0.6	1709	1.7	1435	3.5	5.9	1709	0.9	10	982	236.622	GST09 - 3E □□□ 080C42	E82MV 152_4B							
0.6	1709	1.7	1435	3.5	5.9	1709	1.6	10	982	236.622	GST11 - 3E □□□ 080C42	E82MV 152_4B							
0.6	1821	1.6	1530	3.3	5.5	1821	0.9	10	1047	252.167	GST09 - 3E □□□ 080C42	E82MV 152_4B							
0.6	1821	1.6	1530	3.3	5.5	1821	1.5	10	1047	252.167	GST11 - 3E □□□ 080C42	E82MV 152_4B							

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	30 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			

P ₁ = 1.1 kW												
0.5	1942	1.5	1631	3.1	5.2	1942	0.8	9	1116	268.889	GST09 - 3E □□□ 080C42	E82MV 152_4B
0.5	1942	1.5	1631	3.1	5.2	1942	1.5	9	1116	268.889	GST11 - 3E □□□ 080C42	E82MV 152_4B
0.4	2357	1.2	1980	2.6	4.3	2357	1.2	7	1354	326.333	GST11 - 3E □□□ 080C42	E82MV 152_4B
0.4	2622	1.1	2202	2.3	3.8	2622	1.0	7	1507	363.000	GST11 - 3E □□□ 080C42	E82MV 152_4B
0.3	2979	1	2502	2.0	3.4	2979	1.0	6	1712	412.500	GST11 - 3E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
				20 Hz	50 Hz		50 Hz					
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 3-40 onwards												

P₁ = 1.5 kW

87	16	252	14.5	348	869	16	1.2	1512	9.3	1.600	GST04 - 1E □□□ 090C32	E82MV 152_4B
87	16	252	14.5	348	869	16	2.8	1512	9.3	1.600	GST05 - 1E □□□ 090C32	E82MV 152_4B
68	21	197	18	272	679	21	1.1	1181	12	2.048	GST04 - 1E □□□ 090C32	E82MV 152_4B
68	21	197	18	272	679	21	2.5	1181	12	2.048	GST05 - 1E □□□ 090C32	E82MV 152_4B
62	23	180	20	248	621	23	1.1	1080	13	2.240	GST04 - 1E □□□ 090C32	E82MV 152_4B
62	23	180	20	248	621	23	2.3	1080	13	2.240	GST05 - 1E □□□ 090C32	E82MV 152_4B
49	29	141	26	195	487	29	0.9	847	17	2.857	GST04 - 1E □□□ 090C32	E82MV 152_4B
49	29	141	26	195	487	29	1.8	847	17	2.857	GST05 - 1E □□□ 090C32	E82MV 152_4B
49	29	141	26	195	487	29	3.2	847	17	2.857	GST06 - 1E □□□ 090C32	E82MV 152_4B
40	36	115	32	159	397	36	1.5	691	20	3.500	GST05 - 1E □□□ 090C32	E82MV 152_4B
40	36	115	32	159	397	36	2.9	691	20	3.500	GST06 - 1E □□□ 090C32	E82MV 152_4B
31	46	88	41	122	305	46	1.2	531	27	4.556	GST05 - 1E □□□ 090C32	E82MV 152_4B
31	46	88	41	122	305	46	2.3	531	27	4.556	GST06 - 1E □□□ 090C32	E82MV 152_4B
25	58	71	51	98	245	58	0.9	427	33	5.667	GST05 - 1E □□□ 090C32	E82MV 152_4B
25	58	71	51	98	245	58	1.8	427	33	5.667	GST06 - 1E □□□ 090C32	E82MV 152_4B
25	57	72	50	100	249	57	2.8	433	33	5.583	GST07 - 1E □□□ 090C32	E82MV 152_4B
19	74	55	66	76	190	74	1.3	330	43	7.333	GST06 - 1E □□□ 090C32	E82MV 152_4B
19	74	55	66	76	190	74	2.4	330	43	7.333	GST07 - 1E □□□ 090C32	E82MV 152_4B
19	74	55	66	76	190	74	2.8	330	43	7.333	GST09 - 1E □□□ 090C32	E82MV 152_4B
16	90	45	80	62	156	90	0.9	272	52	8.900	GST06 - 1E □□□ 090C32	E82MV 152_4B
16	90	45	80	62	156	90	2.0	272	52	8.900	GST07 - 1E □□□ 090C32	E82MV 152_4B
16	90	45	80	62	156	90	2.5	272	52	8.900	GST09 - 1E □□□ 090C32	E82MV 152_4B
12	114	36	102	49	124	114	1.2	215	66	11.250	GST07 - 1E □□□ 090C32	E82MV 152_4B
12	114	36	102	49	124	114	1.9	215	66	11.250	GST09 - 1E □□□ 090C32	E82MV 152_4B
47	30	136	26	188	470	30	1.3	818	17	2.956	GST04 - 2E □□□ 090C32	E82MV 152_4B
47	30	136	26	188	470	30	2.1	818	17	2.956	GST05 - 2E □□□ 090C32	E82MV 152_4B
42	33	121	30	167	417	33	1.3	726	19	3.333	GST04 - 2E □□□ 090C32	E82MV 152_4B
42	33	121	30	167	417	33	2.3	726	19	3.333	GST05 - 2E □□□ 090C32	E82MV 152_4B
34	41	99	36	137	343	41	1.1	597	23	4.053	GST04 - 2E □□□ 090C32	E82MV 152_4B
34	41	99	36	137	343	41	2.0	597	23	4.053	GST05 - 2E □□□ 090C32	E82MV 152_4B
30	46	88	41	122	304	46	1.1	529	26	4.571	GST04 - 2E □□□ 090C32	E82MV 152_4B
30	46	88	41	122	304	46	2.0	529	26	4.571	GST05 - 2E □□□ 090C32	E82MV 152_4B
27	52	78	46	107	268	52	1.0	466	30	5.187	GST04 - 2E □□□ 090C32	E82MV 152_4B
27	52	78	46	107	268	52	1.7	466	30	5.187	GST05 - 2E □□□ 090C32	E82MV 152_4B
24	59	69	52	95	238	59	0.9	413	34	5.850	GST04 - 2E □□□ 090C32	E82MV 152_4B
24	59	69	52	95	238	59	1.7	413	34	5.850	GST05 - 2E □□□ 090C32	E82MV 152_4B
22	64	63	57	87	217	64	0.9	378	37	6.400	GST04 - 2E □□□ 090C32	E82MV 152_4B
22	64	63	57	87	217	64	1.6	378	37	6.400	GST05 - 2E □□□ 090C32	E82MV 152_4B
20	70	57	63	79	197	70	0.8	344	40	7.040	GST04 - 2E □□□ 090C32	E82MV 152_4B
19	72	56	64	77	192	72	1.5	334	42	7.238	GST05 - 2E □□□ 090C32	E82MV 152_4B
17	82	49	73	68	170	82	1.4	296	47	8.163	GST05 - 2E □□□ 090C32	E82MV 152_4B
17	82	49	73	68	170	82	3.1	296	47	8.163	GST06 - 2E □□□ 090C32	E82MV 152_4B
15	90	45	80	62	154	90	1.3	268	52	9.010	GST05 - 2E □□□ 090C32	E82MV 152_4B
15	90	45	80	62	154	90	2.9	268	52	9.010	GST06 - 2E □□□ 090C32	E82MV 152_4B
14	100	40	89	56	139	100	1.2	242	57	10.000	GST05 - 2E □□□ 090C32	E82MV 152_4B
14	100	40	89	56	139	100	2.7	242	57	10.000	GST06 - 2E □□□ 090C32	E82MV 152_4B
12	112	36	100	50	124	112	1.1	216	64	11.200	GST05 - 2E □□□ 090C32	E82MV 152_4B
12	112	36	100	50	124	112	2.5	216	64	11.200	GST06 - 2E □□□ 090C32	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 3-40 onwards														

P₁ = 1.5 kW

11	130	31	116	43	107	130	1.1	186	75	13.016	GST05 - 2E □□□ 090C32	E82MV 152_4B
11	126	32	112	44	111	126	2.3	192	72	12.571	GST06 - 2E □□□ 090C32	E82MV 152_4B
9.7	144	28	128	39	97	144	1.0	168	82	14.356	GST05 - 2E □□□ 090C32	E82MV 152_4B
9.7	143	28	127	39	97	143	2.1	169	82	14.286	GST06 - 2E □□□ 090C32	E82MV 152_4B
8.6	162	25	144	34	86	162	0.9	149	93	16.190	GST05 - 2E □□□ 090C32	E82MV 152_4B
9.0	154	26	137	36	90	154	2.1	157	88	15.400	GST06 - 2E □□□ 090C32	E82MV 152_4B
7.9	175	23	156	32	79	175	0.8	138	101	17.500	GST05 - 2E □□□ 090C32	E82MV 152_4B
7.9	175	23	156	32	79	175	1.8	138	101	17.500	GST06 - 2E □□□ 090C32	E82MV 152_4B
6.9	200	20	178	28	69	200	1.7	121	115	20.044	GST06 - 2E □□□ 090C32	E82MV 152_4B
6.1	228	18	203	24	61	228	1.4	106	131	22.778	GST06 - 2E □□□ 090C32	E82MV 152_4B
6.1	228	18	203	24	61	228	3.0	106	131	22.778	GST07 - 2E □□□ 090C32	E82MV 152_4B
5.6	249	16	222	22	56	249	1.4	97	143	24.933	GST06 - 2E □□□ 090C32	E82MV 152_4B
5.7	246	16	219	23	57	246	2.8	98	141	24.567	GST07 - 2E □□□ 090C32	E82MV 152_4B
4.9	283	14	252	20	49	283	1.1	85	163	28.333	GST06 - 2E □□□ 090C32	E82MV 152_4B
5.0	279	14	248	20	50	279	2.5	87	160	27.917	GST07 - 2E □□□ 090C32	E82MV 152_4B
4.3	323	12	287	17	43	323	1.1	75	185	32.267	GST06 - 2E □□□ 090C32	E82MV 152_4B
4.3	323	12	287	17	43	323	2.2	75	185	32.267	GST07 - 2E □□□ 090C32	E82MV 152_4B
4.3	323	12	287	17	43	323	2.8	75	185	32.267	GST09 - 2E □□□ 090C32	E82MV 152_4B
3.8	367	11	326	15	38	367	0.9	66	211	36.667	GST06 - 2E □□□ 090C32	E82MV 152_4B
3.8	367	11	326	15	38	367	1.9	66	211	36.667	GST07 - 2E □□□ 090C32	E82MV 152_4B
3.8	367	11	326	15	38	367	2.8	66	211	36.667	GST09 - 2E □□□ 090C32	E82MV 152_4B
3.6	392	10	348	14	36	392	0.9	62	225	39.160	GST06 - 2E □□□ 090C32	E82MV 152_4B
3.6	392	10	348	14	36	392	1.8	62	225	39.160	GST07 - 2E □□□ 090C32	E82MV 152_4B
3.6	392	10	348	14	36	392	2.5	62	225	39.160	GST09 - 2E □□□ 090C32	E82MV 152_4B
3.1	445	9.1	396	12	31	445	1.6	54	256	44.500	GST07 - 2E □□□ 090C32	E82MV 152_4B
3.1	445	9.1	396	12	31	445	2.5	54	256	44.500	GST09 - 2E □□□ 090C32	E82MV 152_4B
2.8	495	8.1	440	11	28	495	1.2	49	284	49.500	GST07 - 2E □□□ 090C32	E82MV 152_4B
2.8	495	8.1	440	11	28	495	1.9	49	284	49.500	GST09 - 2E □□□ 090C32	E82MV 152_4B
2.5	562	7.2	501	9.9	25	562	1.2	43	323	56.250	GST07 - 2E □□□ 090C32	E82MV 152_4B
2.5	562	7.2	501	9.9	25	562	1.9	43	323	56.250	GST09 - 2E □□□ 090C32	E82MV 152_4B
2.4	571	7	508	9.6	24	571	4.1	42	328	57.968	GST11 - 3E □□□ 090C32	E82MV 152_4B
2.1	641	6.2	570	8.6	21	641	1.1	37	368	65.079	GST07 - 3E □□□ 090C32	E82MV 152_4B
2.3	594	6.7	528	9.2	23	594	2.6	40	341	60.278	GST09 - 3E □□□ 090C32	E82MV 152_4B
2.0	691	5.7	615	7.9	20	691	1.0	34	397	70.156	GST07 - 3E □□□ 090C32	E82MV 152_4B
1.9	708	5.6	630	7.7	19	708	2.1	34	407	71.867	GST09 - 3E □□□ 090C32	E82MV 152_4B
1.7	786	5.1	699	7.0	17	786	0.9	30	451	79.762	GST07 - 3E □□□ 090C32	E82MV 152_4B
1.7	804	4.9	716	6.8	17	804	2.0	30	462	81.667	GST09 - 3E □□□ 090C32	E82MV 152_4B
1.6	847	4.7	754	6.5	16	847	0.8	28	487	85.983	GST07 - 3E □□□ 090C32	E82MV 152_4B
1.5	921	4.3	820	6.0	15	921	1.8	26	529	93.541	GST09 - 3E □□□ 090C32	E82MV 152_4B
1.4	977	4.1	869	5.6	14	977	1.6	24	561	99.167	GST09 - 3E □□□ 090C32	E82MV 152_4B
1.2	1119	3.5	996	4.9	12	1119	1.4	21	643	113.585	GST09 - 3E □□□ 090C32	E82MV 152_4B
1.1	1271	3.1	1131	4.3	11	1271	1.3	19	731	129.074	GST09 - 3E □□□ 090C32	E82MV 152_4B
1.1	1271	3.1	1131	4.3	11	1271	2.2	19	731	129.074	GST11 - 3E □□□ 090C32	E82MV 152_4B
1.0	1391	2.9	1238	3.9	9.8	1391	1.2	17	800	141.289	GST09 - 3E □□□ 090C32	E82MV 152_4B
0.9	1448	2.7	1288	3.8	9.5	1448	1.9	16	832	146.993	GST11 - 3E □□□ 090C32	E82MV 152_4B
0.9	1581	2.5	1407	3.5	8.7	1581	1.0	15	909	160.556	GST09 - 3E □□□ 090C32	E82MV 152_4B
0.9	1558	2.5	1387	3.5	8.8	1558	1.8	15	895	158.194	GST11 - 3E □□□ 090C32	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 3-40 onwards												

P₁ = 1.5 kW

0.8	1801	2.2	1603	3.0	7.6	1801	0.9	13	1035	182.844	GST09 - 3E □□□ 090C32	E82MV 152_4B
0.8	1774	2.2	1579	3.1	7.7	1774	1.5	13	1020	180.156	GST11 - 3E □□□ 090C32	E82MV 152_4B
0.7	2046	1.9	1821	2.7	6.7	2046	1.4	12	1176	207.778	GST11 - 3E □□□ 090C32	E82MV 152_4B
0.7	2016	2	1794	2.7	6.8	2016	2.8	12	1159	204.722	GST14 - 3E □□□ 090C32	E82MV 152_4B
0.6	2330	1.7	2074	2.3	5.9	2330	1.2	10	1339	236.622	GST11 - 3E □□□ 090C32	E82MV 152_4B
0.6	2330	1.7	2074	2.3	5.9	2330	2.5	10	1339	236.622	GST14 - 3E □□□ 090C32	E82MV 152_4B
0.6	2483	1.6	2210	2.2	5.5	2483	1.1	10	1427	252.167	GST11 - 3E □□□ 090C32	E82MV 152_4B
0.6	2447	1.6	2178	2.2	5.6	2447	2.4	10	1406	248.458	GST14 - 3E □□□ 090C32	E82MV 152_4B
0.5	2648	1.5	2357	2.1	5.2	2648	1.1	9	1522	268.889	GST11 - 3E □□□ 090C32	E82MV 152_4B
0.5	2648	1.5	2357	2.1	5.2	2648	2.2	9	1522	268.889	GST14 - 3E □□□ 090C32	E82MV 152_4B
0.4	3214	1.2	2860	1.7	4.3	3214	0.9	7	1847	326.333	GST11 - 3E □□□ 090C32	E82MV 152_4B
0.4	3214	1.2	2860	1.7	4.3	3214	1.8	7	1847	326.333	GST14 - 3E □□□ 090C32	E82MV 152_4B
0.4	3575	1.1	3182	1.5	3.8	3575	1.6	7	2055	363.000	GST14 - 3E □□□ 090C32	E82MV 152_4B
0.3	4062	1	3616	1.3	3.4	4062	1.5	6	2335	412.500	GST14 - 3E □□□ 090C32	E82MV 152_4B

P₁ = 2.2 kW

90	23	261	20	360	900	23	1.9	1566	13	1.600	GST05 - 1E □□□ 100C12	E82MV 222_4B
90	23	261	20	360	900	23	2.7	1566	13	1.600	GST06 - 1E □□□ 100C12	E82MV 222_4B
70	29	204	26	281	703	29	1.8	1224	17	2.048	GST05 - 1E □□□ 100C12	E82MV 222_4B
70	29	204	26	281	703	29	2.5	1224	17	2.048	GST06 - 1E □□□ 100C12	E82MV 222_4B
64	32	186	29	257	643	32	1.6	1119	18	2.240	GST05 - 1E □□□ 100C12	E82MV 222_4B
64	32	186	29	257	643	32	2.4	1119	18	2.240	GST06 - 1E □□□ 100C12	E82MV 222_4B
50	41	146	37	202	504	41	1.3	877	24	2.857	GST05 - 1E □□□ 100C12	E82MV 222_4B
50	41	146	37	202	504	41	2.3	877	24	2.857	GST06 - 1E □□□ 100C12	E82MV 222_4B
41	50	119	45	165	411	50	1.1	716	29	3.500	GST05 - 1E □□□ 100C12	E82MV 222_4B
41	50	119	45	165	411	50	2.1	716	29	3.500	GST06 - 1E □□□ 100C12	E82MV 222_4B
32	66	92	58	126	316	66	1.6	550	38	4.556	GST06 - 1E □□□ 100C12	E82MV 222_4B
32	66	92	58	126	316	66	2.8	550	38	4.556	GST07 - 1E □□□ 100C12	E82MV 222_4B
25	81	74	72	102	254	81	1.3	442	47	5.667	GST06 - 1E □□□ 100C12	E82MV 222_4B
26	80	75	71	103	258	80	2.4	449	46	5.583	GST07 - 1E □□□ 100C12	E82MV 222_4B
20	105	57	94	79	196	105	1.9	342	61	7.333	GST07 - 1E □□□ 100C12	E82MV 222_4B
20	105	57	94	79	196	105	2.8	342	61	7.333	GST09 - 1E □□□ 100C12	E82MV 222_4B
16	128	47	114	65	162	128	1.4	282	74	8.900	GST07 - 1E □□□ 100C12	E82MV 222_4B
16	128	47	114	65	162	128	2.3	282	74	8.900	GST09 - 1E □□□ 100C12	E82MV 222_4B
13	162	37	144	51	128	162	1.8	223	93	11.250	GST09 - 1E □□□ 100C12	E82MV 222_4B
49	42	141	37	195	487	42	1.5	848	24	2.956	GST05 - 2E □□□ 100C12	E82MV 222_4B
43	47	125	42	173	432	47	1.7	752	27	3.333	GST05 - 2E □□□ 100C12	E82MV 222_4B
36	57	103	51	142	355	57	1.4	618	33	4.053	GST05 - 2E □□□ 100C12	E82MV 222_4B
35	59	100	52	138	346	59	3.2	602	34	4.160	GST06 - 2E □□□ 100C12	E82MV 222_4B
32	65	91	58	126	315	65	1.4	548	37	4.571	GST05 - 2E □□□ 100C12	E82MV 222_4B
32	65	91	58	126	315	65	3.1	548	37	4.571	GST06 - 2E □□□ 100C12	E82MV 222_4B
28	73	81	65	111	278	73	1.2	483	42	5.187	GST05 - 2E □□□ 100C12	E82MV 222_4B
27	75	78	67	108	271	75	2.8	471	43	5.324	GST06 - 2E □□□ 100C12	E82MV 222_4B
25	83	71	74	98	246	83	1.2	428	48	5.850	GST05 - 2E □□□ 100C12	E82MV 222_4B
25	83	71	74	98	246	83	2.7	428	48	5.850	GST06 - 2E □□□ 100C12	E82MV 222_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 3-40 onwards														

P₁ = 2.2 kW

23	91	65	81	90	225	91	1.2	392	52	6.400	GST05 - 2E □□□ 100C12	E82MV 222_4B
23	91	65	81	90	225	91	2.5	392	52	6.400	GST06 - 2E □□□ 100C12	E82MV 222_4B
20	103	58	91	80	199	103	1.1	346	59	7.238	GST05 - 2E □□□ 100C12	E82MV 222_4B
20	100	59	89	82	205	100	2.4	356	57	7.040	GST06 - 2E □□□ 100C12	E82MV 222_4B
18	116	51	103	71	176	116	1.0	307	66	8.163	GST05 - 2E □□□ 100C12	E82MV 222_4B
18	116	51	103	71	176	116	2.2	307	66	8.163	GST06 - 2E □□□ 100C12	E82MV 222_4B
16	128	46	114	64	160	128	0.9	278	73	9.010	GST05 - 2E □□□ 100C12	E82MV 222_4B
16	128	46	114	64	160	128	2.0	278	73	9.010	GST06 - 2E □□□ 100C12	E82MV 222_4B
14	142	42	126	58	144	142	0.9	251	81	10.000	GST05 - 2E □□□ 100C12	E82MV 222_4B
14	142	42	126	58	144	142	1.9	251	81	10.000	GST06 - 2E □□□ 100C12	E82MV 222_4B
13	159	37	141	51	129	159	0.8	224	91	11.200	GST05 - 2E □□□ 100C12	E82MV 222_4B
13	159	37	141	51	129	159	1.8	224	91	11.200	GST06 - 2E □□□ 100C12	E82MV 222_4B
11	178	33	158	46	115	178	1.7	199	102	12.571	GST06 - 2E □□□ 100C12	E82MV 222_4B
10	202	29	180	40	101	202	1.5	175	116	14.286	GST06 - 2E □□□ 100C12	E82MV 222_4B
10	202	29	180	40	101	202	3.2	175	116	14.286	GST07 - 2E □□□ 100C12	E82MV 222_4B
9.4	218	27	194	37	94	218	1.5	163	125	15.400	GST06 - 2E □□□ 100C12	E82MV 222_4B
9.4	218	27	194	37	94	218	3.0	163	125	15.400	GST07 - 2E □□□ 100C12	E82MV 222_4B
8.2	248	24	220	33	82	248	1.3	143	142	17.500	GST06 - 2E □□□ 100C12	E82MV 222_4B
8.2	248	24	220	33	82	248	2.7	143	142	17.500	GST07 - 2E □□□ 100C12	E82MV 222_4B
7.2	284	21	253	29	72	284	1.2	125	163	20.044	GST06 - 2E □□□ 100C12	E82MV 222_4B
7.2	284	21	253	29	72	284	2.4	125	163	20.044	GST07 - 2E □□□ 100C12	E82MV 222_4B
6.3	322	18	287	25	63	322	1.0	110	185	22.778	GST06 - 2E □□□ 100C12	E82MV 222_4B
6.3	322	18	287	25	63	322	2.1	110	185	22.778	GST07 - 2E □□□ 100C12	E82MV 222_4B
5.8	353	17	314	23	58	353	1.0	100	203	24.933	GST06 - 2E □□□ 100C12	E82MV 222_4B
5.9	348	17	309	23	59	348	2.0	102	200	24.567	GST07 - 2E □□□ 100C12	E82MV 222_4B
5.2	395	15	352	21	52	395	1.7	90	227	27.917	GST07 - 2E □□□ 100C12	E82MV 222_4B
4.5	457	13	406	18	45	457	1.5	78	262	32.267	GST07 - 2E □□□ 100C12	E82MV 222_4B
4.5	457	13	406	18	45	457	2.8	78	262	32.267	GST09 - 2E □□□ 100C12	E82MV 222_4B
3.9	519	11	462	16	39	519	1.4	68	298	36.667	GST07 - 2E □□□ 100C12	E82MV 222_4B
3.9	519	11	462	16	39	519	2.8	68	298	36.667	GST09 - 2E □□□ 100C12	E82MV 222_4B
3.7	554	11	493	15	37	554	1.3	64	319	39.160	GST07 - 2E □□□ 100C12	E82MV 222_4B
3.7	554	11	493	15	37	554	2.3	64	319	39.160	GST09 - 2E □□□ 100C12	E82MV 222_4B
3.7	554	11	493	15	37	554	2.9	64	319	39.160	GST11 - 2E □□□ 100C12	E82MV 222_4B
3.2	630	9.4	561	13	32	630	1.1	56	362	44.500	GST07 - 2E □□□ 100C12	E82MV 222_4B
3.2	630	9.4	561	13	32	630	2.3	56	362	44.500	GST09 - 2E □□□ 100C12	E82MV 222_4B
3.2	630	9.4	561	13	32	630	2.9	56	362	44.500	GST11 - 2E □□□ 100C12	E82MV 222_4B
2.9	701	8.4	624	12	29	701	1.8	51	403	49.500	GST09 - 2E □□□ 100C12	E82MV 222_4B
2.9	701	8.4	624	12	29	701	2.3	51	403	49.500	GST11 - 2E □□□ 100C12	E82MV 222_4B
2.6	796	7.4	709	10	26	796	1.8	45	458	56.250	GST09 - 2E □□□ 100C12	E82MV 222_4B
2.6	796	7.4	709	10	26	796	2.3	45	458	56.250	GST11 - 2E □□□ 100C12	E82MV 222_4B
2.5	808	7.2	719	9.9	25	808	3.2	43	464	57.968	GST11 - 3E □□□ 100C12	E82MV 222_4B
2.4	840	6.9	748	9.6	24	840	1.9	42	483	60.278	GST09 - 3E □□□ 100C12	E82MV 222_4B
2.4	854	6.8	760	9.4	24	854	3.2	41	491	61.250	GST11 - 3E □□□ 100C12	E82MV 222_4B
2.0	1002	5.8	892	8.0	20	1002	1.5	35	576	71.867	GST09 - 3E □□□ 100C12	E82MV 222_4B
2.0	990	5.9	881	8.1	20	990	2.7	35	569	71.011	GST11 - 3E □□□ 100C12	E82MV 222_4B
1.8	1139	5.1	1013	7.0	18	1139	1.4	31	654	81.667	GST09 - 3E □□□ 100C12	E82MV 222_4B
1.8	1125	5.2	1001	7.1	18	1125	2.5	31	647	80.694	GST11 - 3E □□□ 100C12	E82MV 222_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 3-40 onwards													

P₁ = 2.2 kW

1.5	1304	4.5	1161	6.2	15	1304	1.2	27	750	93.541	GST09 - 3E □□□ 100C12	E82MV 222_4B
1.7	1217	4.8	1083	6.6	17	1217	2.2	29	699	87.267	GST11 - 3E □□□ 100C12	E82MV 222_4B
1.5	1383	4.2	1231	5.8	15	1383	1.2	25	795	99.167	GST09 - 3E □□□ 100C12	E82MV 222_4B
1.5	1383	4.2	1231	5.8	15	1383	2.0	25	795	99.167	GST11 - 3E □□□ 100C12	E82MV 222_4B
1.3	1584	3.7	1409	5.1	13	1584	1.0	22	910	113.585	GST09 - 3E □□□ 100C12	E82MV 222_4B
1.3	1575	3.7	1401	5.1	13	1575	1.7	22	905	112.933	GST11 - 3E □□□ 100C12	E82MV 222_4B
1.1	1800	3.2	1602	4.5	11	1800	0.9	19	1034	129.074	GST09 - 3E □□□ 100C12	E82MV 222_4B
1.1	1800	3.2	1602	4.5	11	1800	1.6	19	1034	129.074	GST11 - 3E □□□ 100C12	E82MV 222_4B
1.0	1970	3	1753	4.1	10	1970	0.8	18	1132	141.289	GST09 - 3E □□□ 100C12	E82MV 222_4B
1.0	2049	2.8	1824	3.9	9.8	2049	1.3	17	1178	146.993	GST11 - 3E □□□ 100C12	E82MV 222_4B
1.0	1941	3	1727	4.1	10	1941	3.0	18	1115	139.211	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.9	2206	2.6	1963	3.6	9.1	2206	1.3	16	1268	158.194	GST11 - 3E □□□ 100C12	E82MV 222_4B
0.9	2206	2.6	1963	3.6	9.1	2206	2.7	16	1268	158.194	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.8	2512	2.3	2236	3.2	8.0	2512	1.1	14	1444	180.156	GST11 - 3E □□□ 100C12	E82MV 222_4B
0.8	2386	2.4	2123	3.4	8.4	2386	2.5	15	1371	171.111	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.7	2897	2	2578	2.8	6.9	2897	1.0	12	1665	207.778	GST11 - 3E □□□ 100C12	E82MV 222_4B
0.7	2854	2	2540	2.8	7.0	2854	2.1	12	1640	204.722	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.6	3299	1.8	2936	2.4	6.1	3299	0.8	11	1896	236.622	GST11 - 3E □□□ 100C12	E82MV 222_4B
0.6	3299	1.8	2936	2.4	6.1	3299	1.8	11	1896	236.622	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.6	3464	1.7	3083	2.3	5.8	3464	1.7	10	1991	248.458	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.5	3749	1.6	3337	2.1	5.4	3749	1.6	9	2155	268.889	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.4	4550	1.3	4049	1.8	4.4	4550	1.3	8	2615	326.333	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.4	5061	1.2	4504	1.6	4.0	5061	1.1	7	2909	363.000	GST14 - 3E □□□ 100C12	E82MV 222_4B
0.3	5751	1	5119	1.4	3.5	5751	1.0	6	3305	412.500	GST14 - 3E □□□ 100C12	E82MV 222_4B

P₁ = 3 kW

89	32	259	28	358	894	32	1.4	1555	18	1.600	GST05 - 1E □□□ 100C32	E82MV 302_4B
89	32	259	28	358	894	32	1.9	1555	18	1.600	GST06 - 1E □□□ 100C32	E82MV 302_4B
70	40	203	36	279	698	40	1.3	1215	23	2.048	GST05 - 1E □□□ 100C32	E82MV 302_4B
70	40	203	36	279	698	40	1.8	1215	23	2.048	GST06 - 1E □□□ 100C32	E82MV 302_4B
72	40	207	35	286	715	40	3.1	1244	23	2.000	GST07 - 1E □□□ 100C32	E82MV 302_4B
64	44	185	39	255	638	44	1.2	1111	25	2.240	GST05 - 1E □□□ 100C32	E82MV 302_4B
64	44	185	39	255	638	44	1.8	1111	25	2.240	GST06 - 1E □□□ 100C32	E82MV 302_4B
64	44	185	39	255	638	44	3.0	1111	25	2.240	GST07 - 1E □□□ 100C32	E82MV 302_4B
50	56	145	50	200	501	56	0.9	871	32	2.857	GST05 - 1E □□□ 100C32	E82MV 302_4B
50	56	145	50	200	501	56	1.6	871	32	2.857	GST06 - 1E □□□ 100C32	E82MV 302_4B
50	56	145	50	200	501	56	2.8	871	32	2.857	GST07 - 1E □□□ 100C32	E82MV 302_4B
41	69	118	61	163	409	69	1.5	711	40	3.500	GST06 - 1E □□□ 100C32	E82MV 302_4B
41	69	118	61	163	409	69	2.5	711	40	3.500	GST07 - 1E □□□ 100C32	E82MV 302_4B
31	90	91	80	126	314	90	1.2	546	52	4.556	GST06 - 1E □□□ 100C32	E82MV 302_4B
31	90	91	80	126	314	90	2.1	546	52	4.556	GST07 - 1E □□□ 100C32	E82MV 302_4B
31	92	89	82	123	306	92	2.9	533	53	4.667	GST09 - 1E □□□ 100C32	E82MV 302_4B
25	112	73	100	101	252	112	0.9	439	64	5.667	GST06 - 1E □□□ 100C32	E82MV 302_4B
26	110	74	98	102	256	110	1.8	446	63	5.583	GST07 - 1E □□□ 100C32	E82MV 302_4B
25	112	73	100	101	252	112	2.5	439	64	5.667	GST09 - 1E □□□ 100C32	E82MV 302_4B
20	145	57	129	78	195	145	1.4	339	83	7.333	GST07 - 1E □□□ 100C32	E82MV 302_4B
20	145	57	129	78	195	145	2.0	339	83	7.333	GST09 - 1E □□□ 100C32	E82MV 302_4B
16	176	47	156	64	161	176	1.0	280	101	8.900	GST07 - 1E □□□ 100C32	E82MV 302_4B
16	176	47	156	64	161	176	1.7	280	101	8.900	GST09 - 1E □□□ 100C32	E82MV 302_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Motor cooling with separate fan															
Motor cooling with integral fan *)															
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor		8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂ 20 Hz	n ₂ 50 Hz	M ₂	c 50 Hz	n ₂	M ₂						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]		Dimensions see page 3-40 onwards				
P ₁ = 3 kW															
13	222	37	198	51	127	222	1.3	221	128	11.250	GST09 - 1E □□□ 100C32		E82MV 302_4B		
48	57	140	51	194	484	57	1.1	842	33	2.956	GST05 - 2E □□□ 100C32		E82MV 302_4B		
47	59	137	52	189	471	59	2.8	820	34	3.033	GST06 - 2E □□□ 100C32		E82MV 302_4B		
43	65	124	58	172	429	65	1.2	746	37	3.333	GST05 - 2E □□□ 100C32		E82MV 302_4B		
43	65	124	58	172	429	65	2.7	746	37	3.333	GST06 - 2E □□□ 100C32		E82MV 302_4B		
35	79	102	70	141	353	79	1.0	614	45	4.053	GST05 - 2E □□□ 100C32		E82MV 302_4B		
34	81	100	72	138	344	81	2.4	598	46	4.160	GST06 - 2E □□□ 100C32		E82MV 302_4B		
31	89	91	79	125	313	89	1.0	544	51	4.571	GST05 - 2E □□□ 100C32		E82MV 302_4B		
31	89	91	79	125	313	89	2.2	544	51	4.571	GST06 - 2E □□□ 100C32		E82MV 302_4B		
28	101	80	90	110	276	101	0.9	480	58	5.187	GST05 - 2E □□□ 100C32		E82MV 302_4B		
27	104	78	92	107	269	104	2.0	467	59	5.324	GST06 - 2E □□□ 100C32		E82MV 302_4B		
24	114	71	101	98	244	114	0.9	425	65	5.850	GST05 - 2E □□□ 100C32		E82MV 302_4B		
24	114	71	101	98	244	114	2.0	425	65	5.850	GST06 - 2E □□□ 100C32		E82MV 302_4B		
22	124	65	111	89	223	124	0.8	389	71	6.400	GST05 - 2E □□□ 100C32		E82MV 302_4B		
22	124	65	111	89	223	124	1.8	389	71	6.400	GST06 - 2E □□□ 100C32		E82MV 302_4B		
20	137	59	122	81	203	137	1.7	353	79	7.040	GST06 - 2E □□□ 100C32		E82MV 302_4B		
18	159	51	141	70	175	159	1.6	305	91	8.163	GST06 - 2E □□□ 100C32		E82MV 302_4B		
16	175	46	156	63	159	175	1.5	276	101	9.010	GST06 - 2E □□□ 100C32		E82MV 302_4B		
16	171	47	152	65	163	171	3.1	283	98	8.800	GST07 - 2E □□□ 100C32		E82MV 302_4B		
14	194	41	173	57	143	194	1.4	249	112	10.000	GST06 - 2E □□□ 100C32		E82MV 302_4B		
15	192	42	170	58	145	192	2.9	252	110	9.856	GST07 - 2E □□□ 100C32		E82MV 302_4B		
13	218	37	194	51	128	218	1.3	222	125	11.200	GST06 - 2E □□□ 100C32		E82MV 302_4B		
13	218	37	194	51	128	218	2.7	222	125	11.200	GST07 - 2E □□□ 100C32		E82MV 302_4B		
11	244	33	217	46	114	244	1.2	198	140	12.571	GST06 - 2E □□□ 100C32		E82MV 302_4B		
11	244	33	217	46	114	244	2.5	198	140	12.571	GST07 - 2E □□□ 100C32		E82MV 302_4B		
10	278	29	247	40	100	278	1.1	174	160	14.286	GST06 - 2E □□□ 100C32		E82MV 302_4B		
10	278	29	247	40	100	278	2.3	174	160	14.286	GST07 - 2E □□□ 100C32		E82MV 302_4B		
9.3	299	27	266	37	93	299	1.1	162	172	15.400	GST06 - 2E □□□ 100C32		E82MV 302_4B		
9.3	299	27	266	37	93	299	2.2	162	172	15.400	GST07 - 2E □□□ 100C32		E82MV 302_4B		
8.2	340	24	303	33	82	340	0.9	142	195	17.500	GST06 - 2E □□□ 100C32		E82MV 302_4B		
8.2	340	24	303	33	82	340	2.0	142	195	17.500	GST07 - 2E □□□ 100C32		E82MV 302_4B		
7.1	390	21	347	29	71	390	0.9	124	224	20.044	GST06 - 2E □□□ 100C32		E82MV 302_4B		
7.1	390	21	347	29	71	390	1.8	124	224	20.044	GST07 - 2E □□□ 100C32		E82MV 302_4B		
7.0	399	20	355	28	70	399	2.9	121	229	20.533	GST09 - 2E □□□ 100C32		E82MV 302_4B		
6.3	443	18	394	25	63	443	1.5	109	254	22.778	GST07 - 2E □□□ 100C32		E82MV 302_4B		
6.1	454	18	404	25	61	454	2.9	107	261	23.333	GST09 - 2E □□□ 100C32		E82MV 302_4B		
5.8	478	17	425	23	58	478	1.5	101	274	24.567	GST07 - 2E □□□ 100C32		E82MV 302_4B		
5.7	485	17	431	23	57	485	2.5	100	279	24.933	GST09 - 2E □□□ 100C32		E82MV 302_4B		
5.1	543	15	483	20	51	543	1.3	89	312	27.917	GST07 - 2E □□□ 100C32		E82MV 302_4B		
5.1	551	15	490	20	51	551	2.5	88	317	28.333	GST09 - 2E □□□ 100C32		E82MV 302_4B		
4.4	627	13	558	18	44	627	1.1	77	360	32.267	GST07 - 2E □□□ 100C32		E82MV 302_4B		
4.4	627	13	558	18	44	627	2.0	77	360	32.267	GST09 - 2E □□□ 100C32		E82MV 302_4B		
4.4	627	13	558	18	44	627	2.5	77	360	32.267	GST11 - 2E □□□ 100C32		E82MV 302_4B		
3.9	713	11	634	16	39	713	1.0	68	410	36.667	GST07 - 2E □□□ 100C32		E82MV 302_4B		
3.9	713	11	634	16	39	713	2.0	68	410	36.667	GST09 - 2E □□□ 100C32		E82MV 302_4B		
3.9	713	11	634	16	39	713	2.5	68	410	36.667	GST11 - 2E □□□ 100C32		E82MV 302_4B		

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Selection tables - Helical gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
										Dimensions see page 3-40 onwards		

P₁ = 3 kW

3.7	761	11	677	15	37	761	0.9	64	437	39.160	GST07 - 2E □□□ 100C32	E82MV 302_4B
3.7	761	11	677	15	37	761	1.7	64	437	39.160	GST09 - 2E □□□ 100C32	E82MV 302_4B
3.7	761	11	677	15	37	761	2.1	64	437	39.160	GST11 - 2E □□□ 100C32	E82MV 302_4B
3.2	865	9.3	770	13	32	865	0.8	56	497	44.500	GST07 - 2E □□□ 100C32	E82MV 302_4B
3.2	865	9.3	770	13	32	865	1.7	56	497	44.500	GST09 - 2E □□□ 100C32	E82MV 302_4B
3.2	865	9.3	770	13	32	865	2.1	56	497	44.500	GST11 - 2E □□□ 100C32	E82MV 302_4B
2.9	962	8.4	856	12	29	962	1.3	50	553	49.500	GST09 - 2E □□□ 100C32	E82MV 302_4B
2.9	962	8.4	856	12	29	962	1.7	50	553	49.500	GST11 - 2E □□□ 100C32	E82MV 302_4B
2.5	1093	7.4	973	10	25	1093	1.3	44	628	56.250	GST09 - 2E □□□ 100C32	E82MV 302_4B
2.5	1093	7.4	973	10	25	1093	1.7	44	628	56.250	GST11 - 2E □□□ 100C32	E82MV 302_4B
2.5	1110	7.2	988	9.9	25	1110	2.3	43	638	57.968	GST11 - 3E □□□ 100C32	E82MV 302_4B
2.4	1154	6.9	1027	9.5	24	1154	1.4	41	663	60.278	GST09 - 3E □□□ 100C32	E82MV 302_4B
2.3	1173	6.8	1044	9.3	23	1173	2.3	41	674	61.250	GST11 - 3E □□□ 100C32	E82MV 302_4B
2.0	1376	5.8	1225	8.0	20	1376	1.1	35	791	71.867	GST09 - 3E □□□ 100C32	E82MV 302_4B
2.0	1360	5.8	1210	8.0	20	1360	1.9	35	781	71.011	GST11 - 3E □□□ 100C32	E82MV 302_4B
1.8	1564	5.1	1392	7.0	18	1564	1.0	30	899	81.667	GST09 - 3E □□□ 100C32	E82MV 302_4B
1.8	1545	5.1	1375	7.1	18	1545	1.8	31	888	80.694	GST11 - 3E □□□ 100C32	E82MV 302_4B
1.5	1791	4.4	1594	6.1	15	1791	0.9	27	1029	93.541	GST09 - 3E □□□ 100C32	E82MV 302_4B
1.6	1671	4.8	1487	6.6	16	1671	1.6	29	960	87.267	GST11 - 3E □□□ 100C32	E82MV 302_4B
1.5	1791	4.4	1594	6.1	15	1791	2.9	27	1029	93.541	GST14 - 3E □□□ 100C32	E82MV 302_4B
1.4	1899	4.2	1690	5.8	14	1899	0.8	25	1091	99.167	GST09 - 3E □□□ 100C32	E82MV 302_4B
1.4	1899	4.2	1690	5.8	14	1899	1.5	25	1091	99.167	GST11 - 3E □□□ 100C32	E82MV 302_4B
1.3	2162	3.7	1924	5.1	13	2162	1.2	22	1243	112.933	GST11 - 3E □□□ 100C32	E82MV 302_4B
1.4	2035	3.9	1811	5.4	14	2035	2.9	23	1170	106.296	GST14 - 3E □□□ 100C32	E82MV 302_4B
1.1	2471	3.2	2199	4.4	11	2471	1.1	19	1420	129.074	GST11 - 3E □□□ 100C32	E82MV 302_4B
1.1	2494	3.2	2220	4.4	11	2494	2.4	19	1433	130.278	GST14 - 3E □□□ 100C32	E82MV 302_4B
1.0	2814	2.8	2505	3.9	9.7	2814	1.0	17	1617	146.993	GST11 - 3E □□□ 100C32	E82MV 302_4B
1.0	2665	3	2372	4.1	10	2665	2.2	18	1532	139.211	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.9	3029	2.6	2696	3.6	9.0	3029	0.9	16	1741	158.194	GST11 - 3E □□□ 100C32	E82MV 302_4B
0.9	3029	2.6	2696	3.6	9.0	3029	2.0	16	1741	158.194	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.8	3276	2.4	2916	3.3	8.4	3276	1.8	15	1883	171.111	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.7	3920	2	3488	2.8	7.0	3920	1.5	12	2253	204.722	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.6	4530	1.8	4032	2.4	6.0	4530	1.3	11	2604	236.622	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.6	4757	1.7	4234	2.3	5.8	4757	1.2	10	2734	248.458	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.5	5148	1.5	4582	2.1	5.3	5148	1.2	9	2959	268.889	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.4	6248	1.3	5561	1.8	4.4	6248	0.9	8	3591	326.333	GST14 - 3E □□□ 100C32	E82MV 302_4B
0.4	6950	1.1	6185	1.6	3.9	6950	0.8	7	3994	363.000	GST14 - 3E □□□ 100C32	E82MV 302_4B

P₁ = 4 kW

91	42	263	36	363	906	42	1.5	1577	24	1.600	GST06 - 1E □□□ 112C22	E82MV 402_4B
89	42	259	36	357	892	42	2.5	1553	24	1.625	GST07 - 1E □□□ 112C22	E82MV 402_4B
71	53	205	46	283	708	53	1.4	1232	31	2.048	GST06 - 1E □□□ 112C22	E82MV 402_4B
73	52	210	45	290	725	52	2.4	1262	30	2.000	GST07 - 1E □□□ 112C22	E82MV 402_4B
65	58	188	50	259	647	58	1.4	1126	33	2.240	GST06 - 1E □□□ 112C22	E82MV 402_4B
65	58	188	50	259	647	58	2.3	1126	33	2.240	GST07 - 1E □□□ 112C22	E82MV 402_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 3-40 onwards													

P₁ = 4 kW

51	74	147	64	203	508	74	1.2	883	43	2.857	GST06 - 1E □□□ 112C22	E82MV 402_4B
51	74	147	64	203	508	74	2.1	883	43	2.857	GST07 - 1E □□□ 112C22	E82MV 402_4B
41	91	120	78	166	414	91	1.2	721	52	3.500	GST06 - 1E □□□ 112C22	E82MV 402_4B
41	91	120	78	166	414	91	1.9	721	52	3.500	GST07 - 1E □□□ 112C22	E82MV 402_4B
32	118	92	102	127	318	118	1.6	554	68	4.556	GST07 - 1E □□□ 112C22	E82MV 402_4B
31	121	90	104	124	311	121	2.6	541	70	4.667	GST09 - 1E □□□ 112C22	E82MV 402_4B
26	145	75	125	104	260	145	1.4	452	83	5.583	GST07 - 1E □□□ 112C22	E82MV 402_4B
26	147	74	126	102	256	147	2.2	445	85	5.667	GST09 - 1E □□□ 112C22	E82MV 402_4B
20	190	57	164	79	198	190	1.7	344	109	7.333	GST09 - 1E □□□ 112C22	E82MV 402_4B
16	231	47	199	65	163	231	1.5	283	133	8.900	GST09 - 1E □□□ 112C22	E82MV 402_4B
48	78	139	67	191	478	78	2.1	832	45	3.033	GST06 - 2E □□□ 112C22	E82MV 402_4B
44	85	126	73	174	435	85	2.0	757	49	3.333	GST06 - 2E □□□ 112C22	E82MV 402_4B
35	106	101	91	139	349	106	1.8	606	61	4.160	GST06 - 2E □□□ 112C22	E82MV 402_4B
32	117	92	100	127	317	117	1.7	552	67	4.571	GST06 - 2E □□□ 112C22	E82MV 402_4B
27	136	79	117	109	272	136	1.5	474	78	5.324	GST06 - 2E □□□ 112C22	E82MV 402_4B
28	133	81	114	112	279	133	3.2	485	76	5.200	GST07 - 2E □□□ 112C22	E82MV 402_4B
25	150	72	129	99	248	150	1.5	431	86	5.850	GST06 - 2E □□□ 112C22	E82MV 402_4B
25	146	74	126	102	254	146	3.1	442	84	5.714	GST07 - 2E □□□ 112C22	E82MV 402_4B
23	164	66	141	91	227	164	1.4	394	94	6.400	GST06 - 2E □□□ 112C22	E82MV 402_4B
23	164	66	141	91	227	164	2.8	394	94	6.400	GST07 - 2E □□□ 112C22	E82MV 402_4B
21	180	60	155	82	206	180	1.3	358	103	7.040	GST06 - 2E □□□ 112C22	E82MV 402_4B
20	183	59	157	81	203	183	2.7	353	105	7.150	GST07 - 2E □□□ 112C22	E82MV 402_4B
18	209	52	179	71	178	209	1.2	309	120	8.163	GST06 - 2E □□□ 112C22	E82MV 402_4B
18	208	52	179	71	179	208	2.6	311	119	8.125	GST07 - 2E □□□ 112C22	E82MV 402_4B
16	230	47	198	64	161	230	1.1	280	132	9.010	GST06 - 2E □□□ 112C22	E82MV 402_4B
16	225	48	193	66	165	225	2.3	287	129	8.800	GST07 - 2E □□□ 112C22	E82MV 402_4B
15	256	42	220	58	145	256	1.1	252	147	10.000	GST06 - 2E □□□ 112C22	E82MV 402_4B
15	252	43	217	59	147	252	2.2	256	145	9.856	GST07 - 2E □□□ 112C22	E82MV 402_4B
13	286	38	246	52	130	286	1.0	225	165	11.200	GST06 - 2E □□□ 112C22	E82MV 402_4B
13	286	38	246	52	130	286	2.1	225	165	11.200	GST07 - 2E □□□ 112C22	E82MV 402_4B
12	321	33	276	46	115	321	0.9	201	185	12.571	GST06 - 2E □□□ 112C22	E82MV 402_4B
12	321	33	276	46	115	321	1.9	201	185	12.571	GST07 - 2E □□□ 112C22	E82MV 402_4B
10	365	29	314	41	102	365	0.8	177	210	14.286	GST06 - 2E □□□ 112C22	E82MV 402_4B
10	365	29	314	41	102	365	1.8	177	210	14.286	GST07 - 2E □□□ 112C22	E82MV 402_4B
9.4	394	27	338	38	94	394	0.8	164	226	15.400	GST06 - 2E □□□ 112C22	E82MV 402_4B
9.4	394	27	338	38	94	394	1.6	164	226	15.400	GST07 - 2E □□□ 112C22	E82MV 402_4B
8.3	447	24	385	33	83	447	1.5	144	257	17.500	GST07 - 2E □□□ 112C22	E82MV 402_4B
8.4	440	24	379	34	84	440	3.1	146	253	17.222	GST09 - 2E □□□ 112C22	E82MV 402_4B
7.2	512	21	441	29	72	512	1.4	126	294	20.044	GST07 - 2E □□□ 112C22	E82MV 402_4B
7.1	525	20	451	28	71	525	2.6	123	302	20.533	GST09 - 2E □□□ 112C22	E82MV 402_4B
7.2	519	21	446	29	72	519	3.2	124	298	20.289	GST11 - 2E □□□ 112C22	E82MV 402_4B
6.4	582	18	501	25	64	582	1.2	111	335	22.778	GST07 - 2E □□□ 112C22	E82MV 402_4B
6.2	596	18	513	25	62	596	2.5	108	343	23.333	GST09 - 2E □□□ 112C22	E82MV 402_4B
6.3	589	18	507	25	63	589	3.2	109	339	23.056	GST11 - 2E □□□ 112C22	E82MV 402_4B
5.9	628	17	540	24	59	628	1.1	103	361	24.567	GST07 - 2E □□□ 112C22	E82MV 402_4B
5.8	637	17	548	23	58	637	2.2	101	366	24.933	GST09 - 2E □□□ 112C22	E82MV 402_4B
5.8	637	17	548	23	58	637	2.7	101	366	24.933	GST11 - 2E □□□ 112C22	E82MV 402_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Selection tables - Helical gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]				
										Dimensions see page 3-40 onwards			

P₁ = 4 kW

5.2	714	15	614	21	52	714	1.0	90	410	27.917	GST07 - 2E □□□ 112C22	E82MV 402_4B
5.1	724	15	623	20	51	724	2.1	89	416	28.333	GST09 - 2E □□□ 112C22	E82MV 402_4B
5.1	724	15	623	20	51	724	2.7	89	416	28.333	GST11 - 2E □□□ 112C22	E82MV 402_4B
4.5	825	13	709	18	45	825	1.7	78	474	32.267	GST09 - 2E □□□ 112C22	E82MV 402_4B
4.5	825	13	709	18	45	825	2.2	78	474	32.267	GST11 - 2E □□□ 112C22	E82MV 402_4B
4.5	825	13	709	18	45	825	2.7	78	474	32.267	GST14 - 2E □□□ 112C22	E82MV 402_4B
4.0	937	11	806	16	40	937	1.6	69	539	36.667	GST09 - 2E □□□ 112C22	E82MV 402_4B
4.0	937	11	806	16	40	937	2.2	69	539	36.667	GST11 - 2E □□□ 112C22	E82MV 402_4B
4.0	937	11	806	16	40	937	2.7	69	539	36.667	GST14 - 2E □□□ 112C22	E82MV 402_4B
3.7	1001	11	861	15	37	1001	1.4	64	575	39.160	GST09 - 2E □□□ 112C22	E82MV 402_4B
3.7	1001	11	861	15	37	1001	1.8	64	575	39.160	GST11 - 2E □□□ 112C22	E82MV 402_4B
3.7	1001	11	861	15	37	1001	2.3	64	575	39.160	GST14 - 2E □□□ 112C22	E82MV 402_4B
3.3	1137	9.4	978	13	33	1137	1.4	57	654	44.500	GST09 - 2E □□□ 112C22	E82MV 402_4B
3.3	1137	9.4	978	13	33	1137	1.8	57	654	44.500	GST11 - 2E □□□ 112C22	E82MV 402_4B
3.3	1137	9.4	978	13	33	1137	2.3	57	654	44.500	GST14 - 2E □□□ 112C22	E82MV 402_4B
2.9	1265	8.5	1088	12	29	1265	1.4	51	727	49.500	GST11 - 2E □□□ 112C22	E82MV 402_4B
2.9	1265	8.5	1088	12	29	1265	1.8	51	727	49.500	GST14 - 2E □□□ 112C22	E82MV 402_4B
2.6	1438	7.5	1236	10	26	1438	1.4	45	826	56.250	GST11 - 2E □□□ 112C22	E82MV 402_4B
2.6	1438	7.5	1236	10	26	1438	1.8	45	826	56.250	GST14 - 2E □□□ 112C22	E82MV 402_4B
2.5	1459	7.3	1255	10	25	1459	1.8	44	839	57.968	GST11 - 3E □□□ 112C22	E82MV 402_4B
2.4	1518	7	1305	9.6	24	1518	1.0	42	872	60.278	GST09 - 3E □□□ 112C22	E82MV 402_4B
2.4	1542	6.9	1326	9.5	24	1542	1.8	41	886	61.250	GST11 - 3E □□□ 112C22	E82MV 402_4B
2.0	1809	5.9	1556	8.1	20	1809	0.8	35	1040	71.867	GST09 - 3E □□□ 112C22	E82MV 402_4B
2.0	1788	5.9	1537	8.2	20	1788	1.5	36	1027	71.011	GST11 - 3E □□□ 112C22	E82MV 402_4B
2.1	1738	6.1	1495	8.4	21	1738	2.8	37	999	69.042	GST14 - 3E □□□ 112C22	E82MV 402_4B
1.8	2032	5.2	1747	7.2	18	2032	1.4	31	1168	80.694	GST11 - 3E □□□ 112C22	E82MV 402_4B
1.9	1975	5.4	1699	7.4	19	1975	2.8	32	1135	78.457	GST14 - 3E □□□ 112C22	E82MV 402_4B
1.7	2197	4.8	1889	6.6	17	2197	1.2	29	1263	87.267	GST11 - 3E □□□ 112C22	E82MV 402_4B
1.6	2355	4.5	2025	6.2	16	2355	2.3	27	1353	93.541	GST14 - 3E □□□ 112C22	E82MV 402_4B
1.5	2497	4.2	2147	5.8	15	2497	1.1	25	1435	99.167	GST11 - 3E □□□ 112C22	E82MV 402_4B
1.5	2421	4.4	2082	6.0	15	2421	2.4	26	1391	96.157	GST14 - 3E □□□ 112C22	E82MV 402_4B
1.3	2843	3.7	2445	5.1	13	2843	0.9	22	1634	112.933	GST11 - 3E □□□ 112C22	E82MV 402_4B
1.4	2676	4	2301	5.4	14	2676	2.2	24	1538	106.296	GST14 - 3E □□□ 112C22	E82MV 402_4B
1.1	3250	3.3	2795	4.5	11	3250	0.9	20	1868	129.074	GST11 - 3E □□□ 112C22	E82MV 402_4B
1.1	3280	3.2	2821	4.4	11	3280	1.8	19	1885	130.278	GST14 - 3E □□□ 112C22	E82MV 402_4B
1.0	3505	3	3014	4.2	10	3505	1.6	18	2014	139.211	GST14 - 3E □□□ 112C22	E82MV 402_4B
0.9	3983	2.7	3425	3.7	9.2	3983	1.5	16	2289	158.194	GST14 - 3E □□□ 112C22	E82MV 402_4B
0.8	4308	2.5	3705	3.4	8.5	4308	1.4	15	2476	171.111	GST14 - 3E □□□ 112C22	E82MV 402_4B
0.7	5154	2.1	4432	2.8	7.1	5154	1.1	12	2962	204.722	GST14 - 3E □□□ 112C22	E82MV 402_4B
0.6	5957	1.8	5123	2.5	6.1	5957	1.0	11	3424	236.622	GST14 - 3E □□□ 112C22	E82MV 402_4B
0.6	6255	1.7	5379	2.3	5.8	6255	0.9	10	3595	248.458	GST14 - 3E □□□ 112C22	E82MV 402_4B
0.5	6769	1.6	5822	2.2	5.4	6769	0.9	9	3890	268.889	GST14 - 3E □□□ 112C22	E82MV 402_4B

P₁ = 5.5 kW

90	57	262	49	361	903	57	1.1	1571	33	1.600	GST06 - 1E □□□ 112C32	E82MV 552_4B
89	58	258	50	356	889	58	1.8	1547	33	1.625	GST07 - 1E □□□ 112C32	E82MV 552_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 3-40 onwards													

P₁ = 5.5 kW

71	73	205	63	282	706	73	1.0	1228	42	2.048	GST06 - 1E □□□ 112C32	E82MV 552_4B
72	72	210	62	289	723	72	1.7	1257	41	2.000	GST07 - 1E □□□ 112C32	E82MV 552_4B
65	80	187	69	258	645	80	1.0	1122	46	2.240	GST06 - 1E □□□ 112C32	E82MV 552_4B
65	80	187	69	258	645	80	1.7	1122	46	2.240	GST07 - 1E □□□ 112C32	E82MV 552_4B
62	84	180	72	248	619	84	3.1	1078	48	2.333	GST09 - 1E □□□ 112C32	E82MV 552_4B
51	102	147	88	202	506	102	0.9	880	59	2.857	GST06 - 1E □□□ 112C32	E82MV 552_4B
51	102	147	88	202	506	102	1.6	880	59	2.857	GST07 - 1E □□□ 112C32	E82MV 552_4B
51	101	149	87	206	514	101	2.8	895	58	2.810	GST09 - 1E □□□ 112C32	E82MV 552_4B
41	125	120	108	165	413	125	0.8	718	72	3.500	GST06 - 1E □□□ 112C32	E82MV 552_4B
41	125	120	108	165	413	125	1.4	718	72	3.500	GST07 - 1E □□□ 112C32	E82MV 552_4B
42	123	122	106	168	420	123	2.4	730	71	3.444	GST09 - 1E □□□ 112C32	E82MV 552_4B
32	163	92	140	127	317	163	1.1	552	94	4.556	GST07 - 1E □□□ 112C32	E82MV 552_4B
31	167	90	144	124	310	167	1.9	539	96	4.667	GST09 - 1E □□□ 112C32	E82MV 552_4B
26	200	75	172	104	259	200	1.0	450	115	5.583	GST07 - 1E □□□ 112C32	E82MV 552_4B
26	203	74	174	102	255	203	1.6	444	117	5.667	GST09 - 1E □□□ 112C32	E82MV 552_4B
20	263	57	226	79	197	263	1.3	343	151	7.333	GST09 - 1E □□□ 112C32	E82MV 552_4B
16	319	47	274	65	162	319	1.1	283	183	8.900	GST09 - 1E □□□ 112C32	E82MV 552_4B
48	107	138	92	191	476	107	1.6	829	61	3.033	GST06 - 2E □□□ 112C32	E82MV 552_4B
47	108	137	92	190	474	108	3.0	825	62	3.048	GST07 - 2E □□□ 112C32	E82MV 552_4B
43	118	126	101	173	434	118	1.5	754	68	3.333	GST06 - 2E □□□ 112C32	E82MV 552_4B
43	118	125	102	173	431	118	3.0	751	68	3.350	GST07 - 2E □□□ 112C32	E82MV 552_4B
35	147	101	126	139	347	147	1.3	604	84	4.160	GST06 - 2E □□□ 112C32	E82MV 552_4B
34	149	99	128	137	342	149	2.7	595	86	4.225	GST07 - 2E □□□ 112C32	E82MV 552_4B
32	161	92	139	126	316	161	1.2	550	93	4.571	GST06 - 2E □□□ 112C32	E82MV 552_4B
31	164	90	141	124	311	164	2.5	542	94	4.643	GST07 - 2E □□□ 112C32	E82MV 552_4B
27	188	79	161	109	271	188	1.1	472	108	5.324	GST06 - 2E □□□ 112C32	E82MV 552_4B
28	183	81	158	111	278	183	2.3	484	105	5.200	GST07 - 2E □□□ 112C32	E82MV 552_4B
25	206	72	177	99	247	206	1.1	430	119	5.850	GST06 - 2E □□□ 112C32	E82MV 552_4B
25	202	73	173	101	253	202	2.2	440	116	5.714	GST07 - 2E □□□ 112C32	E82MV 552_4B
23	226	65	194	90	226	226	1.0	393	130	6.400	GST06 - 2E □□□ 112C32	E82MV 552_4B
23	226	65	194	90	226	226	2.1	393	130	6.400	GST07 - 2E □□□ 112C32	E82MV 552_4B
22	235	63	202	87	217	235	3.1	377	135	6.667	GST09 - 2E □□□ 112C32	E82MV 552_4B
21	248	60	214	82	205	248	1.0	357	143	7.040	GST06 - 2E □□□ 112C32	E82MV 552_4B
20	252	59	217	81	202	252	1.9	352	145	7.150	GST07 - 2E □□□ 112C32	E82MV 552_4B
20	258	57	222	79	198	258	2.8	344	148	7.305	GST09 - 2E □□□ 112C32	E82MV 552_4B
18	288	51	248	71	177	288	0.9	308	165	8.163	GST06 - 2E □□□ 112C32	E82MV 552_4B
18	287	52	246	71	178	287	1.9	309	165	8.125	GST07 - 2E □□□ 112C32	E82MV 552_4B
18	283	52	243	72	180	283	2.8	313	163	8.027	GST09 - 2E □□□ 112C32	E82MV 552_4B
16	318	47	273	64	160	318	0.8	279	183	9.010	GST06 - 2E □□□ 112C32	E82MV 552_4B
16	310	48	267	66	164	310	1.7	286	178	8.800	GST07 - 2E □□□ 112C32	E82MV 552_4B
15	348	43	299	59	147	348	1.6	255	200	9.856	GST07 - 2E □□□ 112C32	E82MV 552_4B
14	362	41	311	56	141	362	3.1	245	208	10.267	GST09 - 2E □□□ 112C32	E82MV 552_4B
13	395	37	340	52	129	395	1.5	224	227	11.200	GST07 - 2E □□□ 112C32	E82MV 552_4B
12	411	36	354	50	124	411	2.9	216	236	11.667	GST09 - 2E □□□ 112C32	E82MV 552_4B
11	443	33	381	46	115	443	1.4	200	255	12.571	GST07 - 2E □□□ 112C32	E82MV 552_4B
12	436	34	375	47	117	436	2.8	203	251	12.362	GST09 - 2E □□□ 112C32	E82MV 552_4B
10	504	29	433	40	101	504	1.3	176	290	14.286	GST07 - 2E □□□ 112C32	E82MV 552_4B
10	495	30	426	41	103	495	2.6	179	285	14.048	GST09 - 2E □□□ 112C32	E82MV 552_4B

Thermal power limit not considered (see page 2-5)
*) Observe current derating (see page 2-2)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan														
Motor cooling with integral fan *)														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂ 20 Hz	n ₂ 50 Hz	M ₂	c 50 Hz	n ₂	M ₂					
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
P ₁ = 5.5 kW										Dimensions see page 3-40 onwards				
9.4	543	27	467	38	94	543	1.2	163	312	15.400			GST07 - 2E □□□ 112C32	E82MV 552_4B
9.5	535	28	460	38	95	535	2.4	166	307	15.156	GST09 - 2E □□□ 112C32	E82MV 552_4B		
8.3	617	24	531	33	83	617	1.1	144	355	17.500	GST07 - 2E □□□ 112C32	E82MV 552_4B		
8.4	607	24	522	34	84	607	2.3	146	349	17.222	GST09 - 2E □□□ 112C32	E82MV 552_4B		
7.2	707	21	608	29	72	707	1.0	125	406	20.044	GST07 - 2E □□□ 112C32	E82MV 552_4B		
7.0	724	20	623	28	70	724	1.9	122	416	20.533	GST09 - 2E □□□ 112C32	E82MV 552_4B		
7.1	716	21	615	28	71	716	2.4	124	411	20.289	GST11 - 2E □□□ 112C32	E82MV 552_4B		
6.3	803	18	691	25	63	803	0.8	110	462	22.778	GST07 - 2E □□□ 112C32	E82MV 552_4B		
6.2	823	18	708	25	62	823	1.8	108	473	23.333	GST09 - 2E □□□ 112C32	E82MV 552_4B		
6.3	813	18	699	25	63	813	2.4	109	467	23.056	GST11 - 2E □□□ 112C32	E82MV 552_4B		
5.9	866	17	745	24	59	866	0.8	102	498	24.567	GST07 - 2E □□□ 112C32	E82MV 552_4B		
5.8	879	17	756	23	58	879	1.6	101	505	24.933	GST09 - 2E □□□ 112C32	E82MV 552_4B		
5.8	879	17	756	23	58	879	2.0	101	505	24.933	GST11 - 2E □□□ 112C32	E82MV 552_4B		
5.1	999	15	859	20	51	999	1.5	89	574	28.333	GST09 - 2E □□□ 112C32	E82MV 552_4B		
5.1	999	15	859	20	51	999	2.0	89	574	28.333	GST11 - 2E □□□ 112C32	E82MV 552_4B		
4.5	1138	13	979	18	45	1138	1.3	78	654	32.267	GST09 - 2E □□□ 112C32	E82MV 552_4B		
4.5	1138	13	979	18	45	1138	1.6	78	654	32.267	GST11 - 2E □□□ 112C32	E82MV 552_4B		
4.5	1138	13	979	18	45	1138	2.0	78	654	32.267	GST14 - 2E □□□ 112C32	E82MV 552_4B		
3.9	1293	11	1112	16	39	1293	1.2	69	743	36.667	GST09 - 2E □□□ 112C32	E82MV 552_4B		
3.9	1293	11	1112	16	39	1293	1.6	69	743	36.667	GST11 - 2E □□□ 112C32	E82MV 552_4B		
3.9	1293	11	1112	16	39	1293	2.0	69	743	36.667	GST14 - 2E □□□ 112C32	E82MV 552_4B		
3.7	1381	11	1188	15	37	1381	1.0	64	794	39.160	GST09 - 2E □□□ 112C32	E82MV 552_4B		
3.7	1381	11	1188	15	37	1381	1.3	64	794	39.160	GST11 - 2E □□□ 112C32	E82MV 552_4B		
3.7	1381	11	1188	15	37	1381	1.6	64	794	39.160	GST14 - 2E □□□ 112C32	E82MV 552_4B		
3.3	1569	9.4	1350	13	33	1569	1.0	57	902	44.500	GST09 - 2E □□□ 112C32	E82MV 552_4B		
3.3	1569	9.4	1350	13	33	1569	1.3	57	902	44.500	GST11 - 2E □□□ 112C32	E82MV 552_4B		
3.3	1569	9.4	1350	13	33	1569	1.6	57	902	44.500	GST14 - 2E □□□ 112C32	E82MV 552_4B		
2.9	1746	8.5	1501	12	29	1746	1.1	51	1003	49.500	GST11 - 2E □□□ 112C32	E82MV 552_4B		
2.9	1746	8.5	1501	12	29	1746	1.3	51	1003	49.500	GST14 - 2E □□□ 112C32	E82MV 552_4B		
2.6	1984	7.4	1706	10	26	1984	1.1	45	1140	56.250	GST11 - 2E □□□ 112C32	E82MV 552_4B		
2.6	1984	7.4	1706	10	26	1984	1.3	45	1140	56.250	GST14 - 2E □□□ 112C32	E82MV 552_4B		
2.5	2014	7.2	1732	10.0	25	2014	1.3	43	1157	57.968	GST11 - 3E □□□ 112C32	E82MV 552_4B		
2.4	2128	6.8	1830	9.4	24	2128	1.3	41	1223	61.250	GST11 - 3E □□□ 112C32	E82MV 552_4B		
2.4	2061	7.1	1772	9.8	24	2061	2.4	42	1184	59.321	GST14 - 3E □□□ 112C32	E82MV 552_4B		
2.0	2467	5.9	2121	8.1	20	2467	1.1	35	1418	71.011	GST11 - 3E □□□ 112C32	E82MV 552_4B		
2.1	2398	6.1	2062	8.4	21	2398	2.1	36	1378	69.042	GST14 - 3E □□□ 112C32	E82MV 552_4B		
1.8	2803	5.2	2411	7.2	18	2803	1.0	31	1611	80.694	GST11 - 3E □□□ 112C32	E82MV 552_4B		
1.8	2725	5.3	2344	7.4	18	2725	2.1	32	1566	78.457	GST14 - 3E □□□ 112C32	E82MV 552_4B		
1.7	3031	4.8	2607	6.6	17	3031	0.9	29	1742	87.267	GST11 - 3E □□□ 112C32	E82MV 552_4B		
1.5	3249	4.5	2794	6.2	15	3249	1.7	27	1867	93.541	GST14 - 3E □□□ 112C32	E82MV 552_4B		
1.5	3445	4.2	2962	5.8	15	3445	0.8	25	1980	99.167	GST11 - 3E □□□ 112C32	E82MV 552_4B		
1.5	3340	4.4	2872	6.0	15	3340	1.8	26	1920	96.157	GST14 - 3E □□□ 112C32	E82MV 552_4B		
1.4	3692	3.9	3175	5.4	14	3692	1.6	24	2122	106.296	GST14 - 3E □□□ 112C32	E82MV 552_4B		
1.1	4525	3.2	3892	4.4	11	4525	1.3	19	2601	130.278	GST14 - 3E □□□ 112C32	E82MV 552_4B		
1.0	4836	3	4159	4.2	10	4836	1.2	18	2779	139.211	GST14 - 3E □□□ 112C32	E82MV 552_4B		
0.9	5495	2.6	4726	3.7	9.1	5495	1.1	16	3158	158.194	GST14 - 3E □□□ 112C32	E82MV 552_4B		
0.8	5944	2.4	5112	3.4	8.4	5944	1.0	15	3416	171.111	GST14 - 3E □□□ 112C32	E82MV 552_4B		
0.7	7111	2	6116	2.8	7.1	7111	0.8	12	4087	204.722	GST14 - 3E □□□ 112C32	E82MV 552_4B		

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 3-40 onwards													

P₁ = 7.5 kW

90	79	260	68	358	895	79	1.3	1558	45	1.625	GST07 - 1E □□□ 132C22	E82MV 752_4B
73	97	211	83	291	728	97	1.3	1266	56	2.000	GST07 - 1E □□□ 132C22	E82MV 752_4B
65	109	188	93	260	650	109	1.2	1130	62	2.240	GST07 - 1E □□□ 132C22	E82MV 752_4B
51	139	148	119	204	509	139	1.1	886	80	2.857	GST07 - 1E □□□ 132C22	E82MV 752_4B
52	136	150	117	207	518	136	3.1	901	78	2.810	GST09 - 1E □□□ 132C22	E82MV 752_4B
42	170	121	146	166	416	170	1.0	723	98	3.500	GST07 - 1E □□□ 132C22	E82MV 752_4B
42	167	123	144	169	422	167	2.7	735	96	3.444	GST09 - 1E □□□ 132C22	E82MV 752_4B
31	226	90	195	125	312	226	1.7	543	130	4.667	GST09 - 1E □□□ 132C22	E82MV 752_4B
26	275	74	236	103	257	275	1.7	447	158	5.667	GST09 - 1E □□□ 132C22	E82MV 752_4B
48	146	138	125	191	477	146	2.4	831	84	3.048	GST07 - 2E □□□ 132C22	E82MV 752_4B
43	160	126	138	174	434	160	2.3	756	92	3.350	GST07 - 2E □□□ 132C22	E82MV 752_4B
34	202	100	174	138	344	202	2.0	599	116	4.225	GST07 - 2E □□□ 132C22	E82MV 752_4B
31	222	91	191	125	313	222	1.9	545	127	4.643	GST07 - 2E □□□ 132C22	E82MV 752_4B
28	248	81	214	112	280	248	1.7	487	143	5.200	GST07 - 2E □□□ 132C22	E82MV 752_4B
25	273	74	235	102	255	273	1.6	443	157	5.714	GST07 - 2E □□□ 132C22	E82MV 752_4B
23	306	66	263	91	227	306	1.5	396	176	6.400	GST07 - 2E □□□ 132C22	E82MV 752_4B
20	342	59	294	81	204	342	1.4	354	196	7.150	GST07 - 2E □□□ 132C22	E82MV 752_4B
20	349	58	300	80	199	349	3.2	347	200	7.305	GST09 - 2E □□□ 132C22	E82MV 752_4B
18	388	52	334	72	179	388	1.4	312	223	8.125	GST07 - 2E □□□ 132C22	E82MV 752_4B
18	383	53	330	73	181	383	3.0	315	220	8.027	GST09 - 2E □□□ 132C22	E82MV 752_4B
17	420	48	361	66	165	420	1.3	288	242	8.800	GST07 - 2E □□□ 132C22	E82MV 752_4B
16	430	47	370	65	162	430	2.6	281	247	9.010	GST09 - 2E □□□ 132C22	E82MV 752_4B
15	471	43	405	59	148	471	1.2	257	271	9.856	GST07 - 2E □□□ 132C22	E82MV 752_4B
14	490	41	422	57	142	490	2.4	247	282	10.267	GST09 - 2E □□□ 132C22	E82MV 752_4B
13	535	38	460	52	130	535	1.1	226	307	11.200	GST07 - 2E □□□ 132C22	E82MV 752_4B
12	557	36	479	50	125	557	2.2	217	320	11.667	GST09 - 2E □□□ 132C22	E82MV 752_4B
12	600	34	516	46	116	600	1.0	201	345	12.571	GST07 - 2E □□□ 132C22	E82MV 752_4B
12	590	34	508	47	118	590	2.1	205	339	12.362	GST09 - 2E □□□ 132C22	E82MV 752_4B
10	682	30	587	41	102	682	0.9	177	392	14.286	GST07 - 2E □□□ 132C22	E82MV 752_4B
10	671	30	577	41	104	671	1.9	180	386	14.048	GST09 - 2E □□□ 132C22	E82MV 752_4B
9.5	736	27	633	38	95	736	0.9	164	423	15.400	GST07 - 2E □□□ 132C22	E82MV 752_4B
9.6	724	28	622	38	96	724	1.9	167	416	15.156	GST09 - 2E □□□ 132C22	E82MV 752_4B
8.3	836	24	719	33	83	836	0.8	145	480	17.500	GST07 - 2E □□□ 132C22	E82MV 752_4B
8.5	823	25	707	34	85	823	1.7	147	473	17.222	GST09 - 2E □□□ 132C22	E82MV 752_4B
7.1	981	21	843	28	71	981	1.5	123	564	20.533	GST09 - 2E □□□ 132C22	E82MV 752_4B
7.2	969	21	833	29	72	969	2.8	125	557	20.289	GST11 - 2E □□□ 132C22	E82MV 752_4B
6.2	1114	18	958	25	62	1114	1.4	109	640	23.333	GST09 - 2E □□□ 132C22	E82MV 752_4B
6.3	1101	18	947	25	63	1101	2.6	110	633	23.056	GST11 - 2E □□□ 132C22	E82MV 752_4B
5.8	1191	17	1024	23	58	1191	1.3	102	684	24.933	GST09 - 2E □□□ 132C22	E82MV 752_4B
5.8	1191	17	1024	23	58	1191	2.3	102	684	24.933	GST11 - 2E □□□ 132C22	E82MV 752_4B
5.1	1353	15	1164	21	51	1353	1.1	89	778	28.333	GST09 - 2E □□□ 132C22	E82MV 752_4B
5.1	1353	15	1164	21	51	1353	2.2	89	778	28.333	GST11 - 2E □□□ 132C22	E82MV 752_4B
4.5	1541	13	1325	18	45	1541	1.8	78	886	32.267	GST11 - 2E □□□ 132C22	E82MV 752_4B
4.5	1541	13	1325	18	45	1541	3.1	78	886	32.267	GST14 - 2E □□□ 132C22	E82MV 752_4B

Thermal power limit not considered (see page 2-5)
*) Observe current derating (see page 2-2)

Selection tables - Helical gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 3-40 onwards													

P₁ = 7.5 kW

4.0	1751	12	1506	16	40	1751	1.7	69	1006	36.667	GST11 - 2E □□□ 132C22	E82MV 752_4B
4.0	1751	12	1506	16	40	1751	3.1	69	1006	36.667	GST14 - 2E □□□ 132C22	E82MV 752_4B
3.7	1870	11	1608	15	37	1870	1.5	65	1075	39.160	GST11 - 2E □□□ 132C22	E82MV 752_4B
3.7	1870	11	1608	15	37	1870	2.6	65	1075	39.160	GST14 - 2E □□□ 132C22	E82MV 752_4B
3.3	2125	9.5	1828	13	33	2125	1.4	57	1221	44.500	GST11 - 2E □□□ 132C22	E82MV 752_4B
3.3	2125	9.5	1828	13	33	2125	2.6	57	1221	44.500	GST14 - 2E □□□ 132C22	E82MV 752_4B
2.9	2364	8.5	2033	12	29	2364	1.8	51	1359	49.500	GST14 - 2E □□□ 132C22	E82MV 752_4B
2.6	2686	7.5	2310	10	26	2686	1.8	45	1544	56.250	GST14 - 2E □□□ 132C22	E82MV 752_4B
2.5	2727	7.3	2345	10	25	2727	0.9	44	1567	57.968	GST11 - 3E □□□ 132C22	E82MV 752_4B
2.4	2881	6.9	2478	9.5	24	2881	0.9	41	1656	61.250	GST11 - 3E □□□ 132C22	E82MV 752_4B
2.5	2791	7.1	2400	9.8	25	2791	1.9	43	1604	59.321	GST14 - 3E □□□ 132C22	E82MV 752_4B
2.1	3248	6.1	2793	8.4	21	3248	1.5	37	1867	69.042	GST14 - 3E □□□ 132C22	E82MV 752_4B
1.9	3691	5.4	3174	7.4	19	3691	1.5	32	2121	78.457	GST14 - 3E □□□ 132C22	E82MV 752_4B
1.6	4400	4.5	3784	6.2	16	4400	1.3	27	2529	93.541	GST14 - 3E □□□ 132C22	E82MV 752_4B
1.5	4523	4.4	3890	6.0	15	4523	1.3	26	2600	96.157	GST14 - 3E □□□ 132C22	E82MV 752_4B
1.4	5000	4	4300	5.5	14	5000	1.2	24	2874	106.296	GST14 - 3E □□□ 132C22	E82MV 752_4B
1.1	6128	3.2	5270	4.5	11	6128	1.0	19	3522	130.278	GST14 - 3E □□□ 132C22	E82MV 752_4B
1.1	6549	3	5632	4.2	11	6549	0.9	18	3764	139.211	GST14 - 3E □□□ 132C22	E82MV 752_4B

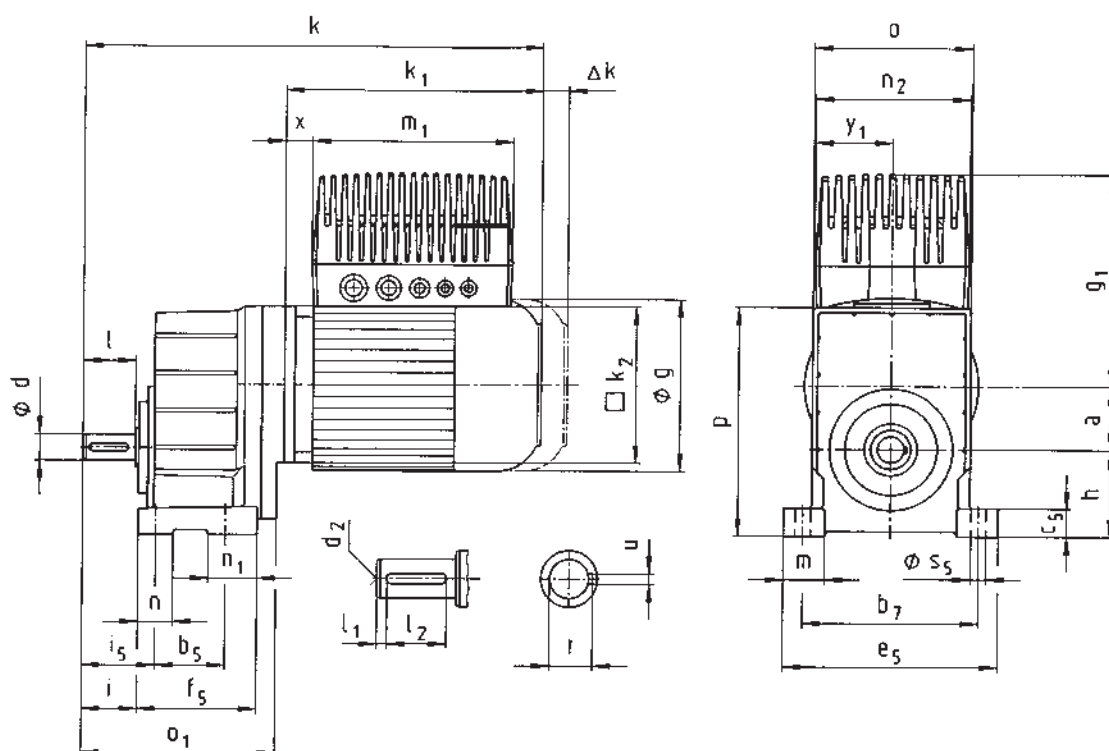
Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)



Dimensions - Helical gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
GST□□ - 1E VBR		8200 motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156		176		196		220	261
	k_1		188			207		225		276		309	319	363	404
	k_2		120			120		145		180		180		222	265
	Δk^{**} Brake		40			52		73		70		79		90	109
	Separate fan		130			128		128		127		109		102	115
	Brake + separate fan		170			165		184		180		170		183	201
8200 motec	g_1		171			180	225	221	237	242	253	268		278	297
	$g_1^{1)}$		207			216									
	m_1		190			190	202	202	230	230	230	327		327	327
	n_2		138			138	156	156	176	176	176	213		213	213
	x		20			23	10	3	3	8	9	0		2	11
	y_1		69			69	78	78	88	88	88	107		107	107
Gearbox size	o^*	o_1	p^*	h^*	a	Total length k									
04	100	134	138	50	36	331	351	373	434						
05	115	165	168	63	45	352	372	394	455	489					
06	145	191	211	80	56	375	395	417	478	512			528	572	
07	180	223	264	100	70			446	507	541			557	601	649
09	222	271	329	125	89				550	584			600	644	692

Gearbox size	Solid shaft								Foot									
	d k_6	l	l_1	l_2	d_2	u	t	b_5	b_7	c_5	e_5	f_5	i	i_5	m	n	n_1	s_5
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

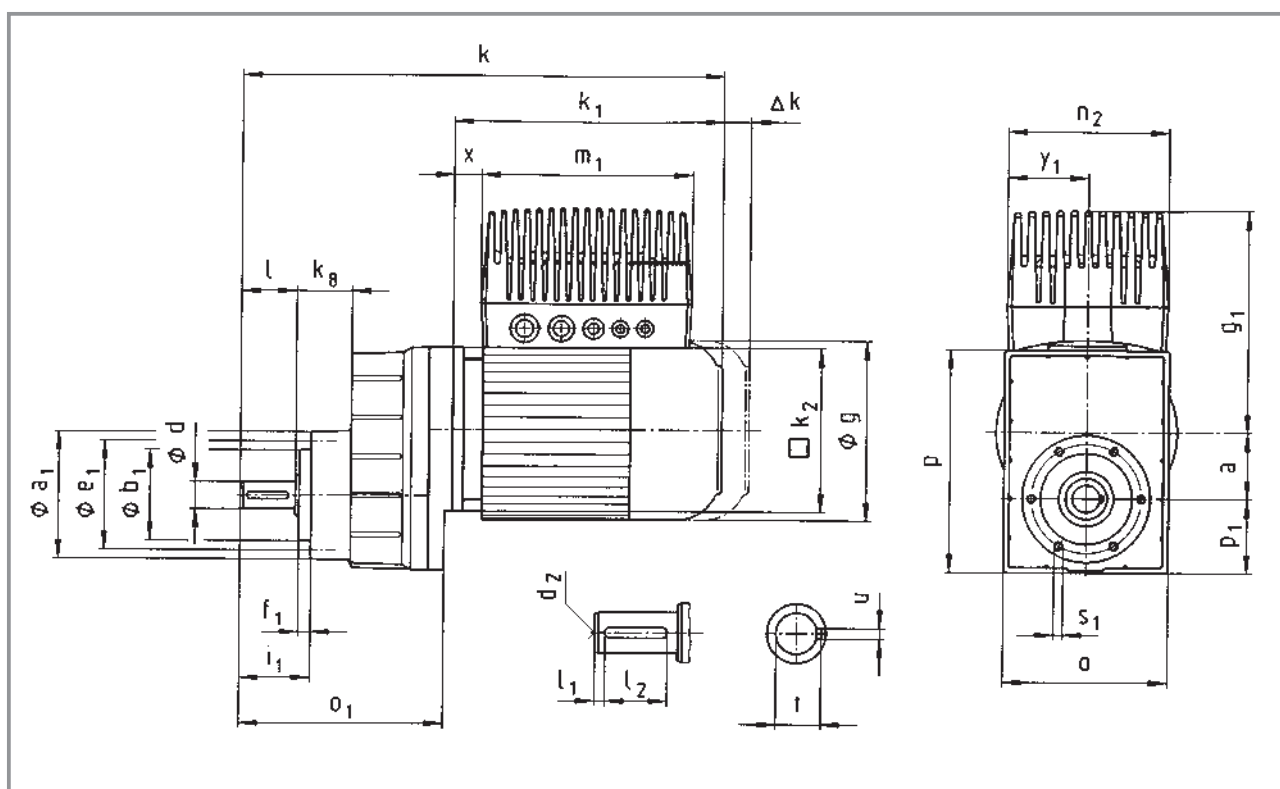
Dimensions in [mm] * Please note dimension k_2 . On gearbox size 04 with motor frame size 090, dimension $k_2/2 > h+a$

** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
GST□□ - 1E VCR		8200 motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156		176		196		220	261
	k_1		188			207		225		276		309	319	363	404
	k_2		120			120		145		180		180		222	265
	Δk^{**}	Brake	40			52		73		70		79		90	109
		Separate fan	130			128		128		127		109		102	115
		Brake + separate fan	170			165		184		180		170		183	201
8200 motec	g_1		171			180	225	221	237	242	253	268		278	297
	$g_1^{1)}$		207			216									
	m_1		190			190	202	202	230	230	230	327		327	327
	n_2		138			138	156	156	176	176	176	213		213	213
	x		20			23	10	3	3	8	9	0		2	11
	y_1		69			69	78	78	88	88	88	107		107	107
Gearbox size	Gearbox						Total length								
	o^*	o_1	p^*	p_1	a	k_8	k								
04	100	134	129	41	36	35	331		351	373	434				
05	115	165	156	51	45	43	352		372	394	455	489			
06	145	191	194	63	56	48	375		395	417	478	512	528	572	
07	180	223	245	82	70	60				446	507	541	557	601	649
09	222	271	304	101	89	74					550	584	600	644	692

Gearbox size	Solid shaft								Pitch circle						
	d_{k6}	l	l_1	l_2	d_2	u	t	a_1	b_1_{h7}	e_1	f_1	i_1	s_1	$6 \times 60^\circ$	
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_2

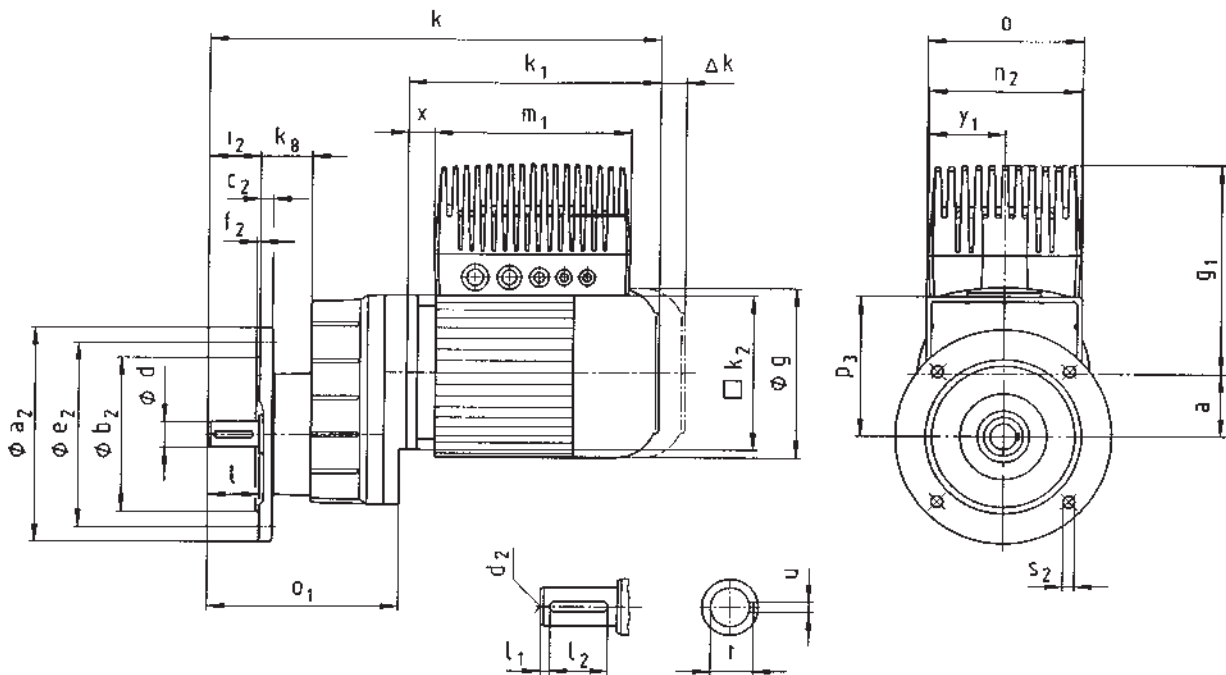
** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical gearboxes

Geared motors with 8200 motec

GST□□ - 1E VCK



Dimensions - Helical gearboxes
Geared motors with 8200 motec



Geared motor		Motor frame size					063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22	
GST□□ - 1E VCK		8200 motec E82MV□□□					251	251	251	371	551	751	152	152	222	302	402	552	752	
Motor	g					123		138			156		176		196		220		261	
	k ₁					188		207			225		276		309		319	363	404	
	k ₂					120		120			145		180		180		222		265	
	Δk** Brake					40		52			73		70		79		90		109	
	Separate fan					130		128			128		127		109		102		115	
	Brake + separate fan					170		165			184		180		170		183		201	
8200 motec	g ₁					171		180	225	221	237	242	253	268	278		297			
	g ₁ ¹⁾					207		216												
	m ₁					190		190	202	202	230	230	230	327	327		327			
	n ₂					138		138	156	156	176	176	176	213	213		213			
	x					20		23	10	3	3	8	9	0	2		11			
	y ₁					69		69	78	78	88	88	88	107	107		107			
Gearbox size	Gearbox						Total length k													
	o*	o ₁	p ₁	p ₃ *	a	k ₈														
04	100	134	41	88	36	35	331		351		373		434							
05	115	165	51	105	45	43	352		372		394		455		489					
06	145	191	63	131	56	48	375		395		417		478		512		528	572		
07	180	223	82	164	70	60	0		446		507		541				557	601	649	
09	222	271	101	204	89	74					550		584				600	644	692	

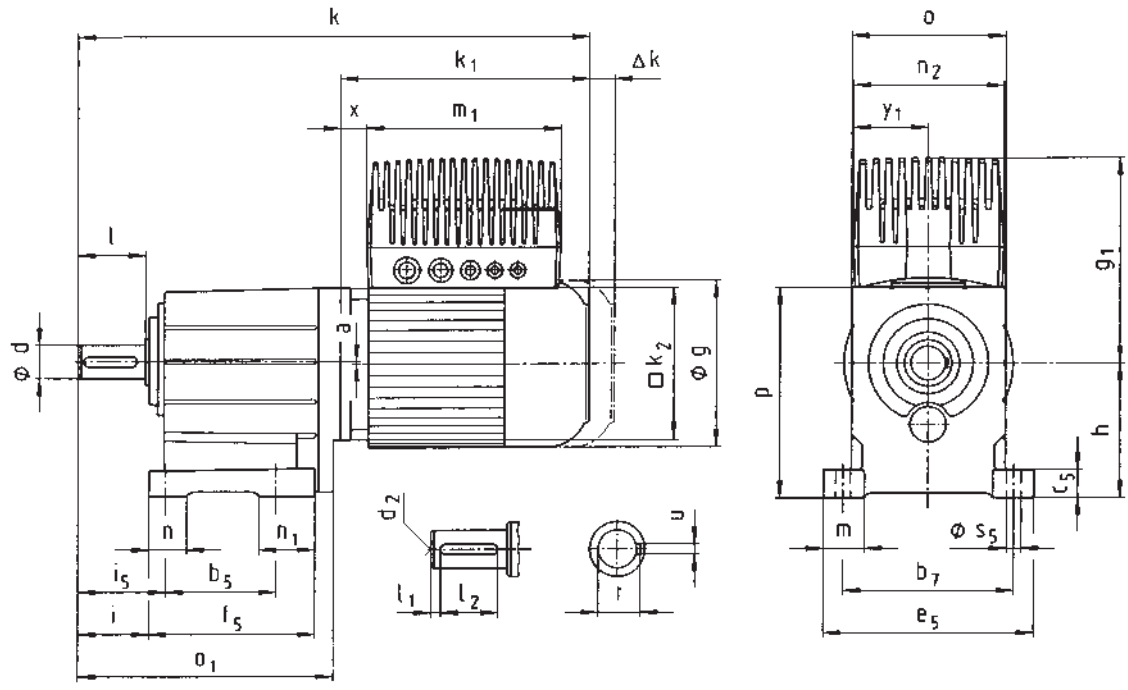
Gearbox size	Solid shaft							Flange						
	d k6	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂ 6 x 60°
04	16	32	6	20	M5	5	18	120	80	10	100	3	32	7
								140	95		115	3		9
								160	110		130	3.5		9
05	20	40	6	28	M6	6	22.5	120	80	10	100	3	40	7
								140	95		115	3		9
								160	110		130	3.5		9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

Dimensions in [mm] * Please note dimension k₂
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical gearboxes

Geared motors with 8200 motec

GST□□ - 2E VBR



Dimensions - Helical gearboxes
Geared motors with 8200 motec



3

Geared motor			Motor frame size			063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22					
GST□□ - 2E VBR			8200 motec E82MV□□□			251	251	251	371	551	751	152	152	222	302	402	552	752					
Motor	g					123			138			156			176			196		220		261	
	k ₁					188			207			225			276			309		319	363	404	
	From gearbox size 04 k ₂					120			120			145			180			180			222		265
	Δk** Brake					40			52			73			70			79			90		109
	Separate fan					130			128			128			127			109			102		115
	Brake + separate fan					170			165			184			180			170			183		201
8200 motec	g ₁					171			180			225	221	237	242	253	268	278		297			
	g ₁ ¹⁾					207			216														
	m ₁					190			190			202	202	230	230	230	327	327		327			
	n ₂					138			138			156	156	176	176	176	213	213		213			
	x					20			23			10	3	3	8	9	0	2		11			
	y ₁					69			69			78	78	88	88	88	107	107		107			
Gearbox size	o ²⁾	o ₁	Gearbox p ²⁾	h ²⁾	a	Total length k																	
03	90	127* 139	101	65	2	317* 329			337* 349														
04	100	174	132	80	0	371			391			413		474									
05	115	214	159	100	1	401			421			443		504	538								
06	145	243	198	125	2	427			447			469		530	564		580	624					
07	180	302	251	160	3							525		586	620		636	680	728				
09	222	370	311	200	4									649	683		699	743	791				
11	270	433	385	250	4									740		756		800	848				
14	328	533	479	315	6											846		890	938				

Gearbox size	Solid shaft								Foot									
	d	l	l ₁	l ₂	d ₂	u	t	b ₅	b ₇	c ₅	e ₅	f ₅	i	i ₅	m	n	n ₁	s ₅
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

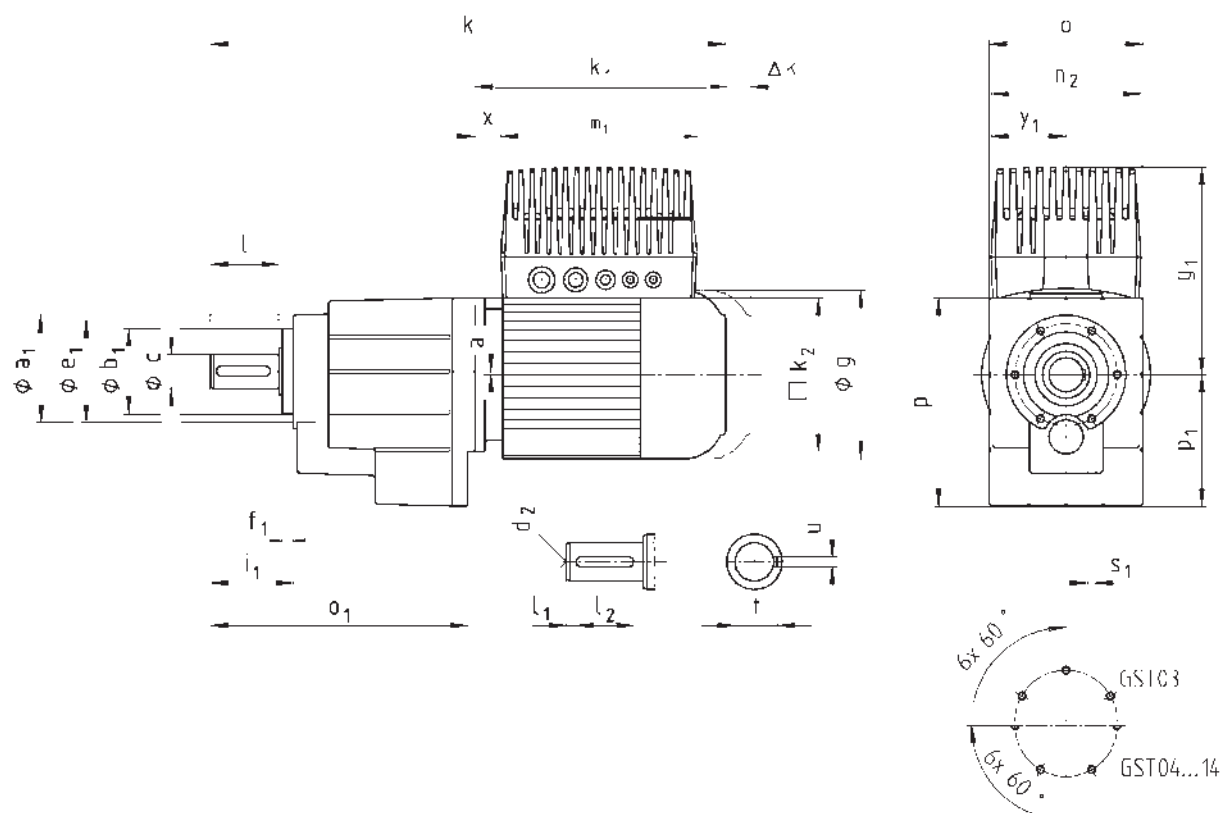
Dimensions in [mm] d ≤ 50 mm: k6 * Solid shaft d=14
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories

- 1) 8200 motec only, option: bus I/O, system terminal or brake rectifier
2) Please note dimension k2. On gearbox size 03 with motor frame size 071, dimension g/2 > h-a
and on gearbox size 04 with motor frame size 090, dimension k2/2 > h-a

Dimensions - Helical gearboxes

Geared motors with 8200 motec

GST□□ - 2E VCR



Dimensions - Helical gearboxes
Geared motors with 8200 motec



Geared motor			Motor frame size			063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22											
GST□□ - 2E VCR			8200 motec E82MV□□□			251	251	251	371	551	751	152	152	222	302	402	552	752											
Motor	g					123				138				156		176		196				220		261					
	k ₁					188				207				225		276		309				319		363		404			
	From gearbox size 04		k ₂					120				120				145		180				180				222		265	
	Δk**		Brake					40				52				73		70		79				90				109	
			Separate fan					130				128				128		127		109				102				115	
			Brake + separate fan					170				165				184		180		170				183				201	
8200 motec	g ₁					171				180		225		221		237		242		253		268				278		297	
	g ₁ ¹⁾					207				216																			
	m ₁					190				190		202		202		230		230		230		327				327		327	
	n ₂					138				138		156		156		176		176		176		213				213		213	
	x ₁					20				23		10		3		3		8		9		0				2		11	
	y ₁					69				69		78		78		88		88		88		107				107		107	
Gearbox size	o ²⁾	o ₁	Gearbox p ²⁾		p ₁	a	Total length k																						
03	90	127* 139	100	64	2	317* 329			337* 349																				
04	100	174	129	77	0	371			391			413		474															
05	115	214	156	98	1	401			421			443		504		538													
06	145	243	194	121	2	427			447			469		530		564		580		624									
07	180	302	245	155	3							525		586		620		636		680		728							
09	222	370	304	194	4									649		683		699		743		791							
11	270	433	378	243	4											740		756		800		848							
14	328	533	470	306	6													846		890		938							

Gearbox-size	Solid shaft							Pitch circle					
	d	l	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ h7	e ₁	f ₁	i ₁	s ₁ 6 x 60°
03	14	28	4	20	M5	5	16	71	48	61	8	39	M5x10
	20	40	5	28	M6	6	22.5					51	
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

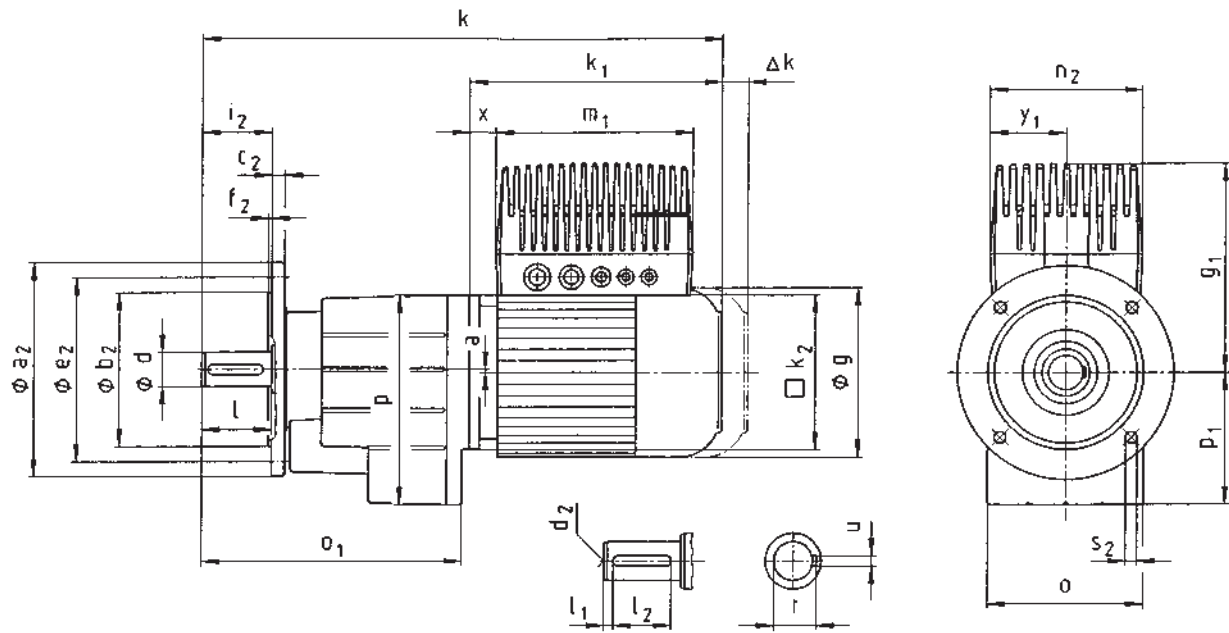
Dimensions in [mm] d ≤ 50 mm: k6 * Solid shaft d=14
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier
2) Please note dimension k2

Dimensions - Helical gearboxes

Geared motors with 8200 motec

GST□□ - 2E VCK



Dimensions - Helical gearboxes
Geared motors with 8200 motec



Geared motor			Motor frame size			063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22				
GST□□ - 2E VCK			8200 motec E82MV□□□			251	251	251	371	551	751	152	152	222	302	402	552	752				
Motor	g		123			138			156			176		196		220		261				
	k ₁		188			207			225			276		309		319	363	404				
	From gearbox size 04 k ₂		120			120			145			180		180		222		265				
	Δk** Brake		40			52			73			70		79		90		109				
	Separate fan		130			128			128			127		109		102		115				
	Brake + separate fan		170			165			184			180		170		183		201				
8200 motec	g ₁		171			180			225	221	237	242	253	268	278		297					
	g ₁ ¹⁾		207			216																
	m ₁		190			190			202	202	230	230	230	327	327		327					
	n ₂		138			138			156	156	176	176	176	213	213		213					
	x		20			23			10	3	3	8	9	0	2		11					
	y ₁		69			69			78	78	88	88	88	107	107		107					
Gearbox size	o ²⁾	o ₁	Gearbox p ²⁾	p ₁	a	Total length k																
03	90	127* 139	100	64	2	317* 329			337* 349													
04	100	174	129	77	0	371			391		413		474									
05	115	214	156	98	1	401			421		443		504	538								
06	145	243	194	121	2	427			447		469		530	564		580	624					
07	180	302	245	155	3					525		586		620		636	680	728				
09	222	370	304	194	4								649		683		699	743	791			
11	270	433	378	243	4											740		756	800	848		
14	328	533	470	306	6														846		890	938

Gearbox size	Solid shaft							Flange						
	d	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂ 4 x 90°
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		9
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	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			

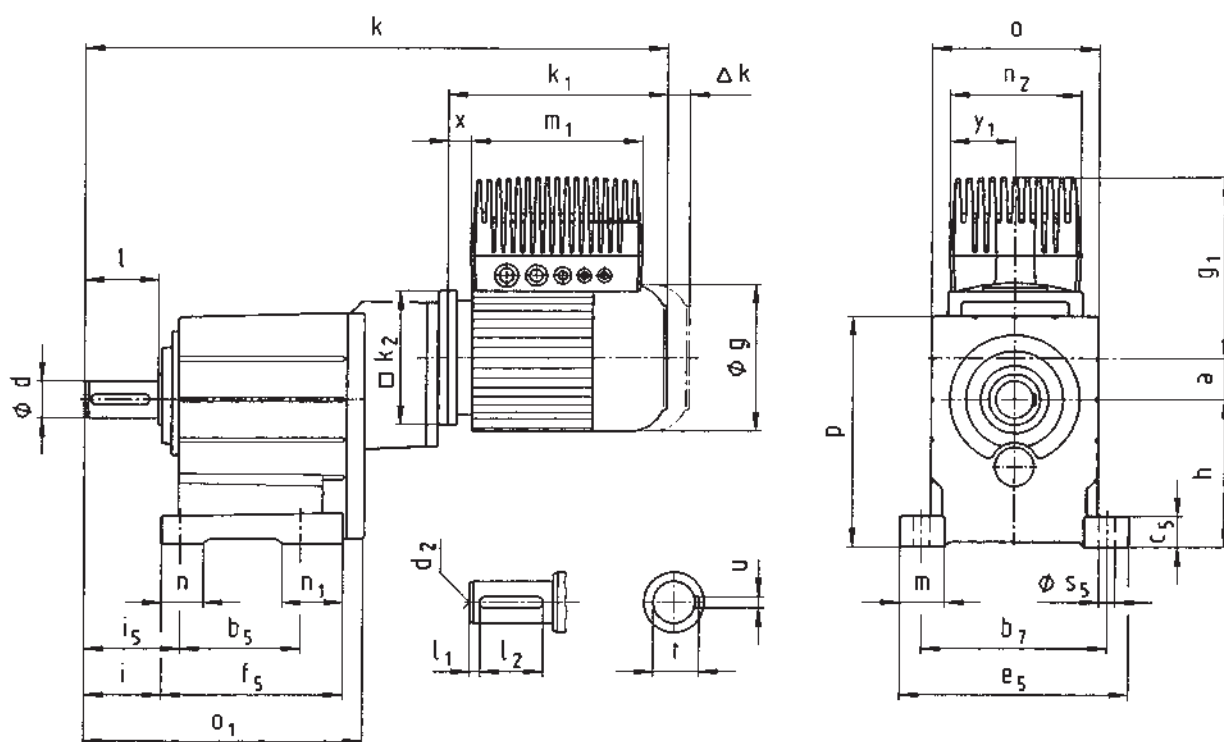
Dimensions in [mm] d ≤ 50 mm: k6 * Solid shaft d=14
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier
2) Please note dimension k2

Dimensions - Helical gearboxes

Geared motors with 8200 motec

GST□□ - 3E VBR



Dimensions - Helical gearboxes
Geared motors with 8200 motec



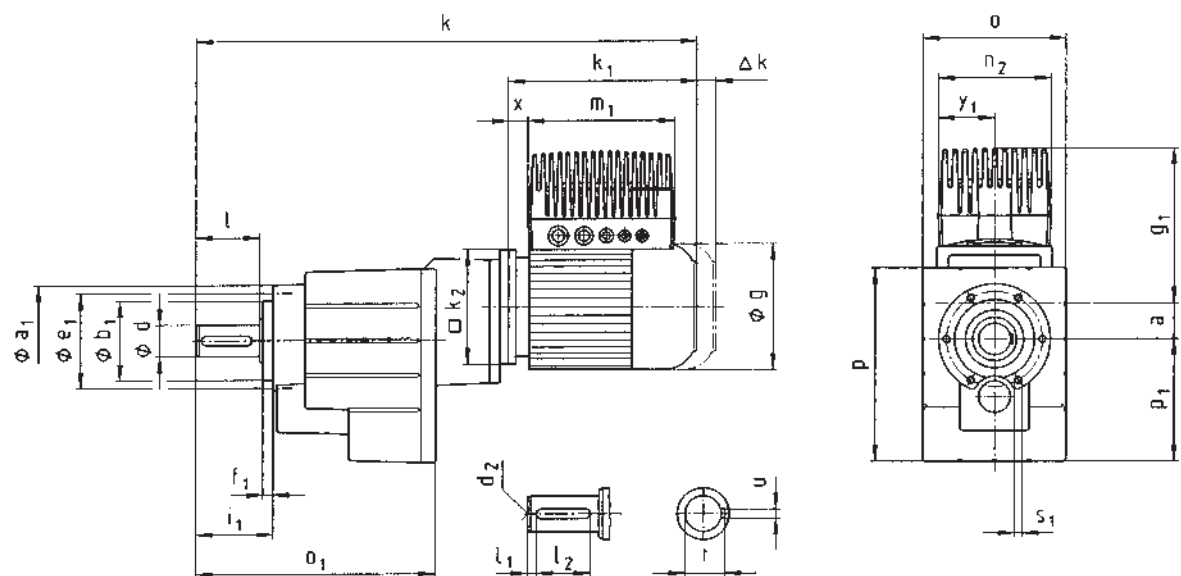
3

Geared motor		Motor frame size				063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22		
GST□□ - 3E VBR		8200 motec E82MV□□□				251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor	g					123			138			156		176		196		220	261	
	k ₁					188			207			225		276		309		319	363	404
	k ₂					120			120			145		180		180		222	265	
	Δk** Brake					40			52			73		70		79		90	109	
	Separate fan					130			128			128		127		109		102	115	
	Brake + separate fan					170			165			184		180		170		183	201	
8200 motec	g ₁					171			180	225	221	237	242	253	268	278			297	
	g ₁ ¹⁾					207			216											
	m ₁					190			190	202	202	230	230	230	327	327			327	
	n ₂					138			138	156	156	176	176	176	213	213			213	
	x					20			23	10	3	3	8	9	0	2			11	
	y ₁					69			69	78	78	88	88	88	107	107			107	
Gearbox size	Gearbox					Total length														
	o*	o ₁	p*	h	a	k														
05	115	208	159	100	35	478			497			520								
06	145	240	198	125	34	521			540			563		624						
07	180	302	251	160	42	588			607			630		691		724				
09	222	370	311	200	52	669			688			711		772		805		821	865	
11	270	433	385	250	66							787		848		881		897	941	990
14	328	533	479	315	83									972		1005		1021	1065	1114

Gearbox size	Solid shaft							Foot										
	d	l	l ₁	l ₂	d ₂	u	t	b ₅	b ₇	c ₅	e ₅	f ₅	i	i ₅	m	n	n ₁	s ₅
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 k2
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GST□□ - 3E VCR



Dimensions - Helical gearboxes
Geared motors with 8200 motec



Geared motor					Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22			
GST□□ - 3E VCR					8200 motec E82MV□□□					251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g					123			138			156			176		196		220		261	
	k ₁					188			207			225			276		309		319	363	404	
	k ₂					120			120			145			180		180		222		265	
	Δk** Brake					40			52			73			70		79		90		109	
	Separate fan					130			128			128			127		109		102		115	
	Brake + separate fan					170			165			184			180		170		183		201	
8200 motec	g ₁					171			180		225	221	237	242	253	268	278			297		
	g ₁ ¹⁾					207			216													
	m ₁					190			190		202	202	230	230	230	327	327			327		
	n ₂					138			138		156	156	176	176	176	213	213			213		
	x					20			23		10	3	3	8	9	0	2			11		
	y ₁					69			69		78	78	88	88	88	107	107			107		
Gearbox size	Gearbox					Total length																
	o*	o ₁	p*	p ₁	a	k																
05	115	208	156	98	35	478			497			520										
06	145	240	194	121	34	521			540			563			624							
07	180	302	245	155	42	588			607			630			691		724					
09	222	370	304	194	52	669			688			711			772		805		821	865		
11	270	433	378	243	66							787			848		881		897	941	990	
14	328	533	470	306	83										972		1005		1021	1065	1114	

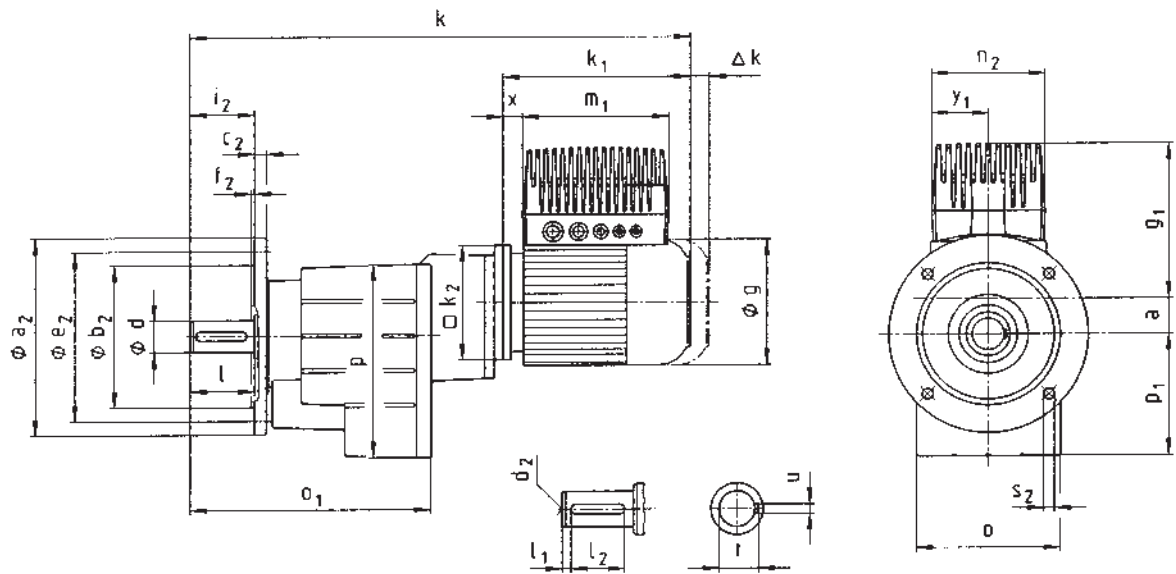
Gearbox size	Solid shaft								Pitch circle					
	d	l	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ h7	e ₁	f ₁	i ₁	s ₁ 6 x 60°	
05	25	50	4	40	M10	8	28	88	58	74	9	62	M6x12	
06	30	60	6	45	M10	8	33	109	70	90	10	74	M8x14	
07	40	80	7	63	M16	12	43	140	100	120	13	97	M10x18	
09	50	100	8	80	M16	14	53.5	174	120	145	15	120	M12x20	
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 k2
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical gearboxes

Geared motors with 8200 motec

GST□□ - 3E VCK



Dimensions - Helical gearboxes
Geared motors with 8200 motec



Geared motor		Motor frame size				063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22		
GST□□ - 3E VCK		8200 motec E82MV□□□				251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor	g					123			138			156		176		196		220	261	
	k ₁					188			207			225		276		309		319	363	404
	k ₂					120			120			145		180		180		222	265	
	Δk** Brake					40			52			73		70		79		90	109	
	Separate fan					130			128			128		127		109		102	115	
	Brake + separate fan					170			165			184		180		170		183	201	
8200 motec	g ₁					171			180	225	221	237	242	253	268	278			297	
	g ₁ ¹⁾					207			216											
	m ₁					190			190	202	202	230	230	230	327	327			327	
	n ₂					138			138	156	156	176	176	176	213	213			213	
	x					20			23	10	3	3	8	9	0	2			11	
	y ₁					69			69	78	78	88	88	88	107	107			107	
Gearbox size	Gearbox					Total length														
	o*	o ₁	p*	p ₁	a	k														
05	115	208	156	98	35	478			497			520								
06	145	240	194	121	34	521			540			563		624						
07	180	302	245	155	42	588			607			630		691		724				
09	222	370	304	194	52	669			688			711		772		805		821	865	
11	270	433	378	243	66							787		848		881		897	941	990
14	328	533	470	306	83									972		1005		1021	1065	1114

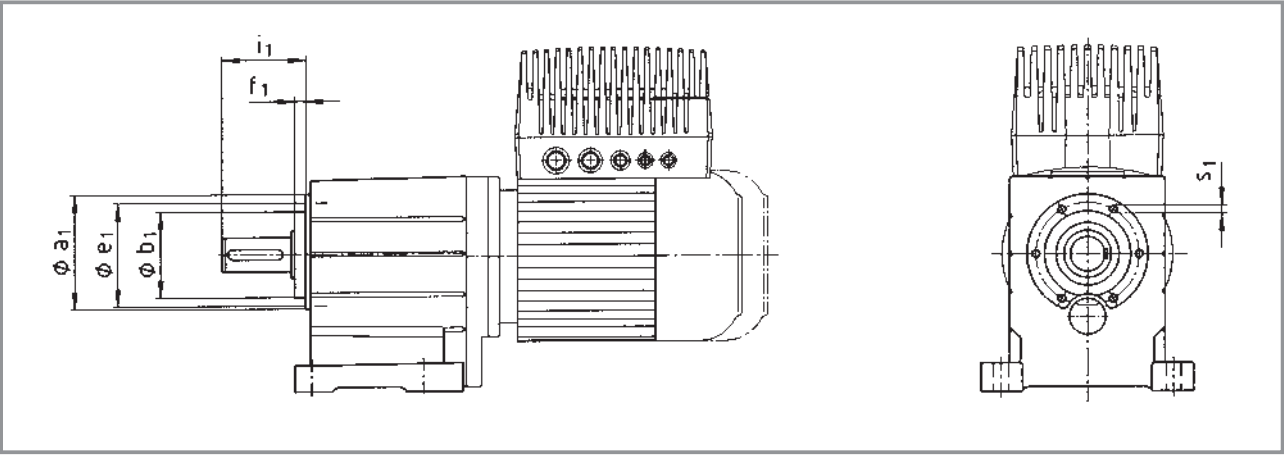
Gearbox size	Solid shaft								Flange						
	d	l	l ₁	l ₂	d ₂	u	t		a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂ 4 x 90°
05	25	50	4	40	M10	8	28		120	80	10	100	3	50	7
									140	95	10	115	3		9
									160	110	10	130	3.5		9
									200	130	12	165	3.5		11
06	30	60	6	45	M10	8	33		160	110	12	130	3.5	60	9
									200	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 * Please note dimension k2
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical gearboxes

Further dimensions GST□□-2, 3

Output design VAR

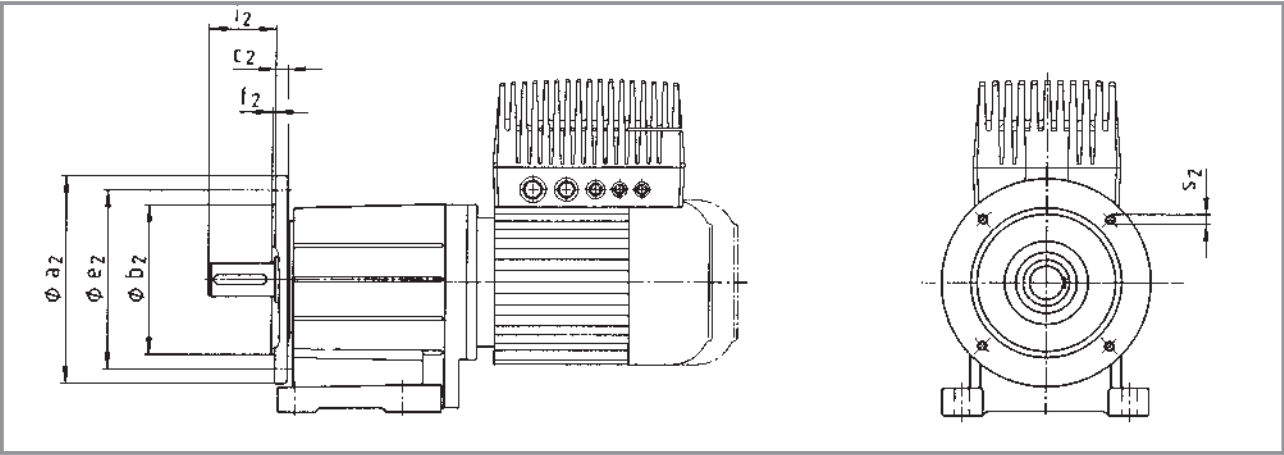


Gearbox size	a_1	b_1 h7	e_1	f_1	i_1	s_1 6 x 60°
04	72	48	61	8	51	M5x10
05	88	58	74	9	62	M6x12
06	109	70	90	10	74	M8x14
07	140	100	120	13	97	M10x8
09	174	120	145	15	120	M12x20
11	215	150	185	18	143	M16x26
14	265	195	230	22	187	M20x34

Dimensions in [mm]



Output design VAL



Gearbox size	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂ 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		M8
	160	110		130	3.5		M8
06	160	110	12	130	3.5	60	M8
	200	130		165			M10
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
	400	300	24	350			

Dimensions in [mm]



Shaft-mounted helical gearboxes (low-profile gearboxes)

G-motion motec

Technical data

Permissible radial and axial forces

Output	4-2
Output backlash	4-4
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Position of ventilation, oil filler plug and oil drain plug	4-5
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Selection tables

Geared motors with 8200 motec	4-9

Dimensions

Geared motors with 8200 motec	4-32
Further dimensions	4-48
Hollow shaft with shrink disc	4-48
Foot mounting	4-49
Rubber buffer set	4-51
Mounting set for hollow shaft circlip	4-52
Proposed design for auxiliary tools	4-52

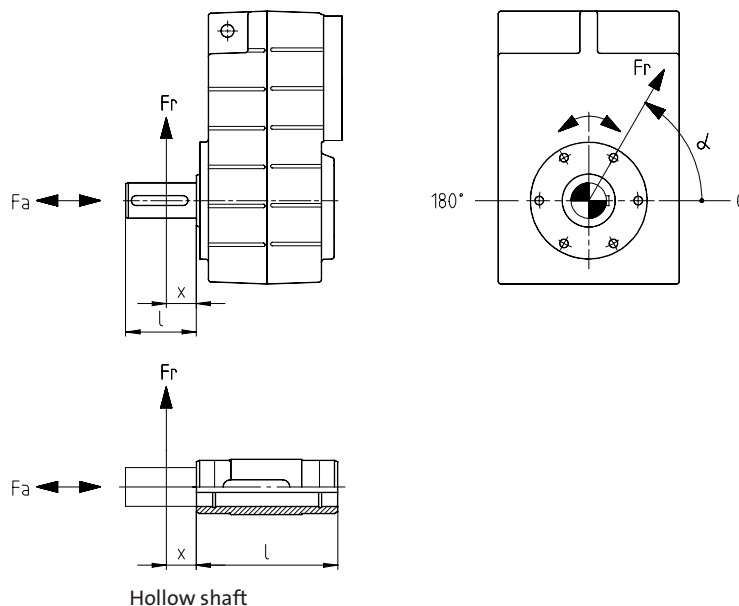
Permissible radial force

$$F_{rperm} = f_w \cdot f_\alpha \cdot F_{rTab} \leq f_w \cdot F_{rmax}$$

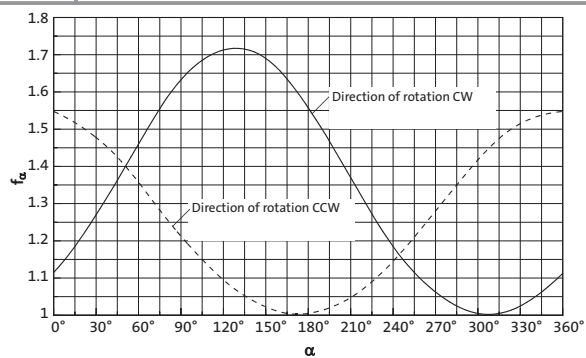
Permissible axial force

$$F_{aperm} = F_{aTab} \quad \text{at } F_r = 0$$

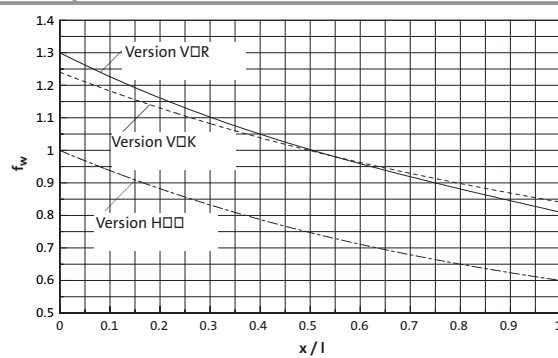
Contact Lenze if F_r and $F_a \neq 0$



f_α Effective direction factor at output shaft



f_w Additional load factor at output shaft



Technical data - Shaft-mounted helical gearboxes (low-profile gearboxes)
Permissible radial and axial forces - Output



VCK	Solid shaft with flange													
	Application of force F_r : Centre of shaft journal ($x = l/2$)													
	F_{aTab} only valid for $F_r = 0$													
n_2 [rpm]	GFL 04		GFL 05		GFL 06		GFL 07		GFL 09		GFL 11		GFL 14	
	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	—

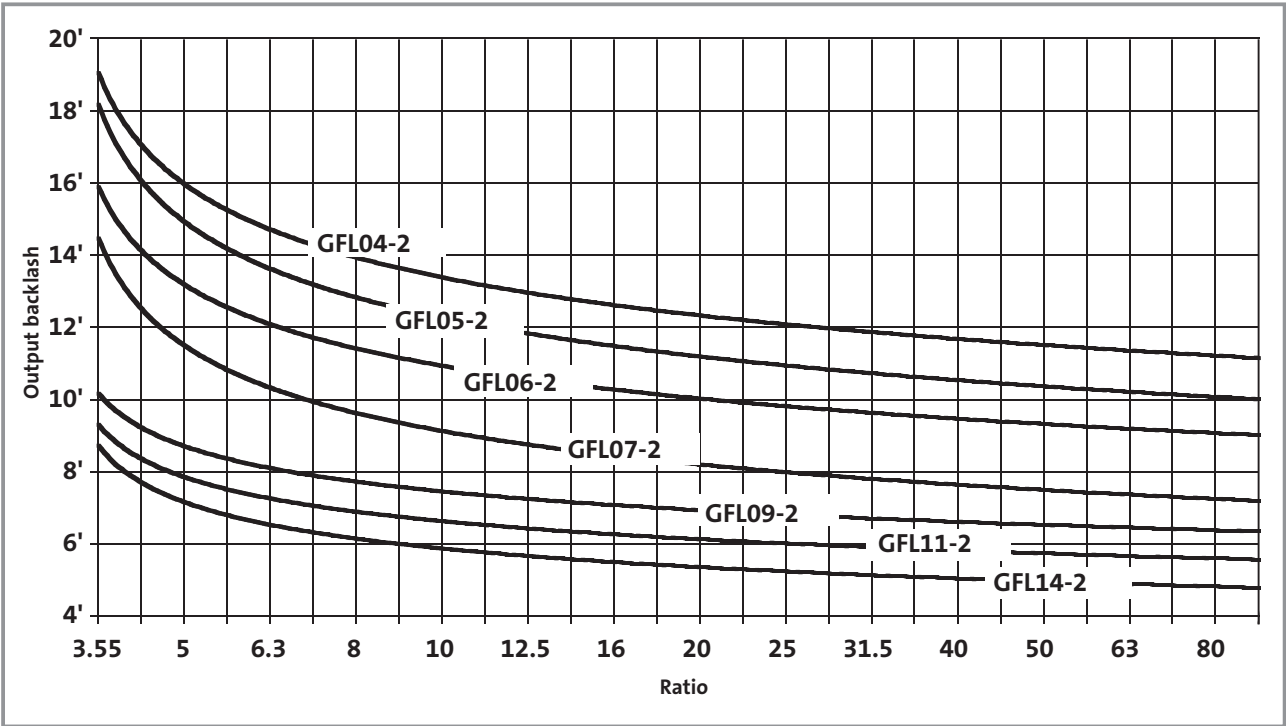
VDR	Solid shaft without flange													
	Application of force F_r : Centre of shaft journal ($x = l/2$)													
	F_{aTab} only valid for $F_r = 0$													
n_2 [rpm]	GFL 04		GFL 05		GFL 06		GFL 07		GFL 09*		GFL 11*		GFL 14	
	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	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	—

HDD	Hollow shaft													
	Application of force F_r : At hollow shaft end face ($x = 0$)													
	F_{aTab} only valid for $F_r = 0$													
n_2 [rpm]	GFL 04		GFL 05		GFL 06		GFL 07		GFL 09		GFL 11		GFL 14	
	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	—

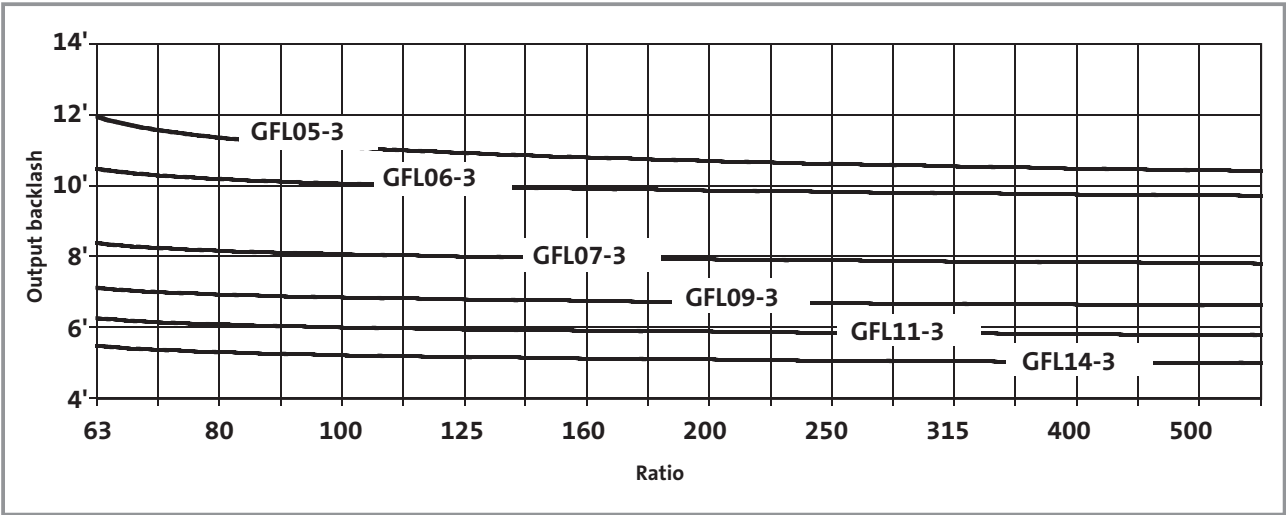
* A reinforced output shaft bearing is available on request for VDR versions.

Neither radial nor axial forces are permitted on hollow shafts with shrink disc (S□□).

GFL00-2



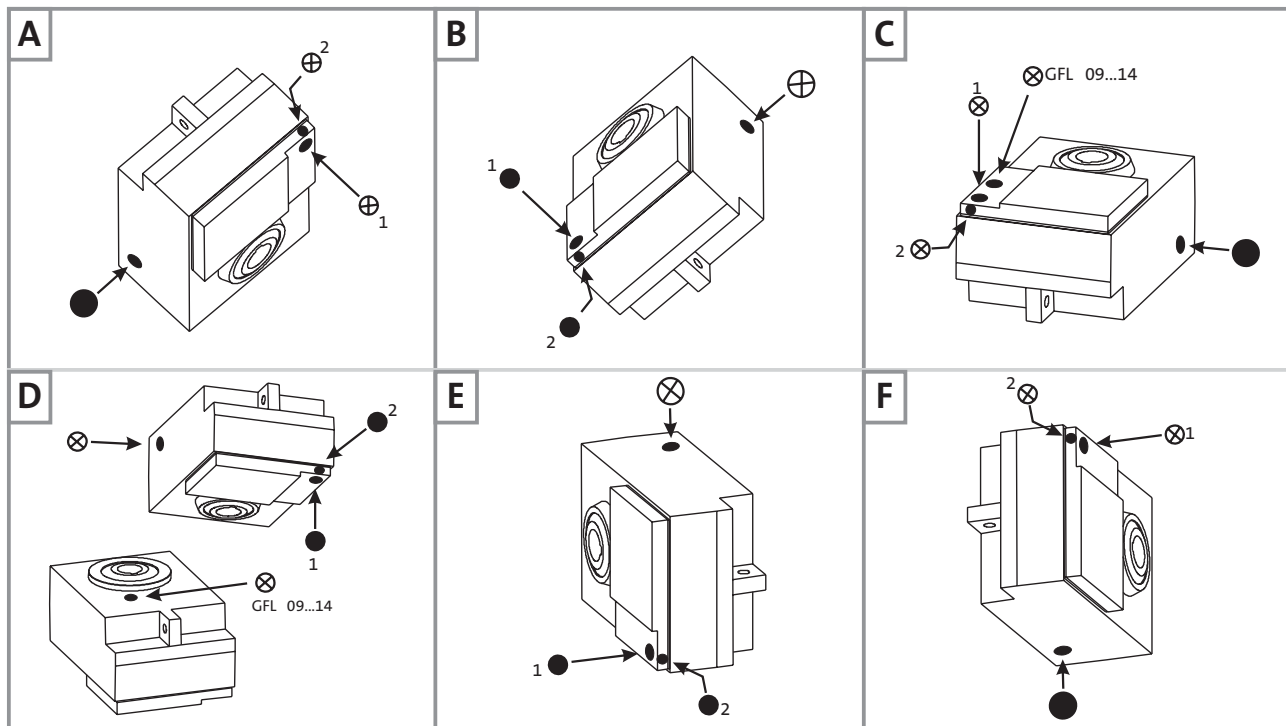
GFL00-3



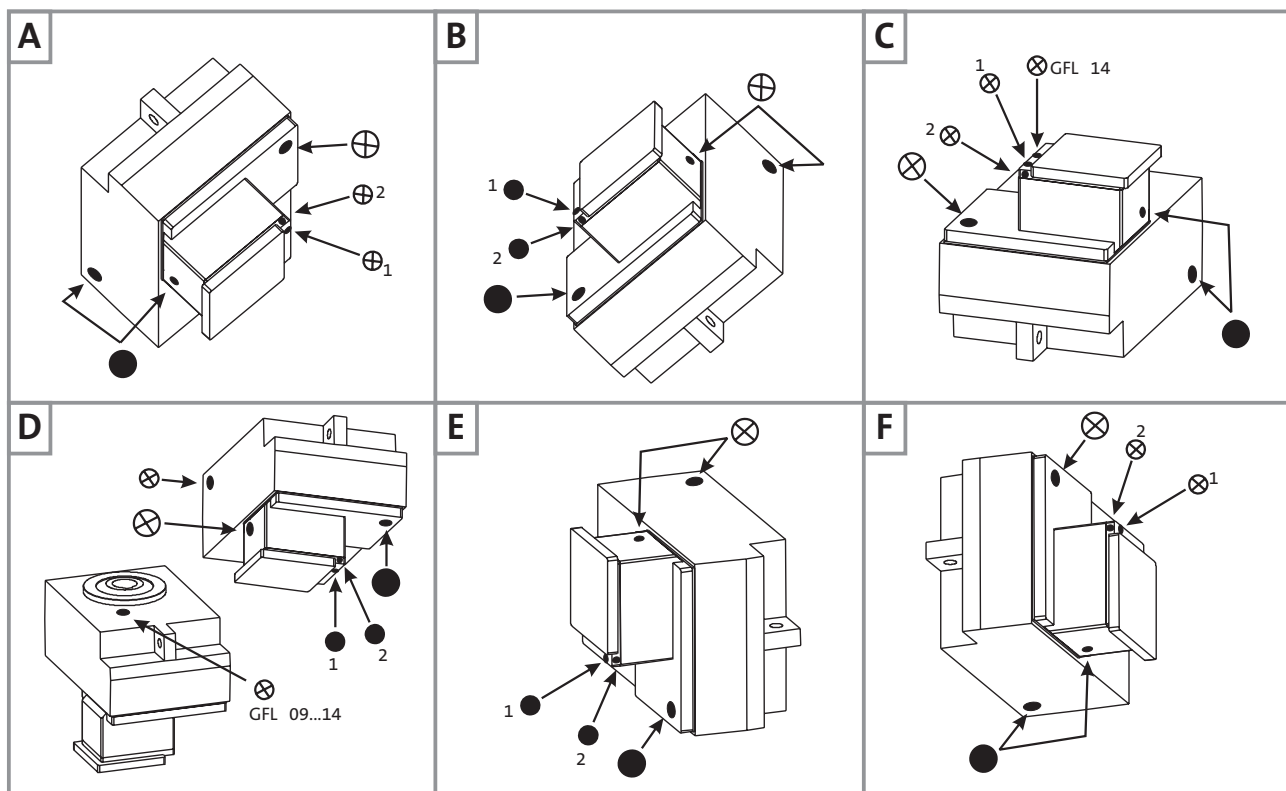


Position of ventilation, oil filler plug and oil drain plug

Shaft-mounted helical gearboxes (low-profile gearboxes) GFL 05 ... 14-2



Shaft-mounted helical gearboxes (low-profile gearboxes) GFL 05 ... 14-3



(A ... F) Mounting position

⊗ Ventilation/oil filler plug
● Oil drain plug

Pos. 1 or 2 depending on version
(see table on page 4-6)



On the **versions listed** in the table, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.
On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

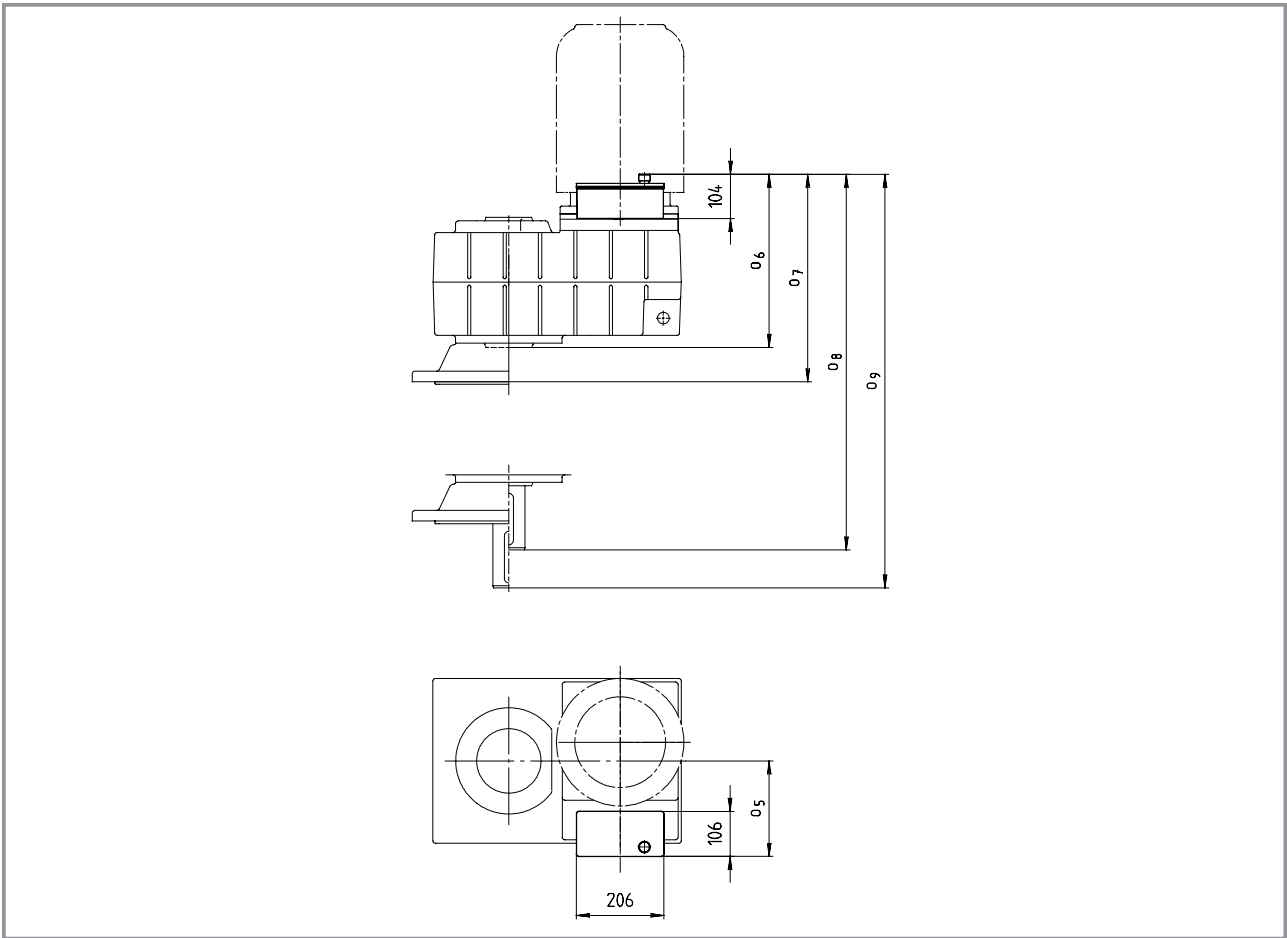
Shaft-mounted helical gearboxes
(low-profile gearboxes)

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



Reservoir for mounting position C

Shaft-mounted helical gearboxes (low-profile gearboxes) GFL



Shaft-mounted helical gearboxes GFL□□ - 2E		Motor frame size / Drive size		
		090 / 100	112	132
09	o ₅	165	187	204
	o ₆	344	344	344
	o ₇	405	405	405
	o ₈	464	464	464
	o ₉	525	525	525
11	o ₅	154	176	200
	o ₆	387	391	391
	o ₇	448	452	452
	o ₈	547	551	551
	o ₉	608	612	612
14	o ₅		181	211
	o ₆		446	446
	o ₇		507	507
	o ₈		646	646
	o ₉		707	707

Terminal box position 3 not permitted.
Foot cannot be in position 3.

Shaft-mounted helical gearboxes (low-profile gearboxes) GFL□□-2

Geared motors GFL□□-2E HCR HDR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 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	49	55			
06	40	42	43	47	49	56	63	69			
07				73	75	82	89	95	103	110	140
09						128	135	141	149	156	187
11							221	226	234	241	270
14									376	383	411

Shaft-mounted helical gearboxes (low-profile gearboxes) GFL□□-3

Geared motors GFL□□-3E HCR HDR	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	251	371	551	751	152	152	222	302	402	552	752
05	27	29	30	35	36						
06	44	46	47	52	53	60					
07	74	76	77	81	83	90					
09	125	127	128	133	134	141	148	154	163	170	
11				226	227	234	241	247	256	263	293
14						391	398	404	412	419	449

Additional 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 capacity for mounting position A. All data is approximate

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec



Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
										Dimensions see page 4-32 onwards				

P₁ = 0.12 kW

20	6	59	4.9	81	203	6	5.4	353	3.2	7.025	GFL04 - 2E □□□ 063C12	E82MV 251_2B
8.9	13	26	11.2	35	89	13	5.4	154	7.2	16.087	GFL04 - 2E □□□ 063C12	E82MV 251_2B
8.0	14	23	12.4	32	80	14	5.4	138	8	17.920	GFL04 - 2E □□□ 063C12	E82MV 251_2B
6.9	16	20	14.2	28	69	16	5.0	121	9.2	20.519	GFL04 - 2E □□□ 063C12	E82MV 251_2B
6.2	18	18	16	25	62	18	5.0	108	10	22.857	GFL04 - 2E □□□ 063C12	E82MV 251_2B
4.5	25	13	22	18	45	25	5.5	78	14	31.600	GFL04 - 2E □□□ 063C12	E82MV 251_2B
4.1	28	12	24	16	41	28	5.5	70	16	35.200	GFL04 - 2E □□□ 063C12	E82MV 251_2B
3.5	32	10	28	14	35	32	4.6	61	18	40.697	GFL04 - 2E □□□ 063C12	E82MV 251_2B
3.1	35	9.1	31	13	31	35	4.6	55	20	45.333	GFL04 - 2E □□□ 063C12	E82MV 251_2B
2.8	40	8	36	11	28	40	4.0	48	23	51.579	GFL04 - 2E □□□ 063C12	E82MV 251_2B
2.5	45	7.2	40	9.9	25	45	3.9	43	26	57.455	GFL04 - 2E □□□ 063C12	E82MV 251_2B
2.2	50	6.4	45	8.8	22	50	3.2	38	29	64.636	GFL04 - 2E □□□ 063C12	E82MV 251_2B
2.0	56	5.7	50	7.9	20	56	3.2	34	32	72.000	GFL04 - 2E □□□ 063C12	E82MV 251_2B
1.7	66	4.9	59	6.7	17	66	1.6	29	38	85.156	GFL04 - 2E □□□ 063C12	E82MV 251_2B
1.5	74	4.4	66	6.0	15	74	1.6	26	43	94.857	GFL04 - 2E □□□ 063C12	E82MV 251_2B
1.4	78	4.1	69	5.6	14	78	4.2	24	45	101.547	GFL05 - 3E □□□ 063C12	E82MV 251_2B
1.2	88	3.6	79	5.0	12	88	3.7	22	51	114.952	GFL05 - 3E □□□ 063C12	E82MV 251_2B
1.1	100	3.2	89	4.4	11	100	3.3	19	57	129.524	GFL05 - 3E □□□ 063C12	E82MV 251_2B
1.0	111	2.9	99	3.9	9.9	111	5.0	17	64	144.320	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.9	125	2.5	111	3.5	8.8	125	4.9	15	72	162.583	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.8	136	2.3	121	3.2	8.1	136	2.5	14	78	177.027	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.7	153	2.1	136	2.9	7.1	153	2.1	12	88	199.467	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.6	175	1.8	156	2.5	6.3	175	2.0	11	101	227.989	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.6	197	1.6	176	2.2	5.6	197	1.7	10	113	256.889	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.5	200	1.6	178	2.2	5.5	200	3.1	10	115	260.457	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.5	222	1.4	198	2.0	4.9	222	1.6	9	128	288.948	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.5	225	1.4	200	1.9	4.9	225	2.9	8	129	293.018	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.4	250	1.3	223	1.8	4.4	250	1.3	8	144	325.576	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.5	230	1.4	205	1.9	4.8	230	2.7	8	132	299.200	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.4	278	1.1	248	1.6	3.9	278	1.2	7	160	362.100	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.4	282	1.1	251	1.6	3.9	282	2.3	7	162	367.200	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.3	314	1	279	1.4	3.5	314	1.0	6	180	408.000	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.3	318	1	283	1.4	3.4	318	1.9	6	183	413.667	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.3	365	0.9	325	1.2	3.0	365	1.8	5	210	475.200	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.3	367	0.9	326	1.2	3.0	367	0.9	5	211	477.052	GFL05 - 3E □□□ 063C12	E82MV 251_2B
0.3	411	0.8	366	1.1	2.7	411	1.5	5	236	535.333	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.2	443	0.7	394	1.0	2.5	443	1.4	4	255	576.720	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.2	499	0.6	444	0.9	2.2	499	1.2	4	287	649.700	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.2	584	0.5	520	0.8	1.9	584	0.9	3	336	759.806	GFL06 - 3E □□□ 063C12	E82MV 251_2B
0.2	658	0.5	585	0.7	1.7	658	0.9	3	378	855.954	GFL06 - 3E □□□ 063C12	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]	Dimensions see page 4-32 onwards		

P₁ = 0.18 kW

19	9	56	7.6	78	194	9	3.4	338	4.9	7.025	GFL04 - 2E □□□ 063C32	E82MV 251_2B
8.5	20	25	17	34	85	20	3.4	148	11	16.087	GFL04 - 2E □□□ 063C32	E82MV 251_2B
7.6	22	22	19	30	76	22	3.4	133	13	17.920	GFL04 - 2E □□□ 063C32	E82MV 251_2B
6.7	25	19	22	27	67	25	3.2	116	14	20.519	GFL04 - 2E □□□ 063C32	E82MV 251_2B
6.0	28	17	25	24	60	28	3.2	104	16	22.857	GFL04 - 2E □□□ 063C32	E82MV 251_2B
4.3	39	13	34	17	43	39	3.5	75	22	31.600	GFL04 - 2E □□□ 063C32	E82MV 251_2B
3.9	43	11	38	16	39	43	3.5	67	25	35.200	GFL04 - 2E □□□ 063C32	E82MV 251_2B
3.4	50	9.7	44	13	34	50	2.9	58	29	40.697	GFL04 - 2E □□□ 063C32	E82MV 251_2B
3.0	55	8.7	49	12	30	55	2.9	52	32	45.333	GFL04 - 2E □□□ 063C32	E82MV 251_2B
2.7	63	7.7	56	11	27	63	2.6	46	36	51.579	GFL04 - 2E □□□ 063C32	E82MV 251_2B
2.4	70	6.9	62	9.5	24	70	2.5	41	40	57.455	GFL04 - 2E □□□ 063C32	E82MV 251_2B
2.1	79	6.1	70	8.4	21	79	2.1	37	45	64.636	GFL04 - 2E □□□ 063C32	E82MV 251_2B
1.9	88	5.5	78	7.6	19	88	2.0	33	51	72.000	GFL04 - 2E □□□ 063C32	E82MV 251_2B
1.6	104	4.6	93	6.4	16	104	1.0	28	60	85.156	GFL04 - 2E □□□ 063C32	E82MV 251_2B
1.4	116	4.2	103	5.8	14	116	1.0	25	67	94.857	GFL04 - 2E □□□ 063C32	E82MV 251_2B
1.3	122	3.9	109	5.4	13	122	2.7	23	70	101.547	GFL05 - 3E □□□ 063C32	E82MV 251_2B
1.2	138	3.4	123	4.8	12	138	2.4	21	80	114.952	GFL05 - 3E □□□ 063C32	E82MV 251_2B
1.2	140	3.4	125	4.7	12	140	2.9	20	81	116.571	GFL06 - 3E □□□ 063C32	E82MV 251_2B
1.1	156	3.1	139	4.2	11	156	2.1	18	90	129.524	GFL05 - 3E □□□ 063C32	E82MV 251_2B
1.0	158	3	141	4.2	10	158	3.2	18	91	131.323	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.9	174	2.7	155	3.8	9.5	174	3.2	16	100	144.320	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.8	196	2.4	174	3.4	8.4	196	3.1	15	112	162.583	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.8	213	2.2	190	3.1	7.7	213	1.6	13	122	177.027	GFL05 - 3E □□□ 063C32	E82MV 251_2B
0.8	216	2.2	192	3.0	7.6	216	2.8	13	124	179.520	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.7	240	2	214	2.7	6.8	240	1.4	12	138	199.467	GFL05 - 3E □□□ 063C32	E82MV 251_2B
0.7	243	2	217	2.7	6.8	243	2.5	12	140	202.237	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.6	274	1.7	244	2.4	6.0	274	1.3	10	158	227.989	GFL05 - 3E □□□ 063C32	E82MV 251_2B
0.6	278	1.7	248	2.4	5.9	278	2.3	10	160	231.200	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.5	309	1.5	275	2.1	5.3	309	1.1	9	178	256.889	GFL05 - 3E □□□ 063C32	E82MV 251_2B
0.5	313	1.5	279	2.1	5.2	313	2.0	9	180	260.457	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.5	348	1.4	309	1.9	4.7	348	1.0	8	200	288.948	GFL05 - 3E □□□ 063C32	E82MV 251_2B
0.5	353	1.4	314	1.9	4.7	353	1.9	8	203	293.018	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.4	392	1.2	349	1.7	4.2	392	0.8	7	225	325.576	GFL05 - 3E □□□ 063C32	E82MV 251_2B
0.5	360	1.3	320	1.8	4.6	360	1.7	8	207	299.200	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.4	442	1.1	393	1.5	3.7	442	1.5	6	254	367.200	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.3	498	1	443	1.3	3.3	498	1.2	6	286	413.667	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.3	572	0.8	509	1.1	2.9	572	1.1	5	329	475.200	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.3	644	0.7	573	1.0	2.6	644	1.0	4	370	535.333	GFL06 - 3E □□□ 063C32	E82MV 251_2B
0.2	694	0.7	618	0.9	2.4	694	0.9	4	399	576.720	GFL06 - 3E □□□ 063C32	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec



Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			

P₁ = 0.25 kW

37	6	109	5.5	150	374	6	4.5	651	3.6	3.659	GFL04 - 2E □□□ 063C42	E82MV 251_2B
27	9	79	7.6	109	273	9	4.5	475	4.9	5.018	GFL04 - 2E □□□ 063C42	E82MV 251_2B
23	10	68	8.8	94	235	10	4.5	409	5.7	5.833	GFL04 - 2E □□□ 063C42	E82MV 251_2B
21	11	62	9.6	86	214	11	4.5	372	6.2	6.400	GFL05 - 2E □□□ 063C42	E82MV 251_2B
20	12	57	10.6	78	195	12	5.2	339	6.8	7.025	GFL04 - 2E □□□ 063C42	E82MV 251_2B
16	14	47	12.6	65	164	14	4.5	285	8.1	8.379	GFL04 - 2E □□□ 063C42	E82MV 251_2B
15	16	43	14	59	147	16	4.5	255	9.1	9.333	GFL04 - 2E □□□ 063C42	E82MV 251_2B
13	17	39	15.4	54	134	17	5.2	233	9.9	10.238	GFL04 - 2E □□□ 063C42	E82MV 251_2B
12	19	35	17	48	119	19	4.5	207	11	11.491	GFL04 - 2E □□□ 063C42	E82MV 251_2B
11	22	31	19	43	107	22	4.5	186	12	12.800	GFL04 - 2E □□□ 063C42	E82MV 251_2B
9.3	25	27	22	37	93	25	5.2	162	14	14.706	GFL04 - 2E □□□ 063C42	E82MV 251_2B
8.6	27	25	24	34	86	27	4.5	150	15	15.904	GFL05 - 2E □□□ 063C42	E82MV 251_2B
7.7	30	22	27	31	77	30	4.5	133	17	17.920	GFL05 - 2E □□□ 063C42	E82MV 251_2B
6.7	35	19	31	27	67	35	4.8	116	20	20.519	GFL04 - 2E □□□ 063C42	E82MV 251_2B
6.0	39	17	34	24	60	39	4.3	104	22	22.857	GFL04 - 2E □□□ 063C42	E82MV 251_2B
5.5	43	16	38	22	55	43	4.3	95	24	25.136	GFL04 - 2E □□□ 063C42	E82MV 251_2B
4.9	47	14	42	20	49	47	3.5	85	27	28.000	GFL04 - 2E □□□ 063C42	E82MV 251_2B
4.3	53	13	48	17	43	53	3.5	75	31	31.600	GFL04 - 2E □□□ 063C42	E82MV 251_2B
3.9	60	11	53	16	39	60	2.9	68	34	35.200	GFL04 - 2E □□□ 063C42	E82MV 251_2B
3.4	69	9.8	61	13	34	69	2.7	59	40	40.697	GFL04 - 2E □□□ 063C42	E82MV 251_2B
3.0	77	8.8	68	12	30	77	2.2	53	44	45.333	GFL04 - 2E □□□ 063C42	E82MV 251_2B
2.7	87	7.7	78	11	27	87	2.2	46	50	51.579	GFL04 - 2E □□□ 063C42	E82MV 251_2B
2.4	97	6.9	86	9.5	24	97	1.8	41	56	57.455	GFL04 - 2E □□□ 063C42	E82MV 251_2B
2.3	99	6.8	88	9.4	23	99	3.2	41	57	58.667	GFL05 - 2E □□□ 063C42	E82MV 251_2B
2.1	109	6.1	97	8.5	21	109	1.2	37	63	64.636	GFL04 - 2E □□□ 063C42	E82MV 251_2B
2.2	107	6.3	95	8.7	22	107	2.6	38	61	63.190	GFL05 - 2E □□□ 063C42	E82MV 251_2B
2.1	108	6.2	96	8.6	21	108	3.2	37	62	64.080	GFL06 - 2E □□□ 063C42	E82MV 251_2B
1.9	122	5.5	108	7.6	19	122	1.2	33	70	72.000	GFL04 - 2E □□□ 063C42	E82MV 251_2B
1.9	120	5.6	107	7.7	19	120	2.5	33	69	71.200	GFL05 - 2E □□□ 063C42	E82MV 251_2B
1.9	122	5.5	109	7.6	19	122	3.2	33	70	72.189	GFL06 - 2E □□□ 063C42	E82MV 251_2B
1.7	137	4.9	122	6.8	17	137	1.4	30	78	80.763	GFL05 - 2E □□□ 063C42	E82MV 251_2B
1.7	137	4.9	122	6.8	17	137	2.6	29	79	81.000	GFL06 - 2E □□□ 063C42	E82MV 251_2B
1.5	154	4.4	137	6.0	15	154	1.4	26	88	91.000	GFL05 - 2E □□□ 063C42	E82MV 251_2B
1.5	154	4.4	137	6.0	15	154	2.6	26	89	91.250	GFL06 - 2E □□□ 063C42	E82MV 251_2B
1.5	154	4.3	137	5.9	15	154	5.2	26	88	92.413	GFL07 - 3E □□□ 063C42	E82MV 251_2B
1.4	169	3.9	151	5.4	14	169	1.9	23	97	101.547	GFL05 - 3E □□□ 063C42	E82MV 251_2B
1.2	191	3.5	170	4.8	12	191	1.7	21	110	114.952	GFL05 - 3E □□□ 063C42	E82MV 251_2B
1.2	194	3.4	173	4.7	12	194	2.7	20	112	116.571	GFL06 - 3E □□□ 063C42	E82MV 251_2B
1.1	216	3.1	192	4.2	11	216	1.5	18	124	129.524	GFL05 - 3E □□□ 063C42	E82MV 251_2B
1.0	219	3	195	4.2	10	219	2.7	18	126	131.323	GFL06 - 3E □□□ 063C42	E82MV 251_2B
1.0	235	2.8	209	3.9	9.7	235	1.5	17	135	140.817	GFL05 - 3E □□□ 063C42	E82MV 251_2B
0.9	240	2.8	214	3.8	9.5	240	2.3	17	138	144.320	GFL06 - 3E □□□ 063C42	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 4-32 onwards													

P₁ = 0.25 kW

0.9	264	2.5	235	3.5	8.6	264	1.2	15	152	158.667	GFL05 - 3E □□□ 063C42	E82MV 251_2B
0.8	271	2.4	241	3.4	8.4	271	2.3	15	156	162.583	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.8	295	2.2	262	3.1	7.7	295	1.2	13	169	177.027	GFL05 - 3E □□□ 063C42	E82MV 251_2B
0.8	299	2.2	266	3.1	7.6	299	2.0	13	172	179.520	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.7	332	2	296	2.7	6.9	332	1.0	12	191	199.467	GFL05 - 3E □□□ 063C42	E82MV 251_2B
0.7	337	2	300	2.7	6.8	337	1.8	12	194	202.237	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.6	380	1.7	338	2.4	6.0	380	0.9	10	218	227.989	GFL05 - 3E □□□ 063C42	E82MV 251_2B
0.6	385	1.7	343	2.4	5.9	385	1.6	10	221	231.200	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.5	434	1.5	386	2.1	5.3	434	1.4	9	249	260.457	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.5	422	1.6	375	2.2	5.4	422	3.0	9	242	253.111	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.5	488	1.4	434	1.9	4.7	488	1.3	8	280	293.018	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.5	484	1.4	431	1.9	4.7	484	2.8	8	278	290.706	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.5	498	1.3	443	1.8	4.6	498	1.2	8	286	299.200	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.4	546	1.2	485	1.7	4.2	546	2.3	7	313	327.556	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.4	612	1.1	544	1.5	3.7	612	1.1	6	351	367.200	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.4	588	1.1	523	1.6	3.9	588	2.3	7	338	352.811	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.4	588	1.1	523	1.6	3.9	588	3.2	7	338	353.033	GFL09 - 3E □□□ 063C42	E82MV 251_2B
0.3	689	1	613	1.3	3.3	689	0.9	6	396	413.667	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.3	662	1	589	1.4	3.5	662	1.9	6	380	397.533	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.3	663	1	590	1.4	3.4	663	3.2	6	381	397.863	GFL09 - 3E □□□ 063C42	E82MV 251_2B
0.3	791	0.8	704	1.2	2.9	791	0.8	5	455	475.200	GFL06 - 3E □□□ 063C42	E82MV 251_2B
0.3	717	0.9	638	1.3	3.2	717	1.8	6	412	430.222	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.3	870	0.8	774	1.0	2.6	870	1.5	5	500	522.133	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.3	857	0.8	763	1.1	2.7	857	3.2	5	493	514.881	GFL09 - 3E □□□ 063C42	E82MV 251_2B
0.2	937	0.7	834	1.0	2.4	937	1.2	4	538	562.391	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.2	923	0.7	822	1.0	2.5	923	2.3	4	531	554.470	GFL09 - 3E □□□ 063C42	E82MV 251_2B
0.2	1055	0.6	939	0.9	2.2	1055	1.2	4	606	633.680	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.2	1041	0.6	926	0.9	2.2	1041	2.2	4	598	624.879	GFL09 - 3E □□□ 063C42	E82MV 251_2B
0.2	1197	0.6	1065	0.8	1.9	1197	0.9	3	688	718.786	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.2	1167	0.6	1039	0.8	2.0	1167	1.8	3	671	700.875	GFL09 - 3E □□□ 063C42	E82MV 251_2B
0.2	1349	0.5	1200	0.7	1.7	1349	0.9	3	775	809.900	GFL07 - 3E □□□ 063C42	E82MV 251_2B
0.2	1315	0.5	1171	0.7	1.7	1315	1.7	3	756	789.875	GFL09 - 3E □□□ 063C42	E82MV 251_2B

P₁ = 0.37 kW

39	9	112	7.9	154	385	9	4.0	670	5.1	3.659	GFL04 - 2E □□□ 071C32	E82MV 371_2B
28	12	81	10.9	112	281	12	4.0	489	7	5.018	GFL04 - 2E □□□ 071C32	E82MV 371_2B
24	14	70	12.6	97	242	14	4.0	421	8.2	5.833	GFL04 - 2E □□□ 071C32	E82MV 371_2B
22	16	64	13.8	88	220	16	4.0	383	8.9	6.400	GFL05 - 2E □□□ 071C32	E82MV 371_2B
20	17	58	15.2	80	201	17	4.5	349	9.8	7.025	GFL04 - 2E □□□ 071C32	E82MV 371_2B
17	20	49	18	67	168	20	4.0	293	12	8.379	GFL04 - 2E □□□ 071C32	E82MV 371_2B
15	23	44	20	60	151	23	4.0	263	13	9.333	GFL04 - 2E □□□ 071C32	E82MV 371_2B
14	25	40	22	55	138	25	4.5	240	14	10.238	GFL04 - 2E □□□ 071C32	E82MV 371_2B
12	28	36	25	49	123	28	4.0	214	16	11.491	GFL04 - 2E □□□ 071C32	E82MV 371_2B
11	31	32	28	44	110	31	4.0	192	18	12.800	GFL04 - 2E □□□ 071C32	E82MV 371_2B
9.6	36	28	32	38	96	36	4.5	167	21	14.706	GFL04 - 2E □□□ 071C32	E82MV 371_2B
8.9	39	26	34	35	89	39	4.0	154	22	15.904	GFL05 - 2E □□□ 071C32	E82MV 371_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec



Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz			87 Hz		i	Shaft-mounted helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂				M ₂
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]				[Nm]
Dimensions see page 4-32 onwards												

P₁ = 0.37 kW

7.9	44	23	39	31	79	44	3.8	137	25	17.920	GFL04 - 2E □□□ 071C32	E82MV 371_2B
6.9	50	20	44	27	69	50	3.7	120	29	20.519	GFL04 - 2E □□□ 071C32	E82MV 371_2B
6.2	56	18	49	25	62	56	3.0	107	32	22.857	GFL04 - 2E □□□ 071C32	E82MV 371_2B
5.6	61	16	54	22	56	61	3.0	98	35	25.136	GFL04 - 2E □□□ 071C32	E82MV 371_2B
5.0	68	15	61	20	50	68	2.5	88	39	28.000	GFL04 - 2E □□□ 071C32	E82MV 371_2B
4.5	77	13	68	18	45	77	2.4	78	44	31.600	GFL04 - 2E □□□ 071C32	E82MV 371_2B
4.0	86	12	76	16	40	86	2.0	70	49	35.200	GFL04 - 2E □□□ 071C32	E82MV 371_2B
3.5	99	10	88	14	35	99	1.9	60	57	40.697	GFL04 - 2E □□□ 071C32	E82MV 371_2B
3.5	98	10	87	14	35	98	3.2	61	56	40.233	GFL05 - 2E □□□ 071C32	E82MV 371_2B
3.1	110	9	98	12	31	110	1.6	54	63	45.333	GFL04 - 2E □□□ 071C32	E82MV 371_2B
3.1	110	9	98	12	31	110	2.9	54	63	45.333	GFL05 - 2E □□□ 071C32	E82MV 371_2B
2.7	125	7.9	112	11	27	125	1.5	48	72	51.579	GFL04 - 2E □□□ 071C32	E82MV 371_2B
2.7	127	7.9	113	11	27	127	2.4	47	73	52.067	GFL05 - 2E □□□ 071C32	E82MV 371_2B
2.7	128	7.7	114	11	27	128	3.2	46	74	52.800	GFL06 - 2E □□□ 071C32	E82MV 371_2B
2.5	140	7.1	124	9.8	25	140	1.2	43	80	57.455	GFL04 - 2E □□□ 071C32	E82MV 371_2B
2.4	143	7	127	9.6	24	143	2.3	42	82	58.667	GFL05 - 2E □□□ 071C32	E82MV 371_2B
2.4	145	6.9	129	9.5	24	145	3.2	41	83	59.481	GFL06 - 2E □□□ 071C32	E82MV 371_2B
2.2	157	6.3	140	8.7	22	157	1.0	38	90	64.636	GFL04 - 2E □□□ 071C32	E82MV 371_2B
2.2	154	6.5	137	8.9	22	154	1.8	39	88	63.190	GFL05 - 2E □□□ 071C32	E82MV 371_2B
2.2	156	6.4	139	8.8	22	156	2.8	38	90	64.080	GFL06 - 2E □□□ 071C32	E82MV 371_2B
2.0	175	5.7	156	7.8	20	175	1.0	34	101	72.000	GFL04 - 2E □□□ 071C32	E82MV 371_2B
2.0	173	5.7	154	7.9	20	173	1.8	34	99	71.200	GFL05 - 2E □□□ 071C32	E82MV 371_2B
2.0	176	5.7	156	7.8	20	176	2.8	34	101	72.189	GFL06 - 2E □□□ 071C32	E82MV 371_2B
1.8	196	5.1	175	7.0	18	196	1.1	30	113	80.763	GFL05 - 2E □□□ 071C32	E82MV 371_2B
1.7	197	5	175	7.0	17	197	2.2	30	113	81.000	GFL06 - 2E □□□ 071C32	E82MV 371_2B
1.6	221	4.5	197	6.2	16	221	1.1	27	127	91.000	GFL05 - 2E □□□ 071C32	E82MV 371_2B
1.6	222	4.5	197	6.2	16	222	2.1	27	128	91.250	GFL06 - 2E □□□ 071C32	E82MV 371_2B
1.5	221	4.4	197	6.1	15	221	4.3	27	127	92.413	GFL07 - 3E □□□ 071C32	E82MV 371_2B
1.4	243	4	216	5.6	14	243	1.3	24	140	101.547	GFL05 - 3E □□□ 071C32	E82MV 371_2B
1.4	238	4.1	212	5.7	14	238	2.3	25	137	99.361	GFL06 - 3E □□□ 071C32	E82MV 371_2B
1.2	275	3.6	245	4.9	12	275	1.2	21	158	114.952	GFL05 - 3E □□□ 071C32	E82MV 371_2B
1.2	279	3.5	248	4.8	12	279	1.9	21	160	116.571	GFL06 - 3E □□□ 071C32	E82MV 371_2B
1.1	310	3.2	276	4.4	11	310	1.1	19	178	129.524	GFL05 - 3E □□□ 071C32	E82MV 371_2B
1.1	315	3.1	280	4.3	11	315	1.9	19	181	131.323	GFL06 - 3E □□□ 071C32	E82MV 371_2B
1.0	337	2.9	300	4.0	10	337	1.0	17	194	140.817	GFL05 - 3E □□□ 071C32	E82MV 371_2B
1.0	346	2.8	308	3.9	9.8	346	1.6	17	199	144.320	GFL06 - 3E □□□ 071C32	E82MV 371_2B
1.0	353	2.8	314	3.8	9.6	353	3.2	17	203	147.347	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.9	380	2.6	338	3.6	8.9	380	0.9	15	218	158.667	GFL05 - 3E □□□ 071C32	E82MV 371_2B
0.9	389	2.5	347	3.5	8.7	389	1.6	15	224	162.583	GFL06 - 3E □□□ 071C32	E82MV 371_2B
0.8	398	2.5	354	3.4	8.5	398	3.1	15	229	166.025	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.8	424	2.3	377	3.2	8.0	424	0.8	14	244	177.027	GFL05 - 3E □□□ 071C32	E82MV 371_2B
0.8	430	2.3	383	3.1	7.9	430	1.4	14	247	179.520	GFL06 - 3E □□□ 071C32	E82MV 371_2B
0.8	439	2.2	391	3.1	7.7	439	2.8	13	252	183.285	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.7	484	2	431	2.8	7.0	484	1.3	12	278	202.237	GFL06 - 3E □□□ 071C32	E82MV 371_2B
0.7	495	2	440	2.7	6.8	495	2.5	12	284	206.519	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.6	554	1.8	493	2.4	6.1	554	1.1	11	318	231.200	GFL06 - 3E □□□ 071C32	E82MV 371_2B
0.6	538	1.8	479	2.5	6.3	538	2.5	11	309	224.636	GFL07 - 3E □□□ 071C32	E82MV 371_2B

Thermal power limit not considered (see page 2-5)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
										Dimensions see page 4-32 onwards			

P₁ = 0.37 kW

0.5	624	1.6	555	2.2	5.4	624	1.0	9	358	260.457	GFL06 - 3E □□□ 071C32	E82MV 371_2B
0.6	606	1.6	539	2.2	5.6	606	2.1	10	348	253.111	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.5	702	1.4	625	1.9	4.8	702	0.9	8	403	293.018	GFL06 - 3E □□□ 071C32	E82MV 371_2B
0.5	696	1.4	620	1.9	4.9	696	2.0	8	400	290.706	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.5	697	1.4	620	1.9	4.9	697	3.2	8	400	290.889	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.5	717	1.4	638	1.9	4.7	717	0.9	8	412	299.200	GFL06 - 3E □□□ 071C32	E82MV 371_2B
0.4	784	1.2	698	1.7	4.3	784	1.6	7	451	327.556	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.4	785	1.2	699	1.7	4.3	785	3.2	7	451	327.827	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.4	845	1.2	752	1.6	4.0	845	1.6	7	486	352.811	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.4	845	1.2	752	1.6	4.0	845	2.8	7	486	353.033	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.4	952	1	847	1.4	3.6	952	1.3	6	547	397.533	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.4	953	1	848	1.4	3.5	953	2.8	6	548	397.863	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.3	1030	1	917	1.3	3.3	1030	1.2	6	592	430.222	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.3	1016	1	904	1.3	3.3	1016	2.7	6	584	424.247	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.3	1250	0.8	1113	1.1	2.7	1250	1.0	5	719	522.133	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.3	1233	0.8	1097	1.1	2.7	1233	2.2	5	709	514.881	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.3	1347	0.7	1199	1.0	2.5	1347	0.8	4	774	562.391	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.3	1328	0.7	1182	1.0	2.5	1328	1.6	4	763	554.470	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.2	1518	0.6	1351	0.9	2.2	1518	0.8	4	872	633.680	GFL07 - 3E □□□ 071C32	E82MV 371_2B
0.2	1496	0.7	1332	0.9	2.3	1496	1.5	4	860	624.879	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.2	1678	0.6	1494	0.8	2.0	1678	1.3	4	965	700.875	GFL09 - 3E □□□ 071C32	E82MV 371_2B
0.2	1892	0.5	1683	0.7	1.8	1892	1.2	3	1087	789.875	GFL09 - 3E □□□ 071C32	E82MV 371_2B

P₁ = 0.55 kW

38	13	111	11.8	154	384	13	4.5	668	7.6	3.659	GFL04 - 2E □□□ 071C42	E82MV 551_4B
28	18	81	16	112	280	18	4.5	487	10	5.018	GFL04 - 2E □□□ 071C42	E82MV 551_4B
24	21	70	19	96	241	21	4.5	419	12	5.833	GFL04 - 2E □□□ 071C42	E82MV 551_4B
22	23	63	21	88	219	23	4.2	381	13	6.422	GFL04 - 2E □□□ 071C42	E82MV 551_4B
20	26	58	23	80	200	26	4.2	348	15	7.025	GFL04 - 2E □□□ 071C42	E82MV 551_4B
17	30	49	27	67	168	30	4.5	292	17	8.379	GFL04 - 2E □□□ 071C42	E82MV 551_4B
16	33	45	29	62	156	33	4.5	271	19	9.010	GFL05 - 2E □□□ 071C42	E82MV 551_4B
14	37	40	33	55	137	37	4.2	239	21	10.238	GFL04 - 2E □□□ 071C42	E82MV 551_4B
12	42	35	37	49	122	42	4.3	213	24	11.491	GFL04 - 2E □□□ 071C42	E82MV 551_4B
11	46	32	41	44	110	46	3.6	191	27	12.800	GFL04 - 2E □□□ 071C42	E82MV 551_4B
9.6	53	28	47	38	96	53	3.4	166	31	14.706	GFL04 - 2E □□□ 071C42	E82MV 551_4B
8.7	58	25	52	35	87	58	3.1	152	34	16.087	GFL04 - 2E □□□ 071C42	E82MV 551_4B
7.8	65	23	58	31	78	65	2.6	136	37	17.920	GFL04 - 2E □□□ 071C42	E82MV 551_4B
6.9	74	20	66	27	69	74	2.5	119	43	20.519	GFL04 - 2E □□□ 071C42	E82MV 551_4B
6.2	83	18	74	25	62	83	2.0	107	48	22.857	GFL04 - 2E □□□ 071C42	E82MV 551_4B
5.6	91	16	81	22	56	91	2.0	97	52	25.136	GFL04 - 2E □□□ 071C42	E82MV 551_4B
5.0	102	15	90	20	50	102	1.7	87	58	28.000	GFL04 - 2E □□□ 071C42	E82MV 551_4B
5.0	102	15	90	20	50	102	3.1	87	58	28.000	GFL05 - 2E □□□ 071C42	E82MV 551_4B
4.5	115	13	102	18	45	115	1.6	77	66	31.600	GFL04 - 2E □□□ 071C42	E82MV 551_4B
4.3	117	13	104	17	43	117	2.9	76	67	32.344	GFL05 - 2E □□□ 071C42	E82MV 551_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 4-32 onwards														

P₁ = 0.55 kW

4.0	128	12	114	16	40	128	1.3	69	73	35.200	GFL04 - 2E □□□ 071C42	E82MV 551_4B
3.9	132	11	118	15	39	132	2.4	67	76	36.444	GFL05 - 2E □□□ 071C42	E82MV 551_4B
3.5	148	10	131	14	35	148	1.3	60	85	40.697	GFL04 - 2E □□□ 071C42	E82MV 551_4B
3.5	146	10	130	14	35	146	2.4	61	84	40.233	GFL05 - 2E □□□ 071C42	E82MV 551_4B
3.4	148	10	132	14	34	148	3.2	60	85	40.800	GFL06 - 2E □□□ 071C42	E82MV 551_4B
3.1	164	9	146	12	31	164	1.0	54	94	45.333	GFL04 - 2E □□□ 071C42	E82MV 551_4B
3.1	164	9	146	12	31	164	1.9	54	94	45.333	GFL05 - 2E □□□ 071C42	E82MV 551_4B
3.1	167	8.9	148	12	31	167	3.2	53	96	45.963	GFL06 - 2E □□□ 071C42	E82MV 551_4B
2.7	189	7.8	168	11	27	189	1.6	47	109	52.067	GFL05 - 2E □□□ 071C42	E82MV 551_4B
2.7	192	7.7	170	11	27	192	2.9	46	110	52.800	GFL06 - 2E □□□ 071C42	E82MV 551_4B
2.4	213	6.9	189	9.6	24	213	1.5	42	122	58.667	GFL05 - 2E □□□ 071C42	E82MV 551_4B
2.4	216	6.9	192	9.4	24	216	2.9	41	124	59.481	GFL06 - 2E □□□ 071C42	E82MV 551_4B
2.2	229	6.4	204	8.9	22	229	1.2	39	132	63.190	GFL05 - 2E □□□ 071C42	E82MV 551_4B
2.2	232	6.4	207	8.8	22	232	2.4	38	134	64.080	GFL06 - 2E □□□ 071C42	E82MV 551_4B
2.0	258	5.7	230	7.9	20	258	1.2	34	148	71.200	GFL05 - 2E □□□ 071C42	E82MV 551_4B
2.0	262	5.6	233	7.8	20	262	2.4	34	150	72.189	GFL06 - 2E □□□ 071C42	E82MV 551_4B
1.7	294	5	261	6.9	17	294	1.4	30	169	81.000	GFL06 - 2E □□□ 071C42	E82MV 551_4B
1.5	331	4.5	295	6.2	15	331	1.4	27	190	91.250	GFL06 - 2E □□□ 071C42	E82MV 551_4B
1.5	330	4.4	294	6.1	15	330	2.9	26	190	92.413	GFL07 - 3E □□□ 071C42	E82MV 551_4B
1.4	363	4	323	5.5	14	363	0.9	24	208	101.547	GFL05 - 3E □□□ 071C42	E82MV 551_4B
1.4	355	4.1	316	5.6	14	355	1.5	25	204	99.361	GFL06 - 3E □□□ 071C42	E82MV 551_4B
1.4	372	3.9	331	5.4	14	372	2.9	23	214	104.127	GFL07 - 3E □□□ 071C42	E82MV 551_4B
1.2	411	3.5	365	4.9	12	411	0.8	21	236	114.952	GFL05 - 3E □□□ 071C42	E82MV 551_4B
1.2	416	3.5	371	4.8	12	416	1.3	21	239	116.571	GFL06 - 3E □□□ 071C42	E82MV 551_4B
1.2	404	3.6	360	5.0	12	404	2.6	22	232	113.206	GFL07 - 3E □□□ 071C42	E82MV 551_4B
1.1	469	3.1	418	4.3	11	469	1.3	19	270	131.323	GFL06 - 3E □□□ 071C42	E82MV 551_4B
1.1	456	3.2	406	4.4	11	456	2.6	19	262	127.556	GFL07 - 3E □□□ 071C42	E82MV 551_4B
1.0	516	2.8	459	3.9	9.7	516	1.1	17	296	144.320	GFL06 - 3E □□□ 071C42	E82MV 551_4B
1.0	526	2.8	468	3.8	9.5	526	2.2	17	303	147.347	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.9	581	2.5	517	3.5	8.6	581	1.1	15	334	162.583	GFL06 - 3E □□□ 071C42	E82MV 551_4B
0.8	593	2.5	528	3.4	8.5	593	2.1	15	341	166.025	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.8	641	2.3	571	3.1	7.8	641	0.9	14	369	179.520	GFL06 - 3E □□□ 071C42	E82MV 551_4B
0.8	655	2.2	583	3.1	7.7	655	1.9	13	376	183.285	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.8	661	2.2	589	3.0	7.6	661	3.2	13	380	185.111	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.7	723	2	643	2.8	7.0	723	0.8	12	415	202.237	GFL06 - 3E □□□ 071C42	E82MV 551_4B
0.7	738	2	657	2.7	6.8	738	1.7	12	424	206.519	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.7	745	2	663	2.7	6.7	745	3.2	12	428	208.617	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.6	803	1.8	714	2.5	6.3	803	1.7	11	461	224.636	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.6	803	1.8	715	2.5	6.3	803	3.0	11	461	224.778	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.6	904	1.6	805	2.2	5.6	904	1.4	10	520	253.111	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.6	905	1.6	805	2.2	5.6	905	3.0	10	520	253.321	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.5	1039	1.4	924	1.9	4.8	1039	1.3	8	597	290.706	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.5	1039	1.4	925	1.9	4.8	1039	2.5	8	597	290.889	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.4	1170	1.2	1041	1.7	4.3	1170	1.1	7	673	327.556	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.4	1171	1.2	1042	1.7	4.3	1171	2.5	7	673	327.827	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.4	1260	1.2	1122	1.6	4.0	1260	1.1	7	724	352.811	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.4	1261	1.2	1122	1.6	4.0	1261	2.2	7	725	353.033	GFL09 - 3E □□□ 071C42	E82MV 551_4B

Thermal power limit not considered (see page 2-5)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
										Dimensions see page 4-32 onwards				

P₁ = 0.55 kW

0.4	1420	1	1264	1.4	3.5	1420	0.9	6	816	397.533	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.4	1421	1	1265	1.4	3.5	1421	2.2	6	817	397.863	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.3	1537	0.9	1368	1.3	3.3	1537	0.8	6	883	430.222	GFL07 - 3E □□□ 071C42	E82MV 551_4B
0.3	1516	1	1349	1.3	3.3	1516	1.8	6	871	424.247	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.3	1839	0.8	1637	1.1	2.7	1839	1.5	5	1057	514.881	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.3	1981	0.7	1763	1.0	2.5	1981	1.1	4	1138	554.470	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.2	2232	0.7	1987	0.9	2.3	2232	1.0	4	1283	624.879	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.2	2504	0.6	2228	0.8	2.0	2504	0.8	3	1439	700.875	GFL09 - 3E □□□ 071C42	E82MV 551_4B
0.2	2822	0.5	2511	0.7	1.8	2822	0.8	3	1622	789.875	GFL09 - 3E □□□ 071C42	E82MV 551_4B

P₁ = 0.75 kW

39	18	112	16	154	385	18	4.2	670	10	3.659	GFL04 - 2E □□□ 080C32	E82MV 751_4B
28	25	81	22	112	281	25	4.2	489	14	5.018	GFL04 - 2E □□□ 080C32	E82MV 751_4B
24	29	70	26	97	242	29	4.2	421	17	5.833	GFL04 - 2E □□□ 080C32	E82MV 751_4B
22	32	64	28	88	220	32	3.6	382	18	6.422	GFL04 - 2E □□□ 080C32	E82MV 751_4B
20	35	58	31	80	201	35	3.3	349	20	7.025	GFL04 - 2E □□□ 080C32	E82MV 751_4B
17	41	49	37	67	168	41	4.2	293	24	8.379	GFL04 - 2E □□□ 080C32	E82MV 751_4B
15	46	44	41	60	151	46	3.6	263	26	9.333	GFL04 - 2E □□□ 080C32	E82MV 751_4B
14	51	40	45	55	138	51	3.2	240	29	10.238	GFL04 - 2E □□□ 080C32	E82MV 751_4B
12	57	36	50	49	123	57	3.2	214	33	11.491	GFL04 - 2E □□□ 080C32	E82MV 751_4B
11	63	32	56	44	110	63	2.6	192	36	12.800	GFL04 - 2E □□□ 080C32	E82MV 751_4B
9.6	73	28	64	38	96	73	2.5	167	42	14.706	GFL04 - 2E □□□ 080C32	E82MV 751_4B
8.8	79	25	71	35	88	79	2.3	153	46	16.087	GFL04 - 2E □□□ 080C32	E82MV 751_4B
7.9	88	23	79	31	79	88	1.9	137	51	17.920	GFL04 - 2E □□□ 080C32	E82MV 751_4B
6.9	101	20	90	27	69	101	1.8	120	58	20.519	GFL04 - 2E □□□ 080C32	E82MV 751_4B
6.2	113	18	100	25	62	113	1.5	107	65	22.857	GFL04 - 2E □□□ 080C32	E82MV 751_4B
6.2	113	18	100	25	62	113	2.8	107	65	22.857	GFL05 - 2E □□□ 080C32	E82MV 751_4B
5.6	124	16	110	22	56	124	1.5	98	71	25.136	GFL04 - 2E □□□ 080C32	E82MV 751_4B
5.7	123	16	109	23	57	123	2.8	99	70	24.850	GFL05 - 2E □□□ 080C32	E82MV 751_4B
5.0	138	15	123	20	50	138	1.2	88	79	28.000	GFL04 - 2E □□□ 080C32	E82MV 751_4B
5.0	138	15	123	20	50	138	2.3	88	79	28.000	GFL05 - 2E □□□ 080C32	E82MV 751_4B
4.5	156	13	139	18	45	156	1.2	78	90	31.600	GFL04 - 2E □□□ 080C32	E82MV 751_4B
4.4	159	13	142	17	44	159	2.2	76	92	32.344	GFL05 - 2E □□□ 080C32	E82MV 751_4B
4.0	174	12	154	16	40	174	1.0	70	100	35.200	GFL04 - 2E □□□ 080C32	E82MV 751_4B
3.9	180	11	160	15	39	180	1.8	67	103	36.444	GFL05 - 2E □□□ 080C32	E82MV 751_4B
3.5	201	10	178	14	35	201	0.9	60	115	40.697	GFL04 - 2E □□□ 080C32	E82MV 751_4B
3.5	198	10	176	14	35	198	1.7	61	114	40.233	GFL05 - 2E □□□ 080C32	E82MV 751_4B
3.5	201	10	179	14	35	201	2.9	60	116	40.800	GFL06 - 2E □□□ 080C32	E82MV 751_4B
3.1	223	9	199	12	31	223	1.4	54	128	45.333	GFL05 - 2E □□□ 080C32	E82MV 751_4B
3.1	227	8.9	202	12	31	227	2.7	53	130	45.963	GFL06 - 2E □□□ 080C32	E82MV 751_4B
2.7	257	7.9	228	11	27	257	1.2	47	147	52.067	GFL05 - 2E □□□ 080C32	E82MV 751_4B
2.7	260	7.7	232	11	27	260	2.5	46	150	52.800	GFL06 - 2E □□□ 080C32	E82MV 751_4B
2.7	257	7.9	228	11	27	257	2.9	47	147	52.067	GFL07 - 2E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec



Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz			87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂				M ₂	
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]				[Nm]	
										Dimensions see page 4-32 onwards			

P₁ = 0.75 kW

2.4	289	7	257	9.6	24	289	1.1	42	166	58.667	GFL05 - 2E □□□ 080C32	E82MV 751_4B
2.4	293	6.9	261	9.5	24	293	2.1	41	168	59.481	GFL06 - 2E □□□ 080C32	E82MV 751_4B
2.4	289	7	257	9.6	24	289	2.9	42	166	58.667	GFL07 - 2E □□□ 080C32	E82MV 751_4B
2.2	311	6.5	277	8.9	22	311	0.9	39	179	63.190	GFL05 - 2E □□□ 080C32	E82MV 751_4B
2.2	316	6.4	281	8.8	22	316	1.8	38	181	64.080	GFL06 - 2E □□□ 080C32	E82MV 751_4B
2.2	311	6.5	277	8.9	22	311	2.5	39	179	63.190	GFL07 - 2E □□□ 080C32	E82MV 751_4B
2.0	351	5.7	312	7.9	20	351	0.9	34	202	71.200	GFL05 - 2E □□□ 080C32	E82MV 751_4B
2.0	356	5.7	317	7.8	20	356	1.7	34	204	72.189	GFL06 - 2E □□□ 080C32	E82MV 751_4B
2.0	351	5.7	312	7.9	20	351	2.5	34	202	71.200	GFL07 - 2E □□□ 080C32	E82MV 751_4B
1.7	399	5	355	7.0	17	399	1.1	30	229	81.000	GFL06 - 2E □□□ 080C32	E82MV 751_4B
1.8	394	5.1	350	7.1	18	394	2.0	31	226	79.875	GFL07 - 2E □□□ 080C32	E82MV 751_4B
1.6	450	4.5	400	6.2	16	450	1.1	27	258	91.250	GFL06 - 2E □□□ 080C32	E82MV 751_4B
1.6	444	4.5	395	6.3	16	444	2.0	27	255	90.000	GFL07 - 2E □□□ 080C32	E82MV 751_4B
1.5	449	4.4	399	6.1	15	449	2.1	27	258	92.413	GFL07 - 3E □□□ 080C32	E82MV 751_4B
1.4	482	4.1	429	5.7	14	482	1.1	25	277	99.361	GFL06 - 3E □□□ 080C32	E82MV 751_4B
1.4	506	3.9	450	5.4	14	506	2.1	24	290	104.127	GFL07 - 3E □□□ 080C32	E82MV 751_4B
1.2	566	3.5	504	4.8	12	566	0.9	21	325	116.571	GFL06 - 3E □□□ 080C32	E82MV 751_4B
1.3	550	3.6	489	5.0	13	550	1.9	22	316	113.206	GFL07 - 3E □□□ 080C32	E82MV 751_4B
1.1	638	3.1	567	4.3	11	638	0.9	19	366	131.323	GFL06 - 3E □□□ 080C32	E82MV 751_4B
1.1	619	3.2	551	4.4	11	619	1.9	19	356	127.556	GFL07 - 3E □□□ 080C32	E82MV 751_4B
1.0	715	2.8	637	3.8	9.6	715	1.6	17	411	147.347	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.9	722	2.7	643	3.8	9.5	722	2.8	16	415	148.815	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.8	806	2.5	717	3.4	8.5	806	1.5	15	463	166.025	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.8	814	2.4	725	3.4	8.4	814	2.8	15	468	167.712	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.8	890	2.2	792	3.1	7.7	890	1.4	13	511	183.285	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.8	899	2.2	800	3.0	7.6	899	2.5	13	516	185.111	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.7	1003	2	892	2.7	6.8	1003	1.2	12	576	206.519	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.7	1013	2	901	2.7	6.8	1013	2.5	12	582	208.617	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.6	1090	1.8	970	2.5	6.3	1090	1.2	11	627	224.636	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.6	1091	1.8	971	2.5	6.3	1091	2.2	11	627	224.778	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.6	1229	1.6	1094	2.2	5.6	1229	1.0	10	706	253.111	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.6	1230	1.6	1094	2.2	5.6	1230	2.2	10	707	253.321	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.5	1411	1.4	1256	1.9	4.9	1411	1.0	8	811	290.706	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.5	1412	1.4	1257	1.9	4.9	1412	1.9	8	812	290.889	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.4	1591	1.2	1416	1.7	4.3	1591	1.9	7	915	327.827	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.4	1713	1.2	1524	1.6	4.0	1713	0.8	7	984	352.811	GFL07 - 3E □□□ 080C32	E82MV 751_4B
0.4	1714	1.2	1525	1.6	4.0	1714	1.6	7	985	353.033	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.4	1738	1.1	1547	1.6	3.9	1738	2.5	7	999	358.077	GFL11 - 3E □□□ 080C32	E82MV 751_4B
0.4	1931	1	1719	1.4	3.5	1931	1.6	6	1110	397.863	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.3	1959	1	1743	1.4	3.5	1959	2.5	6	1126	403.467	GFL11 - 3E □□□ 080C32	E82MV 751_4B
0.3	2059	1	1833	1.3	3.3	2059	1.3	6	1184	424.247	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.3	2088	1	1859	1.3	3.3	2088	2.8	6	1200	430.222	GFL11 - 3E □□□ 080C32	E82MV 751_4B
0.3	2499	0.8	2224	1.1	2.7	2499	1.1	5	1436	514.881	GFL09 - 3E □□□ 080C32	E82MV 751_4B
0.3	2535	0.8	2256	1.1	2.7	2535	2.3	5	1457	522.133	GFL11 - 3E □□□ 080C32	E82MV 751_4B
0.3	2730	0.7	2430	1.0	2.5	2730	1.9	4	1569	562.391	GFL11 - 3E □□□ 080C32	E82MV 751_4B
0.2	3076	0.6	2738	0.9	2.2	3076	1.9	4	1768	633.680	GFL11 - 3E □□□ 080C32	E82MV 751_4B
0.2	3451	0.6	3071	0.8	2.0	3451	1.5	3	1983	710.888	GFL11 - 3E □□□ 080C32	E82MV 751_4B
0.2	3888	0.5	3461	0.7	1.8	3888	1.5	3	2235	801.000	GFL11 - 3E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
[rpm]	[Nm]	[rpm]	[Nm]	30 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]					
										Dimensions see page 4-32 onwards				
P ₁ = 1.1 kW														
38	27	110	23	228	380	27	4.1	661	15	3.659	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
30	34	88	28	182	304	34	4.5	529	19	4.571	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
28	37	80	31	166	277	37	3.0	482	21	5.018	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
24	43	69	36	143	238	43	3.6	415	25	5.833	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
22	47	63	40	130	216	47	2.4	377	27	6.422	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
20	52	57	43	119	198	52	2.2	344	30	7.025	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
17	61	48	52	100	166	61	2.9	289	35	8.379	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
15	68	43	57	89	149	68	2.4	259	39	9.333	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
14	75	39	63	81	136	75	2.1	236	43	10.238	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
12	84	35	71	73	121	84	2.1	210	48	11.491	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
11	94	31	79	65	109	94	1.8	189	54	12.800	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
11	94	31	79	65	109	94	3.0	189	54	12.800	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
9.5	108	27	91	57	95	108	1.7	164	62	14.706	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
9.6	107	28	90	57	96	107	2.8	166	61	14.538	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
8.6	118	25	99	52	86	118	1.5	150	68	16.087	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
8.7	117	25	98	52	87	117	2.7	152	67	15.904	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
7.8	131	22	110	47	78	131	1.3	135	76	17.920	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
7.8	131	22	110	47	78	131	2.4	135	76	17.920	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
6.8	150	20	126	41	68	150	1.2	118	86	20.519	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
6.9	149	20	125	41	69	149	2.2	119	85	20.286	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
6.1	168	18	141	36	61	168	1.0	106	96	22.857	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
6.1	168	18	141	36	61	168	1.9	106	96	22.857	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
5.5	184	16	155	33	55	184	1.0	96	106	25.136	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
5.6	182	16	153	34	56	182	1.9	97	105	24.850	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
5.0	205	14	172	30	50	205	0.8	86	118	28.000	GFL04 - 2E □□□ 080C42	E82MV 152_4B		
5.0	205	14	172	30	50	205	1.5	86	118	28.000	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
4.9	208	14	175	29	49	208	2.9	85	120	28.389	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
4.3	237	12	199	26	43	237	1.5	75	136	32.344	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
4.2	241	12	202	25	42	241	2.7	74	138	32.800	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
3.8	267	11	224	23	38	267	1.2	66	154	36.444	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
3.8	271	11	228	23	38	271	2.3	65	156	36.951	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
3.5	295	10	248	21	35	295	1.2	60	170	40.233	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
3.4	299	9.9	251	20	34	299	2.2	59	172	40.800	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
3.5	291	10	244	21	35	291	3.1	61	167	39.642	GFL07 - 2E □□□ 080C42	E82MV 152_4B		
3.1	332	8.9	279	18	31	332	1.0	53	191	45.333	GFL05 - 2E □□□ 080C42	E82MV 152_4B		
3.0	337	8.8	283	18	30	337	1.8	53	194	45.963	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
3.1	328	9	275	19	31	328	3.1	54	188	44.667	GFL07 - 2E □□□ 080C42	E82MV 152_4B		
2.6	387	7.6	325	16	26	387	1.7	46	222	52.800	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
2.7	382	7.7	321	16	27	382	2.9	46	219	52.067	GFL07 - 2E □□□ 080C42	E82MV 152_4B		
2.3	436	6.8	366	14	23	436	1.4	41	251	59.481	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
2.4	430	6.9	361	14	24	430	2.9	41	247	58.667	GFL07 - 2E □□□ 080C42	E82MV 152_4B		
2.2	470	6.3	395	13	22	470	1.2	38	270	64.080	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
2.2	463	6.4	389	13	22	463	2.3	38	266	63.190	GFL07 - 2E □□□ 080C42	E82MV 152_4B		
1.9	529	5.6	445	12	19	529	1.2	34	304	72.189	GFL06 - 2E □□□ 080C42	E82MV 152_4B		
2.0	522	5.7	439	12	20	522	2.3	34	300	71.200	GFL07 - 2E □□□ 080C42	E82MV 152_4B		
1.7	586	5	492	10	17	586	1.4	30	337	79.875	GFL07 - 2E □□□ 080C42	E82MV 152_4B		
1.5	660	4.5	554	9.2	15	660	1.4	27	379	90.000	GFL07 - 2E □□□ 080C42	E82MV 152_4B		

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec



Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	30 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
Dimensions see page 4-32 onwards												
P ₁ = 1.1 kW												
1.5	667	4.4	561	9.0	15	667	1.4	26	384	92.413	GFL07 - 3E □□□ 080C42	E82MV 152_4B
1.5	674	4.3	566	8.9	15	674	2.5	26	387	93.333	GFL09 - 3E □□□ 080C42	E82MV 152_4B
1.3	752	3.9	632	8.0	13	752	1.4	23	432	104.127	GFL07 - 3E □□□ 080C42	E82MV 152_4B
1.3	760	3.8	638	7.9	13	760	2.5	23	437	105.185	GFL09 - 3E □□□ 080C42	E82MV 152_4B
1.2	818	3.6	687	7.4	12	818	1.3	21	470	113.206	GFL07 - 3E □□□ 080C42	E82MV 152_4B
1.2	826	3.5	694	7.3	12	826	2.2	21	475	114.333	GFL09 - 3E □□□ 080C42	E82MV 152_4B
1.1	921	3.2	774	6.5	11	921	1.3	19	529	127.556	GFL07 - 3E □□□ 080C42	E82MV 152_4B
1.1	931	3.1	782	6.5	11	931	2.2	19	535	128.852	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.9	1064	2.7	894	5.7	9.4	1064	1.1	16	612	147.347	GFL07 - 3E □□□ 080C42	E82MV 152_4B
0.9	1075	2.7	903	5.6	9.3	1075	1.9	16	618	148.815	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.8	1199	2.4	1007	5.0	8.4	1199	1.0	15	689	166.025	GFL07 - 3E □□□ 080C42	E82MV 152_4B
0.8	1211	2.4	1017	5.0	8.3	1211	1.9	14	696	167.712	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.8	1324	2.2	1112	4.5	7.6	1324	0.9	13	761	183.285	GFL07 - 3E □□□ 080C42	E82MV 152_4B
0.8	1337	2.2	1123	4.5	7.5	1337	1.7	13	768	185.111	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.8	1320	2.2	1109	4.6	7.6	1320	3.1	13	759	182.792	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.7	1492	2	1253	4.0	6.7	1492	0.8	12	857	206.519	GFL07 - 3E □□□ 080C42	E82MV 152_4B
0.7	1507	1.9	1266	4.0	6.7	1507	1.7	12	866	208.617	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.7	1488	2	1249	4.1	6.8	1488	3.1	12	855	205.963	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.6	1622	1.8	1363	3.7	6.2	1622	0.8	11	932	224.636	GFL07 - 3E □□□ 080C42	E82MV 152_4B
0.6	1623	1.8	1364	3.7	6.2	1623	1.5	11	933	224.778	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.6	1622	1.8	1363	3.7	6.2	1622	2.8	11	932	224.636	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.5	1830	1.6	1537	3.3	5.5	1830	1.5	10	1051	253.321	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.5	1828	1.6	1535	3.3	5.5	1828	2.8	10	1051	253.111	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.5	2101	1.4	1765	2.9	4.8	2101	1.3	8	1207	290.889	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.5	1930	1.5	1621	3.1	5.2	1930	2.6	9	1109	267.259	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.4	2368	1.2	1989	2.5	4.2	2368	1.3	7	1361	327.827	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.4	2366	1.2	1987	2.5	4.2	2366	2.3	7	1360	327.556	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.4	2550	1.1	2142	2.4	3.9	2550	1.1	7	1465	353.033	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.4	2586	1.1	2172	2.3	3.9	2586	2.0	7	1486	358.077	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.3	2873	1	2414	2.1	3.5	2873	1.1	6	1651	397.863	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.3	2914	1	2448	2.1	3.5	2914	2.0	6	1675	403.467	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.3	3064	1	2574	2.0	3.3	3064	0.9	6	1761	424.247	GFL09 - 3E □□□ 080C42	E82MV 152_4B
0.3	3107	0.9	2610	1.9	3.2	3107	1.9	6	1786	430.222	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.3	3771	0.8	3168	1.6	2.7	3771	1.6	5	2167	522.133	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.2	4062	0.7	3412	1.5	2.5	4062	1.3	4	2334	562.391	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.2	4576	0.6	3844	1.3	2.2	4576	1.3	4	2630	633.680	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.2	5134	0.6	4313	1.2	2.0	5134	1.0	3	2951	710.888	GFL11 - 3E □□□ 080C42	E82MV 152_4B
0.2	5785	0.5	4859	1.0	1.7	5785	1.0	3	3325	801.000	GFL11 - 3E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 4-32 onwards												

P₁ = 1.5 kW

38	37	110	33	152	380	37	3.0	661	21	3.659	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
30	46	88	41	122	304	46	3.7	529	26	4.571	GFL05 - 2E □□□ 090C32	E82MV 152_4B
28	50	80	45	111	277	50	2.2	482	29	5.018	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
24	58	69	52	95	238	58	2.6	415	34	5.833	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
22	64	63	57	87	216	64	1.8	377	37	6.422	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
22	64	63	57	87	217	64	2.7	378	37	6.400	GFL05 - 2E □□□ 090C32	E82MV 152_4B
20	70	57	63	79	198	70	1.6	344	40	7.025	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
17	84	48	75	66	166	84	2.1	289	48	8.379	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
15	93	43	83	60	149	93	1.8	259	54	9.333	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
15	90	45	80	62	154	90	2.9	268	52	9.010	GFL05 - 2E □□□ 090C32	E82MV 152_4B
14	102	39	91	54	136	102	1.6	236	59	10.238	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
14	99	41	88	56	140	99	2.8	243	57	9.946	GFL05 - 2E □□□ 090C32	E82MV 152_4B
12	115	35	102	48	121	115	1.6	210	66	11.491	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
12	114	35	101	49	122	114	2.5	213	65	11.360	GFL05 - 2E □□□ 090C32	E82MV 152_4B
11	128	31	114	43	109	128	1.3	189	74	12.800	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
11	128	31	114	43	109	128	2.2	189	74	12.800	GFL05 - 2E □□□ 090C32	E82MV 152_4B
9.5	147	27	131	38	95	147	1.2	164	84	14.706	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
9.6	145	28	129	38	96	145	2.1	166	84	14.538	GFL05 - 2E □□□ 090C32	E82MV 152_4B
8.6	161	25	143	35	86	161	1.1	150	92	16.087	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
8.7	159	25	142	35	87	159	1.9	152	91	15.904	GFL05 - 2E □□□ 090C32	E82MV 152_4B
7.8	179	22	159	31	78	179	0.9	135	103	17.920	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
7.8	179	22	159	31	78	179	1.7	135	103	17.920	GFL05 - 2E □□□ 090C32	E82MV 152_4B
6.8	205	20	183	27	68	205	0.9	118	118	20.519	* GFL04 - 2E □□□ 090C32	E82MV 152_4B
6.9	203	20	181	27	69	203	1.6	119	117	20.286	GFL05 - 2E □□□ 090C32	E82MV 152_4B
6.8	206	20	183	27	68	206	3.1	118	118	20.571	GFL06 - 2E □□□ 090C32	E82MV 152_4B
6.1	229	18	203	24	61	229	1.4	106	131	22.857	GFL05 - 2E □□□ 090C32	E82MV 152_4B
6.0	232	17	206	24	60	232	2.6	104	133	23.175	GFL06 - 2E □□□ 090C32	E82MV 152_4B
5.6	249	16	221	22	56	249	1.4	97	143	24.850	GFL05 - 2E □□□ 090C32	E82MV 152_4B
5.5	252	16	224	22	55	252	2.6	96	145	25.200	GFL06 - 2E □□□ 090C32	E82MV 152_4B
5.0	280	14	249	20	50	280	1.1	86	161	28.000	GFL05 - 2E □□□ 090C32	E82MV 152_4B
4.9	284	14	253	20	49	284	2.1	85	163	28.389	GFL06 - 2E □□□ 090C32	E82MV 152_4B
4.3	323	12	288	17	43	323	1.1	75	186	32.344	GFL05 - 2E □□□ 090C32	E82MV 152_4B
4.2	328	12	292	17	42	328	2.0	74	188	32.800	GFL06 - 2E □□□ 090C32	E82MV 152_4B
3.8	364	11	324	15	38	364	0.9	66	209	36.444	GFL05 - 2E □□□ 090C32	E82MV 152_4B
3.8	369	11	329	15	38	369	1.7	65	212	36.951	GFL06 - 2E □□□ 090C32	E82MV 152_4B
3.5	402	10	358	14	35	402	0.9	60	231	40.233	GFL05 - 2E □□□ 090C32	E82MV 152_4B
3.4	408	9.9	363	14	34	408	1.6	59	234	40.800	GFL06 - 2E □□□ 090C32	E82MV 152_4B
3.5	396	10	353	14	35	396	2.8	61	228	39.642	GFL07 - 2E □□□ 090C32	E82MV 152_4B
3.0	460	8.8	409	12	30	460	1.3	53	264	45.963	GFL06 - 2E □□□ 090C32	E82MV 152_4B
3.1	447	9	397	12	31	447	2.8	54	257	44.667	GFL07 - 2E □□□ 090C32	E82MV 152_4B
2.6	528	7.6	470	11	26	528	1.2	46	303	52.800	GFL06 - 2E □□□ 090C32	E82MV 152_4B
2.7	521	7.7	463	11	27	521	2.4	46	299	52.067	GFL07 - 2E □□□ 090C32	E82MV 152_4B
2.7	513	7.9	457	11	27	513	2.8	47	295	51.333	GFL09 - 2E □□□ 090C32	E82MV 152_4B
2.3	595	6.8	529	9.4	23	595	1.0	41	342	59.481	GFL06 - 2E □□□ 090C32	E82MV 152_4B
2.4	587	6.9	522	9.5	24	587	2.2	41	337	58.667	GFL07 - 2E □□□ 090C32	E82MV 152_4B
2.4	578	7	515	9.6	24	578	2.8	42	332	57.852	GFL09 - 2E □□□ 090C32	E82MV 152_4B
2.2	641	6.3	570	8.7	22	641	0.9	38	368	64.080	GFL06 - 2E □□□ 090C32	E82MV 152_4B
2.2	632	6.4	562	8.8	22	632	2.0	38	363	63.190	GFL07 - 2E □□□ 090C32	E82MV 152_4B
2.2	623	6.5	554	8.9	22	623	2.5	39	358	62.300	GFL09 - 2E □□□ 090C32	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

* Not possible with hollow shaft (H□□)!

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 4-32 onwards														

P₁ = 1.5 kW

1.9	722	5.6	642	7.7	19	722	0.9	34	415	72.189	GFL06 - 2E □□□ 090C32	E82MV 152_4B
2.0	712	5.7	634	7.8	20	712	1.8	34	409	71.200	GFL07 - 2E □□□ 090C32	E82MV 152_4B
2.0	702	5.7	625	7.9	20	702	2.5	34	403	70.211	GFL09 - 2E □□□ 090C32	E82MV 152_4B
1.7	799	5	711	7.0	17	799	1.1	30	459	79.875	GFL07 - 2E □□□ 090C32	E82MV 152_4B
1.8	787	5.1	701	7.1	18	787	1.9	31	453	78.750	GFL09 - 2E □□□ 090C32	E82MV 152_4B
1.5	900	4.5	801	6.2	15	900	1.0	27	517	90.000	GFL07 - 2E □□□ 090C32	E82MV 152_4B
1.6	887	4.5	790	6.3	16	887	1.9	27	510	88.750	GFL09 - 2E □□□ 090C32	E82MV 152_4B
1.5	910	4.4	810	6.0	15	910	1.1	26	523	92.413	GFL07 - 3E □□□ 090C32	E82MV 152_4B
1.5	919	4.3	818	6.0	15	919	1.8	26	528	93.333	GFL09 - 3E □□□ 090C32	E82MV 152_4B
1.3	1026	3.9	913	5.3	13	1026	1.1	23	589	104.127	GFL07 - 3E □□□ 090C32	E82MV 152_4B
1.3	1036	3.8	922	5.3	13	1036	1.8	23	595	105.185	GFL09 - 3E □□□ 090C32	E82MV 152_4B
1.2	1115	3.6	992	4.9	12	1115	0.9	21	641	113.206	GFL07 - 3E □□□ 090C32	E82MV 152_4B
1.2	1126	3.5	1002	4.9	12	1126	1.6	21	647	114.333	GFL09 - 3E □□□ 090C32	E82MV 152_4B
1.1	1256	3.2	1118	4.4	11	1256	0.9	19	722	127.556	GFL07 - 3E □□□ 090C32	E82MV 152_4B
1.1	1269	3.1	1129	4.3	11	1269	1.6	19	729	128.852	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.9	1466	2.7	1304	3.7	9.3	1466	1.4	16	842	148.815	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.9	1469	2.7	1307	3.7	9.3	1469	2.7	16	844	149.144	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.8	1652	2.4	1470	3.3	8.3	1652	1.4	14	949	167.712	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.8	1655	2.4	1473	3.3	8.3	1655	2.7	14	951	168.049	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.8	1823	2.2	1622	3.0	7.5	1823	1.2	13	1048	185.111	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.8	1800	2.2	1602	3.0	7.6	1800	2.4	13	1035	182.792	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.7	2055	1.9	1829	2.7	6.7	2055	1.2	12	1181	208.617	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.7	2028	2	1805	2.7	6.8	2028	2.4	12	1166	205.963	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.7	1990	2	1771	2.8	6.9	1990	2.8	12	1144	202.074	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.6	2214	1.8	1970	2.5	6.2	2214	1.1	11	1272	224.778	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.6	2212	1.8	1969	2.5	6.2	2212	2.0	11	1271	224.636	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.5	2495	1.6	2220	2.2	5.5	2495	1.1	10	1434	253.321	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.5	2493	1.6	2218	2.2	5.5	2493	2.0	10	1433	253.111	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.5	2865	1.4	2550	1.9	4.8	2865	0.9	8	1646	290.889	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.5	2632	1.5	2342	2.1	5.2	2632	1.9	9	1513	267.259	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.4	3229	1.2	2873	1.7	4.2	3229	0.9	7	1855	327.827	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.4	3226	1.2	2871	1.7	4.2	3226	1.7	7	1854	327.556	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.4	3477	1.1	3094	1.6	3.9	3477	0.8	7	1998	353.033	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.4	3526	1.1	3139	1.6	3.9	3526	1.5	7	2027	358.077	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.4	3475	1.1	3092	1.6	3.9	3475	2.5	7	1997	352.811	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.3	3918	1	3487	1.4	3.5	3918	0.8	6	2252	397.863	GFL09 - 3E □□□ 090C32	E82MV 152_4B
0.3	3973	1	3536	1.4	3.5	3973	1.5	6	2284	403.467	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.4	3915	1	3484	1.4	3.5	3915	2.5	6	2250	397.533	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.3	4237	0.9	3771	1.3	3.2	4237	1.4	6	2435	430.222	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.3	4237	0.9	3771	1.3	3.2	4237	2.5	6	2435	430.222	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.3	5142	0.8	4576	1.1	2.7	5142	1.2	5	2955	522.133	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.3	5142	0.8	4576	1.1	2.7	5142	2.1	5	2955	522.133	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.2	5539	0.7	4929	1.0	2.5	5539	1.0	4	3183	562.391	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.2	5539	0.7	4929	1.0	2.5	5539	1.6	4	3183	562.391	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.2	6241	0.6	5554	0.9	2.2	6241	0.9	4	3587	633.680	GFL11 - 3E □□□ 090C32	E82MV 152_4B
0.2	6241	0.6	5554	0.9	2.2	6241	1.6	4	3587	633.680	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.2	7001	0.6	6231	0.8	2.0	7001	1.3	3	4024	710.888	GFL14 - 3E □□□ 090C32	E82MV 152_4B
0.2	7888	0.5	7021	0.7	1.7	7888	1.2	3	4534	801.000	GFL14 - 3E □□□ 090C32	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 4-32 onwards												

P₁ = 2.2 kW

43	47	125	42	173	432	47	3.5	752	27	3.333	GFL05 - 2E □□□ 100C12	E82MV 222_4B
32	65	91	58	126	315	65	2.6	548	37	4.571	GFL05 - 2E □□□ 100C12	E82MV 222_4B
28	73	81	65	112	281	73	3.1	488	42	5.133	GFL05 - 2E □□□ 100C12	E82MV 222_4B
25	80	74	71	102	254	80	2.9	442	46	5.667	GFL05 - 2E □□□ 100C12	E82MV 222_4B
23	91	65	81	90	225	91	1.9	392	52	6.400	GFL05 - 2E □□□ 100C12	E82MV 222_4B
20	100	59	89	82	205	100	2.5	356	57	7.040	GFL05 - 2E □□□ 100C12	E82MV 222_4B
19	110	54	98	74	185	110	2.3	322	63	7.771	GFL05 - 2E □□□ 100C12	E82MV 222_4B
16	128	46	114	64	160	128	2.1	278	73	9.010	GFL05 - 2E □□□ 100C12	E82MV 222_4B
14	141	42	125	58	145	141	2.0	252	81	9.946	GFL05 - 2E □□□ 100C12	E82MV 222_4B
14	143	41	127	57	143	143	3.2	248	82	10.092	GFL06 - 2E □□□ 100C12	E82MV 222_4B
13	161	37	143	51	127	161	1.7	221	92	11.360	GFL05 - 2E □□□ 100C12	E82MV 222_4B
11	181	33	161	45	113	181	1.6	196	104	12.800	GFL05 - 2E □□□ 100C12	E82MV 222_4B
11	184	32	163	44	111	184	3.2	193	106	12.978	GFL06 - 2E □□□ 100C12	E82MV 222_4B
9.9	206	29	183	40	99	206	1.5	172	118	14.538	GFL05 - 2E □□□ 100C12	E82MV 222_4B
9.8	209	28	186	39	98	209	3.1	170	120	14.743	GFL06 - 2E □□□ 100C12	E82MV 222_4B
9.1	225	26	200	36	91	225	1.4	158	129	15.904	GFL05 - 2E □□□ 100C12	E82MV 222_4B
8.9	228	26	203	36	89	228	2.8	155	131	16.128	GFL06 - 2E □□□ 100C12	E82MV 222_4B
8.0	254	23	226	32	80	254	1.2	140	146	17.920	GFL05 - 2E □□□ 100C12	E82MV 222_4B
7.9	257	23	229	32	79	257	2.3	138	148	18.169	GFL06 - 2E □□□ 100C12	E82MV 222_4B
7.1	287	21	256	28	71	287	1.2	124	165	20.286	GFL05 - 2E □□□ 100C12	E82MV 222_4B
7.0	291	20	259	28	70	291	2.2	122	167	20.571	GFL06 - 2E □□□ 100C12	E82MV 222_4B
6.3	324	18	288	25	63	324	1.0	110	186	22.857	GFL05 - 2E □□□ 100C12	E82MV 222_4B
6.2	328	18	292	25	62	328	1.8	108	189	23.175	GFL06 - 2E □□□ 100C12	E82MV 222_4B
5.8	352	17	313	23	58	352	1.0	101	202	24.850	GFL05 - 2E □□□ 100C12	E82MV 222_4B
5.7	357	17	317	23	57	357	1.8	99	205	25.200	GFL06 - 2E □□□ 100C12	E82MV 222_4B
5.1	402	15	358	20	51	402	1.5	88	231	28.389	GFL06 - 2E □□□ 100C12	E82MV 222_4B
5.1	396	15	353	21	51	396	3.1	89	228	28.000	GFL07 - 2E □□□ 100C12	E82MV 222_4B
4.4	464	13	413	18	44	464	1.4	76	267	32.800	GFL06 - 2E □□□ 100C12	E82MV 222_4B
4.5	458	13	407	18	45	458	3.0	77	263	32.344	GFL07 - 2E □□□ 100C12	E82MV 222_4B
3.9	523	11	465	16	39	523	1.2	68	301	36.951	GFL06 - 2E □□□ 100C12	E82MV 222_4B
4.0	516	11	459	16	40	516	2.4	69	296	36.444	GFL07 - 2E □□□ 100C12	E82MV 222_4B
3.5	578	10	514	14	35	578	1.1	61	332	40.800	GFL06 - 2E □□□ 100C12	E82MV 222_4B
3.6	561	11	499	15	36	561	2.5	63	322	39.642	GFL07 - 2E □□□ 100C12	E82MV 222_4B
3.1	651	9.1	579	13	31	651	0.9	55	374	45.963	GFL06 - 2E □□□ 100C12	E82MV 222_4B
3.2	632	9.3	563	13	32	632	2.0	56	363	44.667	GFL07 - 2E □□□ 100C12	E82MV 222_4B
2.8	737	8	656	11	28	737	1.8	48	424	52.067	GFL07 - 2E □□□ 100C12	E82MV 222_4B
2.8	727	8.1	647	11	28	727	2.8	49	418	51.333	GFL09 - 2E □□□ 100C12	E82MV 222_4B
2.5	830	7.1	739	9.8	25	830	1.5	43	477	58.667	GFL07 - 2E □□□ 100C12	E82MV 222_4B
2.5	819	7.2	729	10.0	25	819	2.8	43	471	57.852	GFL09 - 2E □□□ 100C12	E82MV 222_4B
2.3	894	6.6	796	9.1	23	894	1.4	40	514	63.190	GFL07 - 2E □□□ 100C12	E82MV 222_4B
2.3	882	6.7	785	9.2	23	882	2.3	40	507	62.300	GFL09 - 2E □□□ 100C12	E82MV 222_4B
2.3	894	6.6	796	9.1	23	894	2.9	40	514	63.190	GFL11 - 2E □□□ 100C12	E82MV 222_4B
2.0	1008	5.9	897	8.1	20	1008	1.3	35	579	71.200	GFL07 - 2E □□□ 100C12	E82MV 222_4B
2.1	994	5.9	885	8.2	21	994	2.3	36	571	70.211	GFL09 - 2E □□□ 100C12	E82MV 222_4B
2.0	1008	5.9	897	8.1	20	1008	2.9	35	579	71.200	GFL11 - 2E □□□ 100C12	E82MV 222_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan *)														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 4-32 onwards														

P₁ = 2.2 kW

1.8	1115	5.3	992	7.3	18	1115	1.5	32	641	78.750	GFL09 - 2E □□□ 100C12	E82MV 222_4B
1.8	1131	5.2	1006	7.2	18	1131	2.3	31	650	79.875	GFL11 - 2E □□□ 100C12	E82MV 222_4B
1.6	1256	4.7	1118	6.5	16	1256	1.4	28	722	88.750	GFL09 - 2E □□□ 100C12	E82MV 222_4B
1.6	1274	4.6	1134	6.4	16	1274	2.3	28	732	90.000	GFL11 - 2E □□□ 100C12	E82MV 222_4B
1.5	1301	4.5	1158	6.2	15	1301	1.3	27	748	93.333	GFL09 - 3E □□□ 100C12	E82MV 222_4B
1.5	1304	4.5	1161	6.2	15	1304	2.5	27	750	93.540	GFL11 - 3E □□□ 100C12	E82MV 222_4B
1.4	1467	4	1305	5.5	14	1467	1.3	24	843	105.185	GFL09 - 3E □□□ 100C12	E82MV 222_4B
1.4	1470	4	1308	5.5	14	1470	2.5	24	845	105.397	GFL11 - 3E □□□ 100C12	E82MV 222_4B
1.3	1594	3.7	1419	5.0	13	1594	1.2	22	916	114.333	GFL09 - 3E □□□ 100C12	E82MV 222_4B
1.3	1598	3.6	1422	5.0	13	1598	2.2	22	918	114.586	GFL11 - 3E □□□ 100C12	E82MV 222_4B
1.1	1797	3.2	1599	4.5	11	1797	1.2	19	1032	128.852	GFL09 - 3E □□□ 100C12	E82MV 222_4B
1.1	1800	3.2	1602	4.5	11	1800	2.2	19	1035	129.111	GFL11 - 3E □□□ 100C12	E82MV 222_4B
1.0	2075	2.8	1847	3.9	9.7	2075	1.0	17	1192	148.815	GFL09 - 3E □□□ 100C12	E82MV 222_4B
1.0	2079	2.8	1851	3.9	9.7	2079	1.9	17	1195	149.144	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.9	2338	2.5	2081	3.4	8.6	2338	1.0	15	1344	167.712	GFL09 - 3E □□□ 100C12	E82MV 222_4B
0.9	2343	2.5	2085	3.4	8.6	2343	1.9	15	1347	168.049	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.8	2581	2.3	2297	3.1	7.8	2581	0.9	14	1483	185.111	GFL09 - 3E □□□ 100C12	E82MV 222_4B
0.8	2549	2.3	2268	3.2	7.9	2549	1.7	14	1465	182.792	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.7	2909	2	2589	2.8	6.9	2909	0.9	12	1672	208.617	GFL09 - 3E □□□ 100C12	E82MV 222_4B
0.7	2872	2	2556	2.8	7.0	2872	1.7	12	1650	205.963	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.7	2817	2.1	2508	2.9	7.1	2817	2.8	12	1619	202.074	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.6	3132	1.9	2787	2.6	6.4	3132	1.4	11	1800	224.636	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.6	3132	1.9	2787	2.6	6.4	3132	2.8	11	1800	224.636	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.6	3529	1.6	3141	2.3	5.7	3529	1.4	10	2028	253.111	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.6	3529	1.6	3141	2.3	5.7	3529	2.8	10	2028	253.111	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.5	3726	1.6	3316	2.2	5.4	3726	1.4	9	2142	267.259	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.5	3817	1.5	3397	2.1	5.3	3817	2.6	9	2194	273.778	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.4	4567	1.3	4065	1.8	4.4	4567	1.2	8	2625	327.556	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.4	4635	1.3	4125	1.7	4.3	4635	2.3	8	2664	332.444	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.4	4993	1.2	4443	1.6	4.0	4993	1.1	7	2869	358.077	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.4	4919	1.2	4378	1.6	4.1	4919	2.1	7	2827	352.811	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.4	5625	1	5007	1.4	3.6	5625	1.1	6	3233	403.467	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.4	5543	1.1	4933	1.4	3.6	5543	2.1	6	3185	397.533	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.3	5998	1	5339	1.3	3.4	5998	1.0	6	3447	430.222	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.3	5998	1	5339	1.3	3.4	5998	1.8	6	3447	430.222	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.3	7280	0.8	6479	1.1	2.8	7280	0.8	5	4184	522.133	GFL11 - 3E □□□ 100C12	E82MV 222_4B
0.3	7280	0.8	6479	1.1	2.8	7280	1.5	5	4184	522.133	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.3	7841	0.7	6979	1.0	2.6	7841	1.2	4	4506	562.391	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.2	8835	0.7	7863	0.9	2.3	8835	1.1	4	5078	633.680	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.2	9912	0.6	8821	0.8	2.0	9912	0.9	4	5696	710.888	GFL14 - 3E □□□ 100C12	E82MV 222_4B
0.2	11168	0.5	9939	0.7	1.8	11168	0.9	3	6418	801.000	GFL14 - 3E □□□ 100C12	E82MV 222_4B

P₁ = 3 kW

43	65	124	58	172	429	65	2.6	746	37	3.333	GFL05 - 2E □□□ 100C32	E82MV 302_4B
31	89	91	79	125	313	89	1.9	544	51	4.571	GFL05 - 2E □□□ 100C32	E82MV 302_4B
28	100	81	89	111	279	100	2.2	485	57	5.133	GFL05 - 2E □□□ 100C32	E82MV 302_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan														
Motor cooling with integral fan *)														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]					
										Dimensions see page 4-32 onwards				
P ₁ = 3 kW														
25	110	73	98	101	252	110	2.1	439	63	5.667	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
22	124	65	111	89	223	124	1.4	389	71	6.400	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
22	125	64	112	89	222	125	2.8	386	72	6.450	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
20	137	59	122	81	203	137	1.8	353	79	7.040	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
20	139	58	124	80	200	139	3.1	348	80	7.147	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
18	151	53	134	74	184	151	1.7	320	87	7.771	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
16	175	46	156	63	159	175	1.5	276	101	9.010	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
15	184	44	164	60	151	184	3.2	263	106	9.463	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
14	193	42	172	58	144	193	1.4	250	111	9.946	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
14	196	41	175	57	142	196	2.3	247	113	10.092	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
13	221	37	197	50	126	221	1.3	219	127	11.360	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
12	224	36	199	50	124	224	2.8	216	129	11.520	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
11	249	32	221	45	112	249	1.1	194	143	12.800	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
11	252	32	225	44	110	252	2.3	192	145	12.978	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
9.8	283	29	251	39	98	283	1.1	171	162	14.538	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
9.7	287	28	255	39	97	287	2.2	169	165	14.743	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
9.0	309	26	275	36	90	309	1.0	156	178	15.904	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
8.9	314	26	279	35	89	314	2.1	154	180	16.128	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
8.0	348	23	310	32	80	348	0.9	139	200	17.920	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
7.9	353	23	314	31	79	353	1.7	137	203	18.169	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
7.1	394	20	351	28	71	394	0.8	123	227	20.286	GFL05 - 2E □□□ 100C32	E82MV 302_4B		
7.0	400	20	356	28	70	400	1.6	121	230	20.571	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
7.1	394	20	351	28	71	394	3.2	123	227	20.286	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
6.2	450	18	401	25	62	450	1.3	107	259	23.175	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
6.3	444	18	395	25	63	444	2.8	109	255	22.857	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
5.7	490	16	436	23	57	490	1.3	99	282	25.200	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
5.8	483	17	430	23	58	483	2.8	100	278	24.850	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
5.0	552	15	491	20	50	552	1.1	88	317	28.389	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
5.1	544	15	484	20	51	544	2.3	89	313	28.000	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
4.4	638	13	567	17	44	638	1.0	76	366	32.800	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
4.4	629	13	560	18	44	629	2.2	77	361	32.344	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
4.4	635	13	565	18	44	635	2.9	76	365	32.667	GFL09 - 2E □□□ 100C32	E82MV 302_4B		
3.9	718	11	639	15	39	718	0.9	67	413	36.951	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
3.9	708	11	630	16	39	708	1.8	68	407	36.444	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
3.9	716	11	637	16	39	716	2.9	68	411	36.815	GFL09 - 2E □□□ 100C32	E82MV 302_4B		
3.5	793	10	706	14	35	793	0.8	61	456	40.800	GFL06 - 2E □□□ 100C32	E82MV 302_4B		
3.6	771	10	686	14	36	771	1.8	63	443	39.642	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
3.6	771	10	686	14	36	771	2.5	63	443	39.667	GFL09 - 2E □□□ 100C32	E82MV 302_4B		
3.2	868	9.3	773	13	32	868	1.4	56	499	44.667	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
3.2	869	9.3	773	13	32	869	2.5	56	499	44.704	GFL09 - 2E □□□ 100C32	E82MV 302_4B		
2.8	1012	8	901	11	28	1012	1.3	48	582	52.067	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
2.8	998	8.1	888	11	28	998	2.0	48	573	51.333	GFL09 - 2E □□□ 100C32	E82MV 302_4B		
2.8	1012	8	901	11	28	1012	2.5	48	582	52.067	GFL11 - 2E □□□ 100C32	E82MV 302_4B		
2.4	1140	7.1	1015	9.8	24	1140	1.1	42	655	58.667	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
2.5	1125	7.2	1001	9.9	25	1125	2.0	43	646	57.852	GFL09 - 2E □□□ 100C32	E82MV 302_4B		
2.4	1140	7.1	1015	9.8	24	1140	2.5	42	655	58.667	GFL11 - 2E □□□ 100C32	E82MV 302_4B		
2.3	1228	6.6	1093	9.0	23	1228	1.0	39	706	63.190	GFL07 - 2E □□□ 100C32	E82MV 302_4B		
2.3	1211	6.7	1078	9.2	23	1211	1.7	40	696	62.300	GFL09 - 2E □□□ 100C32	E82MV 302_4B		
2.3	1228	6.6	1093	9.0	23	1228	2.1	39	706	63.190	GFL11 - 2E □□□ 100C32	E82MV 302_4B		

Thermal power limit not considered (see page 2-5) *) Observe current derating (see page 2-2)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec



Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz			87 Hz		i	Shaft-mounted helical geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂				M ₂
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]				[Nm]
[rpm] [Nm]												
Dimensions see page 4-32 onwards												

P₁ = 3 kW

2.0	1384	5.8	1232	8.0	20	1384	0.9	35	795	71.200	GFL07 - 2E □□□ 100C32	E82MV 302_4B
2.0	1365	5.9	1215	8.2	20	1365	1.7	35	784	70.211	GFL09 - 2E □□□ 100C32	E82MV 302_4B
2.0	1384	5.8	1232	8.0	20	1384	2.1	35	795	71.200	GFL11 - 2E □□□ 100C32	E82MV 302_4B
1.8	1531	5.3	1362	7.3	18	1531	1.1	32	880	78.750	GFL09 - 2E □□□ 100C32	E82MV 302_4B
1.8	1553	5.2	1382	7.2	18	1553	1.7	31	892	79.875	GFL11 - 2E □□□ 100C32	E82MV 302_4B
1.6	1725	4.7	1535	6.4	16	1725	1.0	28	991	88.750	GFL09 - 2E □□□ 100C32	E82MV 302_4B
1.6	1749	4.6	1557	6.4	16	1749	1.7	28	1005	90.000	GFL11 - 2E □□□ 100C32	E82MV 302_4B
1.5	1787	4.4	1590	6.1	15	1787	0.9	27	1027	93.333	GFL09 - 3E □□□ 100C32	E82MV 302_4B
1.5	1791	4.4	1594	6.1	15	1791	1.8	27	1029	93.540	GFL11 - 3E □□□ 100C32	E82MV 302_4B
1.4	2014	3.9	1792	5.4	14	2014	0.9	24	1157	105.185	GFL09 - 3E □□□ 100C32	E82MV 302_4B
1.4	2018	3.9	1796	5.4	14	2018	1.8	24	1160	105.397	GFL11 - 3E □□□ 100C32	E82MV 302_4B
1.4	2008	4	1787	5.4	14	2008	2.9	24	1154	104.889	GFL14 - 3E □□□ 100C32	E82MV 302_4B
1.3	2189	3.6	1948	5.0	13	2189	0.8	22	1258	114.333	GFL09 - 3E □□□ 100C32	E82MV 302_4B
1.3	2194	3.6	1952	5.0	13	2194	1.6	22	1261	114.586	GFL11 - 3E □□□ 100C32	E82MV 302_4B
1.3	2185	3.6	1945	5.0	13	2185	2.9	22	1256	114.126	GFL14 - 3E □□□ 100C32	E82MV 302_4B
1.1	2467	3.2	2196	4.4	11	2467	0.8	19	1418	128.852	GFL09 - 3E □□□ 100C32	E82MV 302_4B
1.1	2472	3.2	2200	4.4	11	2472	1.6	19	1421	129.111	GFL11 - 3E □□□ 100C32	E82MV 302_4B
1.1	2462	3.2	2191	4.4	11	2462	2.9	19	1415	128.593	GFL14 - 3E □□□ 100C32	E82MV 302_4B
1.0	2855	2.8	2541	3.8	9.6	2855	1.4	17	1641	149.144	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.9	3217	2.5	2863	3.4	8.5	3217	1.4	15	1849	168.049	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.9	2990	2.7	2661	3.7	9.2	2990	2.5	16	1718	156.148	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.8	3500	2.3	3115	3.1	7.8	3500	1.2	14	2011	182.792	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.8	3256	2.4	2898	3.4	8.4	3256	2.6	15	1871	170.074	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.7	3943	2	3509	2.8	6.9	3943	1.2	12	2266	205.963	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.7	3869	2.1	3443	2.8	7.1	3869	2.0	12	2223	202.074	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.6	4301	1.8	3828	2.5	6.4	4301	1.1	11	2472	224.636	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.6	4301	1.8	3828	2.5	6.4	4301	2.0	11	2472	224.636	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.6	4846	1.6	4313	2.3	5.7	4846	1.1	10	2785	253.111	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.6	4846	1.6	4313	2.3	5.7	4846	2.0	10	2785	253.111	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.5	5117	1.6	4554	2.1	5.4	5117	1.0	9	2941	267.259	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.5	5242	1.5	4665	2.1	5.2	5242	1.9	9	3012	273.778	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.4	6271	1.3	5581	1.7	4.4	6271	0.9	8	3604	327.556	GFL11 - 3E □□□ 100C32	E82MV 302_4B
0.4	6365	1.2	5665	1.7	4.3	6365	1.7	7	3658	332.444	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.4	6755	1.2	6012	1.6	4.1	6755	1.5	7	3882	352.811	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.4	7611	1	6774	1.4	3.6	7611	1.5	6	4374	397.533	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.3	8237	1	7331	1.3	3.3	8237	1.3	6	4734	430.222	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.3	9997	0.8	8897	1.1	2.7	9997	1.1	5	5745	522.133	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.3	10767	0.7	9583	1.0	2.5	10767	0.8	4	6188	562.391	GFL14 - 3E □□□ 100C32	E82MV 302_4B
0.2	12132	0.7	10798	0.9	2.3	12132	0.8	4	6972	633.680	GFL14 - 3E □□□ 100C32	E82MV 302_4B

P₁ = 4 kW

39	94	114	81	158	395	94	3.4	687	54	3.675	GFL06 - 2E □□□ 112C22	E82MV 402_4B
31	119	91	102	125	312	119	4.2	543	68	4.643	GFL07 - 2E □□□ 112C22	E82MV 402_4B
28	133	81	115	111	278	133	3.2	484	77	5.211	GFL06 - 2E □□□ 112C22	E82MV 402_4B
25	147	73	126	101	252	147	3.0	439	84	5.750	GFL06 - 2E □□□ 112C22	E82MV 402_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 4-32 onwards												

P₁ = 4 kW

22	165	65	142	90	225	165	2.1	391	95	6.450	GFL06 - 2E □□□ 112C22	E82MV 402_4B
20	183	59	157	81	203	183	2.4	353	105	7.147	GFL06 - 2E □□□ 112C22	E82MV 402_4B
17	215	50	185	69	173	215	2.8	300	123	8.400	GFL06 - 2E □□□ 112C22	E82MV 402_4B
15	242	44	208	61	153	242	2.4	267	139	9.463	GFL06 - 2E □□□ 112C22	E82MV 402_4B
14	258	42	222	57	144	258	1.8	250	148	10.092	GFL06 - 2E □□□ 112C22	E82MV 402_4B
13	294	37	253	50	126	294	2.1	219	169	11.520	GFL06 - 2E □□□ 112C22	E82MV 402_4B
11	332	32	285	45	112	332	1.8	194	191	12.978	GFL06 - 2E □□□ 112C22	E82MV 402_4B
9.8	377	29	324	39	98	377	1.7	171	217	14.743	GFL06 - 2E □□□ 112C22	E82MV 402_4B
10	363	30	312	41	102	363	3.2	178	209	14.200	GFL07 - 2E □□□ 112C22	E82MV 402_4B
9.0	412	26	354	36	90	412	1.6	156	237	16.128	GFL06 - 2E □□□ 112C22	E82MV 402_4B
9.1	407	26	350	36	91	407	2.9	159	234	15.904	GFL07 - 2E □□□ 112C22	E82MV 402_4B
8.0	464	23	399	32	80	464	1.3	139	267	18.169	GFL06 - 2E □□□ 112C22	E82MV 402_4B
8.1	458	23	394	32	81	458	2.6	141	263	17.920	GFL07 - 2E □□□ 112C22	E82MV 402_4B
7.1	526	20	452	28	71	526	1.2	123	302	20.571	GFL06 - 2E □□□ 112C22	E82MV 402_4B
7.2	519	21	446	29	72	519	2.4	124	298	20.286	GFL07 - 2E □□□ 112C22	E82MV 402_4B
6.3	592	18	509	25	63	592	1.0	109	340	23.175	GFL06 - 2E □□□ 112C22	E82MV 402_4B
6.3	584	18	502	25	63	584	2.1	110	336	22.857	GFL07 - 2E □□□ 112C22	E82MV 402_4B
5.8	644	17	554	23	58	644	1.0	100	370	25.200	GFL06 - 2E □□□ 112C22	E82MV 402_4B
5.8	635	17	546	23	58	635	2.1	102	365	24.850	GFL07 - 2E □□□ 112C22	E82MV 402_4B
5.1	726	15	624	20	51	726	0.8	89	417	28.389	GFL06 - 2E □□□ 112C22	E82MV 402_4B
5.2	716	15	615	21	52	716	1.7	90	411	28.000	GFL07 - 2E □□□ 112C22	E82MV 402_4B
4.5	827	13	711	18	45	827	1.7	78	475	32.344	GFL07 - 2E □□□ 112C22	E82MV 402_4B
4.4	835	13	718	18	44	835	2.6	77	480	32.667	GFL09 - 2E □□□ 112C22	E82MV 402_4B
4.4	837	13	720	18	44	837	3.2	77	481	32.739	GFL11 - 2E □□□ 112C22	E82MV 402_4B
4.0	932	12	801	16	40	932	1.3	69	535	36.444	GFL07 - 2E □□□ 112C22	E82MV 402_4B
3.9	941	11	809	16	39	941	2.6	69	541	36.815	GFL09 - 2E □□□ 112C22	E82MV 402_4B
3.9	943	11	811	16	39	943	3.2	68	542	36.889	GFL11 - 2E □□□ 112C22	E82MV 402_4B
3.7	1013	11	871	15	37	1013	1.4	64	582	39.642	GFL07 - 2E □□□ 112C22	E82MV 402_4B
3.7	1014	11	872	15	37	1014	2.2	64	583	39.667	GFL09 - 2E □□□ 112C22	E82MV 402_4B
3.6	1028	10	884	14	36	1028	2.7	63	591	40.233	GFL11 - 2E □□□ 112C22	E82MV 402_4B
3.3	1142	9.4	982	13	33	1142	1.1	56	656	44.667	GFL07 - 2E □□□ 112C22	E82MV 402_4B
3.2	1143	9.4	983	13	32	1143	2.2	56	657	44.704	GFL09 - 2E □□□ 112C22	E82MV 402_4B
3.2	1159	9.3	996	13	32	1159	2.7	56	666	45.333	GFL11 - 2E □□□ 112C22	E82MV 402_4B
2.8	1312	8.2	1128	11	28	1312	1.7	49	754	51.333	GFL09 - 2E □□□ 112C22	E82MV 402_4B
2.8	1331	8.1	1144	11	28	1331	2.2	48	765	52.067	GFL11 - 2E □□□ 112C22	E82MV 402_4B
2.8	1331	8.1	1144	11	28	1331	2.7	48	765	52.067	GFL14 - 2E □□□ 112C22	E82MV 402_4B
2.5	1479	7.3	1272	10	25	1479	1.7	44	850	57.852	GFL09 - 2E □□□ 112C22	E82MV 402_4B
2.5	1499	7.2	1290	9.9	25	1499	2.2	43	862	58.667	GFL11 - 2E □□□ 112C22	E82MV 402_4B
2.5	1499	7.2	1290	9.9	25	1499	2.7	43	862	58.667	GFL14 - 2E □□□ 112C22	E82MV 402_4B
2.3	1592	6.7	1369	9.3	23	1592	1.5	40	915	62.300	GFL09 - 2E □□□ 112C22	E82MV 402_4B
2.3	1615	6.7	1389	9.2	23	1615	1.8	40	928	63.190	GFL11 - 2E □□□ 112C22	E82MV 402_4B
2.3	1615	6.7	1389	9.2	23	1615	2.3	40	928	63.190	GFL14 - 2E □□□ 112C22	E82MV 402_4B
2.1	1795	6	1543	8.3	21	1795	1.4	36	1031	70.211	GFL09 - 2E □□□ 112C22	E82MV 402_4B
2.0	1820	5.9	1565	8.2	20	1820	1.8	35	1046	71.200	GFL11 - 2E □□□ 112C22	E82MV 402_4B
2.0	1820	5.9	1565	8.2	20	1820	2.3	35	1046	71.200	GFL14 - 2E □□□ 112C22	E82MV 402_4B
1.8	2042	5.3	1756	7.3	18	2042	1.5	32	1173	79.875	GFL11 - 2E □□□ 112C22	E82MV 402_4B
1.8	2042	5.3	1756	7.3	18	2042	1.8	32	1173	79.875	GFL14 - 2E □□□ 112C22	E82MV 402_4B
1.6	2300	4.7	1978	6.4	16	2300	1.5	28	1322	90.000	GFL11 - 2E □□□ 112C22	E82MV 402_4B
1.6	2300	4.7	1978	6.4	16	2300	1.8	28	1322	90.000	GFL14 - 2E □□□ 112C22	E82MV 402_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Motor cooling with separate fan														
Motor cooling with integral fan *)														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 4-32 onwards														

P₁ = 4 kW

1.6	2355	4.5	2025	6.2	16	2355	1.4	27	1353	93.540	GFL11 - 3E □□□ 112C22	E82MV 402_4B
1.4	2653	4	2282	5.5	14	2653	1.4	24	1525	105.397	GFL11 - 3E □□□ 112C22	E82MV 402_4B
1.4	2641	4	2271	5.5	14	2641	2.6	24	1518	104.889	GFL14 - 3E □□□ 112C22	E82MV 402_4B
1.3	2885	3.7	2481	5.1	13	2885	1.2	22	1658	114.586	GFL11 - 3E □□□ 112C22	E82MV 402_4B
1.3	2873	3.7	2471	5.1	13	2873	2.3	22	1651	114.126	GFL14 - 3E □□□ 112C22	E82MV 402_4B
1.1	3250	3.3	2795	4.5	11	3250	1.2	20	1868	129.111	GFL11 - 3E □□□ 112C22	E82MV 402_4B
1.1	3237	3.3	2784	4.5	11	3237	2.3	20	1861	128.593	GFL14 - 3E □□□ 112C22	E82MV 402_4B
1.0	3755	2.8	3229	3.9	9.7	3755	1.0	17	2158	149.144	GFL11 - 3E □□□ 112C22	E82MV 402_4B
1.1	3446	3.1	2964	4.2	11	3446	2.1	18	1981	136.889	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.9	4231	2.5	3638	3.5	8.6	4231	1.0	15	2431	168.049	GFL11 - 3E □□□ 112C22	E82MV 402_4B
0.9	3931	2.7	3381	3.7	9.3	3931	2.1	16	2259	156.148	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.8	4602	2.3	3958	3.2	7.9	4602	0.9	14	2645	182.792	GFL11 - 3E □□□ 112C22	E82MV 402_4B
0.9	4282	2.5	3682	3.4	8.5	4282	2.0	15	2461	170.074	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.7	5185	2	4459	2.8	7.0	5185	0.9	12	2980	205.963	GFL11 - 3E □□□ 112C22	E82MV 402_4B
0.7	5087	2.1	4375	2.9	7.2	5087	1.7	12	2924	202.074	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.6	5655	1.9	4864	2.6	6.5	5655	1.5	11	3250	224.636	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.6	6372	1.7	5480	2.3	5.7	6372	1.5	10	3662	253.111	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.5	6892	1.5	5927	2.1	5.3	6892	1.4	9	3961	273.778	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.4	8369	1.3	7198	1.7	4.4	8369	1.3	8	4810	332.444	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.4	8882	1.2	7639	1.6	4.1	8882	1.2	7	5105	352.811	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.4	10008	1.1	8607	1.5	3.7	10008	1.2	6	5752	397.533	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.3	10831	1	9315	1.3	3.4	10831	1.0	6	6225	430.222	GFL14 - 3E □□□ 112C22	E82MV 402_4B
0.3	13145	0.8	11305	1.1	2.8	13145	0.8	5	7554	522.133	GFL14 - 3E □□□ 112C22	E82MV 402_4B

P₁ = 5.5 kW

39	130	114	111	157	393	130	2.5	684	74	3.675	GFL06 - 2E □□□ 112C32	E82MV 552_4B
43	118	125	102	173	431	118	3.0	751	68	3.350	GFL07 - 2E □□□ 112C32	E82MV 552_4B
31	164	90	141	124	311	164	3.0	542	94	4.643	GFL07 - 2E □□□ 112C32	E82MV 552_4B
28	184	80	158	111	277	184	2.3	482	106	5.211	GFL06 - 2E □□□ 112C32	E82MV 552_4B
28	182	81	156	112	280	182	3.0	487	105	5.159	GFL07 - 2E □□□ 112C32	E82MV 552_4B
25	203	73	174	101	251	203	2.2	437	117	5.750	GFL06 - 2E □□□ 112C32	E82MV 552_4B
25	201	74	173	102	254	201	3.0	442	115	5.695	GFL07 - 2E □□□ 112C32	E82MV 552_4B
22	228	65	196	90	224	228	1.5	390	131	6.450	GFL06 - 2E □□□ 112C32	E82MV 552_4B
23	226	65	194	90	226	226	2.5	393	130	6.400	GFL07 - 2E □□□ 112C32	E82MV 552_4B
20	252	59	217	81	202	252	1.7	352	145	7.147	GFL06 - 2E □□□ 112C32	E82MV 552_4B
20	252	59	217	81	202	252	3.0	352	145	7.150	GFL07 - 2E □□□ 112C32	E82MV 552_4B
17	296	50	255	69	172	296	2.0	299	170	8.400	GFL06 - 2E □□□ 112C32	E82MV 552_4B
17	294	50	252	69	174	294	3.0	302	169	8.324	GFL07 - 2E □□□ 112C32	E82MV 552_4B
15	334	44	287	61	153	334	1.7	266	192	9.463	GFL06 - 2E □□□ 112C32	E82MV 552_4B
15	331	45	284	62	154	331	3.0	268	190	9.379	GFL07 - 2E □□□ 112C32	E82MV 552_4B
14	356	42	306	57	143	356	1.3	249	205	10.092	GFL06 - 2E □□□ 112C32	E82MV 552_4B
15	343	43	295	60	149	343	2.7	259	197	9.714	GFL07 - 2E □□□ 112C32	E82MV 552_4B
13	406	36	349	50	125	406	1.6	218	233	11.520	GFL06 - 2E □□□ 112C32	E82MV 552_4B
13	407	36	350	50	125	407	2.7	218	234	11.538	GFL07 - 2E □□□ 112C32	E82MV 552_4B
13	394	38	339	52	129	394	3.1	225	226	11.167	GFL09 - 2E □□□ 112C32	E82MV 552_4B
11	458	32	394	45	111	458	1.3	194	263	12.978	GFL06 - 2E □□□ 112C32	E82MV 552_4B
11	458	32	394	44	111	458	2.4	193	263	13.000	GFL07 - 2E □□□ 112C32	E82MV 552_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan														
Motor cooling with integral fan *)														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]					
[rpm] [Nm] [rpm] [rpm] [Nm] 50 Hz [rpm] [Nm]										Dimensions see page 4-32 onwards				
P ₁ = 5.5 kW														
9.8	520	28	447	39	98	520	1.2	171	299	14.743	GFL06 - 2E □□□ 112C32	E82MV 552_4B		
10	501	30	431	41	102	501	2.3	177	288	14.200	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
9.0	569	26	489	36	90	569	1.1	156	327	16.128	GFL06 - 2E □□□ 112C32	E82MV 552_4B		
9.1	561	26	482	36	91	561	2.1	158	322	15.904	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
8.9	576	26	495	35	89	576	3.1	154	331	16.333	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
8.0	641	23	551	32	80	641	0.9	138	368	18.169	GFL06 - 2E □□□ 112C32	E82MV 552_4B		
8.1	632	23	543	32	81	632	1.9	140	363	17.920	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
7.9	649	23	558	31	79	649	3.1	137	373	18.407	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
7.0	725	20	624	28	70	725	0.9	122	417	20.571	GFL06 - 2E □□□ 112C32	E82MV 552_4B		
7.1	715	21	615	28	71	715	1.8	124	411	20.286	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
7.4	694	21	596	29	74	694	2.8	128	399	19.667	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
6.3	806	18	693	25	63	806	1.5	110	463	22.857	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
6.5	782	19	672	26	65	782	2.8	113	449	22.164	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
5.8	876	17	754	23	58	876	1.5	101	504	24.850	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
6.0	850	17	731	24	60	850	2.4	104	489	24.111	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
5.2	987	15	849	21	52	987	1.3	90	567	28.000	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
5.3	958	15	824	21	53	958	2.4	93	551	27.173	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
4.5	1141	13	981	18	45	1141	1.2	78	656	32.344	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
4.4	1152	13	991	18	44	1152	1.9	77	662	32.667	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
4.4	1155	13	993	18	44	1155	2.4	77	664	32.739	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
4.0	1285	11	1105	16	40	1285	1.0	69	739	36.444	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
3.9	1298	11	1117	16	39	1298	1.9	68	746	36.815	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
3.9	1301	11	1119	16	39	1301	2.4	68	748	36.889	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
3.7	1398	11	1202	15	37	1398	1.0	63	803	39.642	GFL07 - 2E □□□ 112C32	E82MV 552_4B		
3.6	1399	11	1203	15	36	1399	1.6	63	804	39.667	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
3.6	1419	10	1220	14	36	1419	2.0	62	815	40.233	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
3.2	1577	9.4	1356	13	32	1577	1.6	56	906	44.704	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
3.2	1599	9.2	1375	13	32	1599	2.0	55	919	45.333	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
2.8	1810	8.2	1557	11	28	1810	1.3	49	1040	51.333	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
2.8	1836	8	1579	11	28	1836	1.6	48	1055	52.067	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
2.8	1836	8	1579	11	28	1836	2.0	48	1055	52.067	GFL14 - 2E □□□ 112C32	E82MV 552_4B		
2.5	2040	7.2	1755	10	25	2040	1.3	43	1172	57.852	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
2.5	2069	7.1	1779	9.8	25	2069	1.6	43	1189	58.667	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
2.5	2069	7.1	1779	9.8	25	2069	2.0	43	1189	58.667	GFL14 - 2E □□□ 112C32	E82MV 552_4B		
2.3	2197	6.7	1889	9.3	23	2197	1.1	40	1263	62.300	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
2.3	2228	6.6	1916	9.2	23	2228	1.3	40	1281	63.190	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
2.3	2228	6.6	1916	9.2	23	2228	1.6	40	1281	63.190	GFL14 - 2E □□□ 112C32	E82MV 552_4B		
2.1	2476	6	2129	8.2	21	2476	1.0	36	1423	70.211	GFL09 - 2E □□□ 112C32	E82MV 552_4B		
2.0	2511	5.9	2159	8.1	20	2511	1.3	35	1443	71.200	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
2.0	2511	5.9	2159	8.1	20	2511	1.6	35	1443	71.200	GFL14 - 2E □□□ 112C32	E82MV 552_4B		
1.8	2817	5.2	2422	7.2	18	2817	1.1	31	1619	79.875	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
1.8	2817	5.2	2422	7.2	18	2817	1.3	31	1619	79.875	GFL14 - 2E □□□ 112C32	E82MV 552_4B		
1.6	3174	4.7	2729	6.4	16	3174	1.1	28	1824	90.000	GFL11 - 2E □□□ 112C32	E82MV 552_4B		
1.6	3174	4.7	2729	6.4	16	3174	1.3	28	1824	90.000	GFL14 - 2E □□□ 112C32	E82MV 552_4B		
1.5	3249	4.5	2794	6.2	15	3249	1.0	27	1867	93.540	GFL11 - 3E □□□ 112C32	E82MV 552_4B		
1.4	3661	4	3148	5.5	14	3661	1.0	24	2104	105.397	GFL11 - 3E □□□ 112C32	E82MV 552_4B		
1.4	3643	4	3133	5.5	14	3643	1.9	24	2094	104.889	GFL14 - 3E □□□ 112C32	E82MV 552_4B		
1.3	3980	3.7	3423	5.0	13	3980	0.9	22	2287	114.586	GFL11 - 3E □□□ 112C32	E82MV 552_4B		
1.3	3964	3.7	3409	5.1	13	3964	1.7	22	2278	114.126	GFL14 - 3E □□□ 112C32	E82MV 552_4B		

Thermal power limit not considered (see page 2-5) *) Observe current derating (see page 2-2)

Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes) Geared motors with 8200 motec



Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[rpm]	[Nm]	50 Hz	[rpm]			
										Dimensions see page 4-32 onwards		

P₁ = 5.5 kW

1.1	4485	3.2	3857	4.5	11	4485	0.9	19	2577	129.111	GFL11 - 3E □□□ 112C32	E82MV 552_4B
1.1	4467	3.3	3841	4.5	11	4467	1.7	20	2567	128.593	GFL14 - 3E □□□ 112C32	E82MV 552_4B
1.1	4755	3.1	4089	4.2	11	4755	1.5	18	2733	136.889	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.9	5424	2.7	4665	3.7	9.3	5424	1.5	16	3117	156.148	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.9	5908	2.5	5081	3.4	8.5	5908	1.4	15	3395	170.074	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.7	7019	2.1	6036	2.9	7.2	7019	1.3	12	4034	202.074	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.6	7803	1.9	6710	2.6	6.4	7803	1.1	11	4484	224.636	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.6	8792	1.7	7561	2.3	5.7	8792	1.1	10	5053	253.111	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.5	9510	1.5	8178	2.1	5.3	9510	1.0	9	5465	273.778	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.4	11548	1.3	9931	1.7	4.4	11548	0.9	8	6637	332.444	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.4	12255	1.2	10539	1.6	4.1	12255	0.8	7	7043	352.811	GFL14 - 3E □□□ 112C32	E82MV 552_4B
0.4	13809	1.1	11875	1.5	3.6	13809	0.8	6	7936	397.533	GFL14 - 3E □□□ 112C32	E82MV 552_4B

P₁ = 7.5 kW

43	160	126	138	174	434	160	4.0	756	92	3.350	GFL07 - 2E □□□ 132C22	E82MV 752_4B
31	222	91	191	125	313	222	2.9	545	127	4.643	GFL07 - 2E □□□ 132C22	E82MV 752_4B
28	246	82	212	113	282	246	3.4	491	142	5.159	GFL07 - 2E □□□ 132C22	E82MV 752_4B
26	272	74	234	102	256	272	3.4	445	156	5.695	GFL07 - 2E □□□ 132C22	E82MV 752_4B
23	306	66	263	91	227	306	2.2	396	176	6.400	GFL07 - 2E □□□ 132C22	E82MV 752_4B
20	342	59	294	81	204	342	2.7	354	196	7.150	GFL07 - 2E □□□ 132C22	E82MV 752_4B
17	398	51	342	70	175	398	2.5	304	228	8.324	GFL07 - 2E □□□ 132C22	E82MV 752_4B
16	448	45	385	62	155	448	2.2	270	257	9.379	GFL07 - 2E □□□ 132C22	E82MV 752_4B
15	464	43	399	60	150	464	2.1	261	267	9.714	GFL07 - 2E □□□ 132C22	E82MV 752_4B
13	551	37	474	50	126	551	2.0	219	317	11.538	GFL07 - 2E □□□ 132C22	E82MV 752_4B
11	621	32	534	45	112	621	1.8	195	357	13.000	GFL07 - 2E □□□ 132C22	E82MV 752_4B
10	678	30	583	41	103	678	1.7	178	390	14.200	GFL07 - 2E □□□ 132C22	E82MV 752_4B
9.2	760	27	653	37	92	760	1.6	159	437	15.904	GFL07 - 2E □□□ 132C22	E82MV 752_4B
8.9	780	26	671	36	89	780	3.2	155	448	16.333	GFL09 - 2E □□□ 132C22	E82MV 752_4B
8.1	856	24	736	32	81	856	1.4	141	492	17.920	GFL07 - 2E □□□ 132C22	E82MV 752_4B
7.9	879	23	756	32	79	879	2.8	138	505	18.407	GFL09 - 2E □□□ 132C22	E82MV 752_4B
7.2	969	21	833	29	72	969	1.3	125	557	20.286	GFL07 - 2E □□□ 132C22	E82MV 752_4B
7.4	939	21	808	30	74	939	2.7	129	540	19.667	GFL09 - 2E □□□ 132C22	E82MV 752_4B
6.4	1092	18	939	25	64	1092	1.1	111	627	22.857	GFL07 - 2E □□□ 132C22	E82MV 752_4B
6.6	1059	19	910	26	66	1059	2.5	114	608	22.164	GFL09 - 2E □□□ 132C22	E82MV 752_4B
5.9	1187	17	1021	23	59	1187	1.1	102	682	24.850	GFL07 - 2E □□□ 132C22	E82MV 752_4B
6.0	1152	18	990	24	60	1152	2.4	105	662	24.111	GFL09 - 2E □□□ 132C22	E82MV 752_4B
5.2	1337	15	1150	21	52	1337	0.9	90	769	28.000	GFL07 - 2E □□□ 132C22	E82MV 752_4B
5.4	1298	16	1116	21	54	1298	2.1	93	746	27.173	GFL09 - 2E □□□ 132C22	E82MV 752_4B
5.2	1337	15	1150	21	52	1337	3.2	90	769	28.000	GFL11 - 2E □□□ 132C22	E82MV 752_4B
4.5	1560	13	1342	18	45	1560	1.9	78	897	32.667	GFL09 - 2E □□□ 132C22	E82MV 752_4B
4.4	1564	13	1345	18	44	1564	2.9	77	899	32.739	GFL11 - 2E □□□ 132C22	E82MV 752_4B
4.0	1758	11	1512	16	40	1758	1.7	69	1010	36.815	GFL09 - 2E □□□ 132C22	E82MV 752_4B
3.9	1762	11	1515	16	39	1762	2.6	69	1012	36.889	GFL11 - 2E □□□ 132C22	E82MV 752_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)



Selection tables - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Shaft-mounted helical geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	50 Hz		[rpm]	[Nm]			
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]	Dimensions see page 4-32 onwards		

P₁ = 7.5 kW

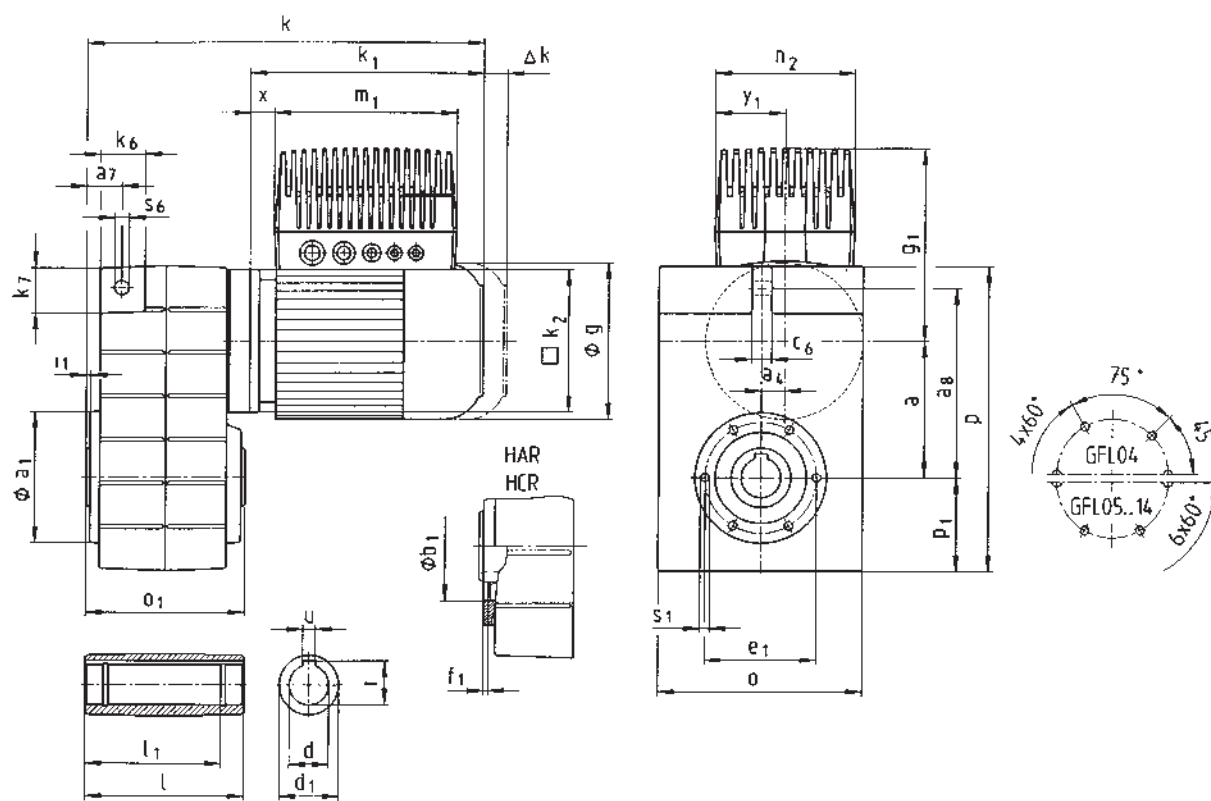
3.7	1894	11	1629	15	37	1894	1.6	64	1089	39.667	GFL09 - 2E □□□ 132C22	E82MV 752_4B
3.6	1921	10	1652	14	36	1921	2.5	63	1104	40.233	GFL11 - 2E □□□ 132C22	E82MV 752_4B
3.3	2135	9.4	1836	13	33	2135	1.4	57	1227	44.704	GFL09 - 2E □□□ 132C22	E82MV 752_4B
3.2	2165	9.3	1862	13	32	2165	2.3	56	1244	45.333	GFL11 - 2E □□□ 132C22	E82MV 752_4B
2.8	2487	8.1	2138	11	28	2487	2.1	49	1429	52.067	GFL11 - 2E □□□ 132C22	E82MV 752_4B
2.8	2487	8.1	2138	11	28	2487	3.1	49	1429	52.067	GFL14 - 2E □□□ 132C22	E82MV 752_4B
2.5	2802	7.2	2410	9.9	25	2802	1.9	43	1610	58.667	GFL11 - 2E □□□ 132C22	E82MV 752_4B
2.5	2802	7.2	2410	9.9	25	2802	3.1	43	1610	58.667	GFL14 - 2E □□□ 132C22	E82MV 752_4B
2.3	3018	6.7	2595	9.2	23	3018	1.8	40	1734	63.190	GFL11 - 2E □□□ 132C22	E82MV 752_4B
2.3	3018	6.7	2595	9.2	23	3018	2.6	40	1734	63.190	GFL14 - 2E □□□ 132C22	E82MV 752_4B
2.0	3400	5.9	2924	8.2	20	3400	1.6	36	1954	71.200	GFL11 - 2E □□□ 132C22	E82MV 752_4B
2.0	3400	5.9	2924	8.2	20	3400	2.6	36	1954	71.200	GFL14 - 2E □□□ 132C22	E82MV 752_4B
1.8	3815	5.3	3281	7.3	18	3815	1.8	32	2192	79.875	GFL14 - 2E □□□ 132C22	E82MV 752_4B
1.6	4298	4.7	3696	6.5	16	4298	1.8	28	2470	90.000	GFL14 - 2E □□□ 132C22	E82MV 752_4B
1.4	4934	4	4243	5.6	14	4934	1.4	24	2836	104.889	GFL14 - 3E □□□ 132C22	E82MV 752_4B
1.3	5369	3.7	4617	5.1	13	5369	1.3	22	3085	114.126	GFL14 - 3E □□□ 132C22	E82MV 752_4B
1.1	6049	3.3	5202	4.5	11	6049	1.3	20	3477	128.593	GFL14 - 3E □□□ 132C22	E82MV 752_4B
1.1	6439	3.1	5538	4.2	11	6439	1.1	18	3701	136.889	GFL14 - 3E □□□ 132C22	E82MV 752_4B
0.9	7345	2.7	6317	3.7	9.3	7345	1.1	16	4221	156.148	GFL14 - 3E □□□ 132C22	E82MV 752_4B
0.9	8001	2.5	6880	3.4	8.6	8001	1.1	15	4598	170.074	GFL14 - 3E □□□ 132C22	E82MV 752_4B
0.6	10567	1.9	9088	2.6	6.5	10567	0.8	11	6073	224.636	GFL14 - 3E □□□ 132C22	E82MV 752_4B
0.6	11907	1.7	10240	2.3	5.8	11907	0.8	10	6843	253.111	GFL14 - 3E □□□ 132C22	E82MV 752_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)



GFL□□ - 2E H□R



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

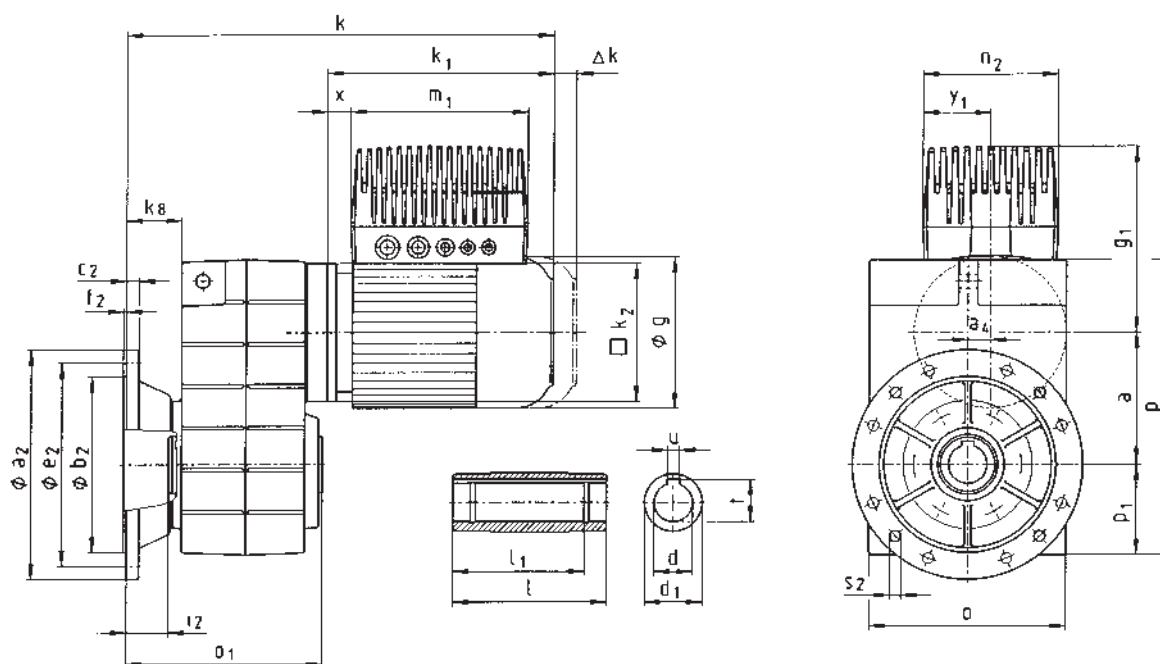


Geared motor		Motor frame size					063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22		
GFL□□ - 2E H□R		8200 motec E82MV□□□					251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor		g					123			138			156		176		196		220	261	
		k ₁					188			207			225		276		309		319	363	404
		k ₂					120			120			145		180		180		222		265
		Δk** Brake					40			52			73		70		79		90		109
		Separate fan					130			128			128		127		109		102		115
		Brake + separate fan					170			165			184		180		170		183		201
8200 motec		g ₁					171			180	225	221	237	242	253	268	278			297	
		g ₁ ¹⁾					207			216											
		m ₁					190			190	202	202	230	230	230	327	327			327	
		n ₂					138			138	156	156	176	176	176	213	213			213	
		x					20			23	10	3	3	8	9	0	2			11	
		y ₁					69			69	78	78	88	88	88	107	107			107	
Gearbox size	Gearbox						Total length														
	o*	o ₁	p*	p ₁	a	a ₄	k														
04	148	115	214	69	90.5	12.5	312		332		354										
05	165	140	252	78	112.5	18.5	334		353		376		437	470							
06	206	160	315	98	140	22	347		366		389		450	483		499	543				
07	256	200	386	118	173	29					422		483	516		532	576	625			
09	318	240	486	149	220	37.5							517	550		566	610	659			
11	395	290	600	181	276.5	50							591			607	651	700			
14	490	350	740	228	339	65										652	696	745			

Gearbox size	Hollow shaft						Pitch circle						Torque plate					
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁	a ₇	a ₈	c ₆	s ₆	k ₆	k ₇
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 k₂
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GFL□□ - 2E HCK



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

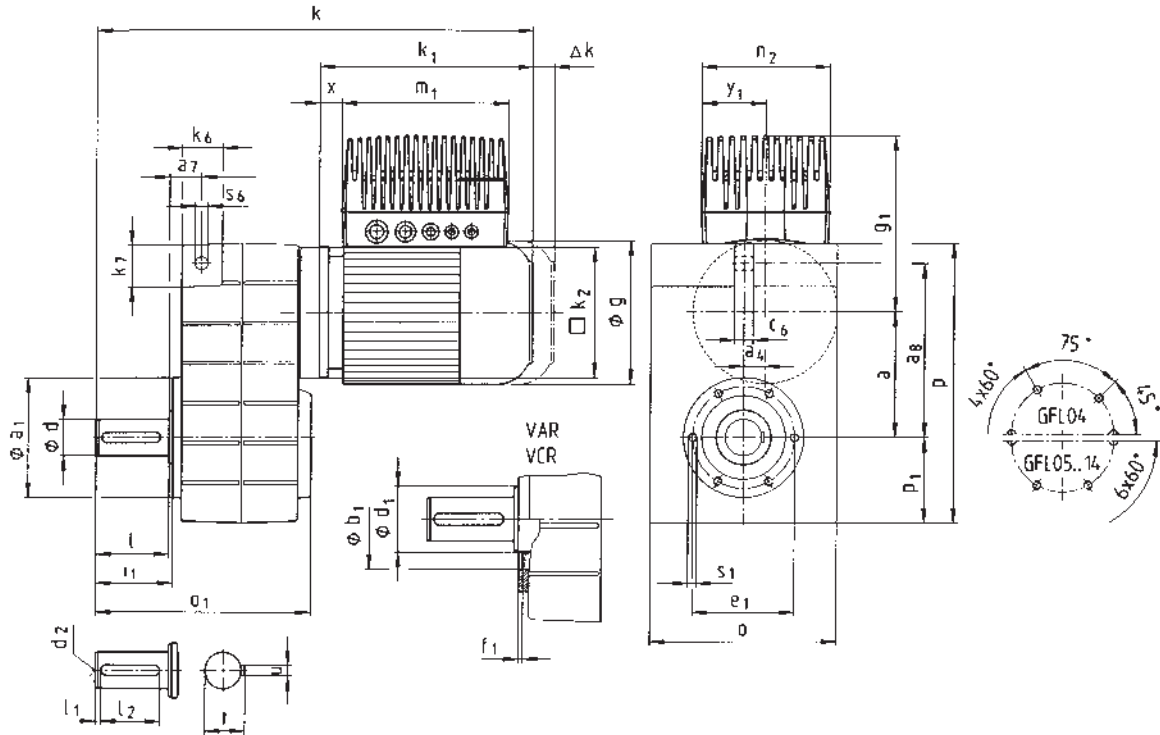


Geared motor				Motor frame size				063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22					
GFL□□ - 2E HCK				8200 motec E82MV□□□				251	251	251	371	551	751	152	152	222	302	402	552	752					
Motor				g				123			138			156			176			196			220		261
				k ₁				188			207			225			276			309			319	363	404
				k ₂				120			120			145			180			180			222		265
				Δk** Brake				40			52			73			70			79			90		109
				Separate fan				130			128			128			127			109			102		115
				Brake + separate fan				170			165			184			180			170			183		201
8200 motec				g ₁				171			180			225	221	237	242	253	268	278			297		
				g ₁ ¹⁾				207			216														
				m ₁				190			190			202	202	230	230	230	327	327			327		
				n ₂				138			138			156	156	176	176	176	213	213			213		
				x				20			23			10	3	3	8	9	0	2			11		
				y ₁				69			69			78	78	88	88	88	107	107			107		
Gearbox size	Gearbox							Total length																	
	o*	o ₁	p*	p ₁	a	a ₄	k _g	k																	
04	148	148	214	69	90.5	12.5	41	345			365			387											
05	165	173	252	78	112.5	18.5	46	367			386			409			470			503					
06	206	201	315	98	140	22	55	388			407			430			491			524			540 584		
07	256	255	386	118	173	29	72							477			538			571			587 631 680		
09	318	300	486	149	220	37.5	77										577			610			626 670 719		
11	395	350	600	181	276.5	50	85													651			667 711 760		
14	490	410	740	228	339	65	89																712 756 805		

Gearbox size	Hollow shaft						Output flange						
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
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 k₂
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GFL□□ - 2E V□R



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

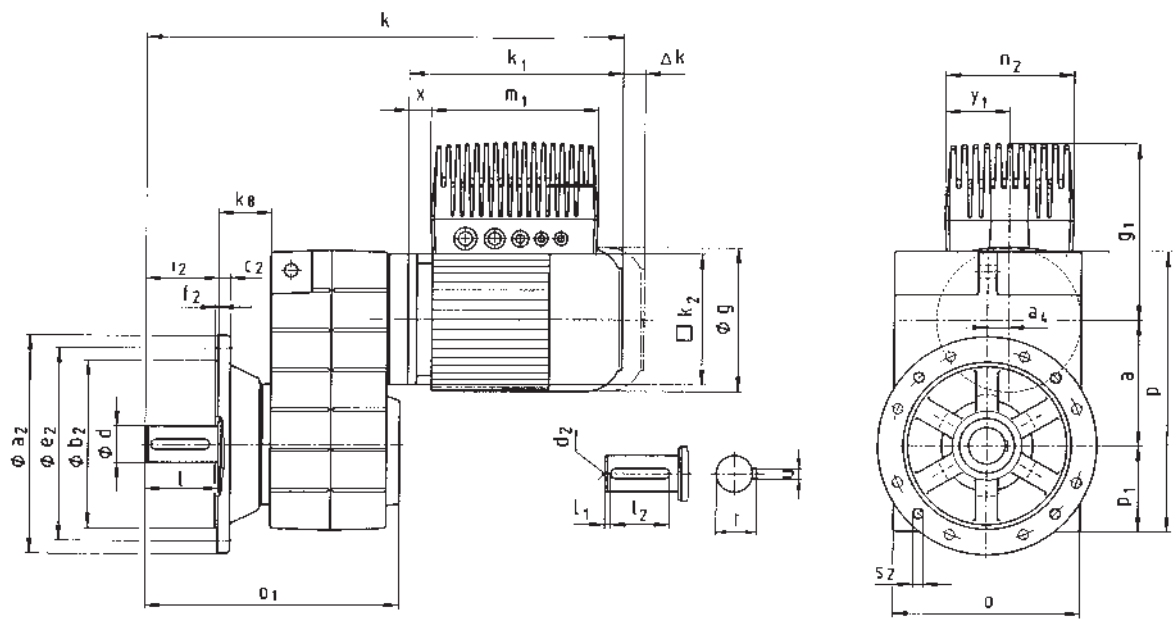


Geared motor							Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22									
GFL□□ - 2E V□R							8200 motec E82MV□□□							251	251	251	371	551	751	152	152	222	302	402	552	752				
Motor	g						123				138				156		176		196				220		261					
	k ₁						188				207				225		276		309		319		363		404					
	k ₂						120				120				145		180		180				222		265					
	Δk** Brake						40				52				73		70		79				90		109					
	Separate fan						130				128				128		127		109				102		115					
	Brake + separate fan						170				165				184		180		170				183		201					
8200 motec	g ₁						171				180		225		221		237		242		253		268				278		297	
	g ₁ ¹⁾						207				216																			
	m ₁						190				190		202		202		230		230		230		327				327		327	
	n ₂						138		138		156		156		176		176		176		213				213		213			
	x ₁						20				23		10		3		3		8		9		0				2		11	
	y ₁						69				69		78		78		88		88		88		107				107		107	
Gearbox size	Gearbox						Total length																							
	o*	o ₁	p*	p ₁	a	a ₄	k																							
04	148	163	214	69	90.5	12.5	362		382		404		465																	
05	165	197	252	78	112.5	18.5	394		413		436		497		530															
06	206	236	315	98	140	22	427		446		469		530		563						579		623							
07	256	296	386	118	173	29					522		583		616						632		676		725					
09	318	356	486	149	220	37.5							637		670						686		730		779					
11	395	445	600	181	276.5	50									751						767		811		860					
14	490	544	740	228	339	65															852		896		945					

Gearbox size	Solid shaft								Pitch circle						Torque plate					
	d	l	d ₁	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁	a ₇	a ₈	c ₆	s ₆	k ₆	k ₇
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 * Please note dimension k2
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GFL□□ - 2E VCK



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

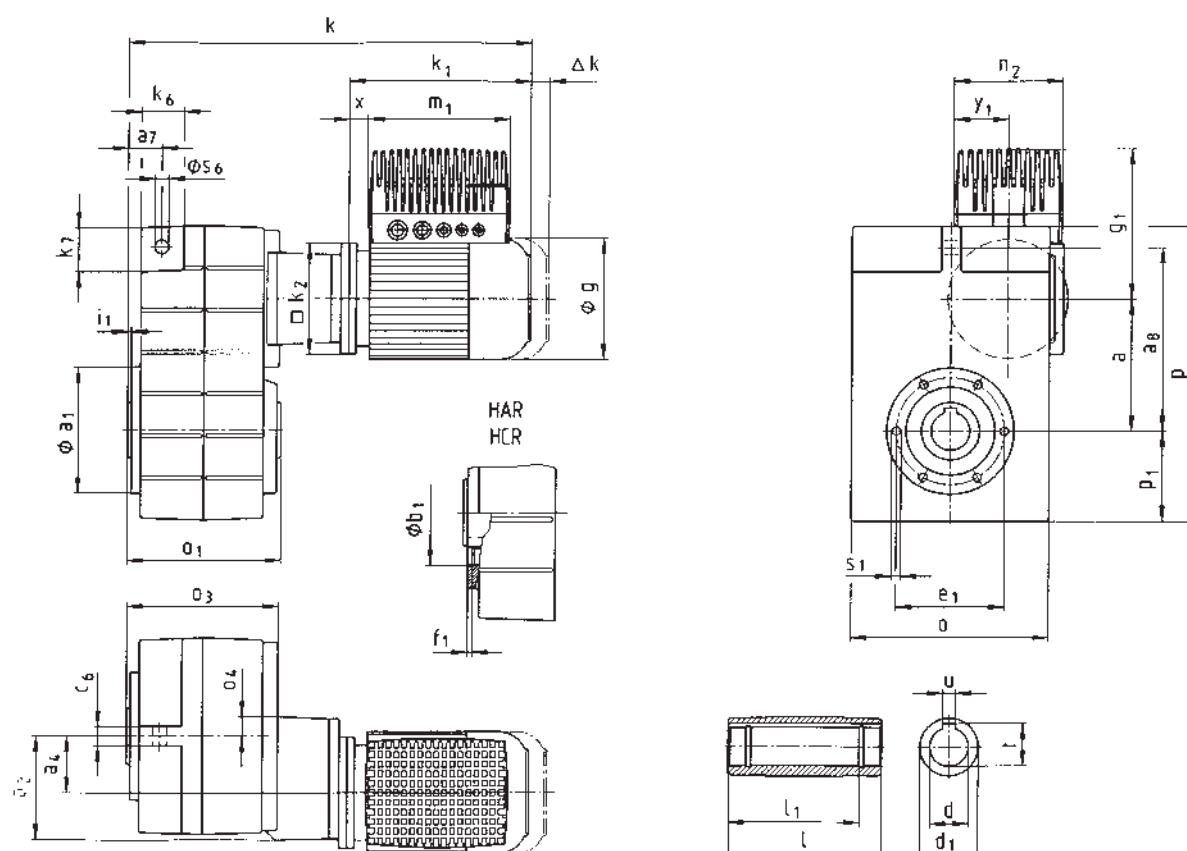


Geared motor		Motor frame size						063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22	
GFL□□ - 2E VCK		8200 motec E82MV□□□						251	251	251	371	551	751	152	152	222	302	402	552	752	
Motor							g	123			138		156		176	196		220		261	
							k ₁	188			207		225		276	309		319	363	404	
							k ₂	120			120		145		180	180		222		265	
							Δk** Brake	40			52		73		70	79		90		109	
							Separate fan	130			128		128		127	109		102		115	
							Brake + separate fan	170			165		184		180	170		183		201	
8200 motec							g ₁	171			180	225	221	237	242	253	268	278		297	
							g ₁ ¹⁾	207			216										
							m ₁	190			190	202	202	230	230	230	327	327		327	
							n ₂	138			138	156	156	176	176	176	213	213		213	
							x	20			23	10	3	3	8	9	0	2		11	
							y ₁	69			69	78	78	88	88	88	107	107		107	
Gearbox size	Gearbox							Total length													
	o*	o ₁	p*	p ₁	a	a ₄	k ₈	k													
04	148	196	214	69	90.5	12.5	41	395		415		437		498							
05	165	230	252	78	112.5	18.5	46	427		446		469		530	563						
06	206	277	315	98	140	22	55	468		487		510		571	604		620		664		
07	256	351	386	118	173	29	72					577		638	671		687		731	780	
09	318	416	486	149	220	37.5	77							697	730		746		790	839	
11	395	505	600	181	276.5	50	85									811		827		871	920
14	490	604	740	228	339	65	89											912		956	1005

Gearbox size	Solid shaft								Output flange							
	d	l	l ₁	l ₂	d ₂	u	t		a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂	
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 * Please note dimension k2
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GFL□□ - 3E H□R



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

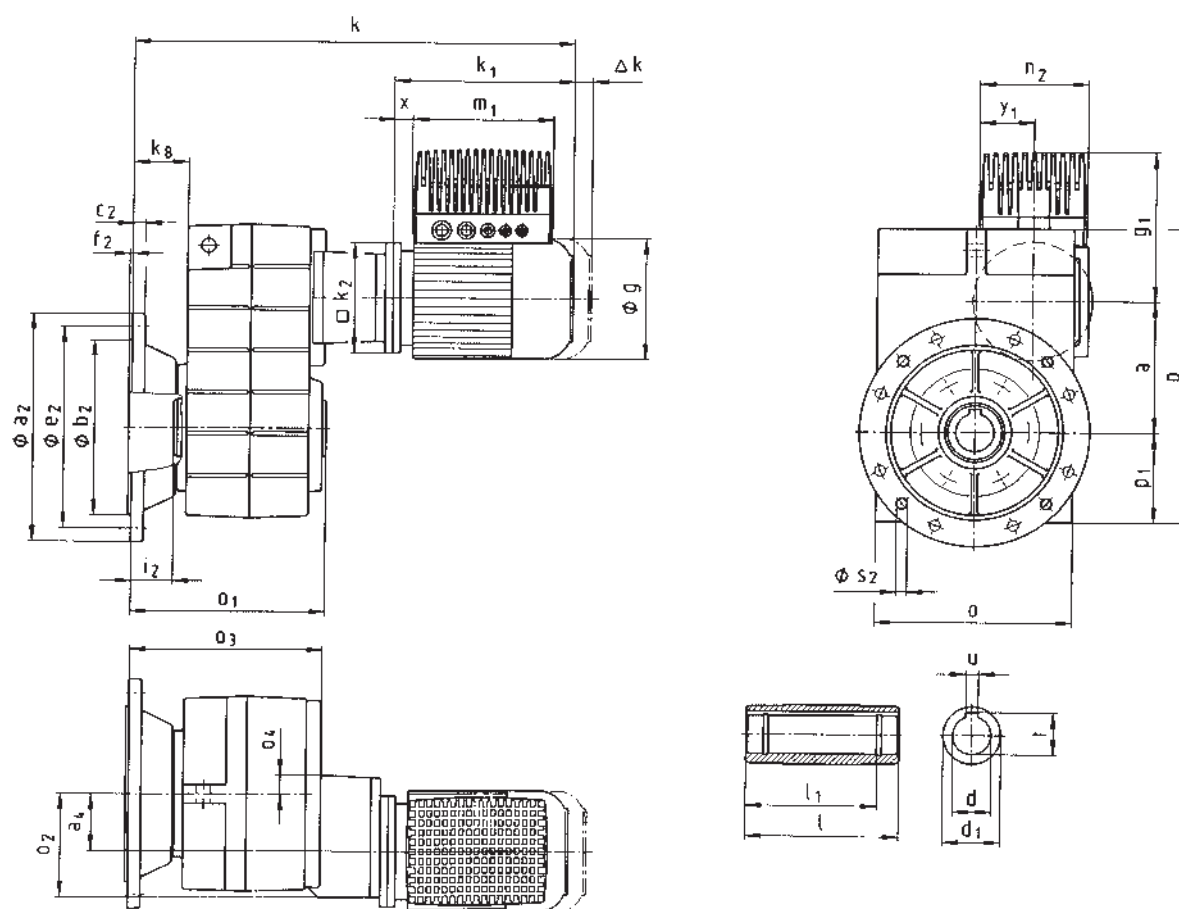


Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22									
GFL□□ - 3 EH□R		8200 motec E82MV□□□		251	251	251	371	551	751	152	152	222	302	402	552	752									
Motor	g		123		138		156		176		196		220		261										
	k ₁		188		207		225		276		309		319		404										
	k ₂		120		120		145		180		180		222		265										
	Δk** Brake		40		52		73		70		79		90		109										
	Separate fan		130		128		128		127		109		102		115										
	Brake + separate fan		170		165		184		180		170		183		201										
8200 motec	g ₁		171		180		225		221		237		242		253		268		278		297				
	g ₁ ¹⁾		207		216																				
	m ₁		190		190		202		202		230		230		230		327		327		327				
	n ₂		138		138		156		156		176		176		176		213		213		213				
	x		20		23		10		3		3		8		9		0		2		11				
	y ₁		69		69		78		78		88		88		88		107		107		107				
Gearbox size	Gearbox									Total length															
	o*	o ₁	o ₂	o ₃	o ₄	p*	p ₁	a	a ₄	k															
05	165	140	107	141	23	252	78	112.5	54.5	410		430		452											
06	206	160	111	160	20	315	98	140	58	440		460		482		543									
07	256	200	135	199	24	386	118	173	74	484		504		526		587		621							
09	318	240	170	238	27	486	149	220	93.5	536		556		578		639		673		689		733			
11	395	290	216	285	34	600	181	276.5	120					638		699		733		749		793		841	
14	490	350	271	340	38	740	228	339	154							778		812		828		872		920	

Gearbox size	Hollow shaft							Pitch circle					Torque plate					
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁ 6 x 60°	a ₇	a ₈	c ₆	s ₆	k ₆	k ₇
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 k₂
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GFL□□ - 3E HCK



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec



Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22		
GFL□□ - 3E HCK		8200 motec E82MV□□□□		251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor	g		123				138		156		176		196		220		261	
	k ₁		188				207		225		276		309		319	363	404	
	k ₂		120				120		145		180		180		222		265	
	Δk** Brake		40				52		73		70		79		90		109	
	Separate fan		130				128		128		127		109		102		115	
	Brake + separate fan		170				165		184		180		170		183		201	
8200 motec	g ₁		171				180	225	221	237	242	253	268	278		297		
	g ₁ ¹⁾		207				216											
	m ₁		190				190	202	202	230	230	230	327	327		327		
	n ₂		138				138	156	156	176	176	176	213	213		213		
	x		20				23	10	3	3	8	9	0	2		11		
	y ₁		69				69	78	78	88	88	88	107	107		107		
Gearbox size	Gearbox										Total length							
	o*	o ₁	o ₂	o ₃	o ₄	p*	p ₁	a	a ₄	k ₈	k							
05	165	173	107	174	23	252	78	112.5	54.5	46	443		463		485			
06	206	201	111	201	20	315	98	140	58	55	481		501		523		584	
07	256	255	135	254	24	386	118	173	74	72	539		559		581		642	
09	318	300	170	298	27	486	149	220	93.5	77	596		616		638		699	
11	395	350	216	345	34	600	181	276.5	120	85					698		759	
14	490	410	271	400	38	740	228	339	154	89					838		872	
													838		872		888	
															888		932	
															901		980	

Gearbox size	Hollow shaft						Output flange						
	d H7	l	d ₁	l ₁	u J59	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
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

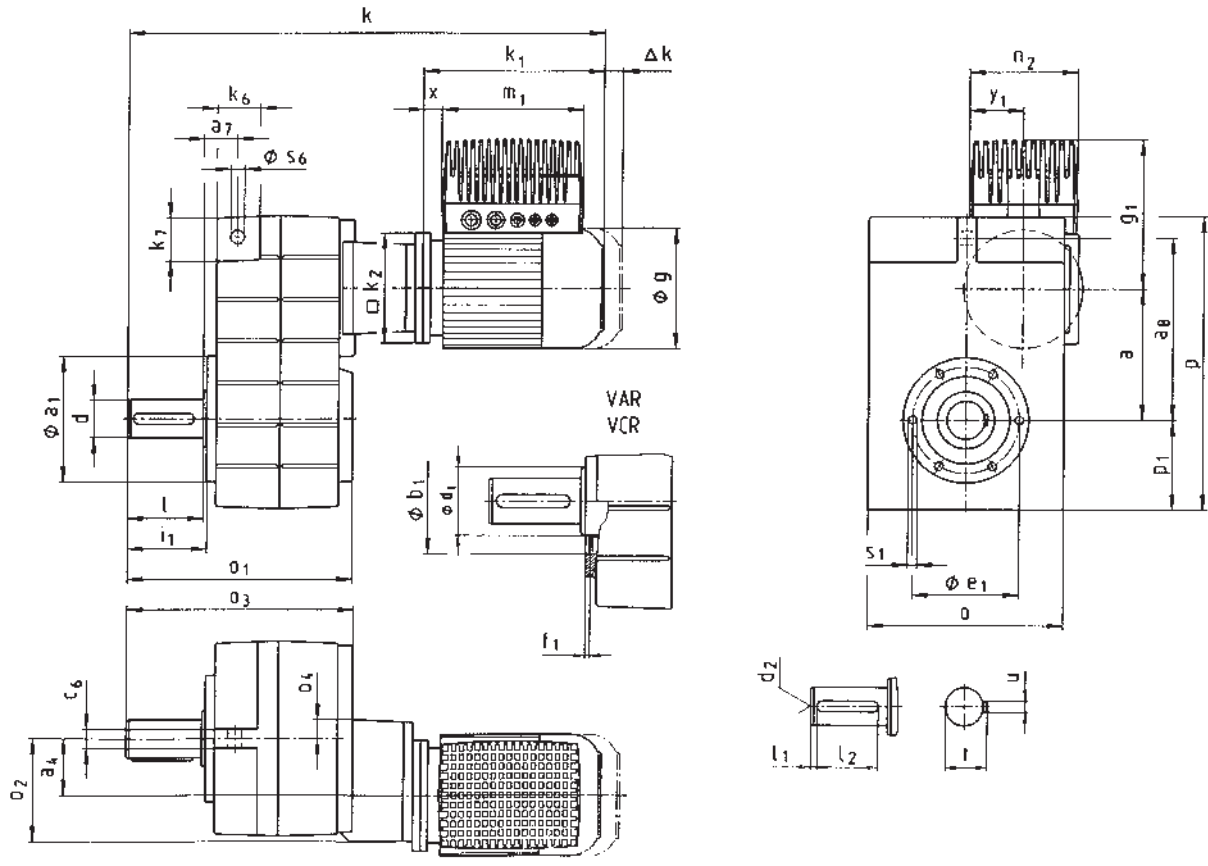
Dimensions in [mm]

* Please note dimension k_2

** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GFL□□ - 3E V□R



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

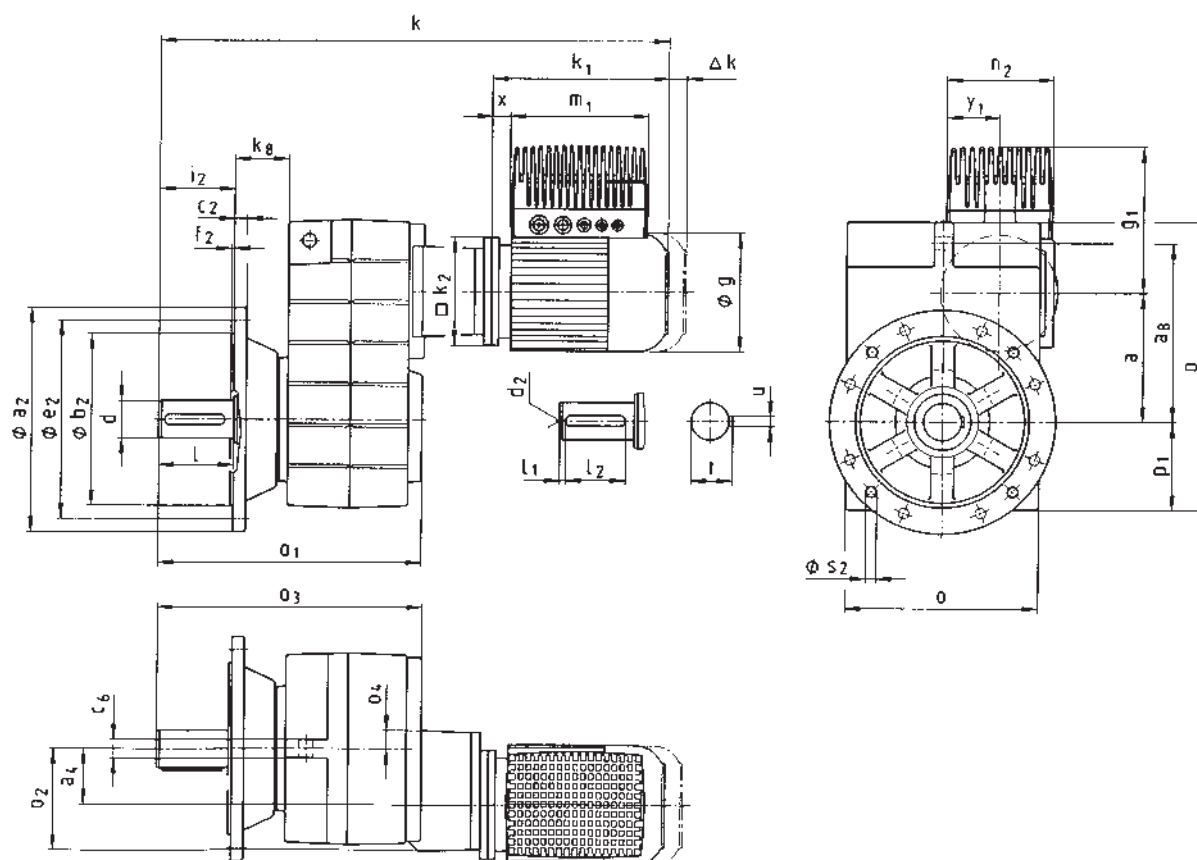


Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
GFL□□ - 3E V□R		8200 motec E82MV□□□		251	251	251	371	551	751	152	152	222	302	402	552	752
Motor		g		123			138		156		176	196		220		261
		k ₁		188			207		225		276	309		319	363	404
		k ₂		120			120		145		180	180		222		265
		Δk** Brake		40			52		73		70	79		90		109
		Separate fan		130			128		128		127	109		102		115
		Brake + separate fan		170			165		184		180	170		183		201
8200 motec		g ₁		171			180	225	221	237	242	253	268	278		297
		g ₁ ¹⁾		207			216									
		m ₁		190			190	202	202	230	230	230	327	327		327
		n ₂		138			138	156	156	176	176	176	213	213		213
		x		20			23	10	3	3	8	9	0	2		11
		y ₁		69			69	78	78	88	88	88	107	107		107
Gearbox size	Gearbox									Total length						
	o*	o ₁	o ₂	o ₃	o ₄	p*	p ₁	a	a ₄	k						
05	165	197	107	201	23	252	78	112.5	54.5	470		490		512		
06	206	236	111	240	20	315	98	140	58	520		540		562		623
07	256	296	135	299	24	386	118	173	74	584		604		626		687
09	318	356	170	358	27	486	149	220	93.5	656		676		698		759
11	395	445	216	445	34	600	181	276.5	120			798		859		893
14	490	544	271	540	38	740	228	339	154					1012		1028
														1072		1120

Gearbox size	Solid shaft								Pitch circle					Torque plate						
	d	l	d ₁	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁ 6x60°	a ₇	a ₈	c ₆	s ₆	k ₆	k ₇
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 * Please note dimension k2
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

GFL□□ - 3E VCK



Dimensions - Shaft-mounted helical gearboxes (low-profile gearboxes)
Geared motors with 8200 motec

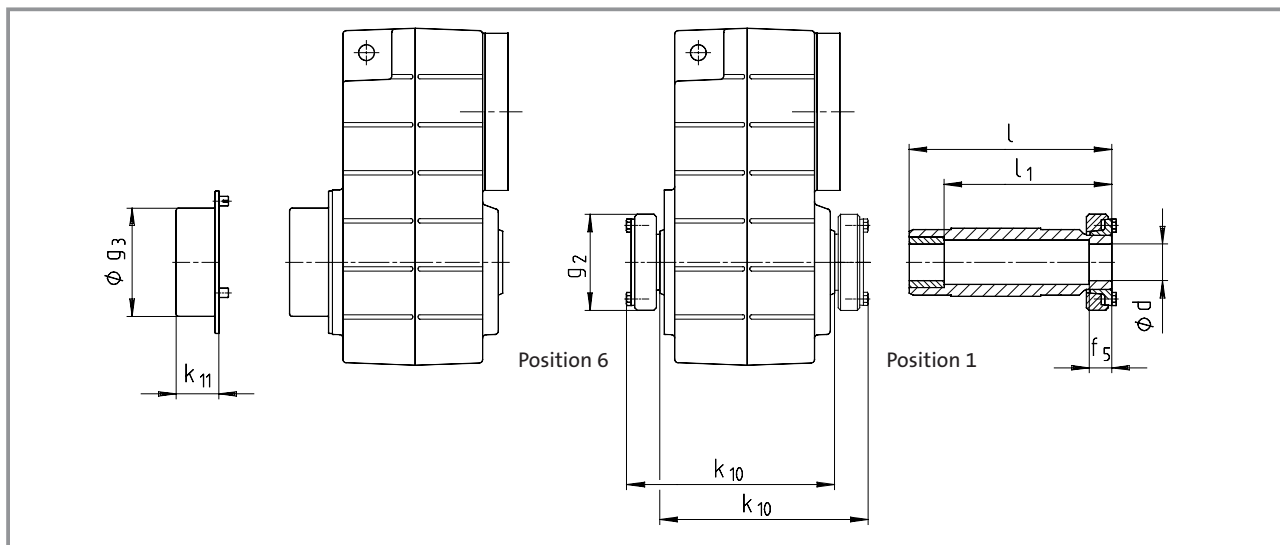


Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22		
GFL□□ - 3E VCK		8200 motec E82MV□□□□	251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor		g	123			138		156		176		196		220		261	
		k ₁	188			207		225		276		309		319	363	404	
		k ₂	120			120		145		180		180		222		265	
		Δk** Brake	40			52		73		70		79		90		109	
		Separate fan	130			128		128		127		109		102		115	
		Brake + separate fan	170			165		184		180		170		183		201	
8200 motec		g ₁	171			180	225	221	237	242	253	268	278		297		
		g ₁ ¹⁾	207			216											
		m ₁	190			190	202	202	230	230	230	327	327		327		
		n ₂	138			138	156	156	176	176	176	213	213		213		
		x	20			23	10	3	3	8	9	0	2		11		
		y ₁	69			69	78	78	88	88	88	107	107		107		
Gearbox size	Gearbox										Total length						
	o*	o ₁	o ₂	o ₃	o ₄	p*	p ₁	a	a ₄	k ₈	k						
05	165	230	107	234	23	252	78	112.5	54.5	46	503		523		545		
06	206	277	111	281	20	315	98	140	58	55	561		581		603		664
07	256	351	135	354	24	386	118	173	74	72	639		659		681		742
09	318	416	170	418	27	486	149	220	93.5	77	716		736		758		819
11	395	505	216	505	34	600	181	276.5	120	85					858		919
14	490	604	271	600	38	740	228	339	154	89							1038
											1072		1088		1132		1180

Gearbox size	Solid shaft								Output flange							
	d	l	l ₁	l ₂	d ₂	u	t		a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂	
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 * Please note dimension k2
d > 50 mm: m6 ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Hollow shaft with shrink disc



Gearbox size	Machine shaft *)		Hollow shaft			Gearbox		Cover	
	d	Fit	l	l ₁	f ₅	g ₂	k ₁₀	g ₃	k ₁₁
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

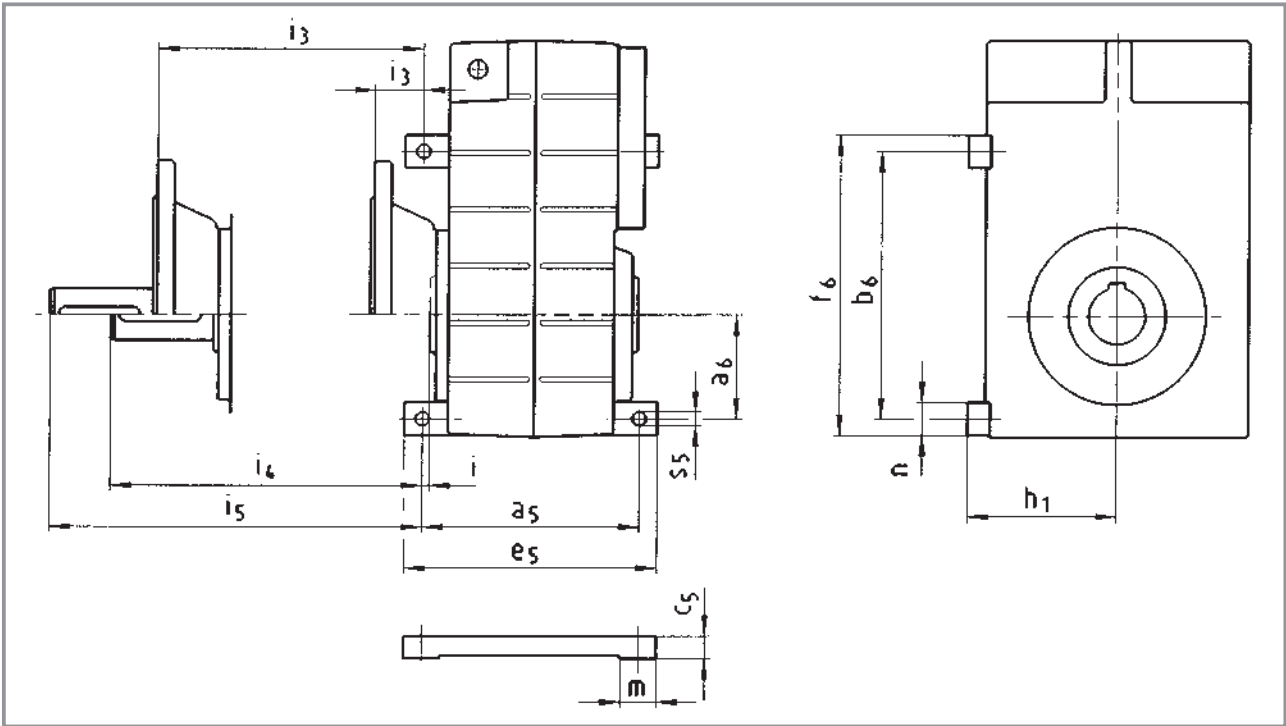
* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4), the torque values given in the selection tables can be transmitted without restriction. If less rigid materials are being used, please contact us. The average surface roughness Rz should not exceed 15 µm (turning is sufficient).

Possible combinations of shrinks discs on the drive side (position 1)

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

1) Without cover
On the GFL□□-2E with shrink disc in position 1, the 8200 motec cannot be in position 4.
All combinations are possible on the GFL□□-3E.
Dimensions in [mm]

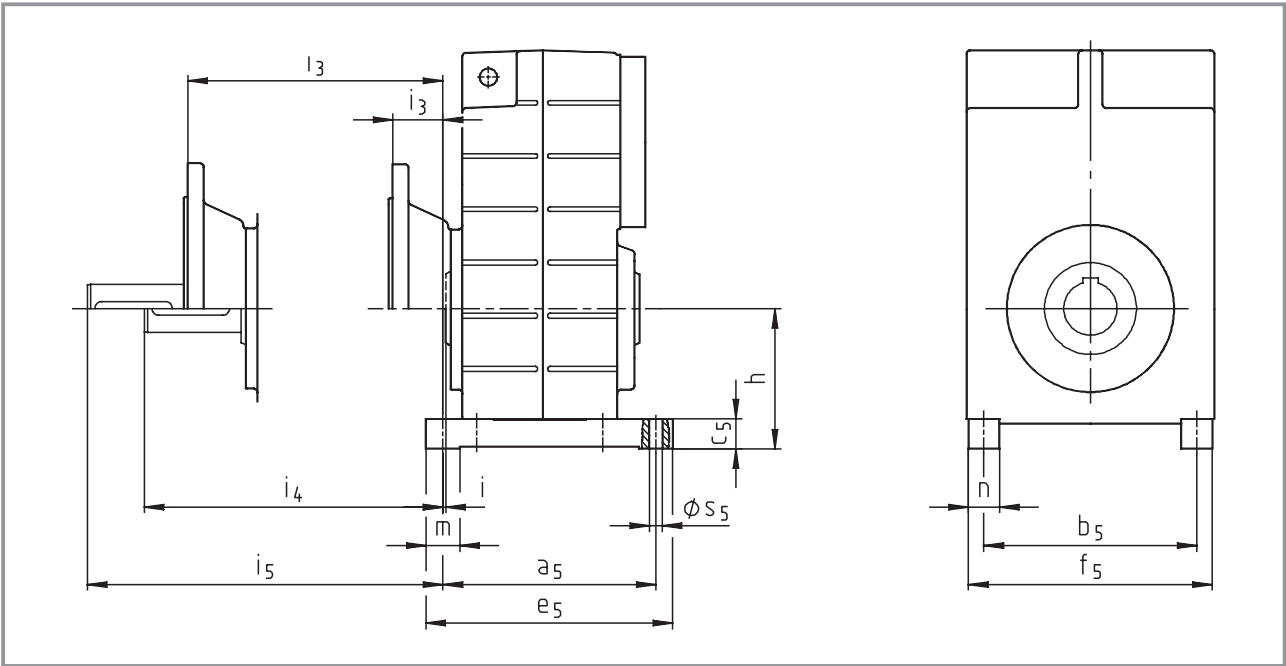
Foot mounting in position 3



Gearbox size	Gearbox						Foot (in position 3)									Foot not possible on GFL□□ -2 with motor frame size
	a ₆	h ₁	HOK i	HOK i ₃	VOK i ₄	VOK i ₅	a ₅	b ₆	c ₅	e ₅	f ₆	n	m	s ₅		
04	47	90	4.5	28.5	45.5	78.5	130	115	18	152	140	25	22	6.6	> 080	
05	65	100	2	31	58	91	160	167	21	185	192	25	25	9	> 080	
06	80	125	2	39	78	119	175	205	27	205	233	28	30	11	> 100	
07	100	155	3	52	97	152	220	260	31	255	292	32	35	13.5	> 132	
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]
On the GFL□□ -2, the 8200 motec cannot be in position 3.

Foot mounting in position 4

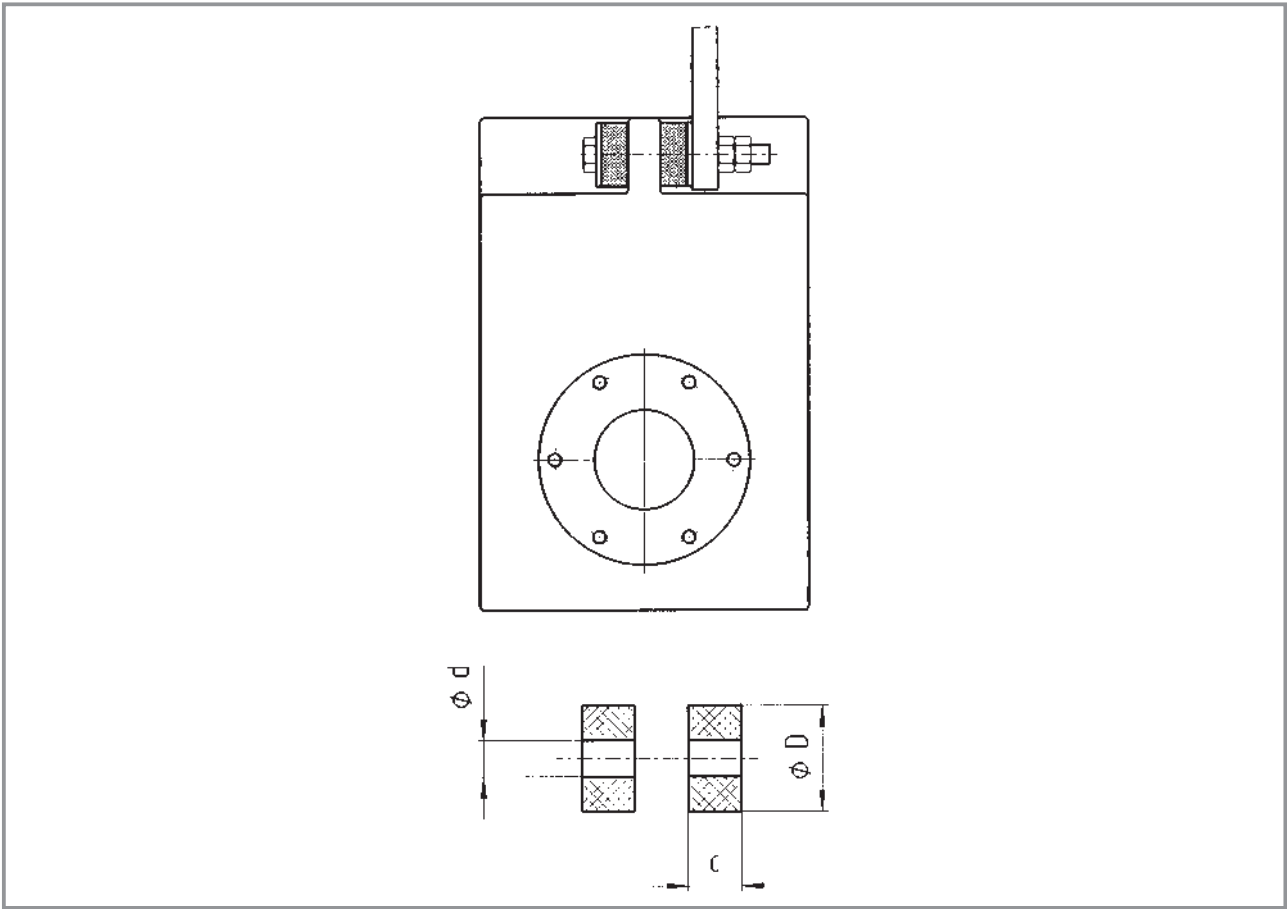


Gearbox-size	Gearbox*					Foot (in position 4)							
	h	HQR i	HOK i3	VQR i4	VOK i5	a5	b5	c5	e5	f5	n	m	s5
04	85	4.5	28.5	45.5	78.5	130	108	18	152	133	25	22	6.6
05	95	2	31	58	91	160	140	21	185	165	25	25	9
06	120	2	39	78	119	175	175	27	205	203	28	30	11
07	145	3	52	97	152	220	220	31	255	252	32	35	13.5
09	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]
On the GFL□□ -2, the 8200 motec cannot be in position 4.



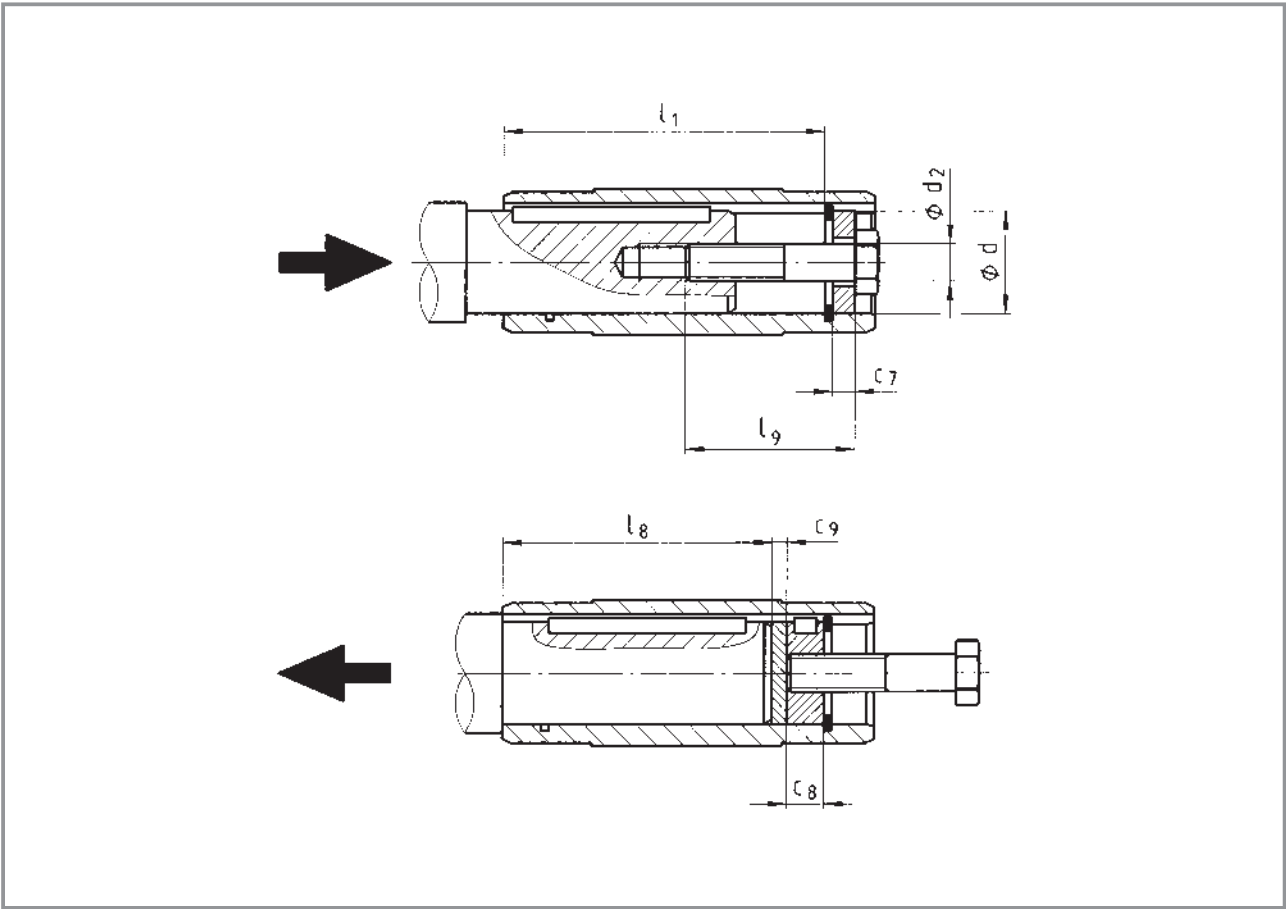
Rubber buffer set



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]

Mounting set for hollow shaft circlip - Proposed design for auxiliary tools



Gearbox-size	Hollow shaft (design H)			Mounting set for hollow shaft circlip (auxiliary tool assembly)			Auxiliary tool disassembly		Machine shaft max l _g
	l	l ₁	d H7	d ₂	l ₉	c ₇	c ₈	c ₉	
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]





Bevel gearboxes | G-motion motec

Technical data

Permissible radial and axial forces

Output	5-2
Output backlash	5-4
Weights	5-6

Selection tables

Geared motors with 8200 motec	5-7

Dimensions

Geared motors with 8200 motec	5-16
Further dimensions	5-24
Hollow shaft with shrink disc	5-24
Gearbox with 2nd output shaft end	5-24
Hoseproof hollow shaft cover	5-25
Rubber buffer set for torque plate	5-25
Torque plate at pitch circle	5-26
Torque plate at housing foot	5-28
Mounting set for hollow shaft circlip	5-28
Proposed design for auxiliary tools	5-28

Technical data - Bevel gearboxes Permissible radial and axial forces - Output

Bevel gearboxes GKR□□

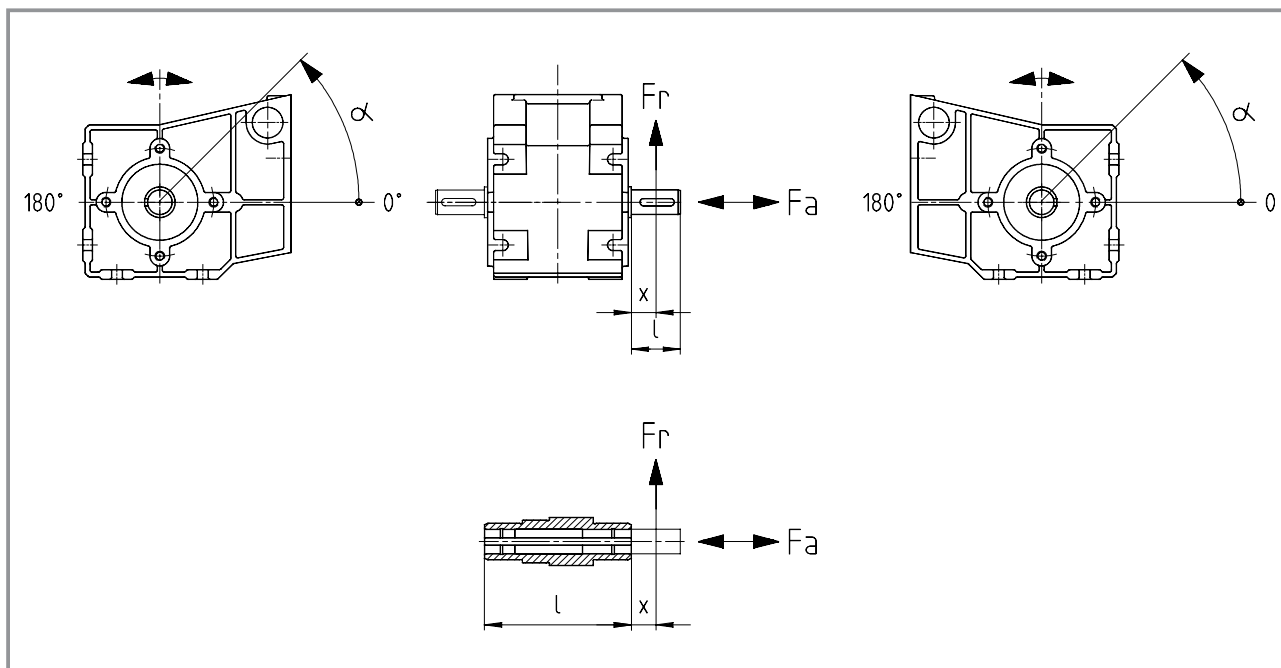
Permissible radial force

$$F_{rperm} = f_w \cdot f_\alpha \cdot F_{rTab} \leq f_w \cdot F_{rmax}$$

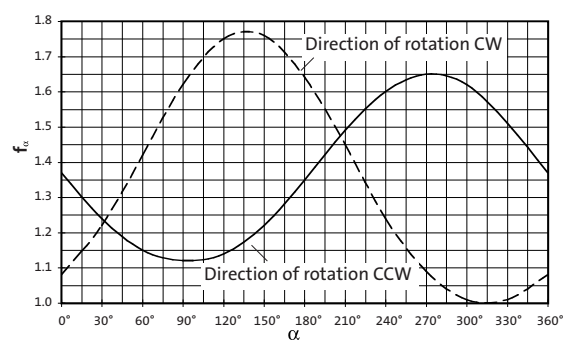
Permissible axial force

$$F_{aperm} = F_{aTab} \quad \text{at } F_r = 0$$

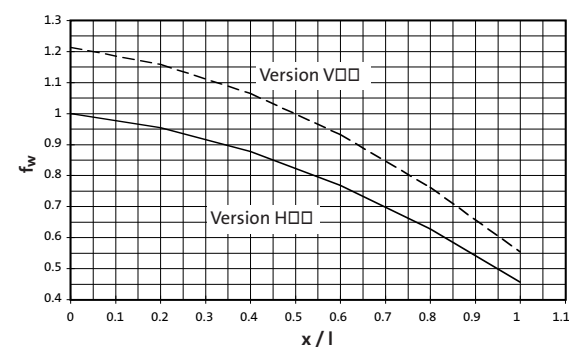
Contact Lenze if F_r and $F_a \neq 0$



f_α Effective direction factor at output shaft



f_w Additional load factor at output shaft



Technical data - Bevel gearboxes

Permissible radial and axial forces - Output



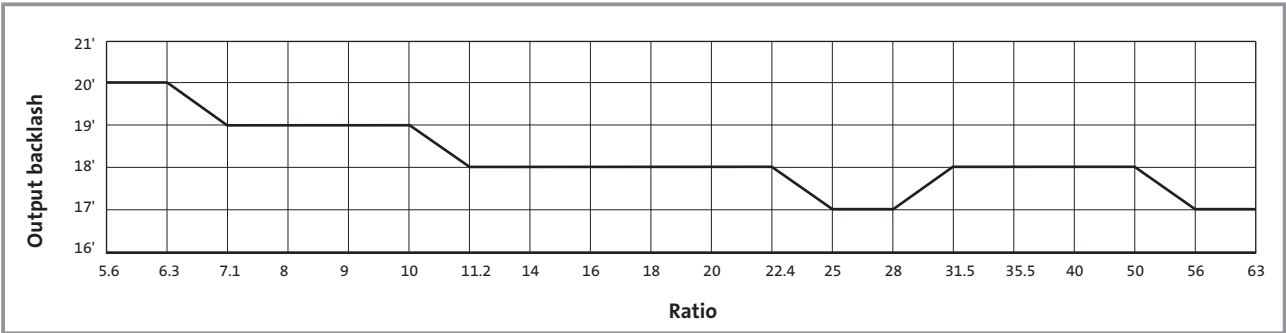
H□□	Hollow shaft Application of force F_r : At hollow shaft end face ($x = 0$) F_{aTab} only valid for $F_r = 0$							
	GKR03		GKR04		GKR05		GKR06	
n_2 [rpm]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]
400	2200	1000	2550	1275	3800	1900	5000	2500
250	2500	1100	3000	1500	4500	2200	5200	2600
160	2800	1250	3300	1650	5100	2500	5500	2750
100	3000	1400	3600	1800	6200	3100	7000	3500
63	3000	1400	3600	1800	7400	3700	9000	4500
40	3000	1400	3600	1800	7800	3900	10000	5000
25	3000	1400	3600	1800	7800	3900	10000	5000
≤16	3000	1400	3600	1800	7800	3900	10000	5000
F_{rmax}	3000	—	3600	—	7800	—	10000	—

V□R	Solid shaft Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$							
	GKR03		GKR04		GKR05		GKR06	
n_2 [rpm]	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	1800	1000	2100	1275	3000	1900	4000	2500
250	2100	1100	2500	1500	3600	2200	4200	2600
160	2400	1250	2700	1650	4500	2500	4500	2750
100	2800	1400	3000	1800	5000	3100	5600	3500
63	3000	1400	3000	1800	6000	3700	7300	4500
40	3000	1400	3000	1800	6500	3900	8600	5000
25	3000	1400	3000	1800	6500	3900	9000	5000
≤16	3000	1400	3000	1800	6500	3900	9000	5000
F_{rmax}	3000	—	3000	—	6500	—	9000	—

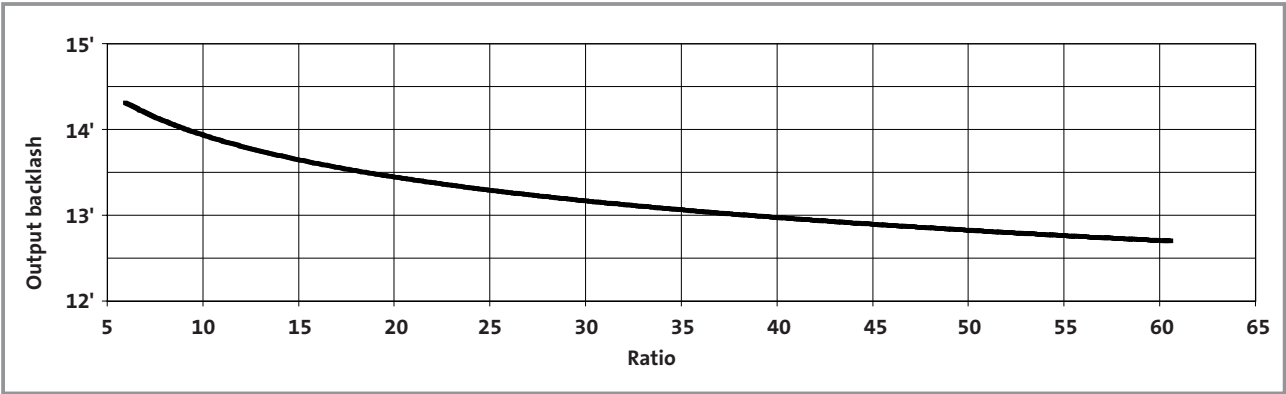
VAK	Solid shaft Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$							
	GKR03		GKR04		GKR05		GKR06	
n_2 [rpm]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]
400	1800	1000	2100	1275	5200	1900	5500	2500
250	2100	1100	2500	1500	6000	2200	6200	2600
160	2400	1250	2700	1650	6500	2500	7000	2750
100	2800	1400	3000	1800	6500	3100	9000	3500
63	3000	1400	3000	1800	6500	3700	9000	4500
40	3000	1400	3000	1800	6500	3900	9000	5000
25	3000	1400	3000	1800	6500	3900	9000	5000
≤16	3000	1400	3000	1800	6500	3900	9000	5000
F_{rmax}	3000	—	3000	—	6500	—	9000	—

Neither radial nor axial forces are permitted on hollow shafts with shrink discs (S□□).

GKR 03-2

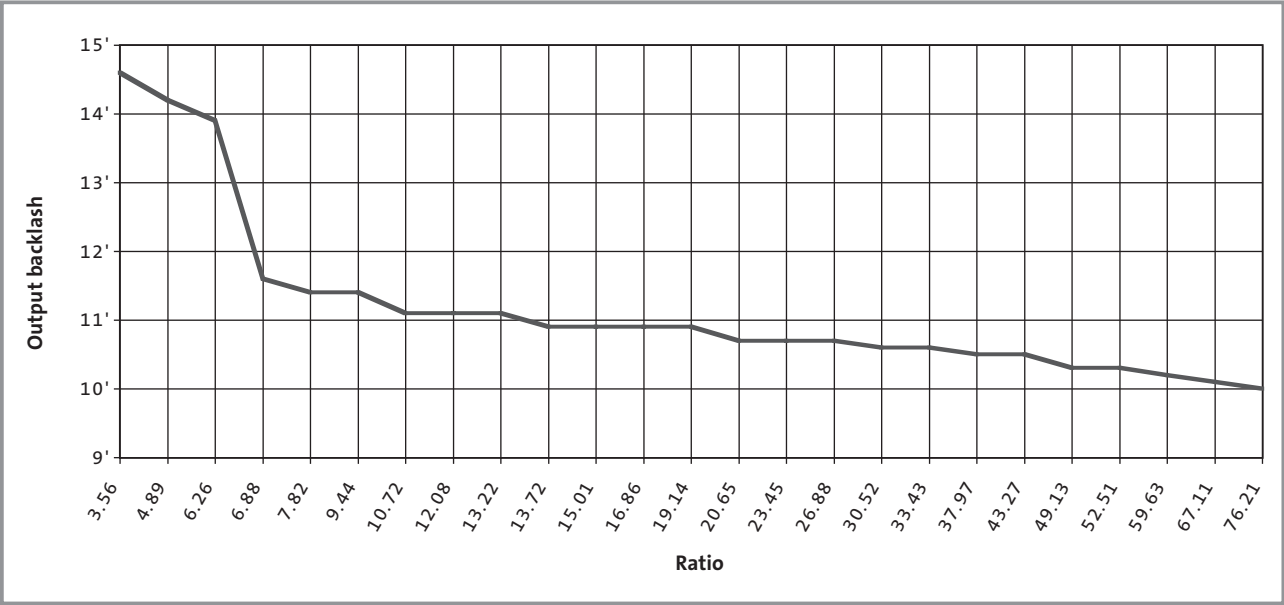


GKR 04-2

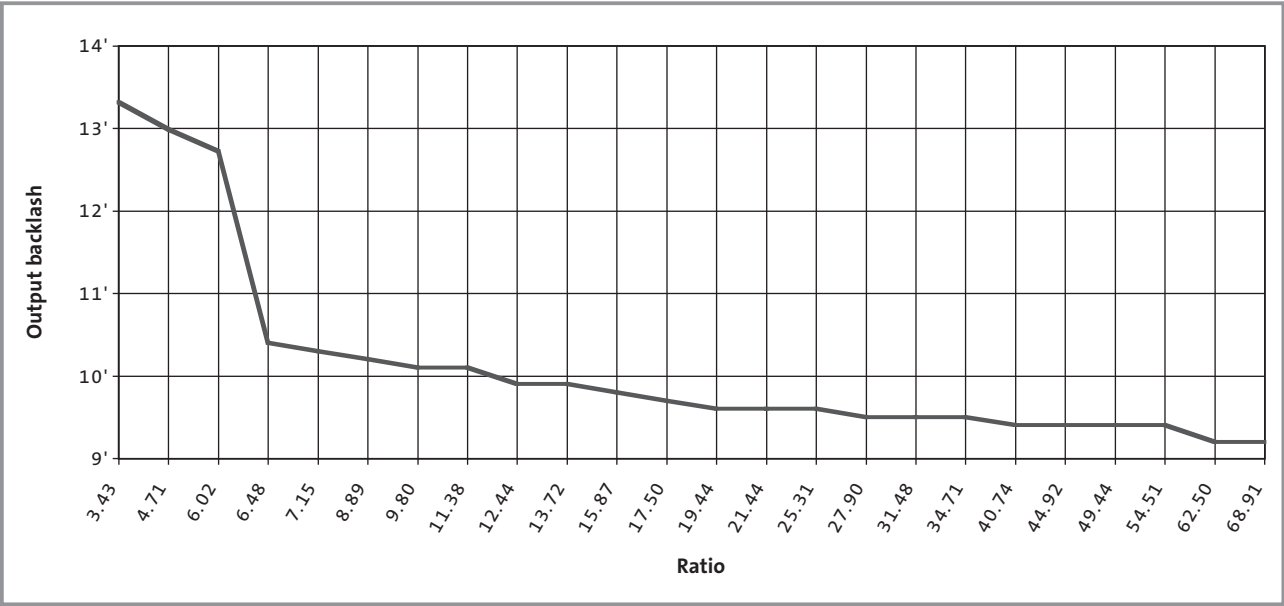




GKR 05-2



GKR 06-2



Bevel gearboxes GKR□□-2

Geared motors GKR□□-2E H□R	Motor frame size									
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32
	8200 motec E82MV □□□									
	251	371	551	751	152	152	222	302	402	552
03	9	11	12							
04	11	13	14	19	20					
05	15	18	19	23	25	32	39	44		
06	24	26	27	31	33	40	47	53	61	68

Additional weights

Gearbox size	Solid shaft V□□	2nd output shaft end V□□	Hollow shaft with shrink disc S□□	Flange □AK	Torque plate Pitch circle	Torque plate Housing 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
06	1.7	0.5	1.0	1.0	2.1	3.7

Weights in [kg] with oil capacity for mounting position A. All data is approximate

Selection tables - Bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[rpm]	[Nm]	50 Hz	[rpm]				[Nm]
										Dimensions see page 5-16 onwards			

Dimensions see page 5-16 onwards

P₁ = 0.12 kW

14	8	39	7.1	54	136	8	5.6	237	4.6	10.466	GKR03 - 2E □□□ 063C12	E82MV 251_2B
12	9	36	7.9	49	122	9	5.1	213	5.1	11.640	GKR03 - 2E □□□ 063C12	E82MV 251_2B
11	10	33	8.6	45	112	10	5.0	195	5.6	12.698	GKR04 - 2E □□□ 063C12	E82MV 251_2B
11	10	31	9.1	43	107	10	4.4	185	5.9	13.386	GKR03 - 2E □□□ 063C12	E82MV 251_2B
9.4	12	27	10.3	38	94	12	3.9	164	6.6	15.111	GKR03 - 2E □□□ 063C12	E82MV 251_2B
8.2	13	24	11.8	33	82	13	3.4	143	7.6	17.378	GKR03 - 2E □□□ 063C12	E82MV 251_2B
7.4	15	21	13.2	29	74	15	3.0	128	8.5	19.365	GKR03 - 2E □□□ 063C12	E82MV 251_2B
6.4	17	19	15.1	26	64	17	2.6	111	9.8	22.270	GKR03 - 2E □□□ 063C12	E82MV 251_2B
5.7	19	16	17	23	57	19	2.4	99	11	25.051	GKR03 - 2E □□□ 063C12	E82MV 251_2B
5.0	22	14	20	20	50	22	2.0	86	13	28.808	GKR03 - 2E □□□ 063C12	E82MV 251_2B
4.4	25	13	22	17	44	25	1.8	76	14	32.593	GKR03 - 2E □□□ 063C12	E82MV 251_2B
3.8	29	11	25	15	38	29	1.6	66	16	37.481	GKR03 - 2E □□□ 063C12	E82MV 251_2B
3.9	28	11	25	16	39	28	3.2	68	16	36.707	GKR04 - 2E □□□ 063C12	E82MV 251_2B
3.4	32	9.8	29	14	34	32	1.4	59	19	42.222	GKR03 - 2E □□□ 063C12	E82MV 251_2B
3.6	31	10	27	14	36	31	2.9	62	18	40.000	GKR04 - 2E □□□ 063C12	E82MV 251_2B
3.1	35	9	31	12	31	35	2.6	54	20	46.000	GKR04 - 2E □□□ 063C12	E82MV 251_2B
2.9	37	8.5	33	12	29	37	1.2	51	21	48.556	GKR03 - 2E □□□ 063C12	E82MV 251_2B
2.7	40	7.8	36	11	27	40	1.7	47	23	52.698	GKR04 - 2E □□□ 063C12	E82MV 251_2B
2.6	41	7.7	37	11	26	41	1.1	46	24	53.889	GKR03 - 2E □□□ 063C12	E82MV 251_2B
2.4	46	6.8	41	9.4	24	46	1.7	41	27	60.603	GKR04 - 2E □□□ 063C12	E82MV 251_2B
2.3	47	6.7	42	9.2	23	47	1.0	40	27	61.972	GKR03 - 2E □□□ 063C12	E82MV 251_2B

P₁ = 0.18 kW

22	7	64	6.6	88	219	7	5.4	382	4.3	6.222	GKR03 - 2E □□□ 063C32	E82MV 251_2B
19	9	56	7.6	77	192	9	5.1	334	4.9	7.111	GKR03 - 2E □□□ 063C32	E82MV 251_2B
17	10	48	8.7	67	167	10	4.5	290	5.6	8.178	GKR03 - 2E □□□ 063C32	E82MV 251_2B
15	11	43	9.7	60	150	11	4.1	261	6.3	9.101	GKR03 - 2E □□□ 063C32	E82MV 251_2B
13	13	38	11.1	52	130	13	3.6	227	7.2	10.466	GKR03 - 2E □□□ 063C32	E82MV 251_2B
12	14	34	12.4	47	117	14	3.2	204	8	11.640	GKR03 - 2E □□□ 063C32	E82MV 251_2B
11	15	31	13.5	43	108	15	3.2	187	8.7	12.698	GKR04 - 2E □□□ 063C32	E82MV 251_2B
10	16	30	14.3	41	102	16	2.8	177	9.2	13.386	GKR03 - 2E □□□ 063C32	E82MV 251_2B
9.4	18	27	16	37	94	18	3.2	163	10	14.603	GKR04 - 2E □□□ 063C32	E82MV 251_2B
9.0	18	26	16	36	90	18	2.5	157	10	15.111	GKR03 - 2E □□□ 063C32	E82MV 251_2B
7.9	21	23	19	31	79	21	2.2	137	12	17.378	GKR03 - 2E □□□ 063C32	E82MV 251_2B
7.1	23	20	21	28	71	23	1.9	123	13	19.365	GKR03 - 2E □□□ 063C32	E82MV 251_2B
6.1	27	18	24	25	61	27	1.7	107	15	22.270	GKR03 - 2E □□□ 063C32	E82MV 251_2B
6.1	27	18	24	24	61	27	3.3	106	15	22.489	GKR04 - 2E □□□ 063C32	E82MV 251_2B
5.5	30	16	27	22	55	30	1.5	95	17	25.051	GKR03 - 2E □□□ 063C32	E82MV 251_2B
5.4	30	16	27	22	54	30	2.9	94	17	25.185	GKR04 - 2E □□□ 063C32	E82MV 251_2B
4.7	35	14	31	19	47	35	1.3	82	20	28.808	GKR03 - 2E □□□ 063C32	E82MV 251_2B
4.7	35	14	31	19	47	35	2.6	82	20	28.963	GKR04 - 2E □□□ 063C32	E82MV 251_2B
4.2	39	12	35	17	42	39	1.2	73	22	32.593	GKR03 - 2E □□□ 063C32	E82MV 251_2B
4.3	38	12	34	17	43	38	2.4	74	22	31.919	GKR04 - 2E □□□ 063C32	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]	Dimensions see page 5-16 onwards		

P₁ = 0.18 kW

3.6	45	11	40	15	36	45	1.0	63	26	37.481	GKR03 - 2E □□□ 063C32	E82MV 251_2B
3.7	44	11	39	15	37	44	2.0	65	25	36.707	GKR04 - 2E □□□ 063C32	E82MV 251_2B
3.2	51	9.4	45	13	32	51	0.9	56	29	42.222	GKR03 - 2E □□□ 063C32	E82MV 251_2B
3.4	48	9.9	43	14	34	48	1.9	59	28	40.000	GKR04 - 2E □□□ 063C32	E82MV 251_2B
3.0	55	8.6	49	12	30	55	1.6	52	32	46.000	GKR04 - 2E □□□ 063C32	E82MV 251_2B
2.6	63	7.5	56	10	26	63	1.1	45	36	52.698	GKR04 - 2E □□□ 063C32	E82MV 251_2B
2.3	73	6.5	65	9.0	23	73	1.1	39	42	60.603	GKR04 - 2E □□□ 063C32	E82MV 251_2B

P₁ = 0.25 kW

26	9	77	7.6	106	264	9	4.5	460	4.9	5.185	GKR04 - 2E □□□ 063C42	E82MV 251_2B
25	9	73	8	101	253	9	4.4	441	5.1	5.411	GKR03 - 2E □□□ 063C42	E82MV 251_2B
22	10	64	9.2	88	220	10	3.9	383	5.9	6.222	GKR03 - 2E □□□ 063C42	E82MV 251_2B
19	12	56	10.5	77	193	12	3.7	335	6.8	7.111	GKR03 - 2E □□□ 063C42	E82MV 251_2B
17	14	49	12	67	168	14	3.3	291	7.8	8.178	GKR03 - 2E □□□ 063C42	E82MV 251_2B
15	15	44	13.4	60	151	15	3.0	262	8.7	9.101	GKR03 - 2E □□□ 063C42	E82MV 251_2B
13	17	38	15.4	52	131	17	2.6	228	10	10.466	GKR03 - 2E □□□ 063C42	E82MV 251_2B
12	19	34	17	47	118	19	2.3	205	11	11.640	GKR03 - 2E □□□ 063C42	E82MV 251_2B
11	21	31	19	43	108	21	4.3	188	12	12.698	GKR04 - 2E □□□ 063C42	E82MV 251_2B
10	22	30	19	41	104	22	4.5	180	13	13.216	GKR05 - 2E □□□ 063C42	E82MV 251_2B
10	22	30	20	41	102	22	2.0	178	13	13.386	GKR03 - 2E □□□ 063C42	E82MV 251_2B
9.1	25	26	22	37	91	25	4.5	159	14	15.008	GKR05 - 2E □□□ 063C42	E82MV 251_2B
9.1	25	26	22	36	91	25	1.8	158	14	15.111	GKR03 - 2E □□□ 063C42	E82MV 251_2B
7.9	29	23	26	32	79	29	1.6	137	17	17.378	GKR03 - 2E □□□ 063C42	E82MV 251_2B
7.7	30	22	26	31	77	30	3.0	133	17	17.889	GKR04 - 2E □□□ 063C42	E82MV 251_2B
7.1	32	21	29	28	71	32	1.4	123	18	19.365	GKR03 - 2E □□□ 063C42	E82MV 251_2B
7.0	32	20	29	28	70	32	2.8	122	19	19.556	GKR04 - 2E □□□ 063C42	E82MV 251_2B
6.2	37	18	33	25	62	37	1.2	107	21	22.270	GKR03 - 2E □□□ 063C42	E82MV 251_2B
6.1	37	18	33	24	61	37	2.4	106	21	22.489	GKR04 - 2E □□□ 063C42	E82MV 251_2B
5.5	42	16	37	22	55	42	1.1	95	24	25.051	GKR03 - 2E □□□ 063C42	E82MV 251_2B
5.4	42	16	37	22	54	42	2.2	95	24	25.185	GKR04 - 2E □□□ 063C42	E82MV 251_2B
4.8	48	14	42	19	48	48	0.9	83	27	28.808	GKR03 - 2E □□□ 063C42	E82MV 251_2B
4.7	48	14	43	19	47	48	1.9	82	28	28.963	GKR04 - 2E □□□ 063C42	E82MV 251_2B
4.5	51	13	45	18	45	51	4.3	78	29	30.522	GKR05 - 2E □□□ 063C42	E82MV 251_2B
4.2	54	12	48	17	42	54	0.8	73	31	32.593	GKR03 - 2E □□□ 063C42	E82MV 251_2B
4.3	53	12	47	17	43	53	1.7	75	30	31.919	GKR04 - 2E □□□ 063C42	E82MV 251_2B
3.7	61	11	54	15	37	61	1.5	65	35	36.707	GKR04 - 2E □□□ 063C42	E82MV 251_2B
3.4	66	9.9	59	14	34	66	1.2	60	38	40.000	GKR04 - 2E □□□ 063C42	E82MV 251_2B
3.0	76	8.6	68	12	30	76	1.2	52	44	46.000	GKR04 - 2E □□□ 063C42	E82MV 251_2B
2.8	81	8.1	72	11	28	81	3.0	49	47	49.133	GKR05 - 2E □□□ 063C42	E82MV 251_2B
2.8	82	8	73	11	28	82	3.2	48	47	49.444	GKR06 - 2E □□□ 063C42	E82MV 251_2B
2.6	87	7.6	77	10	26	87	2.8	45	50	52.510	GKR05 - 2E □□□ 063C42	E82MV 251_2B
2.5	90	7.3	80	10	25	90	3.2	44	52	54.513	GKR06 - 2E □□□ 063C42	E82MV 251_2B
2.3	99	6.7	88	9.2	23	99	2.4	40	57	59.630	GKR05 - 2E □□□ 063C42	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 5-16 onwards													

P₁ = 0.25 kW

2.2	104	6.4	92	8.8	22	104	2.6	38	59	62.500	GKR06 - 2E □□□ 063C42	E82MV 251_2B
2.0	111	5.9	99	8.2	20	111	1.4	36	64	67.113	GKR05 - 2E □□□ 063C42	E82MV 251_2B
2.0	114	5.8	102	8.0	20	114	2.6	35	66	68.906	GKR06 - 2E □□□ 063C42	E82MV 251_2B
1.8	126	5.2	112	7.2	18	126	1.4	31	73	76.213	GKR05 - 2E □□□ 063C42	E82MV 251_2B

P₁ = 0.37 kW

27	12	79	11	109	272	12	4.0	473	7.1	5.185	GKR04 - 2E □□□ 071C32	E82MV 371_2B
26	13	76	11.5	104	261	13	3.1	453	7.4	5.411	GKR03 - 2E □□□ 071C32	E82MV 371_2B
23	15	66	13.2	91	227	15	2.7	394	8.5	6.222	GKR03 - 2E □□□ 071C32	E82MV 371_2B
20	17	58	15.1	79	198	17	2.5	345	9.7	7.111	GKR03 - 2E □□□ 071C32	E82MV 371_2B
17	20	50	17	69	172	20	2.3	300	11	8.178	GKR03 - 2E □□□ 071C32	E82MV 371_2B
15	22	45	19	62	155	22	2.1	270	12	9.101	GKR03 - 2E □□□ 071C32	E82MV 371_2B
13	25	39	22	54	135	25	1.8	234	14	10.466	GKR03 - 2E □□□ 071C32	E82MV 371_2B
12	28	35	25	48	121	28	1.6	211	16	11.640	GKR03 - 2E □□□ 071C32	E82MV 371_2B
12	27	36	24	49	123	27	3.3	214	16	11.449	GKR04 - 2E □□□ 071C32	E82MV 371_2B
11	30	32	27	44	111	30	3.0	193	17	12.698	GKR04 - 2E □□□ 071C32	E82MV 371_2B
11	32	31	28	43	107	32	4.0	186	18	13.216	GKR05 - 2E □□□ 071C32	E82MV 371_2B
11	32	31	28	42	105	32	1.4	183	18	13.386	GKR03 - 2E □□□ 071C32	E82MV 371_2B
9.7	35	28	31	39	97	35	2.6	168	20	14.603	GKR04 - 2E □□□ 071C32	E82MV 371_2B
9.4	36	27	32	38	94	36	4.0	163	21	15.008	GKR05 - 2E □□□ 071C32	E82MV 371_2B
9.3	36	27	32	37	93	36	1.3	162	21	15.111	GKR03 - 2E □□□ 071C32	E82MV 371_2B
9.1	37	26	33	36	91	37	2.4	158	21	15.556	GKR04 - 2E □□□ 071C32	E82MV 371_2B
8.1	41	24	37	32	81	41	1.1	141	24	17.378	GKR03 - 2E □□□ 071C32	E82MV 371_2B
7.9	43	23	38	32	79	43	2.1	137	24	17.889	GKR04 - 2E □□□ 071C32	E82MV 371_2B
7.3	46	21	41	29	73	46	1.0	127	26	19.365	GKR03 - 2E □□□ 071C32	E82MV 371_2B
7.2	47	21	41	29	72	47	1.9	125	27	19.556	GKR04 - 2E □□□ 071C32	E82MV 371_2B
6.3	53	18	47	25	63	53	0.8	110	30	22.270	GKR03 - 2E □□□ 071C32	E82MV 371_2B
6.3	54	18	48	25	63	54	1.7	109	31	22.489	GKR04 - 2E □□□ 071C32	E82MV 371_2B
5.6	60	16	53	22	56	60	1.5	97	34	25.185	GKR04 - 2E □□□ 071C32	E82MV 371_2B
4.9	69	14	61	19	49	69	1.3	85	40	28.963	GKR04 - 2E □□□ 071C32	E82MV 371_2B
4.6	73	13	65	18	46	73	3.3	80	42	30.522	GKR05 - 2E □□□ 071C32	E82MV 371_2B
4.4	76	13	68	18	44	76	1.2	77	44	31.919	GKR04 - 2E □□□ 071C32	E82MV 371_2B
3.8	87	11	78	15	38	87	1.0	67	50	36.707	GKR04 - 2E □□□ 071C32	E82MV 371_2B
4.2	80	12	71	17	42	80	3.0	73	46	33.433	GKR05 - 2E □□□ 071C32	E82MV 371_2B
3.5	95	10	85	14	35	95	0.9	61	55	40.000	GKR04 - 2E □□□ 071C32	E82MV 371_2B
3.7	90	11	80	15	37	90	2.7	65	52	37.967	GKR05 - 2E □□□ 071C32	E82MV 371_2B
3.5	97	10	86	14	35	97	3.2	60	56	40.741	GKR06 - 2E □□□ 071C32	E82MV 371_2B
3.1	110	8.9	97	12	31	110	0.8	53	63	46.000	GKR04 - 2E □□□ 071C32	E82MV 371_2B
3.3	103	9.5	92	13	33	103	2.3	57	59	43.267	GKR05 - 2E □□□ 071C32	E82MV 371_2B
3.1	107	9.1	95	13	31	107	3.2	55	61	44.917	GKR06 - 2E □□□ 071C32	E82MV 371_2B
2.9	117	8.3	104	11	29	117	2.1	50	67	49.133	GKR05 - 2E □□□ 071C32	E82MV 371_2B
2.9	118	8.3	105	11	29	118	2.8	50	68	49.444	GKR06 - 2E □□□ 071C32	E82MV 371_2B
2.7	125	7.8	111	11	27	125	1.9	47	72	52.510	GKR05 - 2E □□□ 071C32	E82MV 371_2B
2.6	130	7.5	116	10	26	130	2.8	45	75	54.513	GKR06 - 2E □□□ 071C32	E82MV 371_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]	Dimensions see page 5-16 onwards		

P₁ = 0.37 kW

2.4	142	6.9	126	9.4	24	142	1.7	41	82	59.630	GKR05 - 2E □□□ 071C32	E82MV 371_2B
2.3	149	6.5	132	9.0	23	149	2.2	39	86	62.500	GKR06 - 2E □□□ 071C32	E82MV 371_2B
2.1	160	6.1	142	8.4	21	160	1.1	37	92	67.113	GKR05 - 2E □□□ 071C32	E82MV 371_2B
2.1	164	5.9	146	8.2	21	164	2.2	36	94	68.906	GKR06 - 2E □□□ 071C32	E82MV 371_2B
1.9	181	5.4	161	7.4	19	181	1.1	32	104	76.213	GKR05 - 2E □□□ 071C32	E82MV 371_2B

P₁ = 0.55 kW

27	18	79	16	108	271	18	3.7	471	11	5.185	GKR04 - 2E □□□ 071C42	E82MV 551_4B
26	19	75	17	104	260	19	2.0	452	11	5.411	GKR03 - 2E □□□ 071C42	E82MV 551_4B
23	22	65	20	90	226	22	1.8	393	13	6.222	GKR03 - 2E □□□ 071C42	E82MV 551_4B
20	25	57	22	79	198	25	1.7	344	15	7.111	GKR03 - 2E □□□ 071C42	E82MV 551_4B
20	25	57	22	79	198	25	3.1	344	15	7.111	GKR04 - 2E □□□ 071C42	E82MV 551_4B
17	29	50	26	69	172	29	1.5	299	17	8.178	GKR03 - 2E □□□ 071C42	E82MV 551_4B
17	29	50	26	69	172	29	2.8	299	17	8.178	GKR04 - 2E □□□ 071C42	E82MV 551_4B
15	32	45	29	62	154	32	1.4	269	19	9.101	GKR03 - 2E □□□ 071C42	E82MV 551_4B
15	32	45	29	62	154	32	2.6	269	19	9.101	GKR04 - 2E □□□ 071C42	E82MV 551_4B
13	37	39	33	54	134	37	1.2	234	21	10.466	GKR03 - 2E □□□ 071C42	E82MV 551_4B
13	37	39	33	54	134	37	2.4	234	21	10.466	GKR04 - 2E □□□ 071C42	E82MV 551_4B
12	41	35	37	48	121	41	1.1	210	24	11.640	GKR03 - 2E □□□ 071C42	E82MV 551_4B
12	41	36	36	49	123	41	2.2	214	23	11.449	GKR04 - 2E □□□ 071C42	E82MV 551_4B
11	45	32	40	44	111	45	2.0	193	26	12.698	GKR04 - 2E □□□ 071C42	E82MV 551_4B
11	47	31	42	43	106	47	4.5	185	27	13.216	GKR05 - 2E □□□ 071C42	E82MV 551_4B
11	48	30	42	42	105	48	0.9	183	27	13.386	GKR03 - 2E □□□ 071C42	E82MV 551_4B
9.6	52	28	46	38	96	52	1.7	167	30	14.603	GKR04 - 2E □□□ 071C42	E82MV 551_4B
9.4	53	27	47	37	94	53	4.2	163	31	15.008	GKR05 - 2E □□□ 071C42	E82MV 551_4B
9.3	54	27	48	37	93	54	0.8	162	31	15.111	GKR03 - 2E □□□ 071C42	E82MV 551_4B
9.0	55	26	49	36	90	55	1.6	157	32	15.556	GKR04 - 2E □□□ 071C42	E82MV 551_4B
7.9	64	23	57	31	79	64	1.4	137	37	17.889	GKR04 - 2E □□□ 071C42	E82MV 551_4B
7.2	69	21	62	29	72	69	1.3	125	40	19.556	GKR04 - 2E □□□ 071C42	E82MV 551_4B
6.3	80	18	71	25	63	80	1.1	109	46	22.489	GKR04 - 2E □□□ 071C42	E82MV 551_4B
6.0	83	17	74	24	60	83	2.9	104	48	23.450	GKR05 - 2E □□□ 071C42	E82MV 551_4B
5.6	89	16	80	22	56	89	1.0	97	51	25.185	GKR04 - 2E □□□ 071C42	E82MV 551_4B
5.2	96	15	85	21	52	96	2.5	91	55	26.878	GKR05 - 2E □□□ 071C42	E82MV 551_4B
4.9	103	14	92	19	49	103	0.9	84	59	28.963	GKR04 - 2E □□□ 071C42	E82MV 551_4B
4.6	108	13	96	18	46	108	2.2	80	62	30.522	GKR05 - 2E □□□ 071C42	E82MV 551_4B
4.5	112	13	100	18	45	112	3.2	78	64	31.481	GKR06 - 2E □□□ 071C42	E82MV 551_4B
4.2	119	12	106	17	42	119	2.0	73	68	33.433	GKR05 - 2E □□□ 071C42	E82MV 551_4B
4.1	123	12	110	16	41	123	3.2	70	71	34.708	GKR06 - 2E □□□ 071C42	E82MV 551_4B
3.7	135	11	120	15	37	135	1.8	64	77	37.967	GKR05 - 2E □□□ 071C42	E82MV 551_4B
3.5	145	10	129	14	35	145	2.9	60	83	40.741	GKR06 - 2E □□□ 071C42	E82MV 551_4B
3.3	154	9.4	137	13	33	154	1.6	57	88	43.267	GKR05 - 2E □□□ 071C42	E82MV 551_4B
3.1	160	9.1	142	13	31	160	2.8	54	92	44.917	GKR06 - 2E □□□ 071C42	E82MV 551_4B
2.9	175	8.3	155	11	29	175	1.4	50	100	49.133	GKR05 - 2E □□□ 071C42	E82MV 551_4B
2.8	176	8.2	156	11	28	176	2.4	49	101	49.444	GKR06 - 2E □□□ 071C42	E82MV 551_4B
2.7	187	7.8	166	11	27	187	1.3	47	107	52.510	GKR05 - 2E □□□ 071C42	E82MV 551_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 5-16 onwards													

P₁ = 0.55 kW

2.6	194	7.5	172	10	26	194	2.3	45	111	54.513	GKR06 - 2E □□□ 071C42	E82MV 551_4B
2.4	212	6.8	188	9.4	24	212	1.1	41	122	59.630	GKR05 - 2E □□□ 071C42	E82MV 551_4B
2.3	222	6.5	198	9.0	23	222	1.4	39	128	62.500	GKR06 - 2E □□□ 071C42	E82MV 551_4B
2.0	245	5.9	218	8.2	20	245	1.4	35	141	68.906	GKR06 - 2E □□□ 071C42	E82MV 551_4B

P₁ = 0.75 kW

27	25	79	22	109	272	25	2.8	473	14	5.185	GKR04 - 2E □□□ 080C32	E82MV 751_4B
24	29	69	26	95	237	29	2.5	411	17	5.963	GKR04 - 2E □□□ 080C32	E82MV 751_4B
23	30	65	27	90	225	30	4.1	392	17	6.257	GKR05 - 2E □□□ 080C32	E82MV 751_4B
20	34	58	31	79	198	34	2.3	345	20	7.111	GKR04 - 2E □□□ 080C32	E82MV 751_4B
17	40	50	35	69	172	40	2.1	300	23	8.178	GKR04 - 2E □□□ 080C32	E82MV 751_4B
15	44	45	39	62	155	44	1.9	270	25	9.101	GKR04 - 2E □□□ 080C32	E82MV 751_4B
13	51	39	45	54	135	51	1.8	234	29	10.466	GKR04 - 2E □□□ 080C32	E82MV 751_4B
12	55	36	49	49	123	55	1.6	214	32	11.449	GKR04 - 2E □□□ 080C32	E82MV 751_4B
11	61	32	55	44	111	61	1.5	193	35	12.698	GKR04 - 2E □□□ 080C32	E82MV 751_4B
11	64	31	57	43	107	64	3.4	186	37	13.216	GKR05 - 2E □□□ 080C32	E82MV 751_4B
9.7	71	28	63	39	97	71	1.3	168	40	14.603	GKR04 - 2E □□□ 080C32	E82MV 751_4B
9.4	72	27	64	38	94	72	3.1	163	42	15.008	GKR05 - 2E □□□ 080C32	E82MV 751_4B
9.1	75	26	67	36	91	75	1.2	158	43	15.556	GKR04 - 2E □□□ 080C32	E82MV 751_4B
8.4	81	24	72	33	84	81	3.0	146	47	16.857	GKR05 - 2E □□□ 080C32	E82MV 751_4B
7.9	86	23	77	32	79	86	1.0	137	50	17.889	GKR04 - 2E □□□ 080C32	E82MV 751_4B
7.4	92	21	82	29	74	92	2.6	128	53	19.143	GKR05 - 2E □□□ 080C32	E82MV 751_4B
7.2	94	21	84	29	72	94	1.0	125	54	19.556	GKR04 - 2E □□□ 080C32	E82MV 751_4B
6.8	100	20	89	27	68	100	2.4	119	57	20.650	GKR05 - 2E □□□ 080C32	E82MV 751_4B
6.3	109	18	97	25	63	109	0.8	109	62	22.489	GKR04 - 2E □□□ 080C32	E82MV 751_4B
6.0	113	17	101	24	60	113	2.1	105	65	23.450	GKR05 - 2E □□□ 080C32	E82MV 751_4B
5.3	130	15	115	21	53	130	1.9	91	75	26.878	GKR05 - 2E □□□ 080C32	E82MV 751_4B
5.1	135	15	120	20	51	135	3.3	88	77	27.903	GKR06 - 2E □□□ 080C32	E82MV 751_4B
4.6	147	13	131	18	46	147	1.6	80	85	30.522	GKR05 - 2E □□□ 080C32	E82MV 751_4B
4.5	152	13	135	18	45	152	2.9	78	87	31.481	GKR06 - 2E □□□ 080C32	E82MV 751_4B
4.2	161	12	144	17	42	161	1.5	73	93	33.433	GKR05 - 2E □□□ 080C32	E82MV 751_4B
4.1	168	12	149	16	41	168	2.7	71	96	34.708	GKR06 - 2E □□□ 080C32	E82MV 751_4B
3.7	183	11	163	15	37	183	1.3	65	105	37.967	GKR05 - 2E □□□ 080C32	E82MV 751_4B
3.5	197	10	175	14	35	197	2.3	60	113	40.741	GKR06 - 2E □□□ 080C32	E82MV 751_4B
3.3	209	9.5	186	13	33	209	1.1	57	120	43.267	GKR05 - 2E □□□ 080C32	E82MV 751_4B
3.1	217	9.1	193	13	31	217	2.1	55	125	44.917	GKR06 - 2E □□□ 080C32	E82MV 751_4B
2.9	237	8.3	211	11	29	237	1.0	50	136	49.133	GKR05 - 2E □□□ 080C32	E82MV 751_4B
2.9	239	8.3	212	11	29	239	1.9	50	137	49.444	GKR06 - 2E □□□ 080C32	E82MV 751_4B
2.7	253	7.8	226	11	27	253	0.9	47	146	52.510	GKR05 - 2E □□□ 080C32	E82MV 751_4B
2.6	263	7.5	234	10	26	263	1.7	45	151	54.513	GKR06 - 2E □□□ 080C32	E82MV 751_4B
2.4	288	6.9	256	9.4	24	288	0.8	41	165	59.630	GKR05 - 2E □□□ 080C32	E82MV 751_4B
2.3	302	6.5	268	9.0	23	302	1.3	39	173	62.500	GKR06 - 2E □□□ 080C32	E82MV 751_4B
2.1	333	5.9	296	8.2	21	333	1.3	36	191	68.906	GKR06 - 2E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	30 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			

Dimensions see page 5-16 onwards

P₁ = 1.1 kW

39	26	113	21	234	390	26	4.5	678	15	3.565	GKR05 - 2E □□□ 080C42	E82MV 152_4B
27	37	78	31	161	268	37	1.8	466	21	5.185	GKR04 - 2E □□□ 080C42	E82MV 152_4B
23	43	68	36	140	233	43	1.7	406	25	5.963	GKR04 - 2E □□□ 080C42	E82MV 152_4B
22	45	64	38	133	222	45	3.5	387	26	6.257	GKR05 - 2E □□□ 080C42	E82MV 152_4B
20	51	57	43	117	196	51	1.5	340	29	7.111	GKR04 - 2E □□□ 080C42	E82MV 152_4B
17	59	49	49	102	170	59	1.4	296	34	8.178	GKR04 - 2E □□□ 080C42	E82MV 152_4B
15	65	44	55	92	153	65	1.3	266	38	9.101	GKR04 - 2E □□□ 080C42	E82MV 152_4B
15	68	43	57	88	147	68	2.8	256	39	9.440	GKR05 - 2E □□□ 080C42	E82MV 152_4B
13	75	39	63	80	133	75	1.2	231	43	10.466	GKR04 - 2E □□□ 080C42	E82MV 152_4B
13	77	38	65	78	130	77	2.6	226	44	10.720	GKR05 - 2E □□□ 080C42	E82MV 152_4B
12	82	35	69	73	121	82	1.1	211	47	11.449	GKR04 - 2E □□□ 080C42	E82MV 152_4B
11	91	32	77	66	110	91	1.0	190	52	12.698	GKR04 - 2E □□□ 080C42	E82MV 152_4B
12	87	33	73	69	115	87	2.4	200	50	12.081	GKR05 - 2E □□□ 080C42	E82MV 152_4B
11	95	31	80	63	105	95	2.3	183	55	13.216	GKR05 - 2E □□□ 080C42	E82MV 152_4B
9.5	105	28	88	57	95	105	0.9	166	60	14.603	GKR04 - 2E □□□ 080C42	E82MV 152_4B
10	99	29	83	61	101	99	2.2	176	57	13.719	GKR05 - 2E □□□ 080C42	E82MV 152_4B
9.3	108	27	91	56	93	108	2.1	161	62	15.008	GKR05 - 2E □□□ 080C42	E82MV 152_4B
8.9	112	26	94	54	89	112	0.8	155	64	15.556	GKR04 - 2E □□□ 080C42	E82MV 152_4B
8.3	121	24	102	50	83	121	2.0	143	70	16.857	GKR05 - 2E □□□ 080C42	E82MV 152_4B
7.3	137	21	115	44	73	137	1.7	126	79	19.143	GKR05 - 2E □□□ 080C42	E82MV 152_4B
6.7	148	20	125	40	67	148	1.6	117	85	20.650	GKR05 - 2E □□□ 080C42	E82MV 152_4B
7.2	140	21	117	43	72	140	3.2	124	80	19.444	GKR06 - 2E □□□ 080C42	E82MV 152_4B
5.9	168	17	141	36	59	168	1.4	103	97	23.450	GKR05 - 2E □□□ 080C42	E82MV 152_4B
6.5	154	19	129	39	65	154	2.9	113	88	21.438	GKR06 - 2E □□□ 080C42	E82MV 152_4B
5.2	193	15	162	31	52	193	1.2	90	111	26.878	GKR05 - 2E □□□ 080C42	E82MV 152_4B
5.5	182	16	153	33	55	182	2.5	96	104	25.309	GKR06 - 2E □□□ 080C42	E82MV 152_4B
5.0	200	14	168	30	50	200	2.2	87	115	27.903	GKR06 - 2E □□□ 080C42	E82MV 152_4B
4.6	219	13	184	27	46	219	1.1	79	126	30.522	GKR05 - 2E □□□ 080C42	E82MV 152_4B
4.4	226	13	190	27	44	226	2.0	77	130	31.481	GKR06 - 2E □□□ 080C42	E82MV 152_4B
4.2	240	12	202	25	42	240	1.0	72	138	33.433	GKR05 - 2E □□□ 080C42	E82MV 152_4B
4.0	249	12	209	24	40	249	1.8	70	143	34.708	GKR06 - 2E □□□ 080C42	E82MV 152_4B
3.7	273	11	229	22	37	273	0.9	64	157	37.967	GKR05 - 2E □□□ 080C42	E82MV 152_4B
3.4	293	9.9	246	20	34	293	1.5	59	168	40.741	GKR06 - 2E □□□ 080C42	E82MV 152_4B
3.1	323	9	271	19	31	323	1.4	54	185	44.917	GKR06 - 2E □□□ 080C42	E82MV 152_4B
2.8	355	8.2	298	17	28	355	1.3	49	204	49.444	GKR06 - 2E □□□ 080C42	E82MV 152_4B
2.6	391	7.4	329	15	26	391	1.2	44	225	54.513	GKR06 - 2E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz						
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
										Dimensions see page 5-16 onwards			

P₁ = 1.5 kW

39	35	113	31	156	390	35	3.9	678	20	3.565	GKR05 - 2E □□□ 090C32	E82MV 152_4B
27	51	78	45	107	268	51	1.4	466	29	5.185	GKR04 - 2E □□□ 090C32	E82MV 152_4B
28	48	82	43	114	284	48	3.1	495	28	4.889	GKR05 - 2E □□□ 090C32	E82MV 152_4B
23	58	68	52	93	233	58	1.2	406	34	5.963	GKR04 - 2E □□□ 090C32	E82MV 152_4B
22	61	64	55	89	222	61	2.5	387	35	6.257	GKR05 - 2E □□□ 090C32	E82MV 152_4B
20	70	57	62	78	196	70	1.1	340	40	7.111	GKR04 - 2E □□□ 090C32	E82MV 152_4B
20	67	59	60	81	202	67	2.7	351	39	6.883	GKR05 - 2E □□□ 090C32	E82MV 152_4B
17	80	49	71	68	170	80	1.0	296	46	8.178	GKR04 - 2E □□□ 090C32	E82MV 152_4B
18	77	52	68	71	178	77	2.4	309	44	7.817	GKR05 - 2E □□□ 090C32	E82MV 152_4B
15	89	44	79	61	153	89	0.9	266	51	9.101	GKR04 - 2E □□□ 090C32	E82MV 152_4B
15	92	43	82	59	147	92	2.1	256	53	9.440	GKR05 - 2E □□□ 090C32	E82MV 152_4B
13	103	39	91	53	133	103	0.9	231	59	10.466	GKR04 - 2E □□□ 090C32	E82MV 152_4B
13	105	38	93	52	130	105	1.9	226	60	10.720	GKR05 - 2E □□□ 090C32	E82MV 152_4B
12	112	35	100	49	121	112	0.8	211	64	11.449	GKR04 - 2E □□□ 090C32	E82MV 152_4B
12	118	33	105	46	115	118	1.8	200	68	12.081	GKR05 - 2E □□□ 090C32	E82MV 152_4B
11	129	31	115	42	105	129	1.7	183	74	13.216	GKR05 - 2E □□□ 090C32	E82MV 152_4B
10	134	29	120	41	101	134	1.6	176	77	13.719	GKR05 - 2E □□□ 090C32	E82MV 152_4B
10	134	29	120	41	101	134	3.2	176	77	13.720	GKR06 - 2E □□□ 090C32	E82MV 152_4B
9.3	147	27	131	37	93	147	1.5	161	84	15.008	GKR05 - 2E □□□ 090C32	E82MV 152_4B
8.3	165	24	147	33	83	165	1.5	143	95	16.857	GKR05 - 2E □□□ 090C32	E82MV 152_4B
8.8	155	25	138	35	88	155	2.9	152	89	15.873	GKR06 - 2E □□□ 090C32	E82MV 152_4B
7.3	187	21	167	29	73	187	1.3	126	108	19.143	GKR05 - 2E □□□ 090C32	E82MV 152_4B
7.9	171	23	152	32	79	171	2.6	138	98	17.500	GKR06 - 2E □□□ 090C32	E82MV 152_4B
6.7	202	20	180	27	67	202	1.2	117	116	20.650	GKR05 - 2E □□□ 090C32	E82MV 152_4B
7.2	190	21	169	29	72	190	2.4	124	109	19.444	GKR06 - 2E □□□ 090C32	E82MV 152_4B
5.9	230	17	204	24	59	230	1.0	103	132	23.450	GKR05 - 2E □□□ 090C32	E82MV 152_4B
6.5	210	19	187	26	65	210	2.1	113	121	21.438	GKR06 - 2E □□□ 090C32	E82MV 152_4B
5.2	263	15	234	21	52	263	0.9	90	151	26.878	GKR05 - 2E □□□ 090C32	E82MV 152_4B
5.5	248	16	221	22	55	248	1.8	96	142	25.309	GKR06 - 2E □□□ 090C32	E82MV 152_4B
5.0	273	14	243	20	50	273	1.6	87	157	27.903	GKR06 - 2E □□□ 090C32	E82MV 152_4B
4.6	299	13	266	18	46	299	0.8	79	172	30.522	GKR05 - 2E □□□ 090C32	E82MV 152_4B
4.4	308	13	274	18	44	308	1.5	77	177	31.481	GKR06 - 2E □□□ 090C32	E82MV 152_4B
4.0	340	12	302	16	40	340	1.3	70	195	34.708	GKR06 - 2E □□□ 090C32	E82MV 152_4B
3.4	399	9.9	355	14	34	399	1.1	59	229	40.741	GKR06 - 2E □□□ 090C32	E82MV 152_4B
3.1	440	9	391	12	31	440	1.0	54	253	44.917	GKR06 - 2E □□□ 090C32	E82MV 152_4B
2.8	484	8.2	431	11	28	484	0.9	49	278	49.444	GKR06 - 2E □□□ 090C32	E82MV 152_4B
2.6	534	7.4	475	10	26	534	0.8	44	307	54.513	GKR06 - 2E □□□ 090C32	E82MV 152_4B

P₁ = 2.2 kW

40	49	117	44	162	404	49	2.8	703	28	3.565	GKR05 - 2E □□□ 100C12	E82MV 222_4B
29	68	85	60	118	295	68	2.2	513	39	4.889	GKR05 - 2E □□□ 100C12	E82MV 222_4B
23	87	67	77	92	230	87	1.8	400	50	6.257	GKR05 - 2E □□□ 100C12	E82MV 222_4B
21	95	61	85	84	209	95	1.9	364	55	6.883	GKR05 - 2E □□□ 100C12	E82MV 222_4B
18	108	53	96	74	184	108	1.7	321	62	7.817	GKR05 - 2E □□□ 100C12	E82MV 222_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan ^{*)}													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz						
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
										Dimensions see page 5-16 onwards			

P₁ = 2.2 kW

15	131	44	116	61	153	131	1.5	265	75	9.440	GKR05 - 2E □□□ 100C12	E82MV 222_4B
13	149	39	132	54	134	149	1.4	234	85	10.720	GKR05 - 2E □□□ 100C12	E82MV 222_4B
15	136	43	121	59	147	136	2.8	256	78	9.800	GKR06 - 2E □□□ 100C12	E82MV 222_4B
13	158	37	140	51	127	158	2.8	220	91	11.376	GKR06 - 2E □□□ 100C12	E82MV 222_4B
12	167	35	149	48	119	167	1.2	207	96	12.081	GKR05 - 2E □□□ 100C12	E82MV 222_4B
12	173	34	154	46	116	173	2.6	201	99	12.444	GKR06 - 2E □□□ 100C12	E82MV 222_4B
11	183	32	163	44	109	183	1.2	190	105	13.216	GKR05 - 2E □□□ 100C12	E82MV 222_4B
11	190	30	169	42	105	190	1.1	183	109	13.719	GKR05 - 2E □□□ 100C12	E82MV 222_4B
11	190	30	169	42	105	190	2.2	183	109	13.720	GKR06 - 2E □□□ 100C12	E82MV 222_4B
9.6	208	28	185	38	96	208	1.1	167	120	15.008	GKR05 - 2E □□□ 100C12	E82MV 222_4B
8.5	234	25	208	34	85	234	1.0	149	134	16.857	GKR05 - 2E □□□ 100C12	E82MV 222_4B
9.1	220	26	196	36	91	220	2.0	158	126	15.873	GKR06 - 2E □□□ 100C12	E82MV 222_4B
7.5	265	22	236	30	75	265	0.9	131	152	19.143	GKR05 - 2E □□□ 100C12	E82MV 222_4B
8.2	243	24	216	33	82	243	1.9	143	139	17.500	GKR06 - 2E □□□ 100C12	E82MV 222_4B
7.0	286	20	255	28	70	286	0.8	121	164	20.650	GKR05 - 2E □□□ 100C12	E82MV 222_4B
7.4	270	21	240	30	74	270	1.7	129	155	19.444	GKR06 - 2E □□□ 100C12	E82MV 222_4B
6.7	297	19	264	27	67	297	1.5	117	171	21.438	GKR06 - 2E □□□ 100C12	E82MV 222_4B
5.7	351	17	312	23	57	351	1.3	99	202	25.309	GKR06 - 2E □□□ 100C12	E82MV 222_4B
5.2	387	15	344	21	52	387	1.2	90	222	27.903	GKR06 - 2E □□□ 100C12	E82MV 222_4B
4.6	436	13	388	18	46	436	1.0	80	251	31.481	GKR06 - 2E □□□ 100C12	E82MV 222_4B
4.2	481	12	428	17	42	481	0.9	72	276	34.708	GKR06 - 2E □□□ 100C12	E82MV 222_4B

P₁ = 3 kW

40	68	116	60	160	401	68	2.0	698	39	3.565	GKR05 - 2E □□□ 100C32	E82MV 302_4B
42	65	121	58	167	417	65	3.1	725	38	3.431	GKR06 - 2E □□□ 100C32	E82MV 302_4B
29	93	85	83	117	293	93	1.6	509	53	4.889	GKR05 - 2E □□□ 100C32	E82MV 302_4B
30	90	88	80	122	304	90	2.8	529	51	4.706	GKR06 - 2E □□□ 100C32	E82MV 302_4B
23	119	66	106	91	229	119	1.3	398	68	6.257	GKR05 - 2E □□□ 100C32	E82MV 302_4B
24	115	69	102	95	237	115	2.4	413	66	6.022	GKR06 - 2E □□□ 100C32	E82MV 302_4B
22	123	64	110	88	221	123	2.8	384	71	6.481	GKR06 - 2E □□□ 100C32	E82MV 302_4B
21	131	60	117	83	208	131	1.4	361	75	6.883	GKR05 - 2E □□□ 100C32	E82MV 302_4B
20	136	58	121	80	200	136	2.6	348	78	7.146	GKR06 - 2E □□□ 100C32	E82MV 302_4B
18	149	53	132	73	183	149	1.3	318	86	7.817	GKR05 - 2E □□□ 100C32	E82MV 302_4B
15	180	44	160	61	152	180	1.1	264	103	9.440	GKR05 - 2E □□□ 100C32	E82MV 302_4B
16	169	47	151	64	161	169	2.4	280	97	8.889	GKR06 - 2E □□□ 100C32	E82MV 302_4B
13	204	39	182	53	133	204	1.0	232	117	10.720	GKR05 - 2E □□□ 100C32	E82MV 302_4B
15	187	42	166	58	146	187	2.1	254	107	9.800	GKR06 - 2E □□□ 100C32	E82MV 302_4B
13	217	36	193	50	126	217	2.0	219	124	11.376	GKR06 - 2E □□□ 100C32	E82MV 302_4B
12	230	34	205	47	118	230	0.9	206	132	12.081	GKR05 - 2E □□□ 100C32	E82MV 302_4B
11	237	33	211	46	115	237	1.9	200	136	12.444	GKR06 - 2E □□□ 100C32	E82MV 302_4B
11	252	31	224	43	108	252	0.9	188	145	13.216	GKR05 - 2E □□□ 100C32	E82MV 302_4B
10	261	30	232	42	104	261	0.8	181	150	13.719	GKR05 - 2E □□□ 100C32	E82MV 302_4B
10	261	30	232	42	104	261	1.6	181	150	13.720	GKR06 - 2E □□□ 100C32	E82MV 302_4B
9.0	302	26	269	36	90	302	1.5	157	174	15.873	GKR06 - 2E □□□ 100C32	E82MV 302_4B
8.2	333	24	296	33	82	333	1.4	142	191	17.500	GKR06 - 2E □□□ 100C32	E82MV 302_4B

Thermal power limit not considered (see page 2-5)

^{*)} Observe current derating (see page 2-2)

Selection tables - Bevel gearboxes
Geared motors with 8200 motec



Motor cooling with separate fan													
Motor cooling with integral fan*)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
				20 Hz	50 Hz		50 Hz						
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 5-16 onwards													

P₁ = 3 kW

7.4	370	21	329	29	74	370	1.2	128	213	19.444	GKR06 - 2E □□□ 100C32	E82MV 302_4B
6.7	408	19	363	27	67	408	1.1	116	234	21.438	GKR06 - 2E □□□ 100C32	E82MV 302_4B
5.7	482	16	429	23	57	482	0.9	98	277	25.309	GKR06 - 2E □□□ 100C32	E82MV 302_4B
5.1	531	15	473	20	51	531	0.8	89	305	27.903	GKR06 - 2E □□□ 100C32	E82MV 302_4B

P₁ = 4 kW

42	86	123	74	169	423	86	2.3	735	49	3.431	GKR06 - 2E □□□ 112C22	E82MV 402_4B
31	118	89	101	123	308	118	2.1	536	68	4.706	GKR06 - 2E □□□ 112C22	E82MV 402_4B
24	151	70	130	96	241	151	1.9	419	87	6.022	GKR06 - 2E □□□ 112C22	E82MV 402_4B
22	162	65	140	89	224	162	2.2	389	93	6.481	GKR06 - 2E □□□ 112C22	E82MV 402_4B
20	179	59	154	81	203	179	1.9	353	103	7.146	GKR06 - 2E □□□ 112C22	E82MV 402_4B
16	223	47	191	65	163	223	1.8	284	128	8.889	GKR06 - 2E □□□ 112C22	E82MV 402_4B
15	245	43	211	59	148	245	1.6	257	141	9.800	GKR06 - 2E □□□ 112C22	E82MV 402_4B
13	285	37	245	51	128	285	1.5	222	164	11.376	GKR06 - 2E □□□ 112C22	E82MV 402_4B
12	311	34	268	47	117	311	1.4	203	179	12.444	GKR06 - 2E □□□ 112C22	E82MV 402_4B
11	343	31	295	42	106	343	1.2	184	197	13.720	GKR06 - 2E □□□ 112C22	E82MV 402_4B
9.1	397	26	342	37	91	397	1.1	159	228	15.873	GKR06 - 2E □□□ 112C22	E82MV 402_4B
8.3	438	24	377	33	83	438	1.0	144	252	17.500	GKR06 - 2E □□□ 112C22	E82MV 402_4B
7.5	487	22	419	30	75	487	0.9	130	280	19.444	GKR06 - 2E □□□ 112C22	E82MV 402_4B
6.8	537	20	461	27	68	537	0.8	118	308	21.438	GKR06 - 2E □□□ 112C22	E82MV 402_4B

P₁ = 5.5 kW

42	119	122	102	168	421	119	1.7	733	68	3.431	GKR06 - 2E □□□ 112C32	E82MV 552_4B
31	163	89	140	123	307	163	1.5	534	93	4.706	GKR06 - 2E □□□ 112C32	E82MV 552_4B
24	208	70	179	96	240	208	1.3	417	120	6.022	GKR06 - 2E □□□ 112C32	E82MV 552_4B
22	224	65	192	89	223	224	1.6	388	129	6.481	GKR06 - 2E □□□ 112C32	E82MV 552_4B
20	247	59	212	81	202	247	1.4	352	142	7.146	GKR06 - 2E □□□ 112C32	E82MV 552_4B
16	307	47	264	65	163	307	1.3	283	176	8.889	GKR06 - 2E □□□ 112C32	E82MV 552_4B
15	338	43	291	59	147	338	1.1	257	194	9.800	GKR06 - 2E □□□ 112C32	E82MV 552_4B
13	393	37	338	51	127	393	1.1	221	226	11.376	GKR06 - 2E □□□ 112C32	E82MV 552_4B
12	430	34	370	46	116	430	1.0	202	247	12.444	GKR06 - 2E □□□ 112C32	E82MV 552_4B
11	474	31	407	42	105	474	0.9	183	272	13.720	GKR06 - 2E □□□ 112C32	E82MV 552_4B
9.1	548	26	471	36	91	548	0.8	158	315	15.873	GKR06 - 2E □□□ 112C32	E82MV 552_4B

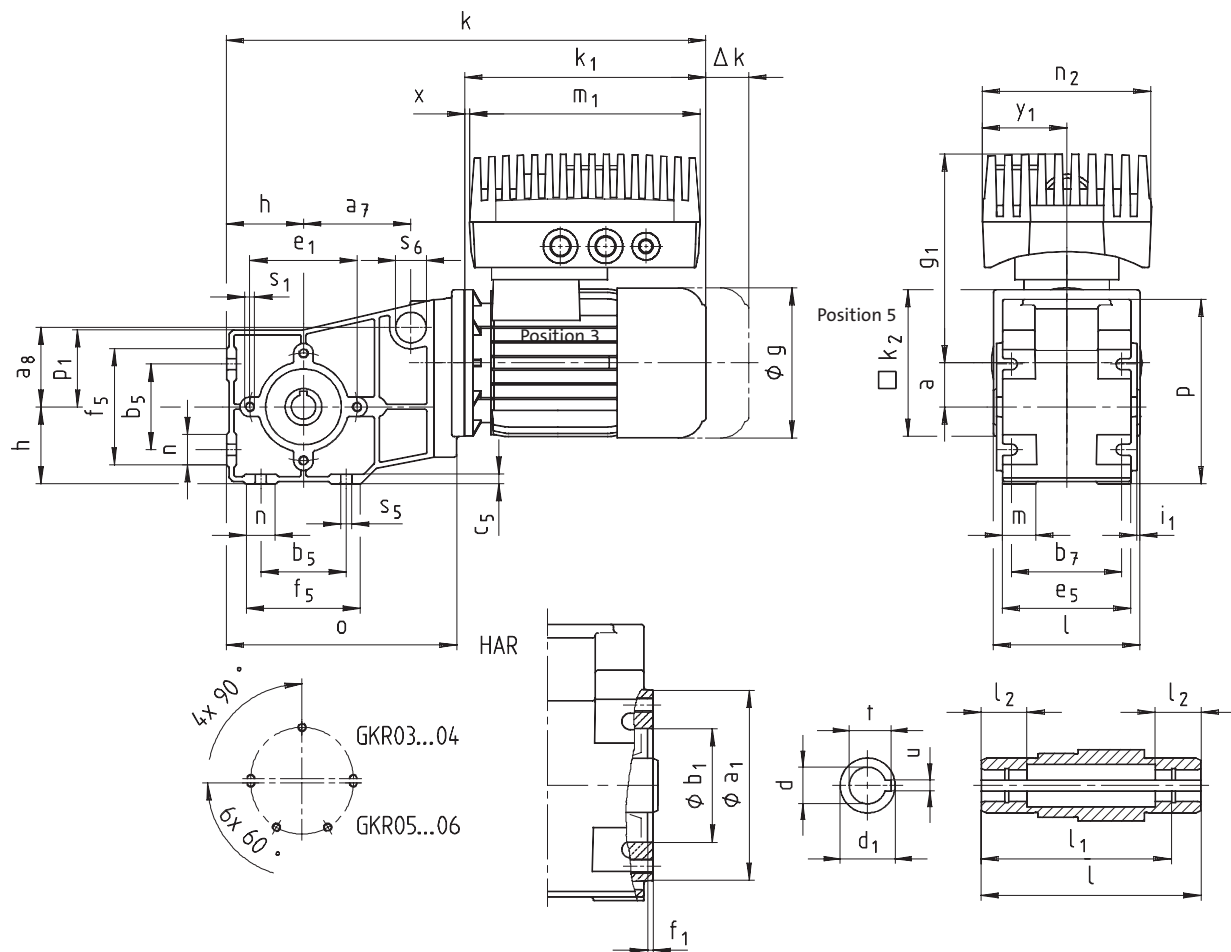
Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Dimensions - Bevel gearboxes

Geared motors with 8200 motec

GKR□□ - 2E H□R



Dimensions - Bevel gearboxes

Geared motors with 8200 motec

Geared motor							Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32			
GKR□□ - 2E H□R							8200 motec E82MV□□□□	251	251	251	371	551	751	152	152	222	302	402	552			
Motor	g						123				138				156		176		196		220	
	k ₁						188				207				225		276		309		319 363	
	From gearbox size 04 k ₂						120				120				145		180		180		222	
	Δk** Brake						40				52				73		70		79		90	
	Separate fan						130				128				128		127		109		102	
	Brake + separate fan						170				165				184		180		170		183	
8200 motec	g ₁						171				180	225	221	237	242	253	268	278				
	g ₁ ¹⁾						207		216													
	m ₁						190		190		202	202	230	230	230	327	327					
	n ₂						138		138		156	156	176	176	176	213	213					
	x						20		23		10	3	3	8	9	0	2					
	y ₁						69		69		78	78	88	88	88	107	107					
	Gearbox size	Gearbox						Total length														
l*		p*	p ₁	a	h	o	k															
03		100	117	48	29	50	142	332		352												
04		120	151	63	36	63	189	383		403		425		486								
05		143	181	82	40	80	251	437		456		479		540		573						
06	170	226	100	51	100	307	488		508		530		591		625		641		685			

Gearbox size	Hollow shaft							Pitch circle					
	d ³⁾ H7	l	d ₁	l ₁	l ₂	u JS9	t ²⁾ +0.1	a ₁	b ₁ J7	e ₁	f ₁	i ₁	s ₁
03	18 20	100	30	85	22	6	20.8 22.8	85	55	70	2.5	2.5	M6x12
04	20 25	120	30 35	105	25	6 8	22.8 27.0	104	62	88	3	2.5	M8x16
05	30 35	143	50	127	25	8 10	33.3 38.3	116	80	100	4	4	M8x15
06	40 45	170	65	150	30	12 14	43.3 48.8	140	100	120	4	5	M10x22

Gearbox size	Foot							Torque plate				
	b ₅	b ₇	c ₅	e ₅	f ₅	n	m	s ₅	a ₇	a ₈	s ₆	
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	-			
06	120	125	12	145	164	53	32	11	-			

Dimensions in [mm] * Please note dimension k₂ ** See chapter 8 for more built-on accessories

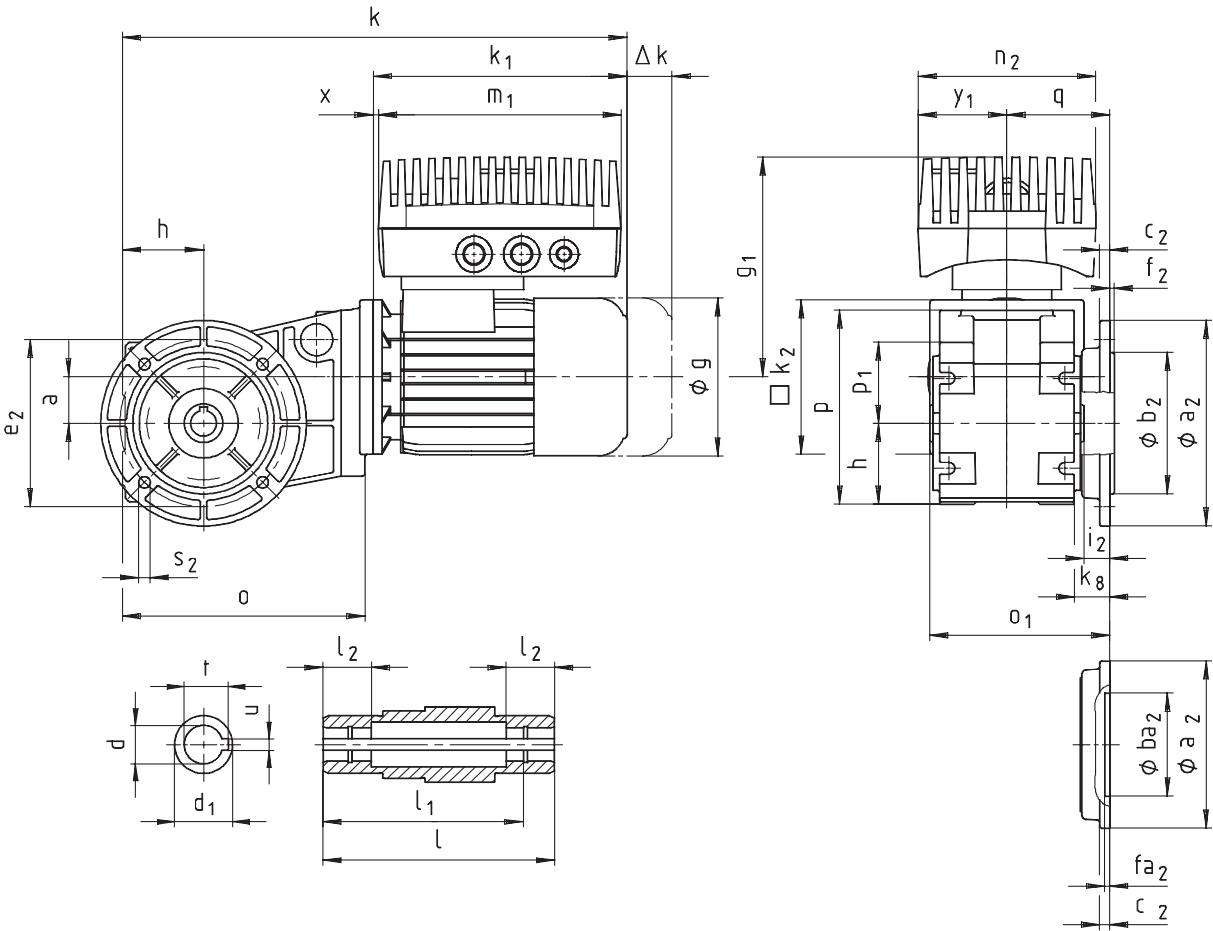
¹⁾ 8200 motec only, option: bus I/O, system terminal or brake rectifier

²⁾ If the hollow shaft diameter d = 25 mm, use a featherkey to DIN 6885/3

³⁾ Only for the range l₂

Dimensions - Bevel gearboxes
Geared motors with 8200 motec

GKR□□ - 2E HAK



Dimensions - Bevel gearboxes
Geared motors with 8200 motec



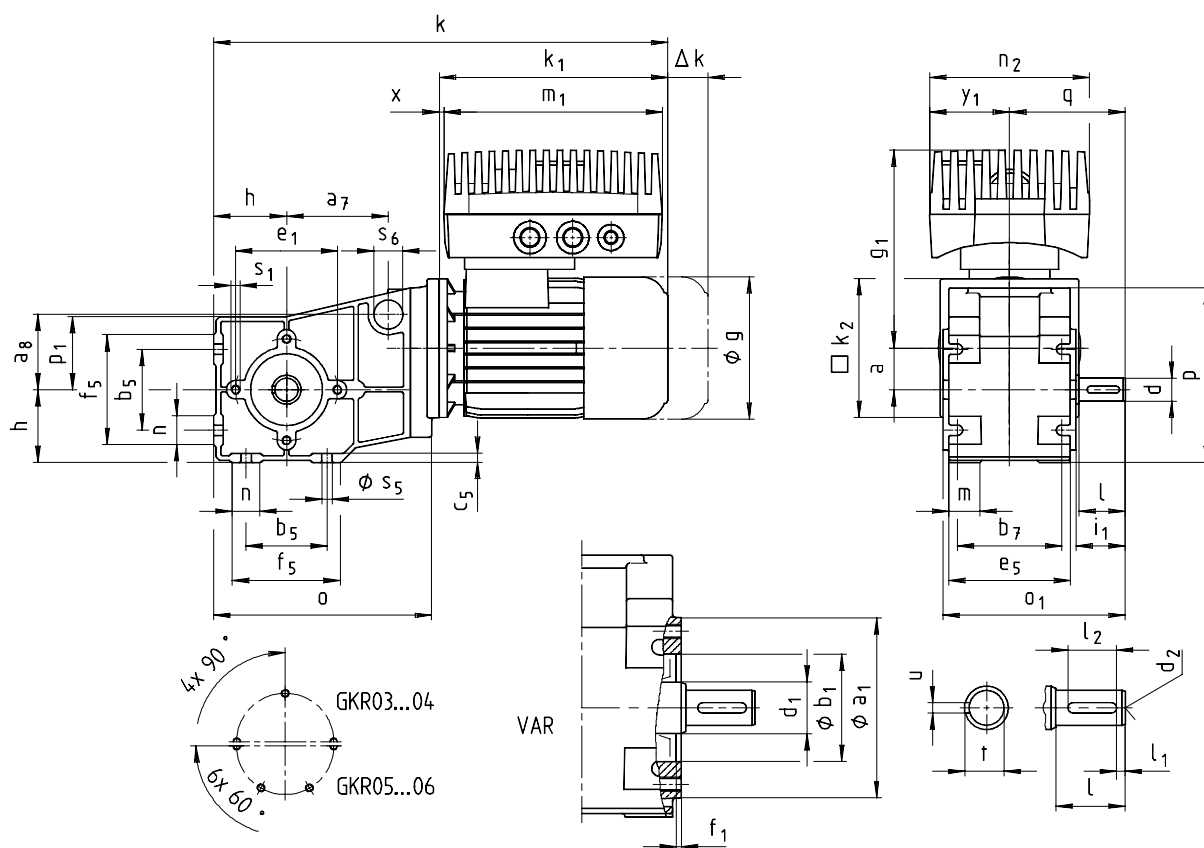
Geared motor		Motor frame size						063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32				
GKR□□ - 2E HAK		8200 motec E82MV□□□□						251	251	251	371	551	751	152	152	222	302	402	552				
Motor		g						123			138			156		176	196		220				
		k ₁						188			207			225		276	309		319	363			
		From gearbox size 04 k ₂						120			120			145		180	180		222				
		Δk** Brake						40			52			73		70	79		90				
		Separate fan						130			128			128		127	109		102				
		Brake + separate fan						170			165			184		180	170		183				
8200 motec		g ₁						171			180	225	221	237	242	253	268	278					
		g ₁ ¹⁾						207			216												
		m ₁						190			190	202	202	230	230	230	327	327					
		n ₂						138			138	156	156	176	176	176	213	213					
		x						20			23	10	3	3	8	9	0	2					
		y ₁						69			69	78	78	88	88	88	107	107					
		Gearbox size	Gearbox									Total length k											
o ₁ *	p*		p ₁	a	h	k ₈	o	q															
03	130		117	48	29	50	35	142	80	332			352										
04	140		151	63	36	63	28	189	80	383			403			425		486					
05	177		181	82	40	80	47	251	105	437			456			479		540		573			
06	212		226	100	51	100	54	307	126.5	488			508			530		591		625		641	685

Gearbox size	Hollow shaft								Output flange								
	d H7	l	d ₁	l ₁	l ₂	u JS9	t ²⁾ +0.1		a ₂	b ₂ j7	ba ₂ H7	c ₂	e ₂	f ₂	fa ₂	i ₂	s ₂ 4x90°
03	18 20	100	30	85	22	6	20.8 22.8		110 120	- 80	60 -	8	87 100	- 3	4 -	30	9 7
04	20 25	120	30 35	105	25	6 8	22.8 27.0		120 160	80 110	-	8	100 130	3 3.5	-	20	7 9
05	30 35	143	50	127	25	8 10	33.3 38.3		160 200	110 130	-	12	130 165	3.5	-	33.5	9 11
06	40 45	170	65	150	30	12 14	43.3 48.8		200 250	130 180	-	12	165 215	3.5	-	41.5	11 14

Dimensions in [mm] * Please note dimension k₂ ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier
2) If the hollow shaft diameter d = 25 mm, use a featherkey to DIN 6885/3

Dimensions - Bevel gearboxes Geared motors with 8200 motec

GKR□□ - 2E V□R



Dimensions - Bevel gearboxes
Geared motors with 8200 motec



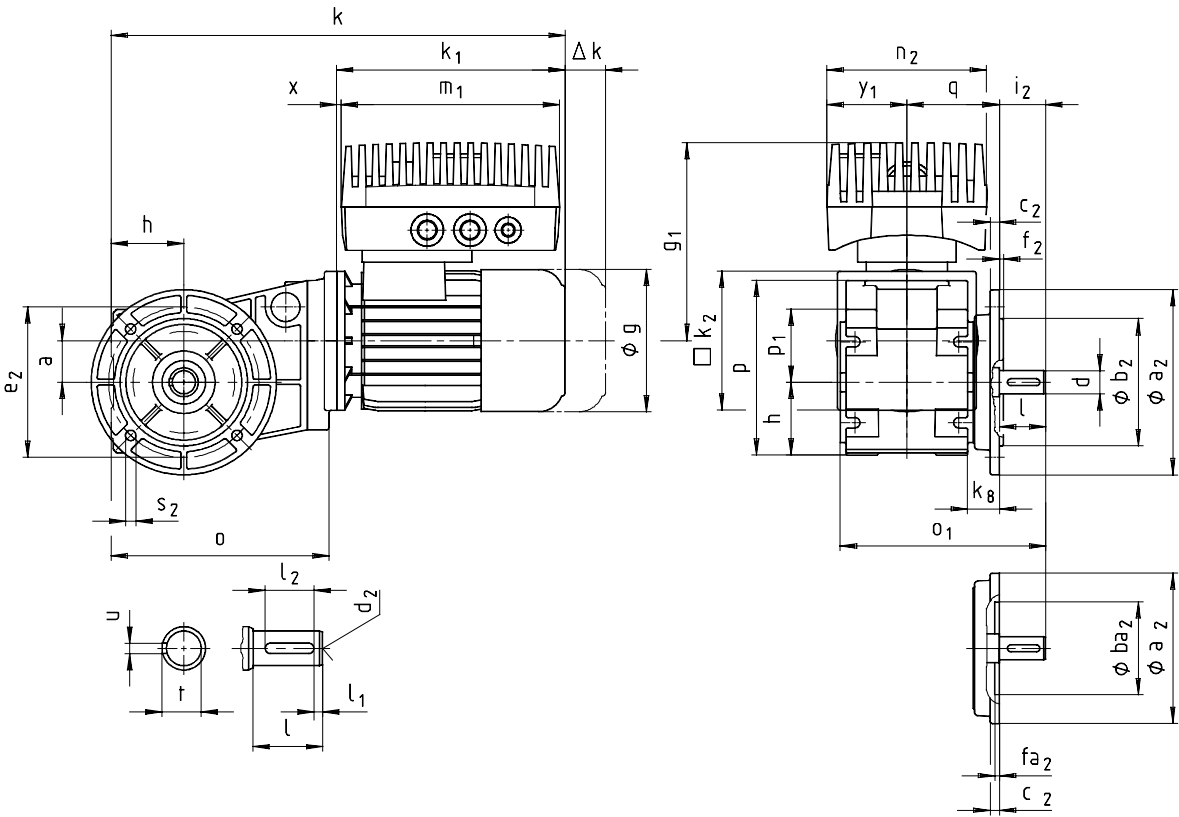
Geared motor		Motor frame size						063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32		
GKR□□ - 2E V□R		8200 motec E82MV□□□						251	251	251	371	551	751	152	152	222	302	402	552		
Motor	g						123			138			156			176		196		220	
	k ₁						188			207			225			276		309		319	363
	From gearbox size 04 k ₂						120			120			145			180		180		222	
	Δk** Brake						40			52			73			70		79		90	
	Separate fan						130			128			128			127		109		102	
	Brake + separate fan						170			165			184			180		170		183	
8200 motec	g ₁						171			180		225	221	237	242	253	268	278			
	g ₁ ¹⁾						207			216											
	m ₁						190			190		202	202	230	230	230	327	327			
	n ₂						138			138		156	156	176	176	176	213	213			
	x						20			23		10	3	3	8	9	0	2			
	y ₁						69			69		78	78	88	88	88	107	107			
	Gearbox size	Gearbox							Total length												
o ₁ *		p*	p ₁	a	h	o	q	k													
03	138	117	48	29	50	142	90	332			352										
04	158	151	63	36	63	189	100	383			403			425		486					
05	199	181	82	40	80	251	131.5	437			456			479		573					
06	235	226	100	51	100	307	155	488			508			530		591		625		641 685	

Gearbox size	Solid shaft									Pitch circle					
	d k6	l	d ₁	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ J7	e ₁	f ₁	i ₁	s ₁	
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	
06	35	70	65	7	56	M12	10	38	140	100	120	4	75	M10x22	

Gearbox size	Foot								Torque plate		
	b ₅	b ₇	c ₅	e ₅	f ₅	n	m	s ₅	a ₇	a ₈	s ₆
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	-		
06	120	125	12	145	164	53	32	11	-		

Dimensions in [mm] * Please note dimension k₂ ** See chapter 8 for more built-on accessories
¹⁾ 8200 motec only, option: bus I/O, system terminal or brake rectifier

GKR□□ - 2E VAK



Dimensions - Bevel gearboxes
Geared motors with 8200 motec



Geared motor			Motor frame size					063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32				
GKR□□ - 2E VAK			8200 motec E82MV□□□□					251	251	251	371	551	751	152	152	222	302	402	552				
Motor	g		123					138					156			176		196		220			
	k ₁		188					207					225			276		309		319	363		
	From gearbox size 04 k ₂		120					120					145			180		180		222			
	Δk** Brake		40					52					73			70		79		90			
	Separate fan		130					128					128			127		109		102			
	Brake + separate fan		170					165					184			180		170		183			
8200 motec	g ₁		171					180		225	221	237	242	253	268	278							
	g ₁ ¹⁾		207					216															
	m ₁		190					190		202	202	230	230	230	327	327							
	n ₂		138					138		156	156	176	176	176	213	213							
	x		20					23		10	3	3	8	9	0	2							
	y ₁		69					69		78	78	88	88	88	107	107							
	Gearbox size	Gearbox									Total length k												
o ₁ *		p*	p ₁	a	h	o	q	k ₈															
03	168	117	48	29	50	142	80	35	332					352									
04	178	151	63	36	63	189	80.5	28	383					403		425		486					
05	233	181	82	40	80	251	105	47	437					456		479		540		573			
06	277	226	100	51	100	307	126.5	54	488					508		530		591		625		641	685

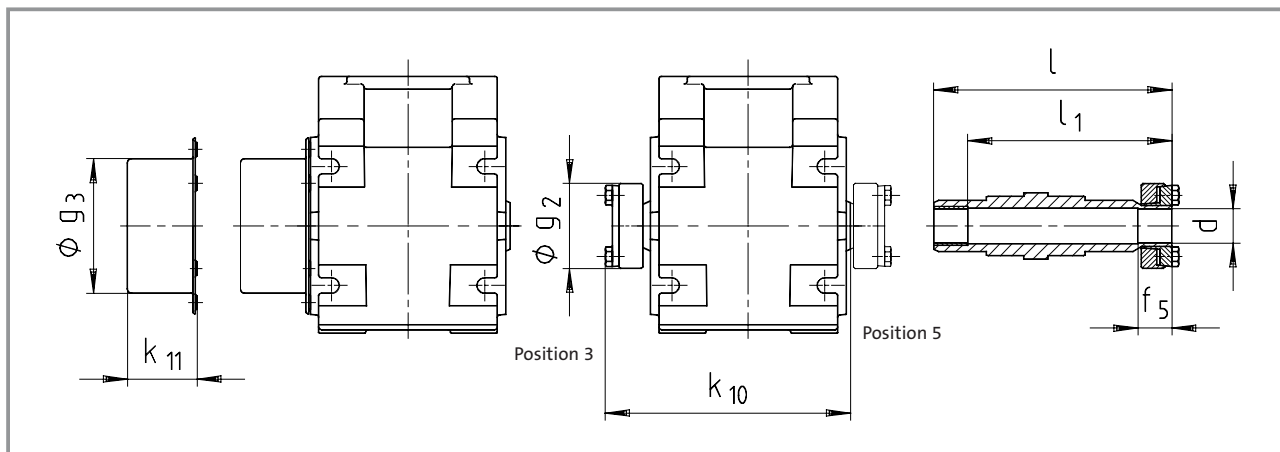
Gearbox size	Solid shaft							Output flange								
	d k6	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	ba ₂ H7	c ₂	e ₂	f ₂	fa ₂	i ₂	s ₂ 4x90°
03	20	40	5	28	M6	6	22.5	110 120	- 80	60 -	8	87 100	- 3	4 -	40	9 7
04	20	40	5	28	M6	6	22.5	120 160	80 110	-	8	100 130	3 3.5	-	40	7 9
05	30	60	6	45	M10	8	33	160 200	110 130	-	12	130 165	3.5	-	60	9 11
06	35	70	7	56	M12	10	38	200 250	130 180	-	12	165 215	3.5 4	-	70	11 14

Dimensions in [mm] * Please note dimension k₂ ** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Bevel gearboxes

Further dimensions GKR□□

Hollow shaft with shrink disc



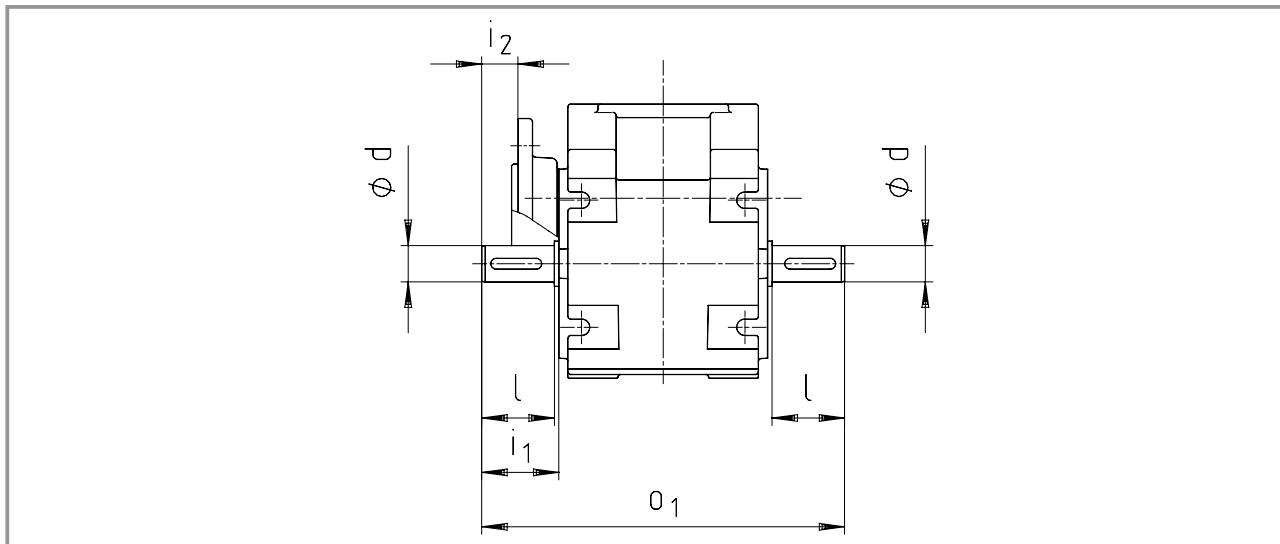
Gearbox size	Machine shaft *		Hollow shaft			Gearbox		Cover	
	d	Fit	l	l ₁	f ₅	g ₂	k ₁₀	g ₃	k ₁₁
03	20	h6	120	100	20	50	124	65	41
04	20	h6	140	120	20	50	144	79	41
05	30/35	h6	171	151	28	80	177	90	43
06	40	h6	204	174	30	90	210	100	49

Dimensions in [mm]

* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4), the torque values given in the selection tables can be transmitted without restrictions. If less rigid materials are being used, please contact us. The average surface roughness Rz should not exceed 15 µm (turning is sufficient).

5

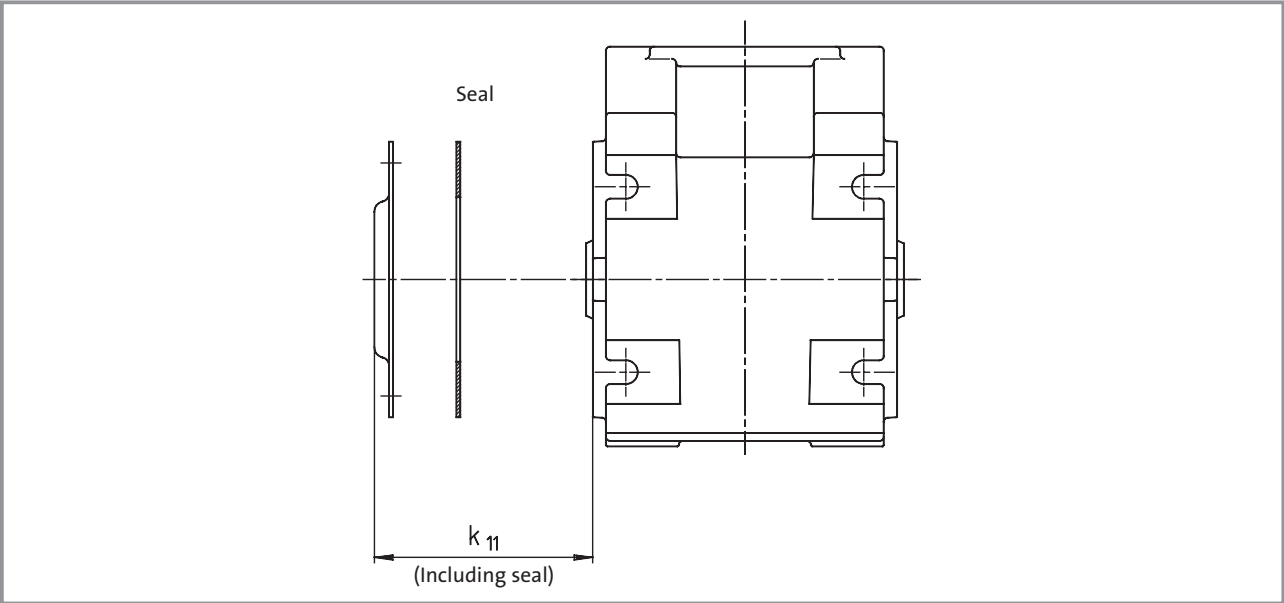
Gearbox with 2nd output shaft end



Gearbox size	d k6	l	i ₁	i ₂	o ₁
03	20	40	42.5	9.5	180
04	20	40	42.5	19.5	200
05	30	60	64	27	263
06	35	70	75	28.5	310

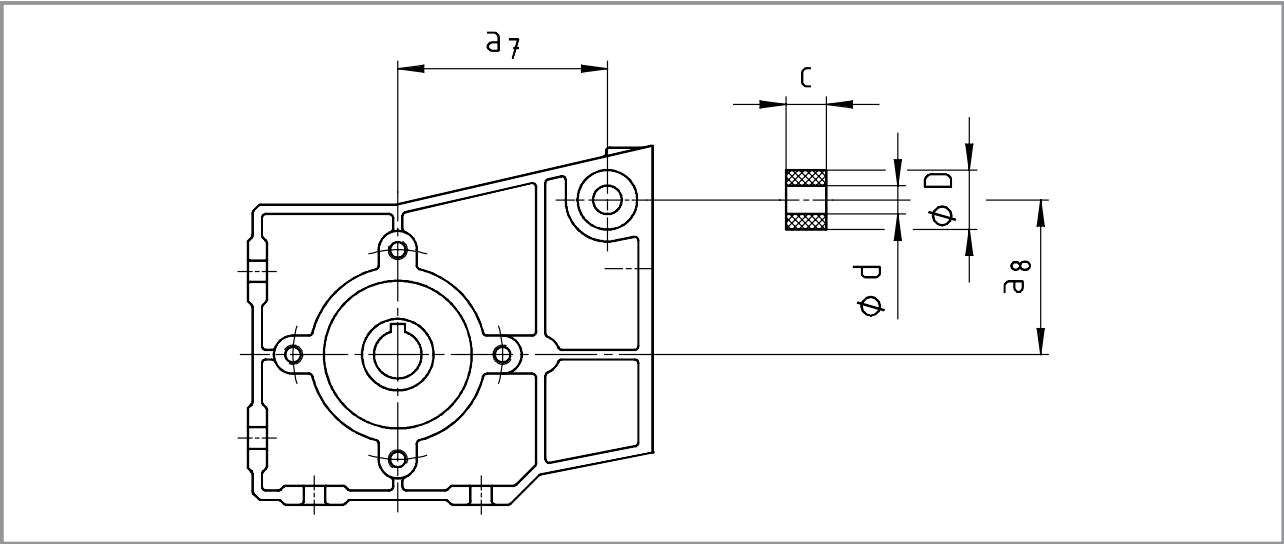
Dimensions in [mm]

Hoseproof hollow shaft cover



Gearbox size	Protection cover
	k_{11}
03	9
04	9
05	10
06	11

Rubber buffer set for torque plate



Gearbox size	d	D	c	a_7	a_8
03	10	25	13	66	39
04	10	25	13	88	65

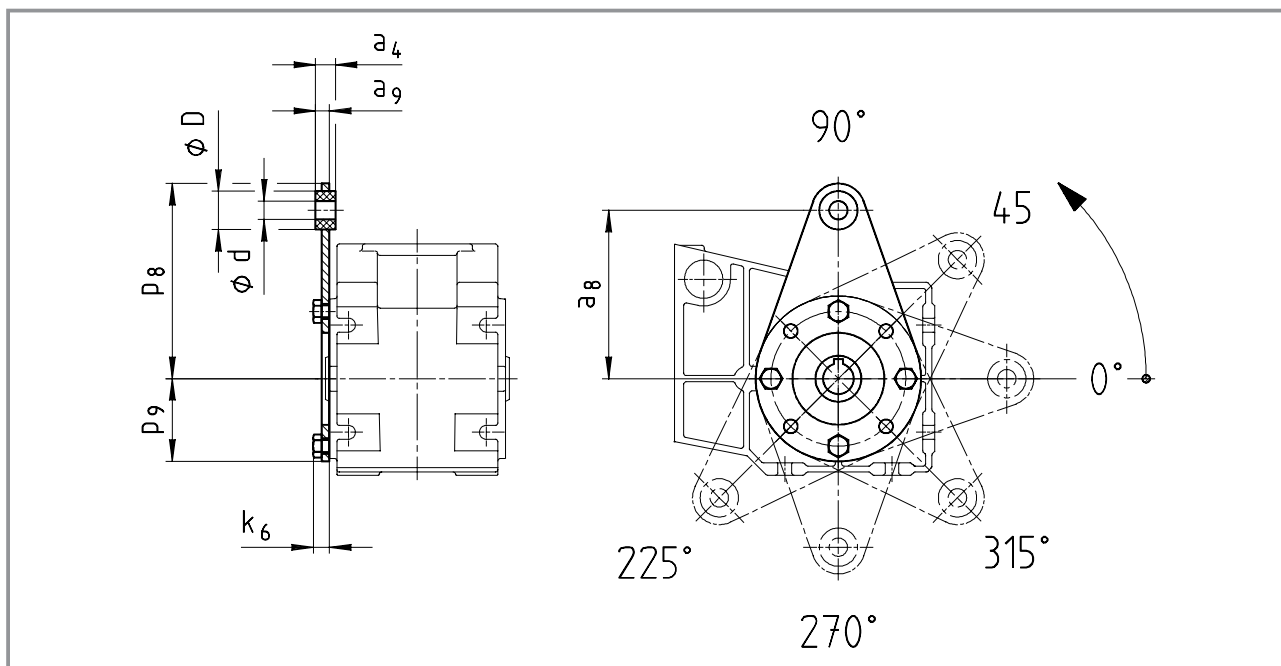
Dimensions in [mm]

Dimensions - Bevel gearboxes

Further dimensions GKR□□

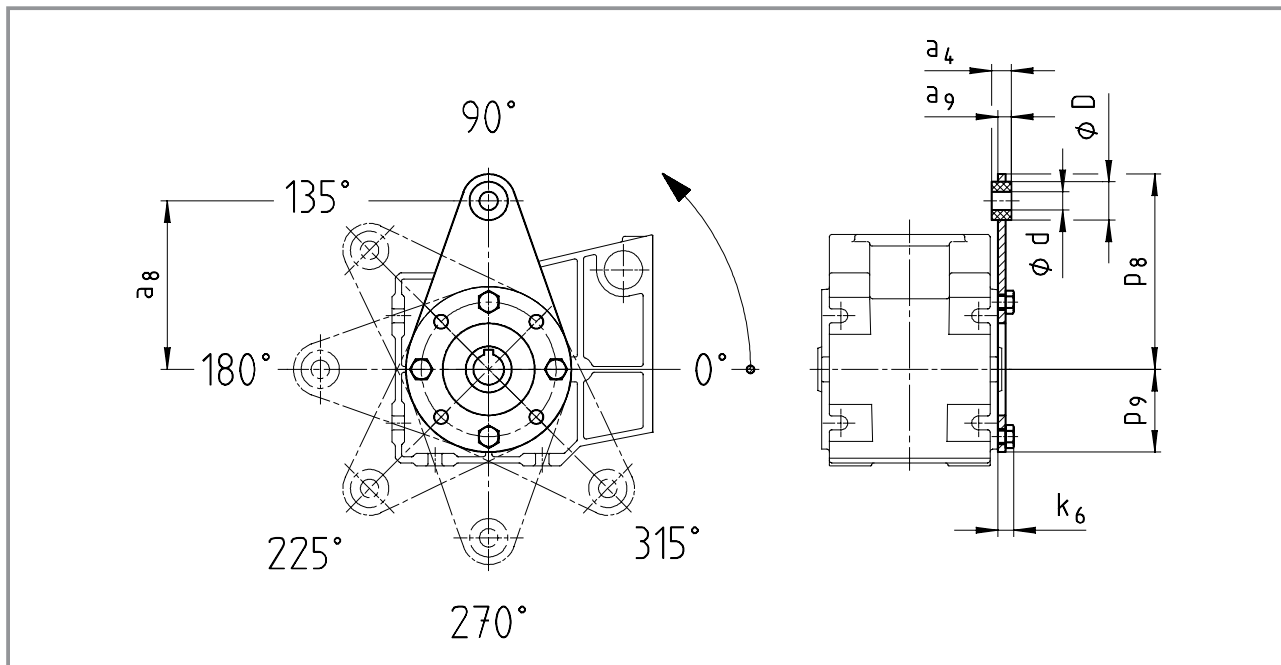
GKR 03/04

Torque plate at pitch circle, position 3



GKR 03/04

Torque plate at pitch circle, position 5

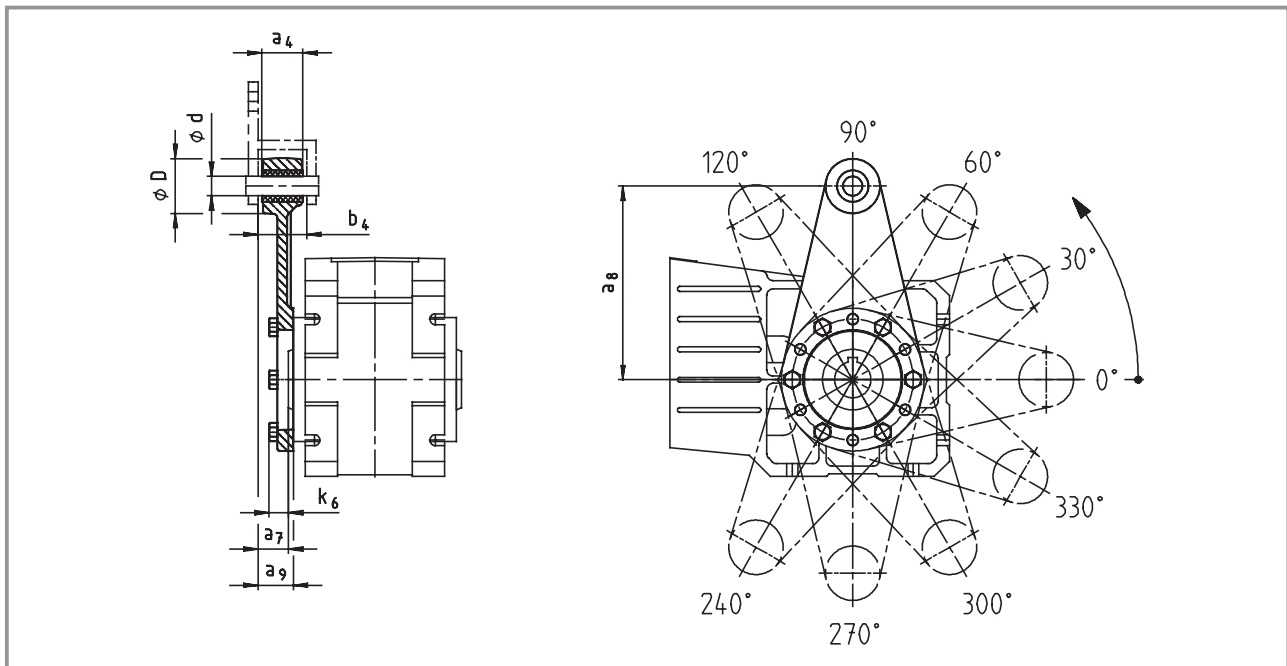


Gearbox size	Torque plate							
	a ₄	a ₈	a ₉	d	D	k ₆	p ₈	p ₉
03	12	100	8	8	20	9	115	42
04	13	110	9	10	25	11	128	52

Dimensions in [mm]

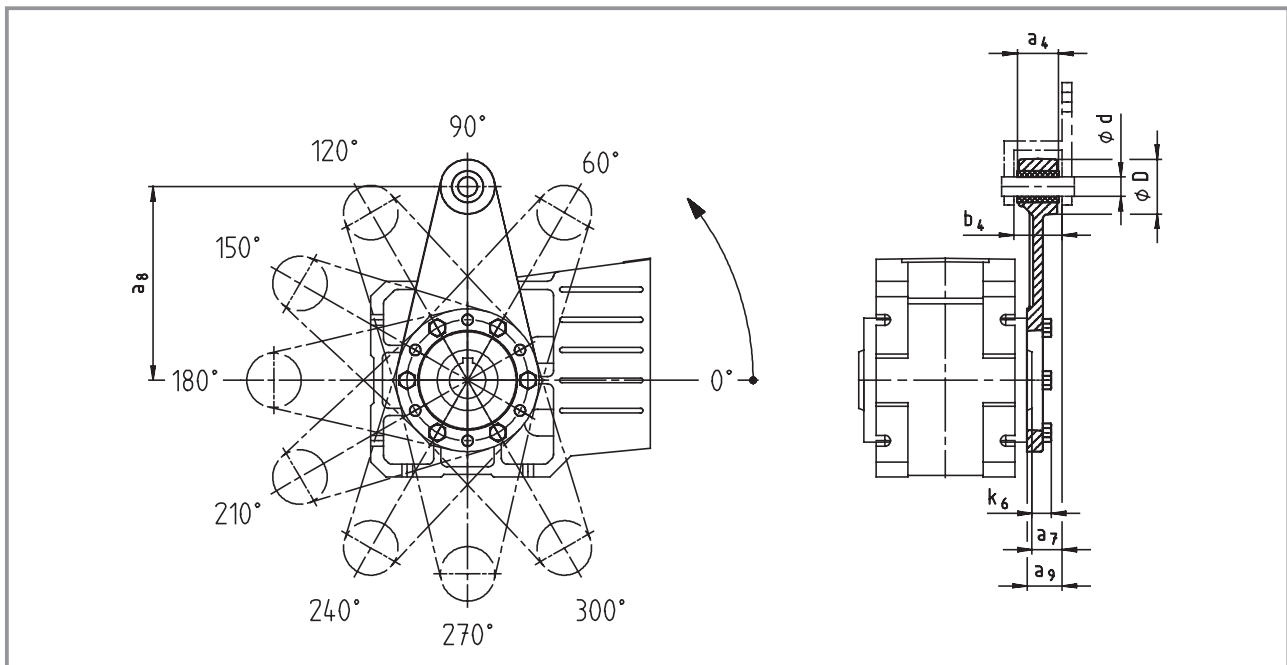
GKR 05/06

Torque plate at pitch circle, position 3



GKR 05/06

Torque plate at pitch circle, position 5



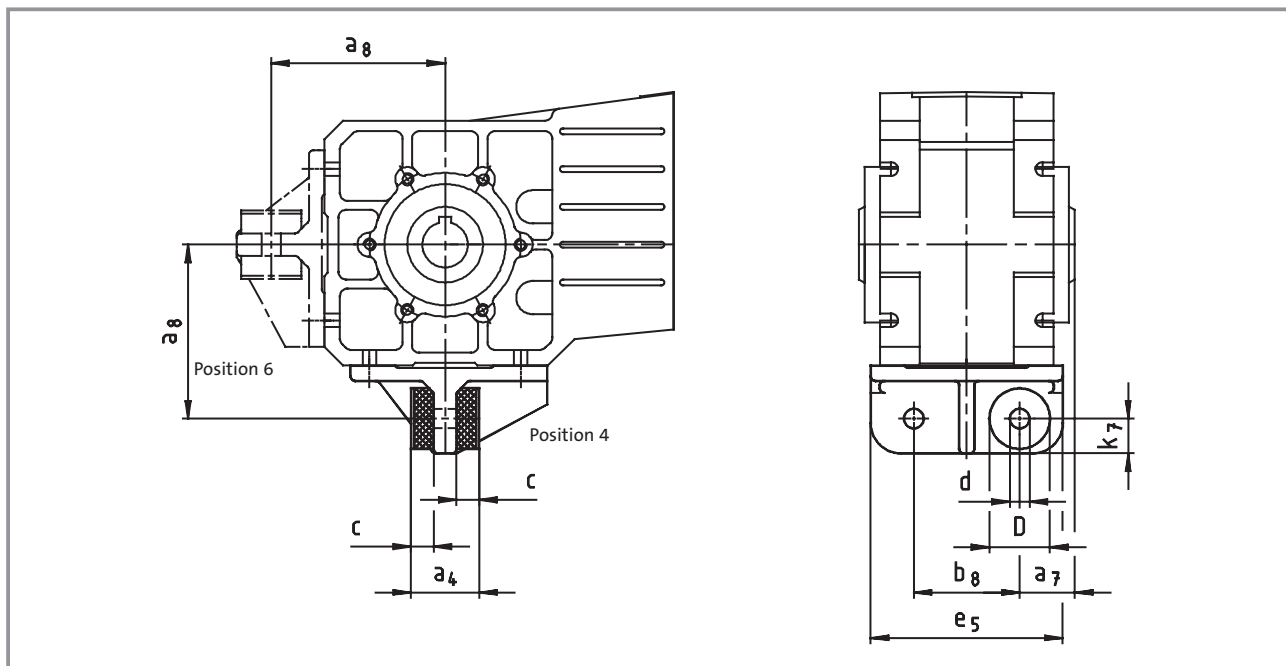
Gearbox size	Assembly space		Torque plate						
	a ₇	b ₄	a ₄	a ₈	a ₉	d	D	k ₆	
05	23.5	38.5	34	160	27.5	16	45	16	
06	28	44.5	40	200	33	20	50	18	

Dimensions in [mm]

Dimensions - Bevel gearboxes

Further dimensions GKR□□

Torque plate at housing foot

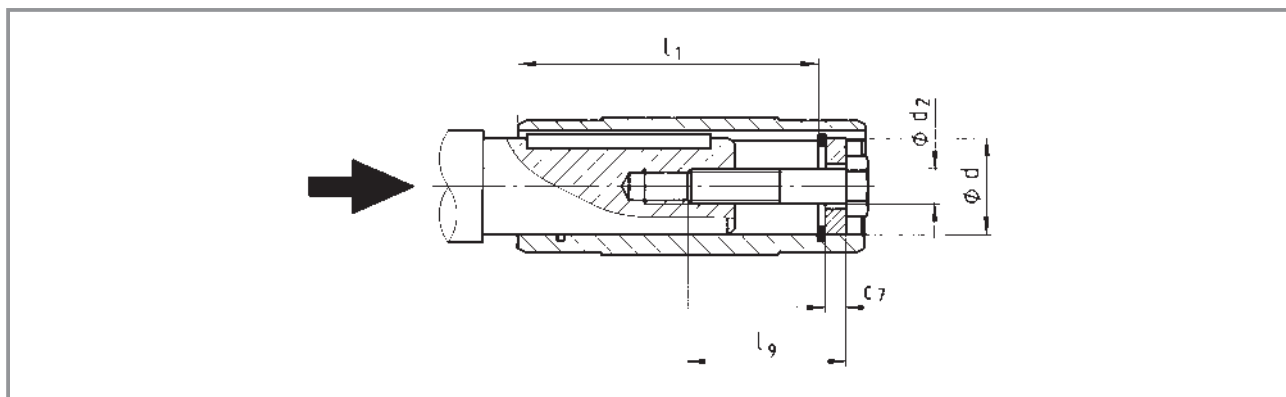


Gearbox size	a ₄	a ₇	a ₈	b ₈	c	d	D	e ₅	k ₇
05	45	36.5	115	70	15	13	40	127	23
06	72	45	145	80	27	17	50	145	28

Dimensions in [mm]

5

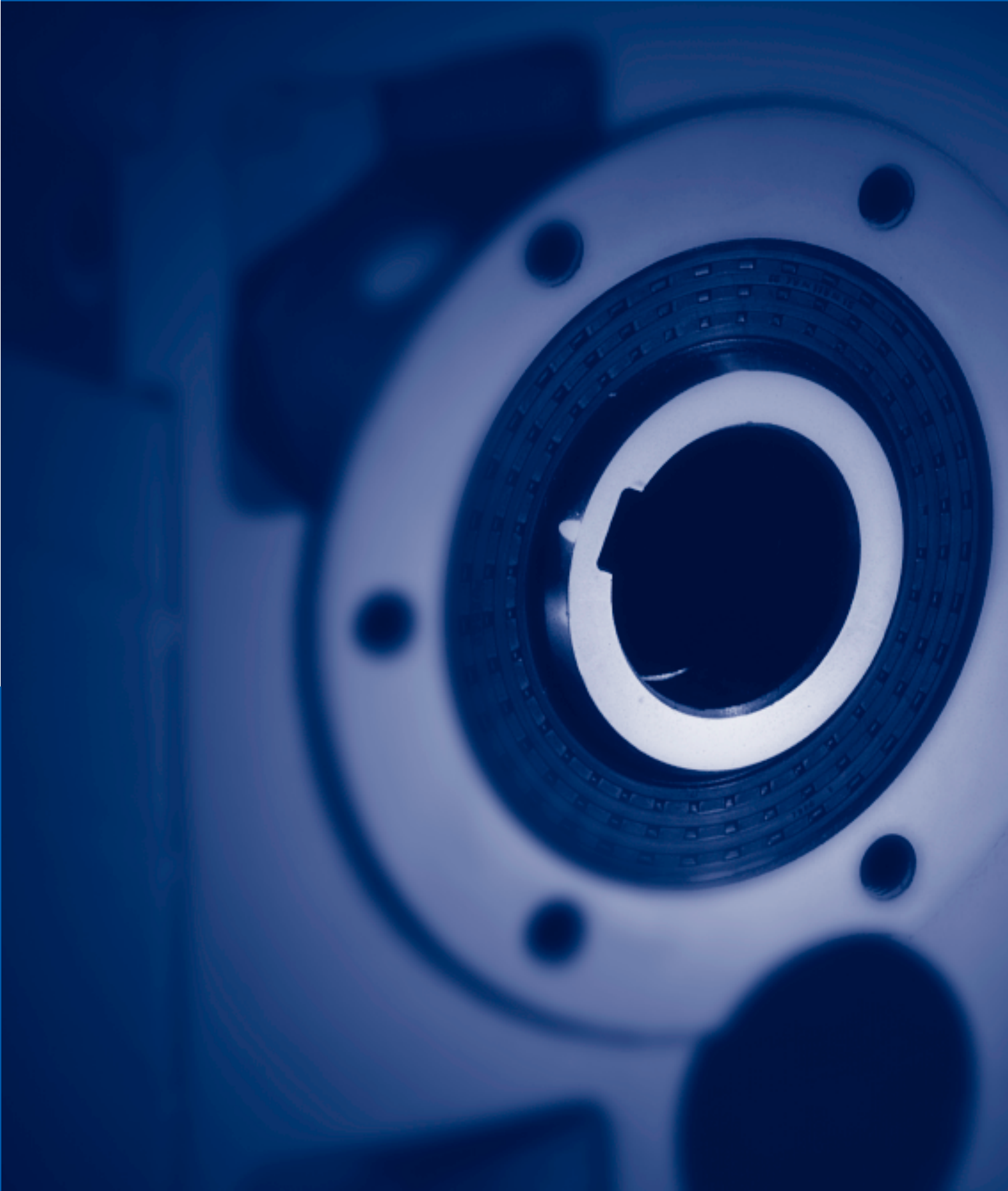
Mounting set for hollow shaft circlip - Proposed design for auxiliary tools



Gearbox size	Hollow shaft (version H)			Mounting set for hollow shaft circlip (auxiliary tool assembly)		
	l	l ₁	d H7	d ₂	l ₉	c ₇
03	100	85	18 20	M6	40	4
04	120	105	20 25	M6 M10	40	4 5
05	143	127	30 35	M10 M12	40 50	6 7
06	170	150	40 45	M16	60	8 9

Dimensions in [mm]





Helical-bevel gearboxes | G-motion motec

Technical data

Permissible radial and axial forces

Output _____ 6-2

Output backlash _____ 6-4

Ventilation _____ 6-5

Position of ventilation, oil filler plug
and oil drain plug _____ 6-5

Reservoir for mounting position C _____ 6-7

Weights _____ 6-8

Selection tables

Geared motors with 8200 motec _____ 6-9

Dimensions

Geared motors with 8200 motec _____ 6-30

Further dimensions _____ 6-46

Hollow shaft with shrink disc _____ 6-46

Gearbox with 2nd output shaft end _____ 6-47

Hoseproof hollow shaft cover _____ 6-48

Torque plate at pitch circle _____ 6-49

Torque plate at housing foot _____ 6-50

Mounting set for hollow shaft circlip _____ 6-51

Proposed design for auxiliary tools _____ 6-51

Technical data - Helical-bevel gearboxes

Permissible radial and axial forces - Output

Helical-bevel gearboxes GKS□□

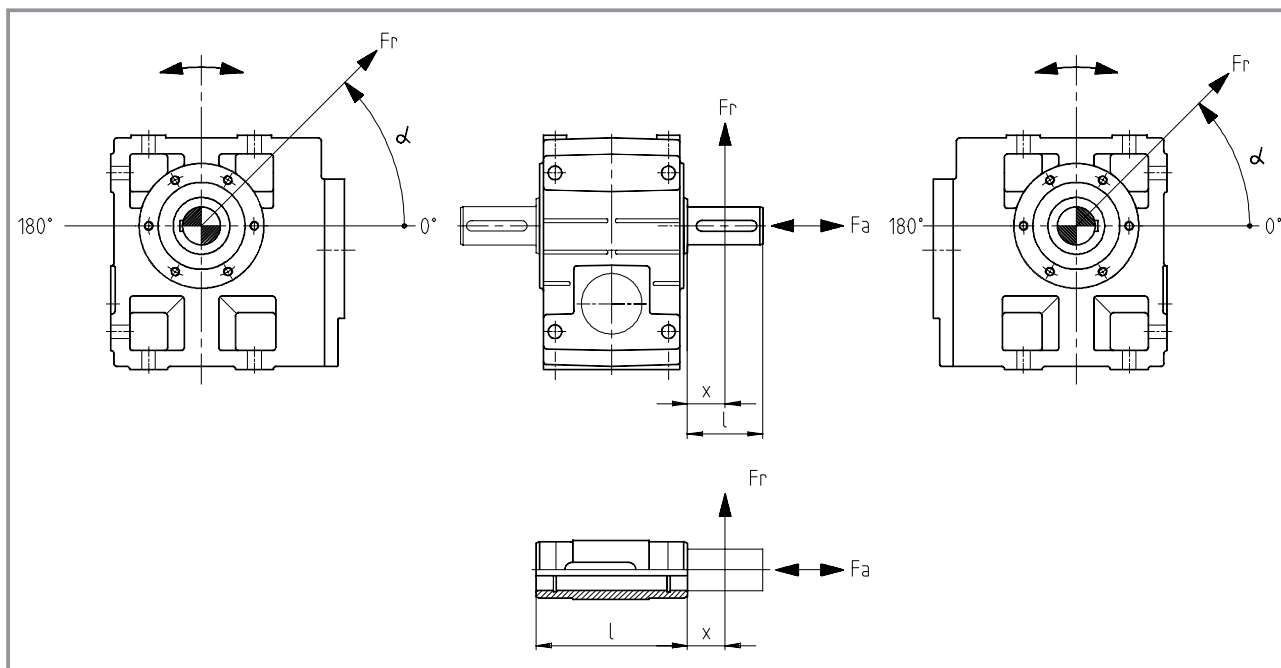
Permissible radial force

$$F_{rperm} = f_w \cdot f_\alpha \cdot F_{rTab} \leq f_w \cdot F_{rmax}$$

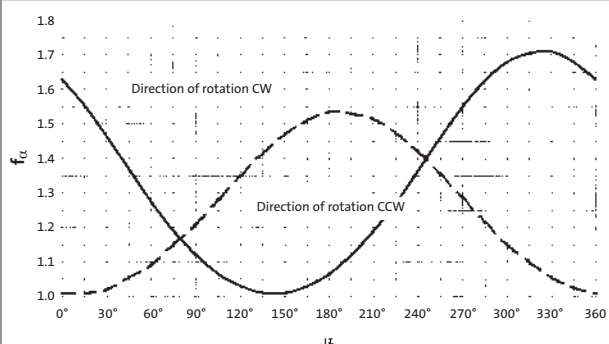
Permissible axial force

$$F_{aperm} = F_{aTab} \quad \text{at } F_r = 0$$

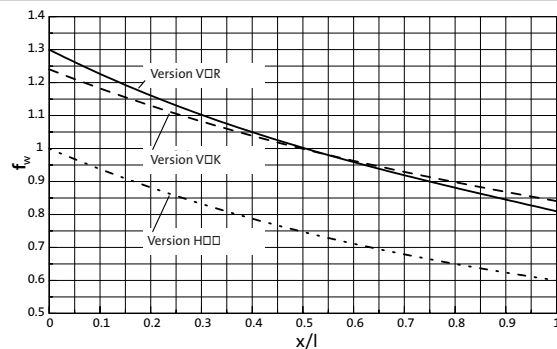
Contact Lenze if F_r and $F_a \neq 0$



f_α Effective direction factor at output shaft



f_w Additional load factor at output shaft



Technical data - Helical-bevel gearboxes

Permissible radial and axial forces - Output

Helical-bevel gearboxes GKS□□

VAK	Solid shaft with flange Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09		GKS 11		GKS 14	
n_2 [rpm]	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	—

VQR	Solid shaft without flange Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$													
	GKS 04		GKS 05		GKS 06		GKS 07		GKS 09*		GKS 11*		GKS 14	
n_2 [rpm]	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□□	Hollow shaft Application of force F_r : 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 [rpm]	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	—

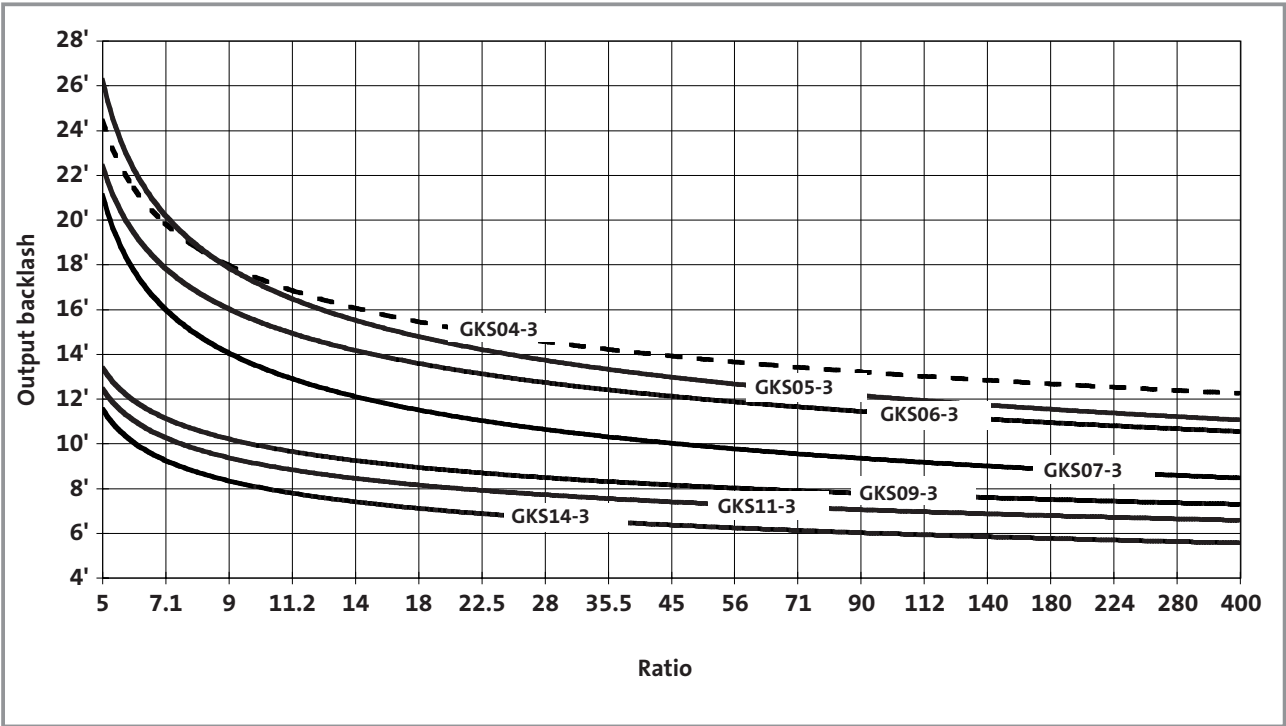
* A reinforced output shaft bearing is available on request for VQR versions.

Neither radial nor axial forces are permitted on hollow shafts with shrink disc (S□□).

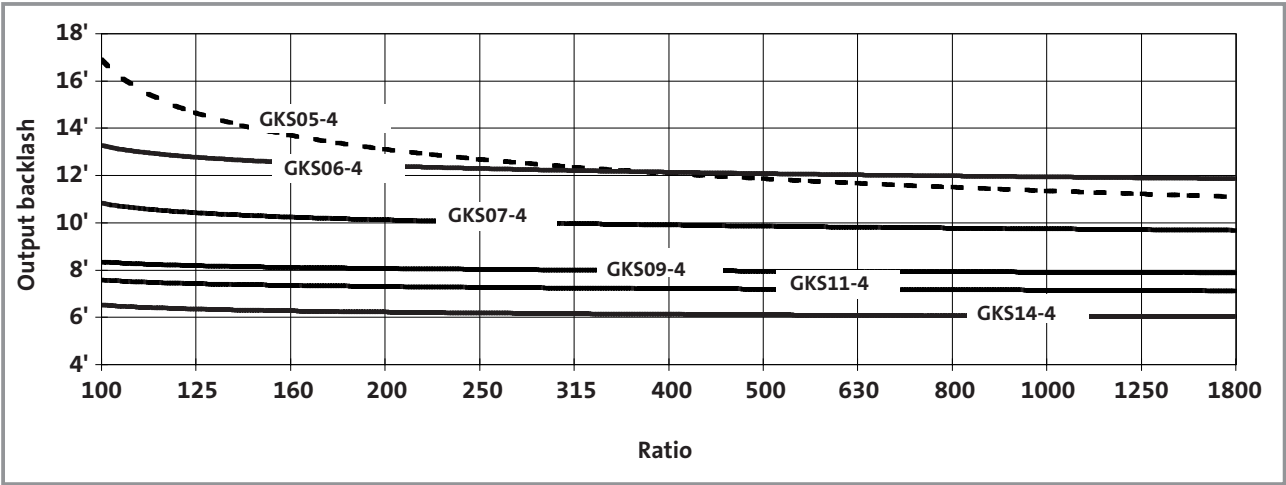
Technical data - Helical-bevel gearboxes

Output backlash in angular minutes

Helical-bevel gearboxes GKS□□-3

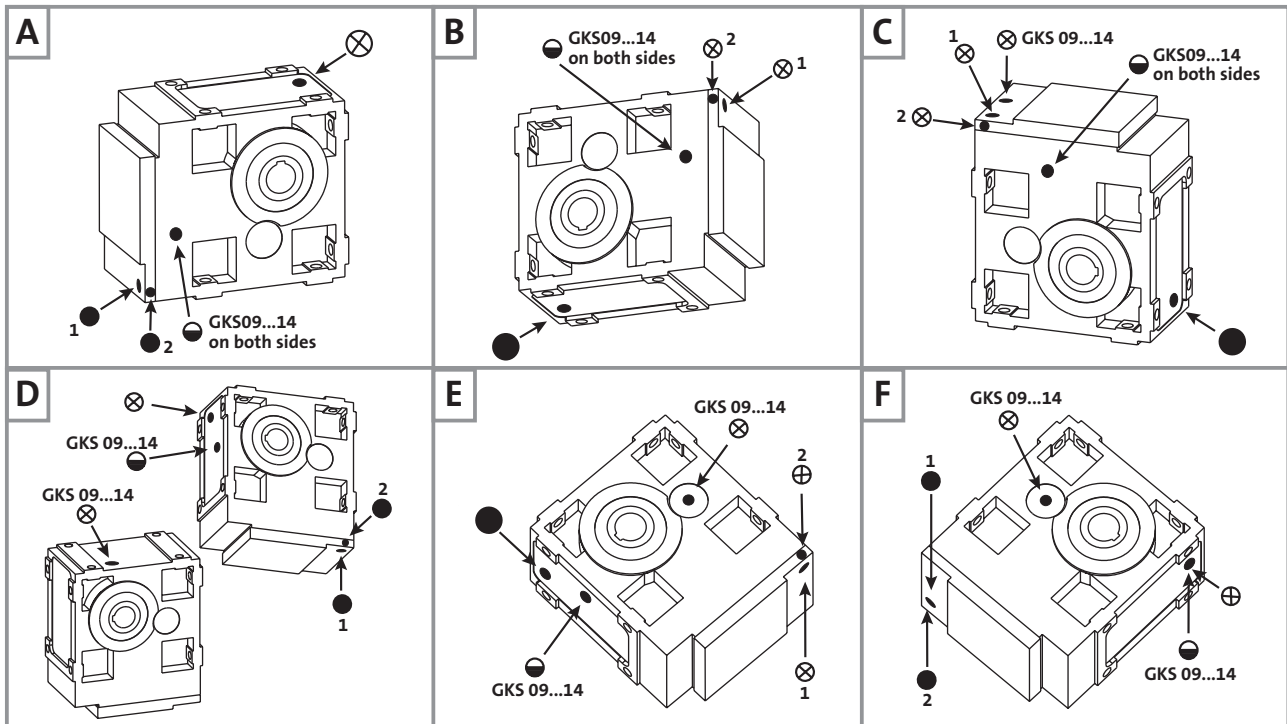


Helical-bevel gearboxes GKS□□-4

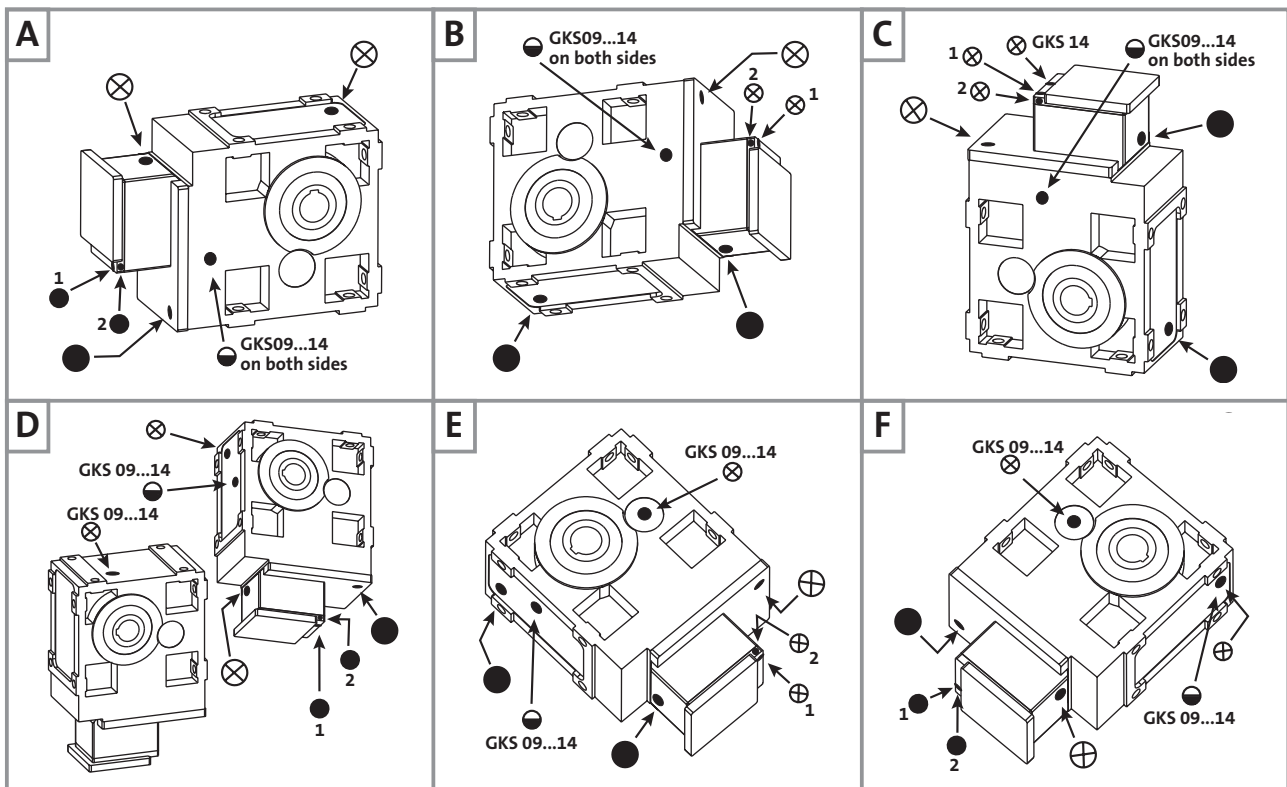


Position of ventilation, oil filler plug and oil drain plug

Helical-bevel gearboxes GKS 05 ... 14-3



Helical-bevel gearboxes GKS 05 ... 14-4



(A ... F) Mounting position

⊗ Ventilation/oil filler plug
● Oil drain plug

◐ Oil control plug

Pos. 1 or 2 depending on version
(see table on page 6-6)

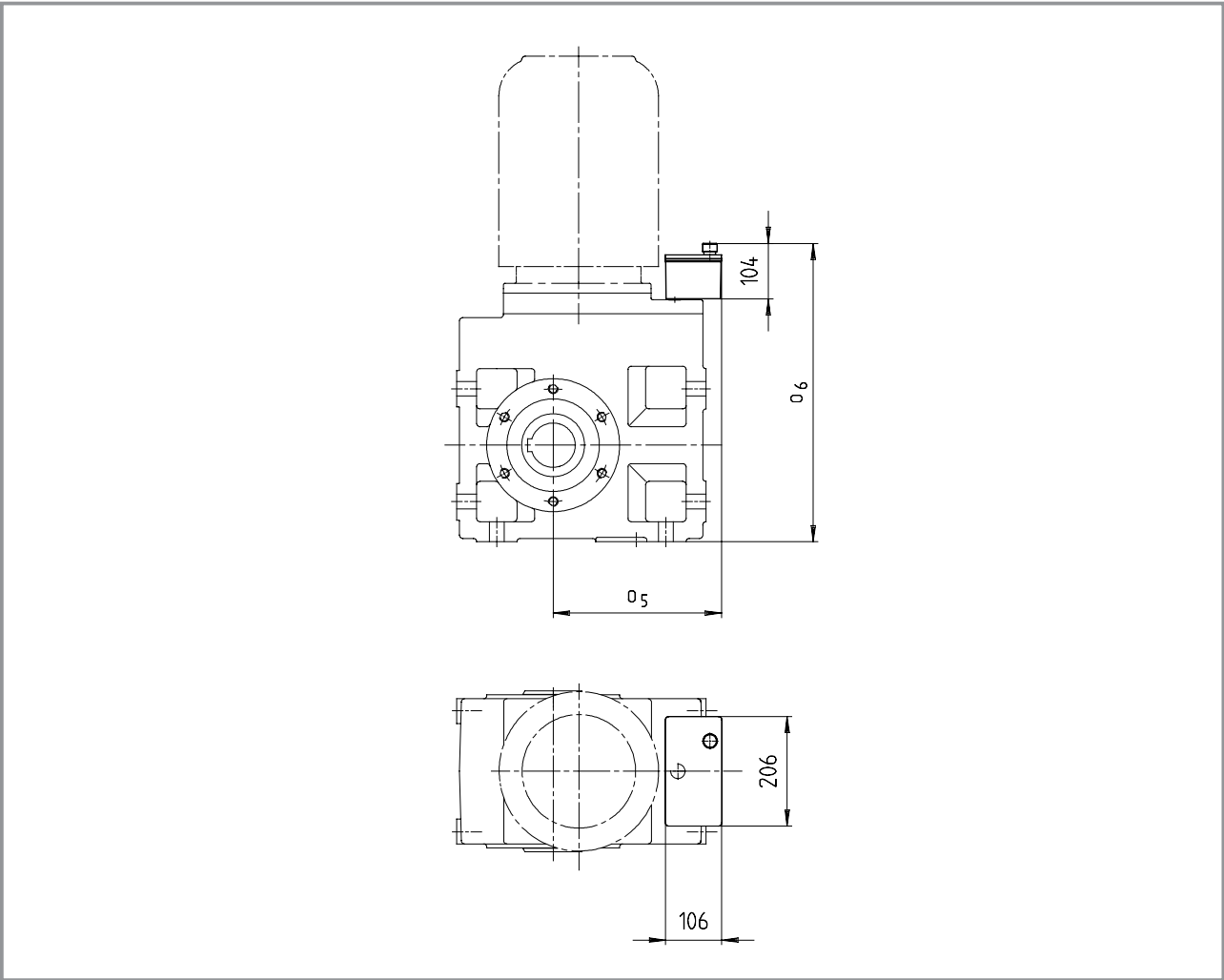
On the **versions listed** in the table, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.
On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

Helical-bevel gearboxes

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



Reservoir for mounting position C
Helical-bevel gearboxes GKS



Helical-bevel gearboxes		Motor frame size/ Drive size		
GKS□□ - 3E		090 / 100	112	132
09	o ₅	243	265	282
	o ₆	533	533	533
11	o ₅	258	280	304
	o ₆	626	630	630
14	o ₅		313	343
	o ₆		739	739

8200 motec cannot be in position 4.

Helical-bevel gearboxes GKS□□-3

Geared motors GKS□□-3E H□R	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 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	51	57			
06	42	44	45	50	51	58	65	71	80	87	
07				75	77	84	91	97	105	112	142
09						132	139	145	153	160	191
11							239	245	252	259	289
14									423	430	457

Helical-bevel gearboxes GKS□□-4

Geared motors GKS□□-4E H□R	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 motec E82MV □□□										
	251	371	551	751	152	152	222	302	402	552	752
05	29	31	32	37	38						
06	46	48	49	54	55	62					
07	76	78	79	83	85	92	99	105			
09	129	131	132	137	138	145	152	158	167	174	
11				245	246	253	260	266	274	281	311
14						438	445	451	459	466	497

Additional weights

Gearbox size	Solid shaft	2nd output shaft end	Hollow shaft with shrink disc	Flange	Torque plate	Torque plate
	V□□	V□□	S□□	□AK	Housing foot	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 capacity for mounting position A. All data is approximate

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 6-30 onwards														

P₁ = 0.12 kW

5.7	19	16	17	23	57	19	5.4	99	11	25.088	GKS04 - 3E □□□ 063C12	E82MV 251_2B
5.0	22	14	20	20	50	22	5.0	86	13	28.727	GKS04 - 3E □□□ 063C12	E82MV 251_2B
4.5	24	13	22	18	45	24	5.0	77	14	32.000	GKS04 - 3E □□□ 063C12	E82MV 251_2B
3.2	34	9.3	30	13	32	34	5.5	56	19	44.240	GKS04 - 3E □□□ 063C12	E82MV 251_2B
2.8	39	8.1	35	11	28	39	4.7	49	22	50.943	GKS04 - 3E □□□ 063C12	E82MV 251_2B
2.5	44	7.3	39	10	25	44	4.3	44	25	56.976	GKS04 - 3E □□□ 063C12	E82MV 251_2B
2.2	50	6.4	44	8.8	22	50	3.7	38	29	64.978	GKS04 - 3E □□□ 063C12	E82MV 251_2B
2.0	55	5.7	49	7.9	20	55	3.4	34	32	72.210	GKS04 - 3E □□□ 063C12	E82MV 251_2B
1.6	69	4.6	62	6.3	16	69	2.7	27	40	90.491	GKS04 - 3E □□□ 063C12	E82MV 251_2B
1.4	76	4.1	68	5.7	14	76	2.4	25	44	100.067	GKS04 - 3E □□□ 063C12	E82MV 251_2B
1.3	85	3.7	76	5.1	13	85	2.0	22	49	111.467	GKS04 - 3E □□□ 063C12	E82MV 251_2B
1.1	98	3.2	88	4.4	11	98	1.9	19	57	128.874	GKS04 - 3E □□□ 063C12	E82MV 251_2B
1.0	110	2.9	98	4.0	9.9	110	1.6	17	63	143.556	GKS04 - 3E □□□ 063C12	E82MV 251_2B
0.9	125	2.5	111	3.5	8.7	125	1.5	15	72	163.332	GKS04 - 3E □□□ 063C12	E82MV 251_2B
0.8	139	2.3	124	3.1	7.8	139	1.3	14	80	181.939	GKS04 - 3E □□□ 063C12	E82MV 251_2B
0.7	156	2	139	2.8	7.0	156	1.2	12	90	204.682	GKS04 - 3E □□□ 063C12	E82MV 251_2B
0.6	174	1.8	155	2.5	6.3	174	1.0	11	100	228.000	GKS04 - 3E □□□ 063C12	E82MV 251_2B
0.5	206	1.5	183	2.1	5.3	206	0.9	9	118	269.660	GKS04 - 3E □□□ 063C12	E82MV 251_2B
0.5	210	1.5	187	2.0	5.1	210	2.6	9	121	279.286	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.5	238	1.3	212	1.8	4.5	238	3.0	8	137	316.800	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.4	274	1.1	244	1.6	3.9	274	1.2	7	157	364.467	GKS05 - 4E □□□ 063C12	E82MV 251_2B
0.4	271	1.1	242	1.6	3.9	271	2.0	7	156	361.429	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.3	308	1	274	1.4	3.5	308	1.0	6	177	410.667	GKS05 - 4E □□□ 063C12	E82MV 251_2B
0.3	306	1	273	1.4	3.5	306	2.3	6	176	408.000	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.3	352	0.9	314	1.2	3.0	352	0.9	5	203	469.389	GKS05 - 4E □□□ 063C12	E82MV 251_2B
0.3	344	0.9	306	1.2	3.1	344	1.6	5	198	458.067	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.3	388	0.8	346	1.1	2.8	388	1.8	5	223	517.091	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.3	417	0.7	372	1.0	2.6	417	1.3	4	240	555.927	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.2	481	0.6	428	0.9	2.2	481	1.5	4	277	640.800	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.2	523	0.6	466	0.8	2.1	523	1.0	4	301	696.668	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.2	610	0.5	543	0.7	1.8	610	1.2	3	350	812.137	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.2	687	0.5	611	0.6	1.6	687	0.9	3	395	914.907	GKS06 - 4E □□□ 063C12	E82MV 251_2B
0.1	764	0.4	680	0.6	1.4	764	0.9	2	439	1017.741	GKS06 - 4E □□□ 063C12	E82MV 251_2B

P₁ = 0.18 kW

14	12	40	10.5	56	139	12	3.4	241	6.8	9.836	GKS04 - 3E □□□ 063C32	E82MV 251_2B
6.1	27	18	24	24	61	27	3.4	105	15	22.522	GKS04 - 3E □□□ 063C32	E82MV 251_2B
5.4	30	16	27	22	54	30	3.4	95	17	25.088	GKS04 - 3E □□□ 063C32	E82MV 251_2B
4.8	34	14	31	19	48	34	3.2	83	20	28.727	GKS04 - 3E □□□ 063C32	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz						
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
Dimensions see page 6-30 onwards													

P₁ = 0.18 kW

4.3	38	12	34	17	43	38	3.2	74	22	32.000	GKS04 - 3E □□□ 063C32	E82MV 251_2B
3.1	53	8.9	47	12	31	53	3.5	54	30	44.240	GKS04 - 3E □□□ 063C32	E82MV 251_2B
2.7	61	7.8	54	11	27	61	3.0	47	35	50.943	GKS04 - 3E □□□ 063C32	E82MV 251_2B
2.4	68	6.9	61	9.6	24	68	2.7	42	39	56.976	GKS04 - 3E □□□ 063C32	E82MV 251_2B
2.1	78	6.1	69	8.4	21	78	2.4	37	45	64.978	GKS04 - 3E □□□ 063C32	E82MV 251_2B
1.9	86	5.5	77	7.6	19	86	2.2	33	50	72.210	GKS04 - 3E □□□ 063C32	E82MV 251_2B
1.5	108	4.4	96	6.0	15	108	1.8	26	62	90.491	GKS04 - 3E □□□ 063C32	E82MV 251_2B
1.4	120	4	107	5.4	14	120	1.5	24	69	100.067	GKS04 - 3E □□□ 063C32	E82MV 251_2B
1.2	133	3.6	119	4.9	12	133	1.3	21	77	111.467	GKS04 - 3E □□□ 063C32	E82MV 251_2B
1.1	154	3.1	137	4.2	11	154	1.2	18	89	128.874	GKS04 - 3E □□□ 063C32	E82MV 251_2B
1.0	172	2.8	153	3.8	9.5	172	1.0	17	99	143.556	GKS04 - 3E □□□ 063C32	E82MV 251_2B
0.8	195	2.4	174	3.3	8.4	195	1.0	15	112	163.332	GKS04 - 3E □□□ 063C32	E82MV 251_2B
0.7	218	2.1	194	2.9	7.4	218	1.5	13	125	185.547	GKS05 - 4E □□□ 063C32	E82MV 251_2B
0.8	205	2.3	182	3.1	7.8	205	2.6	14	118	174.336	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.7	246	1.9	219	2.6	6.5	246	1.3	11	141	209.067	GKS05 - 4E □□□ 063C32	E82MV 251_2B
0.6	266	1.8	236	2.4	6.0	266	0.9	11	153	225.867	GKS05 - 4E □□□ 063C32	E82MV 251_2B
0.6	264	1.8	235	2.4	6.1	264	2.0	11	152	224.524	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.6	278	1.7	248	2.3	5.8	278	1.2	10	160	236.667	GKS05 - 4E □□□ 063C32	E82MV 251_2B
0.5	328	1.4	292	2.0	4.9	328	1.6	9	189	279.286	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.4	373	1.2	332	1.7	4.3	373	1.9	7	214	316.800	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.4	425	1.1	378	1.5	3.8	425	1.3	7	244	361.429	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.3	480	1	427	1.3	3.4	480	1.5	6	276	408.000	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.3	539	0.9	479	1.2	3.0	539	1.0	5	310	458.067	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.3	608	0.8	541	1.1	2.6	608	1.2	5	349	517.091	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.2	654	0.7	582	1.0	2.5	654	0.8	4	376	555.927	GKS06 - 4E □□□ 063C32	E82MV 251_2B
0.2	753	0.6	671	0.9	2.1	753	0.9	4	433	640.800	GKS06 - 4E □□□ 063C32	E82MV 251_2B

P₁ = 0.25 kW

27	9	78	7.5	107	267	9	4.5	465	4.9	5.123	GKS04 - 3E □□□ 063C42	E82MV 251_2B
20	12	57	10.3	78	195	12	4.5	339	6.7	7.025	GKS04 - 3E □□□ 063C42	E82MV 251_2B
17	14	49	12	67	168	14	4.5	292	7.8	8.167	GKS04 - 3E □□□ 063C42	E82MV 251_2B
15	15	44	13.2	61	152	15	5.2	265	8.6	8.991	GKS04 - 3E □□□ 063C42	E82MV 251_2B
14	16	40	14.5	56	139	16	5.2	242	9.4	9.836	GKS04 - 3E □□□ 063C42	E82MV 251_2B
12	19	34	17	47	117	19	4.5	203	11	11.730	GKS04 - 3E □□□ 063C42	E82MV 251_2B
10	22	30	19	42	105	22	4.5	182	12	13.067	GKS04 - 3E □□□ 063C42	E82MV 251_2B
9.6	24	28	21	38	96	24	5.2	166	14	14.333	GKS04 - 3E □□□ 063C42	E82MV 251_2B
8.5	27	25	24	34	85	27	4.5	148	15	16.087	GKS04 - 3E □□□ 063C42	E82MV 251_2B
7.7	30	22	26	31	77	30	4.5	133	17	17.920	GKS04 - 3E □□□ 063C42	E82MV 251_2B
6.7	34	19	30	27	67	34	5.2	116	20	20.588	GKS04 - 3E □□□ 063C42	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 6-30 onwards												

P₁ = 0.25 kW

6.1	37	18	33	24	61	37	4.9	106	21	22.522	GKS04 - 3E □□□ 063C42	E82MV 251_2B
5.5	42	16	37	22	55	42	4.0	95	24	25.088	GKS04 - 3E □□□ 063C42	E82MV 251_2B
4.8	48	14	42	19	48	48	3.8	83	27	28.727	GKS04 - 3E □□□ 063C42	E82MV 251_2B
4.3	53	12	47	17	43	53	3.2	74	30	32.000	GKS04 - 3E □□□ 063C42	E82MV 251_2B
3.9	58	11	52	16	39	58	3.1	68	33	35.191	GKS04 - 3E □□□ 063C42	E82MV 251_2B
3.5	65	10	58	14	35	65	2.6	61	37	39.200	GKS04 - 3E □□□ 063C42	E82MV 251_2B
3.1	73	9	65	12	31	73	2.5	54	42	44.240	GKS04 - 3E □□□ 063C42	E82MV 251_2B
2.7	84	7.8	75	11	27	84	2.2	47	48	50.943	GKS04 - 3E □□□ 063C42	E82MV 251_2B
2.4	94	7	84	9.6	24	94	2.0	42	54	56.976	GKS04 - 3E □□□ 063C42	E82MV 251_2B
2.1	108	6.1	96	8.4	21	108	1.7	37	62	64.978	GKS04 - 3E □□□ 063C42	E82MV 251_2B
2.1	110	6	98	8.2	21	110	3.0	36	63	66.592	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.9	120	5.5	106	7.6	19	120	1.6	33	69	72.210	GKS04 - 3E □□□ 063C42	E82MV 251_2B
1.8	124	5.3	111	7.3	18	124	2.5	32	71	75.033	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.7	132	5	117	6.9	17	132	1.4	30	76	79.598	GKS04 - 3E □□□ 063C42	E82MV 251_2B
1.7	137	4.8	122	6.6	17	137	2.4	29	79	82.833	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.5	150	4.4	133	6.0	15	150	1.2	26	86	90.491	GKS04 - 3E □□□ 063C42	E82MV 251_2B
1.5	155	4.3	137	5.9	15	155	2.0	26	89	93.333	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.4	166	4	147	5.5	14	166	1.1	24	95	100.067	GKS04 - 3E □□□ 063C42	E82MV 251_2B
1.3	177	3.7	158	5.1	13	177	1.9	22	102	107.196	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.2	185	3.6	164	4.9	12	185	0.9	21	106	111.467	GKS04 - 3E □□□ 063C42	E82MV 251_2B
1.1	200	3.3	178	4.5	11	200	1.6	20	115	120.784	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.2	187	3.5	167	4.8	12	187	3.2	21	108	113.082	GKS06 - 3E □□□ 063C42	E82MV 251_2B
1.1	213	3.1	190	4.2	11	213	0.9	18	123	128.874	GKS04 - 3E □□□ 063C42	E82MV 251_2B
1.1	215	3.1	192	4.2	11	215	1.5	18	124	130.097	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.1	211	3.1	188	4.3	11	211	3.0	19	121	127.392	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.9	243	2.7	216	3.7	9.4	243	1.3	16	139	146.588	GKS05 - 3E □□□ 063C42	E82MV 251_2B
1.0	237	2.8	211	3.8	9.6	237	2.6	17	136	142.941	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.8	275	2.4	245	3.3	8.2	275	1.2	14	158	166.276	GKS05 - 3E □□□ 063C42	E82MV 251_2B
0.9	267	2.5	237	3.4	8.5	267	2.4	15	153	161.029	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.7	310	2.1	276	2.9	7.3	310	1.0	13	178	187.353	GKS05 - 3E □□□ 063C42	E82MV 251_2B
0.7	315	2.1	280	2.9	7.2	315	2.2	13	181	190.080	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.6	350	1.9	311	2.6	6.5	350	0.9	11	201	211.200	GKS05 - 3E □□□ 063C42	E82MV 251_2B
0.6	354	1.9	315	2.6	6.4	354	1.8	11	204	214.133	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.6	382	1.7	340	2.4	5.9	382	1.8	10	219	230.688	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.5	430	1.5	383	2.1	5.3	430	1.5	9	247	259.880	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.5	483	1.4	430	1.9	4.7	483	1.5	8	277	291.600	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.4	544	1.2	484	1.7	4.2	544	1.2	7	312	328.500	GKS06 - 3E □□□ 063C42	E82MV 251_2B
0.4	588	1.1	523	1.5	3.8	588	0.9	7	338	361.429	GKS06 - 4E □□□ 063C42	E82MV 251_2B
0.4	584	1.1	520	1.5	3.8	584	1.8	7	336	358.829	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.3	664	1	591	1.3	3.4	664	1.1	6	382	408.000	GKS06 - 4E □□□ 063C42	E82MV 251_2B
0.3	650	1	578	1.4	3.4	650	2.0	6	373	399.353	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.3	756	0.9	672	1.2	3.0	756	1.4	5	434	464.367	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.3	841	0.8	749	1.1	2.7	841	0.8	5	484	517.091	GKS06 - 4E □□□ 063C42	E82MV 251_2B
0.3	841	0.8	748	1.1	2.7	841	1.6	5	483	516.810	GKS07 - 4E □□□ 063C42	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 6-30 onwards												

P₁ = 0.25 kW

0.2	917	0.7	816	1.0	2.4	917	1.1	4	527	563.572	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.2	1036	0.6	922	0.9	2.2	1036	1.3	4	595	636.581	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.2	1113	0.6	990	0.8	2.0	1113	0.9	3	640	683.972	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.2	1340	0.5	1193	0.7	1.7	1340	1.0	3	770	823.810	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.2	1330	0.5	1184	0.7	1.7	1330	2.3	3	764	817.551	GKS09 - 4E □□□ 063C42	E82MV 251_2B
0.1	1510	0.4	1344	0.6	1.5	1510	0.8	3	868	928.237	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.1	1499	0.4	1334	0.6	1.5	1499	2.1	3	862	921.367	GKS09 - 4E □□□ 063C42	E82MV 251_2B
0.1	1627	0.4	1448	0.5	1.4	1627	0.8	2	935	999.806	GKS07 - 4E □□□ 063C42	E82MV 251_2B
0.1	1614	0.4	1437	0.6	1.4	1614	1.9	2	928	992.209	GKS09 - 4E □□□ 063C42	E82MV 251_2B
0.1	1819	0.4	1619	0.5	1.2	1819	1.7	2	1046	1118.204	GKS09 - 4E □□□ 063C42	E82MV 251_2B
0.1	2041	0.3	1816	0.4	1.1	2041	1.5	2	1173	1254.197	GKS09 - 4E □□□ 063C42	E82MV 251_2B
0.1	2300	0.3	2047	0.4	1.0	2300	1.3	2	1322	1413.461	GKS09 - 4E □□□ 063C42	E82MV 251_2B

P₁ = 0.37 kW

28	12	80	10.9	110	275	12	4.0	479	7	5.123	GKS04 - 3E □□□ 071C32	E82MV 371_2B
20	17	58	14.9	80	201	17	4.0	349	9.6	7.025	GKS04 - 3E □□□ 071C32	E82MV 371_2B
17	19	50	17	69	173	19	4.0	300	11	8.167	GKS04 - 3E □□□ 071C32	E82MV 371_2B
16	21	45	19	63	157	21	4.5	273	12	8.991	GKS04 - 3E □□□ 071C32	E82MV 371_2B
14	23	42	21	57	143	23	4.5	249	13	9.836	GKS04 - 3E □□□ 071C32	E82MV 371_2B
12	28	35	25	48	120	28	4.0	209	16	11.730	GKS04 - 3E □□□ 071C32	E82MV 371_2B
11	31	31	28	43	108	31	4.0	188	18	13.067	GKS04 - 3E □□□ 071C32	E82MV 371_2B
9.8	34	29	30	39	98	34	4.5	171	20	14.333	GKS04 - 3E □□□ 071C32	E82MV 371_2B
8.8	38	25	34	35	88	38	4.0	153	22	16.087	GKS04 - 3E □□□ 071C32	E82MV 371_2B
7.9	43	23	38	31	79	43	3.9	137	25	17.920	GKS04 - 3E □□□ 071C32	E82MV 371_2B
6.9	49	20	44	27	69	49	3.7	119	28	20.588	GKS04 - 3E □□□ 071C32	E82MV 371_2B
6.3	54	18	48	25	63	54	3.4	109	31	22.522	GKS04 - 3E □□□ 071C32	E82MV 371_2B
5.6	60	16	53	22	56	60	2.8	98	34	25.088	GKS04 - 3E □□□ 071C32	E82MV 371_2B
4.9	68	14	61	20	49	68	2.7	85	39	28.727	GKS04 - 3E □□□ 071C32	E82MV 371_2B
4.4	76	13	68	18	44	76	2.2	77	44	32.000	GKS04 - 3E □□□ 071C32	E82MV 371_2B
4.0	84	12	75	16	40	84	2.2	70	48	35.191	GKS04 - 3E □□□ 071C32	E82MV 371_2B
3.6	93	10	83	14	36	93	1.8	63	54	39.200	GKS04 - 3E □□□ 071C32	E82MV 371_2B
3.2	105	9.2	94	13	32	105	1.8	55	61	44.240	GKS04 - 3E □□□ 071C32	E82MV 371_2B
3.0	112	8.7	100	12	30	112	2.7	52	64	47.059	GKS05 - 3E □□□ 071C32	E82MV 371_2B
2.8	121	8	108	11	28	121	1.5	48	70	50.943	GKS04 - 3E □□□ 071C32	E82MV 371_2B
2.5	136	7.2	121	9.9	25	136	1.4	43	78	56.976	GKS04 - 3E □□□ 071C32	E82MV 371_2B
2.2	155	6.3	138	8.7	22	155	1.2	38	89	64.978	GKS04 - 3E □□□ 071C32	E82MV 371_2B
2.1	159	6.1	141	8.5	21	159	2.1	37	91	66.592	GKS05 - 3E □□□ 071C32	E82MV 371_2B
2.0	172	5.7	153	7.8	20	172	1.1	34	99	72.210	GKS04 - 3E □□□ 071C32	E82MV 371_2B
1.9	179	5.4	159	7.5	19	179	1.7	33	103	75.033	GKS05 - 3E □□□ 071C32	E82MV 371_2B
1.8	190	5.1	169	7.1	18	190	1.0	31	109	79.598	GKS04 - 3E □□□ 071C32	E82MV 371_2B
1.7	197	4.9	175	6.8	17	197	1.7	30	113	82.833	GKS05 - 3E □□□ 071C32	E82MV 371_2B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 6-30 onwards														

P₁ = 0.37 kW

1.6	215	4.5	192	6.2	16	215	0.9	27	124	90.491	GKS04 - 3E □□□ 071C32	E82MV 371_2B
1.5	222	4.4	198	6.0	15	222	1.4	26	128	93.333	GKS05 - 3E □□□ 071C32	E82MV 371_2B
1.5	222	4.4	197	6.0	15	222	3.2	26	127	93.176	GKS06 - 3E □□□ 071C32	E82MV 371_2B
1.3	255	3.8	227	5.3	13	255	1.3	23	147	107.196	GKS05 - 3E □□□ 071C32	E82MV 371_2B
1.3	250	3.9	222	5.4	13	250	2.5	23	144	104.967	GKS06 - 3E □□□ 071C32	E82MV 371_2B
1.2	288	3.4	256	4.7	12	288	1.1	20	165	120.784	GKS05 - 3E □□□ 071C32	E82MV 371_2B
1.3	269	3.6	240	5.0	13	269	2.6	22	155	113.082	GKS06 - 3E □□□ 071C32	E82MV 371_2B
1.1	310	3.1	276	4.3	11	310	1.1	19	178	130.097	GKS05 - 3E □□□ 071C32	E82MV 371_2B
1.1	303	3.2	270	4.4	11	303	2.1	19	174	127.392	GKS06 - 3E □□□ 071C32	E82MV 371_2B
1.0	349	2.8	311	3.8	9.6	349	0.9	17	201	146.588	GKS05 - 3E □□□ 071C32	E82MV 371_2B
1.0	340	2.9	303	3.9	9.9	340	2.1	17	196	142.941	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.8	396	2.5	352	3.4	8.5	396	0.8	15	227	166.276	GKS05 - 3E □□□ 071C32	E82MV 371_2B
0.9	383	2.5	341	3.5	8.8	383	1.7	15	220	161.029	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.7	452	2.2	403	3.0	7.4	452	1.6	13	260	190.080	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.7	510	1.9	454	2.6	6.6	510	1.2	11	293	214.133	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.6	549	1.8	489	2.4	6.1	549	1.3	11	316	230.688	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.5	619	1.6	551	2.2	5.4	619	1.0	9	355	259.880	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.5	694	1.4	618	1.9	4.8	694	1.0	8	399	291.600	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.4	782	1.2	696	1.7	4.3	782	0.8	7	449	328.500	GKS06 - 3E □□□ 071C32	E82MV 371_2B
0.4	840	1.1	747	1.6	3.9	840	1.3	7	483	358.829	GKS07 - 4E □□□ 071C32	E82MV 371_2B
0.4	934	1	832	1.4	3.5	934	1.4	6	537	399.353	GKS07 - 4E □□□ 071C32	E82MV 371_2B
0.3	1087	0.9	967	1.2	3.0	1087	1.0	5	624	464.367	GKS07 - 4E □□□ 071C32	E82MV 371_2B
0.3	1209	0.8	1076	1.1	2.7	1209	1.1	5	695	516.810	GKS07 - 4E □□□ 071C32	E82MV 371_2B
0.2	1489	0.6	1326	0.9	2.2	1489	0.9	4	856	636.581	GKS07 - 4E □□□ 071C32	E82MV 371_2B
0.2	1913	0.5	1702	0.7	1.7	1913	1.6	3	1099	817.551	GKS09 - 4E □□□ 071C32	E82MV 371_2B
0.2	2156	0.4	1919	0.6	1.5	2156	1.4	3	1239	921.367	GKS09 - 4E □□□ 071C32	E82MV 371_2B
0.1	2322	0.4	2066	0.6	1.4	2322	1.3	2	1334	992.209	GKS09 - 4E □□□ 071C32	E82MV 371_2B
0.1	2616	0.4	2329	0.5	1.3	2616	1.2	2	1504	1118.204	GKS09 - 4E □□□ 071C32	E82MV 371_2B
0.1	2935	0.3	2612	0.4	1.1	2935	1.0	2	1686	1254.197	GKS09 - 4E □□□ 071C32	E82MV 371_2B
0.1	3307	0.3	2943	0.4	1.0	3307	0.9	2	1901	1413.461	GKS09 - 4E □□□ 071C32	E82MV 371_2B

P₁ = 0.55 kW

27	18	80	16	110	274	18	4.4	477	10	5.123	GKS04 - 3E □□□ 071C42	E82MV 551_4B
20	25	58	22	80	200	25	3.7	348	14	7.025	GKS04 - 3E □□□ 071C42	E82MV 551_4B
17	29	50	26	69	172	29	4.4	299	17	8.167	GKS04 - 3E □□□ 071C42	E82MV 551_4B
16	32	45	28	63	156	32	3.2	272	18	8.991	GKS04 - 3E □□□ 071C42	E82MV 551_4B
14	35	41	31	57	143	35	3.0	249	20	9.836	GKS04 - 3E □□□ 071C42	E82MV 551_4B
12	42	35	37	48	120	42	4.3	208	24	11.730	GKS04 - 3E □□□ 071C42	E82MV 551_4B
11	47	31	42	43	107	47	3.5	186	27	13.176	GKS05 - 3E □□□ 071C42	E82MV 551_4B
9.8	51	28	45	39	98	51	3.2	171	29	14.333	GKS04 - 3E □□□ 071C42	E82MV 551_4B
8.7	57	25	51	35	87	57	3.2	152	33	16.087	GKS04 - 3E □□□ 071C42	E82MV 551_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[rpm]	[Nm]	50 Hz	[rpm]				[Nm]
										Dimensions see page 6-30 onwards			

P₁ = 0.55 kW

7.8	64	23	57	31	78	64	2.6	136	37	17.920	GKS04 - 3E □□□ 071C42	E82MV 551_4B
6.8	73	20	65	27	68	73	2.5	119	42	20.588	GKS04 - 3E □□□ 071C42	E82MV 551_4B
6.2	80	18	71	25	62	80	2.3	109	46	22.522	GKS04 - 3E □□□ 071C42	E82MV 551_4B
5.6	89	16	79	22	56	89	1.9	97	51	25.088	GKS04 - 3E □□□ 071C42	E82MV 551_4B
4.9	102	14	91	20	49	102	1.8	85	59	28.727	GKS04 - 3E □□□ 071C42	E82MV 551_4B
4.7	106	14	95	19	47	106	3.1	82	61	29.931	GKS05 - 3E □□□ 071C42	E82MV 551_4B
4.4	114	13	101	18	44	114	1.5	76	65	32.000	GKS04 - 3E □□□ 071C42	E82MV 551_4B
4.3	116	12	103	17	43	116	2.8	75	67	32.744	GKS05 - 3E □□□ 071C42	E82MV 551_4B
4.0	125	12	111	16	40	125	1.5	69	72	35.191	GKS04 - 3E □□□ 071C42	E82MV 551_4B
3.8	131	11	117	15	38	131	2.3	66	75	36.894	GKS05 - 3E □□□ 071C42	E82MV 551_4B
3.6	139	10	124	14	36	139	1.2	62	80	39.200	GKS04 - 3E □□□ 071C42	E82MV 551_4B
3.4	148	9.8	132	13	34	148	2.2	59	85	41.765	GKS05 - 3E □□□ 071C42	E82MV 551_4B
3.2	157	9.2	140	13	32	157	1.2	55	90	44.240	GKS04 - 3E □□□ 071C42	E82MV 551_4B
3.0	167	8.7	149	12	30	167	1.8	52	96	47.059	GKS05 - 3E □□□ 071C42	E82MV 551_4B
2.8	181	8	161	11	28	181	1.0	48	104	50.943	GKS04 - 3E □□□ 071C42	E82MV 551_4B
2.8	182	8	162	11	28	182	1.8	48	104	51.162	GKS05 - 3E □□□ 071C42	E82MV 551_4B
2.5	202	7.2	180	9.9	25	202	0.9	43	116	56.976	GKS04 - 3E □□□ 071C42	E82MV 551_4B
2.4	205	7.1	182	9.8	24	205	1.5	42	118	57.647	GKS05 - 3E □□□ 071C42	E82MV 551_4B
2.1	236	6.1	210	8.4	21	236	1.4	37	136	66.592	GKS05 - 3E □□□ 071C42	E82MV 551_4B
2.2	232	6.2	206	8.6	22	232	2.7	37	133	65.207	GKS06 - 3E □□□ 071C42	E82MV 551_4B
1.9	266	5.4	237	7.5	19	266	1.2	33	153	75.033	GKS05 - 3E □□□ 071C42	E82MV 551_4B
2.0	256	5.7	228	7.8	20	256	2.7	34	147	72.000	GKS06 - 3E □□□ 071C42	E82MV 551_4B
1.7	294	4.9	262	6.8	17	294	1.1	30	169	82.833	GKS05 - 3E □□□ 071C42	E82MV 551_4B
1.7	288	5	256	6.9	17	288	2.2	30	166	81.111	GKS06 - 3E □□□ 071C42	E82MV 551_4B
1.5	331	4.4	295	6.0	15	331	1.0	26	190	93.333	GKS05 - 3E □□□ 071C42	E82MV 551_4B
1.5	331	4.4	294	6.0	15	331	2.1	26	190	93.176	GKS06 - 3E □□□ 071C42	E82MV 551_4B
1.3	381	3.8	339	5.2	13	381	0.9	23	219	107.196	GKS05 - 3E □□□ 071C42	E82MV 551_4B
1.3	373	3.9	332	5.4	13	373	1.7	23	214	104.967	GKS06 - 3E □□□ 071C42	E82MV 551_4B
1.2	402	3.6	357	5.0	12	402	1.7	22	231	113.082	GKS06 - 3E □□□ 071C42	E82MV 551_4B
1.1	452	3.2	403	4.4	11	452	1.4	19	260	127.392	GKS06 - 3E □□□ 071C42	E82MV 551_4B
1.0	508	2.9	452	3.9	9.8	508	1.4	17	292	142.941	GKS06 - 3E □□□ 071C42	E82MV 551_4B
0.9	572	2.5	509	3.5	8.7	572	1.1	15	329	161.029	GKS06 - 3E □□□ 071C42	E82MV 551_4B
0.7	675	2.1	601	3.0	7.4	675	1.0	13	388	190.080	GKS06 - 3E □□□ 071C42	E82MV 551_4B
0.7	760	1.9	677	2.6	6.6	760	0.8	11	437	214.133	GKS06 - 3E □□□ 071C42	E82MV 551_4B
0.6	819	1.8	729	2.4	6.1	819	0.9	11	471	230.688	GKS06 - 3E □□□ 071C42	E82MV 551_4B
0.6	861	1.7	766	2.3	5.7	861	1.5	10	495	246.659	GKS07 - 4E □□□ 071C42	E82MV 551_4B
0.5	954	1.5	849	2.1	5.1	954	1.1	9	548	273.199	GKS07 - 4E □□□ 071C42	E82MV 551_4B
0.4	1121	1.3	997	1.8	4.4	1121	1.2	8	644	321.049	GKS07 - 4E □□□ 071C42	E82MV 551_4B
0.4	1129	1.3	1005	1.7	4.3	1129	2.7	8	649	323.365	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.4	1252	1.1	1115	1.6	3.9	1252	0.8	7	720	358.829	GKS07 - 4E □□□ 071C42	E82MV 551_4B
0.4	1272	1.1	1132	1.5	3.9	1272	2.4	7	731	364.427	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.4	1394	1	1241	1.4	3.5	1394	0.9	6	801	399.353	GKS07 - 4E □□□ 071C42	E82MV 551_4B
0.3	1404	1	1250	1.4	3.5	1404	2.2	6	807	402.234	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.3	1582	0.9	1408	1.2	3.1	1582	1.9	5	909	453.311	GKS09 - 4E □□□ 071C42	E82MV 551_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 6-30 onwards														

P₁ = 0.55 kW

0.3	1817	0.8	1617	1.1	2.7	1817	1.7	5	1044	520.538	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.2	2048	0.7	1822	1.0	2.4	2048	1.5	4	1177	586.638	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.2	2205	0.6	1962	0.9	2.2	2205	1.4	4	1267	631.744	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.2	2485	0.6	2212	0.8	2.0	2485	1.2	3	1428	711.965	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.2	2854	0.5	2540	0.7	1.7	2854	1.1	3	1640	817.551	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.2	3216	0.4	2862	0.6	1.5	3216	1.0	3	1848	921.367	GKS09 - 4E □□□ 071C42	E82MV 551_4B
0.1	3463	0.4	3082	0.6	1.4	3463	0.9	2	1990	992.209	GKS09 - 4E □□□ 071C42	E82MV 551_4B

P₁ = 0.75 kW

28	25	80	22	110	275	25	3.3	479	14	5.123	GKS04 - 3E □□□ 080C32	E82MV 751_4B
20	34	58	30	80	201	34	2.7	349	19	7.025	GKS04 - 3E □□□ 080C32	E82MV 751_4B
17	39	50	35	69	173	39	3.3	300	23	8.167	GKS04 - 3E □□□ 080C32	E82MV 751_4B
16	43	45	39	63	157	43	2.4	273	25	8.991	GKS04 - 3E □□□ 080C32	E82MV 751_4B
14	48	42	42	57	143	48	2.2	249	27	9.836	GKS04 - 3E □□□ 080C32	E82MV 751_4B
12	57	35	50	48	120	57	3.2	209	33	11.730	GKS04 - 3E □□□ 080C32	E82MV 751_4B
11	64	31	57	43	107	64	2.6	186	37	13.176	GKS05 - 3E □□□ 080C32	E82MV 751_4B
11	63	31	56	43	108	63	2.6	188	36	13.067	GKS04 - 3E □□□ 080C32	E82MV 751_4B
9.8	69	29	62	39	98	69	2.4	171	40	14.333	GKS04 - 3E □□□ 080C32	E82MV 751_4B
8.8	78	25	69	35	88	78	2.3	153	45	16.087	GKS04 - 3E □□□ 080C32	E82MV 751_4B
7.9	87	23	77	31	79	87	1.9	137	50	17.920	GKS04 - 3E □□□ 080C32	E82MV 751_4B
6.9	99	20	88	27	69	99	1.8	119	57	20.588	GKS04 - 3E □□□ 080C32	E82MV 751_4B
6.3	109	18	97	25	63	109	1.7	109	62	22.522	GKS04 - 3E □□□ 080C32	E82MV 751_4B
5.6	121	16	108	22	56	121	1.4	98	70	25.088	GKS04 - 3E □□□ 080C32	E82MV 751_4B
4.9	139	14	123	20	49	139	1.3	85	80	28.727	GKS04 - 3E □□□ 080C32	E82MV 751_4B
4.7	144	14	129	19	47	144	2.3	82	83	29.931	GKS05 - 3E □□□ 080C32	E82MV 751_4B
4.4	154	13	137	18	44	154	1.1	77	89	32.000	GKS04 - 3E □□□ 080C32	E82MV 751_4B
4.3	158	12	141	17	43	158	2.1	75	91	32.744	GKS05 - 3E □□□ 080C32	E82MV 751_4B
4.0	170	12	151	16	40	170	1.1	70	98	35.191	GKS04 - 3E □□□ 080C32	E82MV 751_4B
3.8	178	11	158	15	38	178	1.7	66	102	36.894	GKS05 - 3E □□□ 080C32	E82MV 751_4B
3.6	189	10	168	14	36	189	0.9	63	109	39.200	GKS04 - 3E □□□ 080C32	E82MV 751_4B
3.4	202	9.8	179	14	34	202	1.6	59	116	41.765	GKS05 - 3E □□□ 080C32	E82MV 751_4B
3.2	213	9.2	190	13	32	213	0.9	55	123	44.240	GKS04 - 3E □□□ 080C32	E82MV 751_4B
3.0	227	8.7	202	12	30	227	1.3	52	130	47.059	GKS05 - 3E □□□ 080C32	E82MV 751_4B
2.8	247	8	220	11	28	247	1.3	48	142	51.162	GKS05 - 3E □□□ 080C32	E82MV 751_4B
2.5	278	7.1	248	9.8	25	278	1.1	43	160	57.647	GKS05 - 3E □□□ 080C32	E82MV 751_4B
2.4	279	7.1	249	9.8	24	279	2.5	42	160	57.882	GKS06 - 3E □□□ 080C32	E82MV 751_4B
2.1	321	6.1	286	8.5	21	321	1.0	37	185	66.592	GKS05 - 3E □□□ 080C32	E82MV 751_4B
2.2	315	6.3	280	8.6	22	315	2.0	38	181	65.207	GKS06 - 3E □□□ 080C32	E82MV 751_4B
1.9	362	5.4	322	7.5	19	362	0.9	33	208	75.033	GKS05 - 3E □□□ 080C32	E82MV 751_4B
2.0	347	5.7	309	7.8	20	347	2.0	34	200	72.000	GKS06 - 3E □□□ 080C32	E82MV 751_4B
1.7	400	4.9	356	6.8	17	400	0.8	30	230	82.833	GKS05 - 3E □□□ 080C32	E82MV 751_4B
1.7	391	5	348	7.0	17	391	1.6	30	225	81.111	GKS06 - 3E □□□ 080C32	E82MV 751_4B
1.5	450	4.4	400	6.0	15	450	1.6	26	258	93.176	GKS06 - 3E □□□ 080C32	E82MV 751_4B
1.5	447	4.4	397	6.1	15	447	2.9	27	257	92.563	GKS07 - 3E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz						
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
										Dimensions see page 6-30 onwards			

P₁ = 0.75 kW

1.3	506	3.9	451	5.4	13	506	1.3	23	291	104.967	GKS06 - 3E □□□ 080C32	E82MV 751_4B
1.4	503	3.9	448	5.4	14	503	2.4	24	289	104.296	GKS07 - 3E □□□ 080C32	E82MV 751_4B
1.3	546	3.6	486	5.0	13	546	1.3	22	314	113.082	GKS06 - 3E □□□ 080C32	E82MV 751_4B
1.3	542	3.6	482	5.0	13	542	2.5	22	311	112.338	GKS07 - 3E □□□ 080C32	E82MV 751_4B
1.1	615	3.2	547	4.4	11	615	1.0	19	353	127.392	GKS06 - 3E □□□ 080C32	E82MV 751_4B
1.1	611	3.2	544	4.4	11	611	2.0	19	351	126.578	GKS07 - 3E □□□ 080C32	E82MV 751_4B
1.0	690	2.9	614	3.9	9.9	690	1.0	17	396	142.941	GKS06 - 3E □□□ 080C32	E82MV 751_4B
0.9	777	2.5	691	3.5	8.8	777	0.8	15	447	161.029	GKS06 - 3E □□□ 080C32	E82MV 751_4B
0.8	891	2.2	793	3.1	7.6	891	1.5	13	512	184.600	GKS07 - 3E □□□ 080C32	E82MV 751_4B
0.7	1004	2	893	2.7	6.8	1004	1.2	12	577	208.000	GKS07 - 3E □□□ 080C32	E82MV 751_4B
0.6	1081	1.8	962	2.5	6.3	1081	1.2	11	621	224.037	GKS07 - 3E □□□ 080C32	E82MV 751_4B
0.6	1218	1.6	1084	2.2	5.6	1218	1.0	10	700	252.436	GKS07 - 3E □□□ 080C32	E82MV 751_4B
0.5	1366	1.4	1216	2.0	5.0	1366	1.0	9	785	283.193	GKS07 - 3E □□□ 080C32	E82MV 751_4B
0.4	1523	1.3	1355	1.8	4.4	1523	0.9	8	875	321.049	GKS07 - 4E □□□ 080C32	E82MV 751_4B
0.4	1534	1.3	1365	1.7	4.4	1534	2.0	8	881	323.365	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.4	1728	1.1	1538	1.5	3.9	1728	1.8	7	993	364.427	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.4	1908	1	1698	1.4	3.5	1908	1.6	6	1096	402.234	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.3	2150	0.9	1913	1.2	3.1	2150	1.4	5	1236	453.311	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.3	2469	0.8	2197	1.1	2.7	2469	1.2	5	1419	520.538	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.2	2782	0.7	2476	1.0	2.4	2782	1.1	4	1599	586.638	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.2	2996	0.6	2667	0.9	2.2	2996	1.0	4	1722	631.744	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.2	3377	0.6	3005	0.8	2.0	3377	0.9	3	1941	711.965	GKS09 - 4E □□□ 080C32	E82MV 751_4B
0.2	3872	0.5	3446	0.7	1.7	3872	1.5	3	2225	816.455	GKS11 - 4E □□□ 080C32	E82MV 751_4B
0.2	4363	0.4	3883	0.6	1.5	4363	1.4	3	2508	919.949	GKS11 - 4E □□□ 080C32	E82MV 751_4B
0.1	4700	0.4	4183	0.6	1.4	4700	1.3	2	2701	990.879	GKS11 - 4E □□□ 080C32	E82MV 751_4B
0.1	5295	0.4	4713	0.5	1.3	5295	1.1	2	3043	1116.484	GKS11 - 4E □□□ 080C32	E82MV 751_4B
0.1	5940	0.3	5287	0.5	1.1	5940	1.0	2	3414	1252.516	GKS11 - 4E □□□ 080C32	E82MV 751_4B
0.1	6693	0.3	5957	0.4	1.0	6693	0.9	2	3847	1411.286	GKS11 - 4E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan														
Motor cooling with integral fan														
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				30 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 6-30 onwards														

P ₁ = 1.1 kW												
27	37	79	31	163	271	37	2.2	472	21	5.123	GKS04 - 3E □□□ 080C42	E82MV 152_4B
20	50	57	42	119	198	50	1.8	344	29	7.025	GKS04 - 3E □□□ 080C42	E82MV 152_4B
20	49	59	41	122	203	49	3.0	352	28	6.863	GKS05 - 3E □□□ 080C42	E82MV 152_4B
17	59	49	49	102	170	59	2.2	296	34	8.167	GKS04 - 3E □□□ 080C42	E82MV 152_4B
15	65	45	54	93	155	65	1.6	269	37	8.991	GKS04 - 3E □□□ 080C42	E82MV 152_4B
15	68	43	57	89	148	68	2.4	257	39	9.412	GKS05 - 3E □□□ 080C42	E82MV 152_4B
14	71	41	59	85	141	71	1.5	246	41	9.836	GKS04 - 3E □□□ 080C42	E82MV 152_4B
13	76	38	64	79	132	76	3.0	229	44	10.569	GKS05 - 3E □□□ 080C42	E82MV 152_4B
12	84	34	71	71	119	84	2.1	206	48	11.730	GKS04 - 3E □□□ 080C42	E82MV 152_4B
12	84	35	70	71	119	84	3.0	207	48	11.667	GKS05 - 3E □□□ 080C42	E82MV 152_4B
11	95	31	79	63	106	95	1.7	184	54	13.176	GKS05 - 3E □□□ 080C42	E82MV 152_4B
11	94	31	79	64	106	94	1.8	185	54	13.067	GKS04 - 3E □□□ 080C42	E82MV 152_4B
9.7	103	28	86	58	97	103	1.6	169	59	14.333	GKS04 - 3E □□□ 080C42	E82MV 152_4B
9.6	104	28	87	58	96	104	2.4	167	60	14.494	GKS05 - 3E □□□ 080C42	E82MV 152_4B
8.6	116	25	97	52	86	116	1.6	150	66	16.087	GKS04 - 3E □□□ 080C42	E82MV 152_4B
8.7	115	25	96	52	87	115	2.4	151	66	16.000	GKS05 - 3E □□□ 080C42	E82MV 152_4B
7.8	129	22	108	47	78	129	1.3	135	74	17.920	GKS04 - 3E □□□ 080C42	E82MV 152_4B
8.2	122	24	103	49	82	122	2.6	142	70	17.054	GKS05 - 3E □□□ 080C42	E82MV 152_4B
6.8	148	20	124	41	68	148	1.2	117	85	20.588	GKS04 - 3E □□□ 080C42	E82MV 152_4B
7.2	138	21	116	43	72	138	2.2	126	79	19.216	GKS05 - 3E □□□ 080C42	E82MV 152_4B
6.2	162	18	136	37	62	162	1.1	107	93	22.522	GKS04 - 3E □□□ 080C42	E82MV 152_4B
5.9	168	17	141	36	59	168	2.0	103	96	23.388	GKS05 - 3E □□□ 080C42	E82MV 152_4B
5.3	189	15	159	32	53	189	1.6	92	109	26.353	GKS05 - 3E □□□ 080C42	E82MV 152_4B
5.5	180	16	151	33	55	180	0.9	96	103	25.088	GKS04 - 3E □□□ 080C42	E82MV 152_4B
4.8	206	14	173	29	48	206	0.9	84	119	28.727	GKS04 - 3E □□□ 080C42	E82MV 152_4B
4.6	215	13	180	28	46	215	1.5	81	123	29.931	GKS05 - 3E □□□ 080C42	E82MV 152_4B
4.3	235	12	197	26	43	235	1.4	74	135	32.744	GKS05 - 3E □□□ 080C42	E82MV 152_4B
4.3	230	13	193	26	43	230	2.7	75	132	32.063	GKS06 - 3E □□□ 080C42	E82MV 152_4B
3.8	265	11	222	23	38	265	1.1	66	152	36.894	GKS05 - 3E □□□ 080C42	E82MV 152_4B
3.8	261	11	219	23	38	261	2.6	67	150	36.303	GKS06 - 3E □□□ 080C42	E82MV 152_4B
3.3	300	9.7	252	20	33	300	1.1	58	172	41.765	GKS05 - 3E □□□ 080C42	E82MV 152_4B
3.0	338	8.6	284	18	30	338	0.9	51	194	47.059	GKS05 - 3E □□□ 080C42	E82MV 152_4B
3.1	319	9.1	268	19	31	319	2.2	54	183	44.471	GKS06 - 3E □□□ 080C42	E82MV 152_4B
2.7	367	7.9	308	16	27	367	0.9	47	211	51.162	GKS05 - 3E □□□ 080C42	E82MV 152_4B
2.6	381	7.6	320	16	26	381	1.8	46	219	53.074	GKS06 - 3E □□□ 080C42	E82MV 152_4B
2.4	416	7	349	14	24	416	1.7	42	239	57.882	GKS06 - 3E □□□ 080C42	E82MV 152_4B
2.4	413	7	347	15	24	413	3.2	42	237	57.501	GKS07 - 3E □□□ 080C42	E82MV 152_4B
2.1	468	6.2	393	13	21	468	1.3	37	269	65.207	GKS06 - 3E □□□ 080C42	E82MV 152_4B
2.2	465	6.2	391	13	22	465	2.6	37	267	64.790	GKS07 - 3E □□□ 080C42	E82MV 152_4B
1.9	517	5.6	434	12	19	517	1.4	34	297	72.000	GKS06 - 3E □□□ 080C42	E82MV 152_4B
2.0	506	5.7	425	12	20	506	2.6	34	291	70.474	GKS07 - 3E □□□ 080C42	E82MV 152_4B
1.7	582	5	489	10	17	582	1.1	30	335	81.111	GKS06 - 3E □□□ 080C42	E82MV 152_4B
1.8	570	5.1	479	11	18	570	2.1	30	328	79.407	GKS07 - 3E □□□ 080C42	E82MV 152_4B
1.5	669	4.3	562	8.9	15	669	1.1	26	384	93.176	GKS06 - 3E □□□ 080C42	E82MV 152_4B
1.5	664	4.4	558	9.0	15	664	2.0	26	382	92.563	GKS07 - 3E □□□ 080C42	E82MV 152_4B
1.3	754	3.8	633	7.9	13	754	0.8	23	433	104.967	GKS06 - 3E □□□ 080C42	E82MV 152_4B
1.3	749	3.9	629	8.0	13	749	1.6	23	430	104.296	GKS07 - 3E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂ 30 Hz	n ₂ 50 Hz	M ₂	c 50 Hz	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 6-30 onwards												
P ₁ = 1.1 kW												
1.2	812	3.6	682	7.4	12	812	0.9	21	467	113.082	GKS06 - 3E □□□ 080C42	E82MV 152_4B
1.2	806	3.6	677	7.4	12	806	1.6	22	463	112.338	GKS07 - 3E □□□ 080C42	E82MV 152_4B
1.1	909	3.2	763	6.6	11	909	1.3	19	522	126.578	GKS07 - 3E □□□ 080C42	E82MV 152_4B
1.0	1009	2.9	847	5.9	9.9	1009	1.3	17	580	140.548	GKS07 - 3E □□□ 080C42	E82MV 152_4B
0.9	1137	2.5	955	5.3	8.8	1137	1.1	15	653	158.364	GKS07 - 3E □□□ 080C42	E82MV 152_4B
0.8	1325	2.2	1113	4.5	7.5	1325	1.0	13	762	184.600	GKS07 - 3E □□□ 080C42	E82MV 152_4B
0.7	1493	1.9	1254	4.0	6.7	1493	0.8	12	858	208.000	GKS07 - 3E □□□ 080C42	E82MV 152_4B
0.6	1608	1.8	1351	3.7	6.2	1608	0.8	11	924	224.037	GKS07 - 3E □□□ 080C42	E82MV 152_4B
0.6	1627	1.7	1367	3.6	6.0	1627	1.9	10	935	230.577	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.6	1753	1.6	1473	3.4	5.6	1753	1.7	10	1007	248.439	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.5	1976	1.4	1660	3.0	5.0	1976	1.6	9	1135	279.986	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.4	2282	1.2	1917	2.6	4.3	2282	1.3	7	1311	323.365	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.4	2279	1.2	1914	2.6	4.3	2279	2.6	7	1310	322.931	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.4	2571	1.1	2160	2.3	3.8	2571	1.2	7	1478	364.427	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.4	2568	1.1	2157	2.3	3.8	2568	2.3	7	1476	363.866	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.3	2838	1	2384	2.1	3.5	2838	1.1	6	1631	402.234	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.4	2793	1	2346	2.1	3.5	2793	2.1	6	1605	395.787	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.3	3199	0.9	2687	1.8	3.1	3199	1.0	5	1838	453.311	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.3	3147	0.9	2643	1.9	3.1	3147	1.9	5	1808	445.958	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.3	3673	0.8	3085	1.6	2.7	3673	0.8	5	2111	520.538	GKS09 - 4E □□□ 080C42	E82MV 152_4B
0.3	3614	0.8	3036	1.6	2.7	3614	1.7	5	2077	512.196	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.2	4072	0.7	3421	1.4	2.4	4072	1.5	4	2340	577.122	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.2	4386	0.6	3684	1.3	2.2	4386	1.4	4	2521	621.619	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.2	4942	0.6	4151	1.2	2.0	4942	1.2	3	2840	700.416	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.2	5761	0.5	4839	1.0	1.7	5761	1.0	3	3311	816.455	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.2	6491	0.4	5453	0.9	1.5	6491	0.9	3	3731	919.949	GKS11 - 4E □□□ 080C42	E82MV 152_4B
0.1	6992	0.4	5873	0.8	1.4	6992	0.9	2	4018	990.879	GKS11 - 4E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
Dimensions see page 6-30 onwards												

P₁ = 1.5 kW

27	50	79	45	109	271	50	1.6	472	29	5.123	GKS04 - 3E □□□ 090C32	E82MV 152_4B
20	69	57	61	79	198	69	1.3	344	40	7.025	GKS04 - 3E □□□ 090C32	E82MV 152_4B
20	67	59	60	81	203	67	2.2	352	39	6.863	GKS05 - 3E □□□ 090C32	E82MV 152_4B
17	80	49	71	68	170	80	1.6	296	46	8.167	GKS04 - 3E □□□ 090C32	E82MV 152_4B
15	88	45	78	62	155	88	1.2	269	51	8.991	GKS04 - 3E □□□ 090C32	E82MV 152_4B
15	92	43	82	59	148	92	1.8	257	53	9.412	GKS05 - 3E □□□ 090C32	E82MV 152_4B
14	96	41	86	57	141	96	1.1	246	55	9.836	GKS04 - 3E □□□ 090C32	E82MV 152_4B
13	103	38	92	53	132	103	2.2	229	59	10.569	GKS05 - 3E □□□ 090C32	E82MV 152_4B
12	115	34	102	47	119	115	1.6	206	66	11.730	GKS04 - 3E □□□ 090C32	E82MV 152_4B
12	114	35	102	48	119	114	2.2	207	66	11.667	GKS05 - 3E □□□ 090C32	E82MV 152_4B
12	111	35	99	49	122	111	3.0	212	64	11.382	GKS06 - 3E □□□ 090C32	E82MV 152_4B
11	129	31	115	42	106	129	1.3	184	74	13.176	GKS05 - 3E □□□ 090C32	E82MV 152_4B
11	128	31	114	43	106	128	1.3	185	74	13.067	GKS04 - 3E □□□ 090C32	E82MV 152_4B
9.7	140	28	125	39	97	140	1.2	169	81	14.333	GKS04 - 3E □□□ 090C32	E82MV 152_4B
9.6	142	28	126	38	96	142	1.8	167	82	14.494	GKS05 - 3E □□□ 090C32	E82MV 152_4B
8.6	158	25	140	35	86	158	1.1	150	90	16.087	GKS04 - 3E □□□ 090C32	E82MV 152_4B
8.7	157	25	139	35	87	157	1.8	151	90	16.000	GKS05 - 3E □□□ 090C32	E82MV 152_4B
7.8	175	22	156	31	78	175	0.9	135	101	17.920	GKS04 - 3E □□□ 090C32	E82MV 152_4B
8.2	167	24	149	33	82	167	1.9	142	96	17.054	GKS05 - 3E □□□ 090C32	E82MV 152_4B
7.8	174	23	155	31	78	174	3.0	136	100	17.809	GKS06 - 3E □□□ 090C32	E82MV 152_4B
6.8	202	20	179	27	68	202	0.9	117	116	20.588	GKS04 - 3E □□□ 090C32	E82MV 152_4B
7.2	188	21	167	29	72	188	1.6	126	108	19.216	GKS05 - 3E □□□ 090C32	E82MV 152_4B
6.2	221	18	196	25	62	221	0.8	107	127	22.522	GKS04 - 3E □□□ 090C32	E82MV 152_4B
5.9	229	17	204	24	59	229	1.4	103	132	23.388	GKS05 - 3E □□□ 090C32	E82MV 152_4B
5.3	258	15	230	21	53	258	1.2	92	148	26.353	GKS05 - 3E □□□ 090C32	E82MV 152_4B
5.3	255	15	227	21	53	255	2.7	93	146	26.017	GKS06 - 3E □□□ 090C32	E82MV 152_4B
4.6	293	13	261	19	46	293	1.1	81	168	29.931	GKS05 - 3E □□□ 090C32	E82MV 152_4B
4.9	279	14	248	20	49	279	2.4	85	160	28.461	GKS06 - 3E □□□ 090C32	E82MV 152_4B
4.3	321	12	285	17	43	321	1.0	74	184	32.744	GKS05 - 3E □□□ 090C32	E82MV 152_4B
4.3	314	13	279	17	43	314	1.9	75	180	32.063	GKS06 - 3E □□□ 090C32	E82MV 152_4B
3.8	361	11	321	15	38	361	0.8	66	208	36.894	GKS05 - 3E □□□ 090C32	E82MV 152_4B
3.8	355	11	316	15	38	355	1.9	67	204	36.303	GKS06 - 3E □□□ 090C32	E82MV 152_4B
3.3	409	9.7	364	13	33	409	0.8	58	235	41.765	GKS05 - 3E □□□ 090C32	E82MV 152_4B
3.1	435	9.1	387	13	31	435	1.6	54	250	44.471	GKS06 - 3E □□□ 090C32	E82MV 152_4B
2.6	520	7.6	462	10	26	520	1.3	46	299	53.074	GKS06 - 3E □□□ 090C32	E82MV 152_4B
2.4	567	7	504	9.6	24	567	1.2	42	326	57.882	GKS06 - 3E □□□ 090C32	E82MV 152_4B
2.4	563	7	501	9.7	24	563	2.3	42	323	57.501	GKS07 - 3E □□□ 090C32	E82MV 152_4B
2.1	638	6.2	568	8.5	21	638	1.0	37	367	65.207	GKS06 - 3E □□□ 090C32	E82MV 152_4B
2.2	634	6.2	564	8.6	22	634	1.9	37	364	64.790	GKS07 - 3E □□□ 090C32	E82MV 152_4B
1.9	705	5.6	627	7.7	19	705	1.0	34	405	72.000	GKS06 - 3E □□□ 090C32	E82MV 152_4B
2.0	690	5.7	614	7.9	20	690	1.9	34	396	70.474	GKS07 - 3E □□□ 090C32	E82MV 152_4B
1.8	777	5.1	692	7.0	18	777	1.6	30	447	79.407	GKS07 - 3E □□□ 090C32	E82MV 152_4B
1.5	906	4.4	806	6.0	15	906	1.5	26	521	92.563	GKS07 - 3E □□□ 090C32	E82MV 152_4B
1.5	899	4.4	800	6.0	15	899	2.8	26	517	91.860	GKS09 - 3E □□□ 090C32	E82MV 152_4B
1.3	1021	3.9	909	5.3	13	1021	1.2	23	587	104.296	GKS07 - 3E □□□ 090C32	E82MV 152_4B
1.3	1013	3.9	902	5.4	13	1013	2.8	23	582	103.524	GKS09 - 3E □□□ 090C32	E82MV 152_4B
1.2	1100	3.6	979	5.0	12	1100	1.2	22	632	112.338	GKS07 - 3E □□□ 090C32	E82MV 152_4B
1.3	1091	3.6	971	5.0	13	1091	2.5	22	627	111.484	GKS09 - 3E □□□ 090C32	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan								Motor cooling with integral fan						
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]					
				[rpm]	[rpm]									Dimensions see page 6-30 onwards

P₁ = 1.5 kW

1.1	1239	3.2	1103	4.4	11	1239	1.0	19	712	126.578	GKS07 - 3E □□□ 090C32	E82MV 152_4B	
1.1	1230	3.2	1095	4.4	11	1230	2.5	19	707	125.641	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
1.0	1376	2.9	1224	4.0	9.9	1376	1.0	17	791	140.548	GKS07 - 3E □□□ 090C32	E82MV 152_4B	
1.0	1379	2.9	1228	3.9	9.9	1379	1.9	17	793	140.921	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.9	1555	2.5	1384	3.5	8.8	1555	1.9	15	893	158.816	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.8	1782	2.2	1586	3.1	7.6	1782	1.7	13	1024	182.000	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.7	2008	2	1787	2.7	6.8	2008	1.5	12	1154	205.111	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.6	2162	1.8	1924	2.5	6.3	2162	1.4	11	1243	220.882	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.6	2437	1.6	2169	2.2	5.6	2437	1.3	10	1400	248.930	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.5	2733	1.4	2432	2.0	5.0	2733	1.1	9	1571	279.205	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.4	3080	1.3	2741	1.8	4.4	3080	1.0	8	1770	314.659	GKS09 - 3E □□□ 090C32	E82MV 152_4B	
0.4	3111	1.2	2769	1.7	4.3	3111	1.0	7	1788	323.365	GKS09 - 4E □□□ 090C32	E82MV 152_4B	
0.4	3107	1.2	2765	1.7	4.3	3107	1.9	7	1786	322.931	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.4	3507	1.1	3121	1.5	3.8	3507	0.9	7	2015	364.427	GKS09 - 4E □□□ 090C32	E82MV 152_4B	
0.4	3501	1.1	3116	1.5	3.8	3501	1.7	7	2012	363.866	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.4	3808	1	3389	1.4	3.5	3808	1.6	6	2189	395.787	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.3	4291	0.9	3819	1.2	3.1	4291	1.4	5	2466	445.958	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.3	4928	0.8	4386	1.1	2.7	4928	1.2	5	2832	512.196	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.2	5553	0.7	4942	1.0	2.4	5553	1.1	4	3191	577.122	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.2	5981	0.6	5323	0.9	2.2	5981	1.0	4	3437	621.619	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.2	6739	0.6	5998	0.8	2.0	6739	0.9	3	3873	700.416	GKS11 - 4E □□□ 090C32	E82MV 152_4B	
0.2	7754	0.5	6901	0.7	1.7	7754	1.5	3	4457	805.901	GKS14 - 4E □□□ 090C32	E82MV 152_4B	
0.2	8737	0.4	7776	0.6	1.5	8737	1.3	3	5021	908.058	GKS14 - 4E □□□ 090C32	E82MV 152_4B	
0.1	9411	0.4	8376	0.6	1.4	9411	1.2	2	5409	978.071	GKS14 - 4E □□□ 090C32	E82MV 152_4B	
0.1	10604	0.4	9437	0.5	1.3	10604	1.1	2	6094	1102.052	GKS14 - 4E □□□ 090C32	E82MV 152_4B	
0.1	11896	0.3	10587	0.4	1.1	11896	1.0	2	6837	1236.326	GKS14 - 4E □□□ 090C32	E82MV 152_4B	
0.1	13404	0.3	11929	0.4	1.0	13404	0.9	2	7703	1393.043	GKS14 - 4E □□□ 090C32	E82MV 152_4B	

P₁ = 2.2 kW

22	90	64	80	89	222	90	2.9	386	52	6.485	GKS06 - 3E □□□ 100C12	E82MV 222_4B	
21	95	61	85	84	210	95	1.6	365	55	6.863	GKS05 - 3E □□□ 100C12	E82MV 222_4B	
15	130	44	116	61	153	130	1.3	266	75	9.412	GKS05 - 3E □□□ 100C12	E82MV 222_4B	
16	127	45	113	63	157	127	2.9	272	73	9.196	GKS06 - 3E □□□ 100C12	E82MV 222_4B	
14	147	40	130	55	136	147	1.6	237	84	10.569	GKS05 - 3E □□□ 100C12	E82MV 222_4B	
14	141	41	125	57	142	141	2.9	247	81	10.147	GKS06 - 3E □□□ 100C12	E82MV 222_4B	
12	162	36	144	49	123	162	1.6	215	93	11.667	GKS05 - 3E □□□ 100C12	E82MV 222_4B	
13	158	37	140	51	127	158	2.1	220	91	11.382	GKS06 - 3E □□□ 100C12	E82MV 222_4B	
11	183	32	163	44	109	183	0.9	190	105	13.176	GKS05 - 3E □□□ 100C12	E82MV 222_4B	
11	175	33	156	46	114	175	2.4	199	100	12.612	GKS06 - 3E □□□ 100C12	E82MV 222_4B	
9.9	201	29	179	40	99	201	1.3	173	115	14.494	GKS05 - 3E □□□ 100C12	E82MV 222_4B	
9.7	205	28	183	39	97	205	2.9	169	118	14.824	GKS06 - 3E □□□ 100C12	E82MV 222_4B	

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 6-30 onwards												

P₁ = 2.2 kW

9.0	222	26	197	36	90	222	1.3	157	127	16.000	GKS05 - 3E □□□ 100C12	E82MV 222_4B
8.6	231	25	206	34	86	231	2.6	150	133	16.699	GKS06 - 3E □□□ 100C12	E82MV 222_4B
8.4	236	24	210	34	84	236	1.3	147	136	17.054	GKS05 - 3E □□□ 100C12	E82MV 222_4B
8.1	247	23	220	32	81	247	2.1	141	142	17.809	GKS06 - 3E □□□ 100C12	E82MV 222_4B
7.5	266	22	237	30	75	266	1.1	130	153	19.216	GKS05 - 3E □□□ 100C12	E82MV 222_4B
7.1	282	21	251	28	71	282	2.4	123	162	20.329	GKS06 - 3E □□□ 100C12	E82MV 222_4B
6.2	324	18	288	25	62	324	1.0	107	186	23.388	GKS05 - 3E □□□ 100C12	E82MV 222_4B
6.3	317	18	282	25	63	317	1.9	109	182	22.902	GKS06 - 3E □□□ 100C12	E82MV 222_4B
5.5	365	16	325	22	55	365	0.8	95	210	26.353	GKS05 - 3E □□□ 100C12	E82MV 222_4B
5.5	361	16	321	22	55	361	1.9	96	207	26.017	GKS06 - 3E □□□ 100C12	E82MV 222_4B
5.1	394	15	351	20	51	394	1.7	88	227	28.461	GKS06 - 3E □□□ 100C12	E82MV 222_4B
5.1	392	15	349	20	51	392	3.1	89	225	28.274	GKS07 - 3E □□□ 100C12	E82MV 222_4B
4.5	444	13	395	18	45	444	1.4	78	255	32.063	GKS06 - 3E □□□ 100C12	E82MV 222_4B
4.5	442	13	393	18	45	442	2.7	79	254	31.858	GKS07 - 3E □□□ 100C12	E82MV 222_4B
4.0	503	12	448	16	40	503	1.4	69	289	36.303	GKS06 - 3E □□□ 100C12	E82MV 222_4B
4.0	500	12	445	16	40	500	2.6	69	287	36.063	GKS07 - 3E □□□ 100C12	E82MV 222_4B
3.5	575	10	511	14	35	575	1.2	60	330	41.472	GKS06 - 3E □□□ 100C12	E82MV 222_4B
3.2	616	9.4	548	13	32	616	1.1	56	354	44.471	GKS06 - 3E □□□ 100C12	E82MV 222_4B
3.3	612	9.5	545	13	33	612	2.1	57	352	44.178	GKS07 - 3E □□□ 100C12	E82MV 222_4B
2.7	736	7.9	655	11	27	736	0.9	47	423	53.074	GKS06 - 3E □□□ 100C12	E82MV 222_4B
2.9	698	8.3	621	11	29	698	1.9	50	401	50.345	GKS07 - 3E □□□ 100C12	E82MV 222_4B
2.5	802	7.2	714	10.0	25	802	0.9	43	461	57.882	GKS06 - 3E □□□ 100C12	E82MV 222_4B
2.5	797	7.3	709	10	25	797	1.6	44	458	57.501	GKS07 - 3E □□□ 100C12	E82MV 222_4B
2.2	898	6.4	799	8.9	22	898	1.3	39	516	64.790	GKS07 - 3E □□□ 100C12	E82MV 222_4B
2.0	977	5.9	869	8.2	20	977	1.4	36	561	70.474	GKS07 - 3E □□□ 100C12	E82MV 222_4B
2.0	984	5.9	875	8.1	20	984	3.1	35	565	70.982	GKS09 - 3E □□□ 100C12	E82MV 222_4B
1.8	1100	5.3	979	7.2	18	1100	1.1	32	632	79.407	GKS07 - 3E □□□ 100C12	E82MV 222_4B
1.8	1109	5.2	987	7.2	18	1109	2.8	31	637	79.996	GKS09 - 3E □□□ 100C12	E82MV 222_4B
1.6	1283	4.5	1142	6.2	16	1283	1.0	27	737	92.563	GKS07 - 3E □□□ 100C12	E82MV 222_4B
1.6	1273	4.5	1133	6.3	16	1273	2.4	27	732	91.860	GKS09 - 3E □□□ 100C12	E82MV 222_4B
1.4	1445	4	1286	5.5	14	1445	0.8	24	831	104.296	GKS07 - 3E □□□ 100C12	E82MV 222_4B
1.4	1435	4	1277	5.6	14	1435	2.1	24	824	103.524	GKS09 - 3E □□□ 100C12	E82MV 222_4B
1.3	1557	3.7	1386	5.1	13	1557	0.9	22	895	112.338	GKS07 - 3E □□□ 100C12	E82MV 222_4B
1.3	1545	3.7	1375	5.2	13	1545	2.0	22	888	111.484	GKS09 - 3E □□□ 100C12	E82MV 222_4B
1.3	1543	3.8	1373	5.2	13	1543	2.9	23	887	111.335	GKS11 - 3E □□□ 100C12	E82MV 222_4B
1.2	1741	3.3	1550	4.6	12	1741	1.8	20	1001	125.641	GKS09 - 3E □□□ 100C12	E82MV 222_4B
1.2	1738	3.3	1547	4.6	12	1738	2.9	20	999	125.448	GKS11 - 3E □□□ 100C12	E82MV 222_4B
1.0	1953	3	1738	4.1	10	1953	1.6	18	1122	140.921	GKS09 - 3E □□□ 100C12	E82MV 222_4B
1.0	1950	3	1736	4.1	10	1950	2.3	18	1121	140.732	GKS11 - 3E □□□ 100C12	E82MV 222_4B
0.9	2201	2.6	1959	3.6	9.1	2201	1.4	16	1265	158.816	GKS09 - 3E □□□ 100C12	E82MV 222_4B
0.9	2197	2.6	1956	3.6	9.1	2197	2.3	16	1263	158.571	GKS11 - 3E □□□ 100C12	E82MV 222_4B
0.8	2522	2.3	2245	3.2	7.9	2522	1.2	14	1449	182.000	GKS09 - 3E □□□ 100C12	E82MV 222_4B
0.8	2586	2.2	2301	3.1	7.7	2586	2.3	13	1486	186.572	GKS11 - 3E □□□ 100C12	E82MV 222_4B
0.7	2842	2	2530	2.8	7.0	2842	1.1	12	1634	205.111	GKS09 - 3E □□□ 100C12	E82MV 222_4B
0.7	2913	2	2593	2.7	6.9	2913	2.0	12	1674	210.222	GKS11 - 3E □□□ 100C12	E82MV 222_4B
0.7	3061	1.9	2724	2.6	6.5	3061	1.0	11	1759	220.882	GKS09 - 3E □□□ 100C12	E82MV 222_4B
0.6	3138	1.8	2793	2.5	6.4	3138	1.9	11	1803	226.431	GKS11 - 3E □□□ 100C12	E82MV 222_4B
0.6	3450	1.7	3070	2.3	5.8	3450	0.9	10	1983	248.930	GKS09 - 3E □□□ 100C12	E82MV 222_4B
0.6	3536	1.6	3147	2.3	5.6	3536	1.7	10	2032	255.133	GKS11 - 3E □□□ 100C12	E82MV 222_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan														
Motor cooling with integral fan *)														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 6-30 onwards														

P₁ = 2.2 kW

0.5	3966	1.5	3530	2.0	5.0	3966	1.5	9	2280	286.219	GKS11 - 3E □□□ 100C12	E82MV 222_4B
0.4	4469	1.3	3978	1.8	4.5	4469	1.3	8	2568	322.500	GKS11 - 3E □□□ 100C12	E82MV 222_4B
0.4	4399	1.3	3915	1.8	4.5	4399	1.4	8	2528	322.931	GKS11 - 4E □□□ 100C12	E82MV 222_4B
0.4	4957	1.1	4411	1.6	4.0	4957	1.2	7	2849	363.866	GKS11 - 4E □□□ 100C12	E82MV 222_4B
0.4	4938	1.2	4395	1.6	4.0	4938	2.3	7	2838	362.512	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.4	5392	1.1	4798	1.5	3.6	5392	1.1	6	3099	395.787	GKS11 - 4E □□□ 100C12	E82MV 222_4B
0.4	5322	1.1	4736	1.5	3.7	5322	2.2	6	3058	390.671	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.3	6075	0.9	5407	1.3	3.2	6075	1.0	6	3491	445.958	GKS11 - 4E □□□ 100C12	E82MV 222_4B
0.3	5996	0.9	5337	1.3	3.3	5996	1.9	6	3446	440.193	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.3	6977	0.8	6210	1.1	2.8	6977	0.9	5	4010	512.196	GKS11 - 4E □□□ 100C12	E82MV 222_4B
0.3	6990	0.8	6221	1.1	2.8	6990	1.6	5	4017	513.121	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.2	7876	0.7	7009	1.0	2.5	7876	1.5	4	4526	578.164	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.2	8483	0.7	7550	0.9	2.3	8483	1.4	4	4875	622.742	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.2	9558	0.6	8507	0.8	2.1	9558	1.2	4	5493	701.681	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.2	10978	0.5	9771	0.7	1.8	10978	1.0	3	6309	805.901	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.2	12370	0.5	11009	0.6	1.6	12370	0.9	3	7109	908.058	GKS14 - 4E □□□ 100C12	E82MV 222_4B
0.1	13323	0.4	11858	0.6	1.5	13323	0.9	3	7657	978.071	GKS14 - 4E □□□ 100C12	E82MV 222_4B

P₁ = 3 kW

22	123	64	110	88	221	123	2.1	384	71	6.485	GKS06 - 3E □□□ 100C32	E82MV 302_4B
21	131	60	116	83	208	131	1.1	363	75	6.863	GKS05 - 3E □□□ 100C32	E82MV 302_4B
15	179	44	159	61	152	179	0.9	264	103	9.412	GKS05 - 3E □□□ 100C32	E82MV 302_4B
16	175	45	156	62	156	175	2.1	271	101	9.196	GKS06 - 3E □□□ 100C32	E82MV 302_4B
14	201	39	179	54	135	201	1.1	235	116	10.569	GKS05 - 3E □□□ 100C32	E82MV 302_4B
14	193	41	172	56	141	193	2.1	245	111	10.147	GKS06 - 3E □□□ 100C32	E82MV 302_4B
12	222	36	198	49	123	222	1.1	213	128	11.667	GKS05 - 3E □□□ 100C32	E82MV 302_4B
13	217	36	193	50	126	217	1.5	219	124	11.382	GKS06 - 3E □□□ 100C32	E82MV 302_4B
13	217	36	193	50	126	217	2.8	219	124	11.378	GKS07 - 3E □□□ 100C32	E82MV 302_4B
11	240	33	214	45	113	240	1.8	197	138	12.612	GKS06 - 3E □□□ 100C32	E82MV 302_4B
9.9	276	29	245	39	99	276	0.9	172	159	14.494	GKS05 - 3E □□□ 100C32	E82MV 302_4B
9.7	282	28	251	39	97	282	2.1	168	162	14.824	GKS06 - 3E □□□ 100C32	E82MV 302_4B
8.9	305	26	271	36	89	305	0.9	156	175	16.000	GKS05 - 3E □□□ 100C32	E82MV 302_4B
8.6	318	25	283	34	86	318	1.9	149	183	16.699	GKS06 - 3E □□□ 100C32	E82MV 302_4B
8.4	325	24	289	34	84	325	1.0	146	187	17.054	GKS05 - 3E □□□ 100C32	E82MV 302_4B
8.0	339	23	302	32	80	339	1.5	140	195	17.809	GKS06 - 3E □□□ 100C32	E82MV 302_4B
8.3	329	24	292	33	83	329	3.0	144	189	17.270	GKS07 - 3E □□□ 100C32	E82MV 302_4B
7.4	366	22	325	30	74	366	0.8	129	210	19.216	GKS05 - 3E □□□ 100C32	E82MV 302_4B
7.0	387	20	344	28	70	387	1.7	122	222	20.329	GKS06 - 3E □□□ 100C32	E82MV 302_4B
6.2	436	18	388	25	62	436	1.4	109	250	22.902	GKS06 - 3E □□□ 100C32	E82MV 302_4B
5.5	495	16	441	22	55	495	1.4	96	285	26.017	GKS06 - 3E □□□ 100C32	E82MV 302_4B
5.7	480	16	428	23	57	480	2.5	99	276	25.244	GKS07 - 3E □□□ 100C32	E82MV 302_4B
5.0	542	15	482	20	50	542	1.3	87	311	28.461	GKS06 - 3E □□□ 100C32	E82MV 302_4B
5.1	538	15	479	20	51	538	2.2	88	309	28.274	GKS07 - 3E □□□ 100C32	E82MV 302_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Motor cooling with separate fan														
Motor cooling with integral fan *)														
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec		
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂					
				20 Hz	50 Hz		50 Hz							
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]					
Dimensions see page 6-30 onwards														

P ₁ = 3 kW												
4.5	610	13	543	18	45	610	1.0	78	351	32.063	GKS06 - 3E □□□ 100C32	E82MV 302_4B
4.5	606	13	540	18	45	606	1.9	78	348	31.858	GKS07 - 3E □□□ 100C32	E82MV 302_4B
3.9	691	11	615	16	39	691	1.0	69	397	36.303	GKS06 - 3E □□□ 100C32	E82MV 302_4B
4.0	686	11	611	16	40	686	1.9	69	394	36.063	GKS07 - 3E □□□ 100C32	E82MV 302_4B
3.5	789	10	702	14	35	789	0.9	60	454	41.472	GKS06 - 3E □□□ 100C32	E82MV 302_4B
3.2	846	9.3	753	13	32	846	0.8	56	486	44.471	GKS06 - 3E □□□ 100C32	E82MV 302_4B
3.2	841	9.4	748	13	32	841	1.5	56	483	44.178	GKS07 - 3E □□□ 100C32	E82MV 302_4B
2.8	958	8.2	853	11	28	958	1.4	49	551	50.345	GKS07 - 3E □□□ 100C32	E82MV 302_4B
2.5	1094	7.2	974	10.0	25	1094	1.2	43	629	57.501	GKS07 - 3E □□□ 100C32	E82MV 302_4B
2.5	1112	7.1	990	9.8	25	1112	2.7	43	639	58.456	GKS09 - 3E □□□ 100C32	E82MV 302_4B
2.2	1233	6.4	1097	8.8	22	1233	1.0	38	709	64.790	GKS07 - 3E □□□ 100C32	E82MV 302_4B
2.2	1254	6.3	1116	8.7	22	1254	2.4	38	720	65.879	GKS09 - 3E □□□ 100C32	E82MV 302_4B
2.0	1341	5.9	1194	8.1	20	1341	1.0	35	771	70.474	GKS07 - 3E □□□ 100C32	E82MV 302_4B
2.0	1351	5.8	1202	8.0	20	1351	2.2	35	776	70.982	GKS09 - 3E □□□ 100C32	E82MV 302_4B
1.8	1522	5.2	1355	7.2	18	1522	2.0	31	875	79.996	GKS09 - 3E □□□ 100C32	E82MV 302_4B
1.6	1748	4.5	1556	6.2	16	1748	1.7	27	1005	91.860	GKS09 - 3E □□□ 100C32	E82MV 302_4B
1.6	1746	4.5	1554	6.2	16	1746	2.5	27	1003	91.737	GKS11 - 3E □□□ 100C32	E82MV 302_4B
1.4	1970	4	1753	5.5	14	1970	1.6	24	1132	103.524	GKS09 - 3E □□□ 100C32	E82MV 302_4B
1.4	1967	4	1751	5.5	14	1967	2.5	24	1130	103.365	GKS11 - 3E □□□ 100C32	E82MV 302_4B
1.3	2121	3.7	1888	5.1	13	2121	1.4	22	1219	111.484	GKS09 - 3E □□□ 100C32	E82MV 302_4B
1.3	2119	3.7	1886	5.1	13	2119	2.1	22	1218	111.335	GKS11 - 3E □□□ 100C32	E82MV 302_4B
1.1	2391	3.3	2128	4.6	11	2391	1.3	20	1374	125.641	GKS09 - 3E □□□ 100C32	E82MV 302_4B
1.1	2387	3.3	2125	4.6	11	2387	2.1	20	1372	125.448	GKS11 - 3E □□□ 100C32	E82MV 302_4B
1.0	2682	2.9	2387	4.0	10	2682	1.1	18	1541	140.921	GKS09 - 3E □□□ 100C32	E82MV 302_4B
1.0	2678	2.9	2383	4.1	10	2678	1.7	18	1539	140.732	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.9	3022	2.6	2690	3.6	9.0	3022	1.0	16	1737	158.816	GKS09 - 3E □□□ 100C32	E82MV 302_4B
0.9	3018	2.6	2686	3.6	9.0	3018	1.7	16	1734	158.571	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.8	3463	2.3	3082	3.1	7.9	3463	0.9	14	1990	182.000	GKS09 - 3E □□□ 100C32	E82MV 302_4B
0.8	3550	2.2	3160	3.1	7.7	3550	1.7	13	2040	186.572	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.7	4000	2	3560	2.7	6.8	4000	1.5	12	2299	210.222	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.6	4309	1.8	3835	2.5	6.3	4309	1.4	11	2476	226.431	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.6	4855	1.6	4321	2.2	5.6	4855	1.2	10	2790	255.133	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.5	5447	1.4	4847	2.0	5.0	5447	1.1	9	3130	286.219	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.4	6137	1.3	5462	1.8	4.4	6137	1.0	8	3527	322.500	GKS11 - 3E □□□ 100C32	E82MV 302_4B
0.4	6041	1.3	5376	1.8	4.4	6041	1.0	8	3472	322.931	GKS11 - 4E □□□ 100C32	E82MV 302_4B
0.4	6806	1.1	6058	1.6	3.9	6806	0.9	7	3912	363.866	GKS11 - 4E □□□ 100C32	E82MV 302_4B
0.4	6781	1.1	6035	1.6	3.9	6781	1.7	7	3897	362.512	GKS14 - 4E □□□ 100C32	E82MV 302_4B
0.4	7403	1	6589	1.4	3.6	7403	0.8	6	4255	395.787	GKS11 - 4E □□□ 100C32	E82MV 302_4B
0.4	7308	1.1	6504	1.5	3.7	7308	1.6	6	4200	390.671	GKS14 - 4E □□□ 100C32	E82MV 302_4B
0.3	8234	0.9	7328	1.3	3.3	8234	1.4	6	4732	440.193	GKS14 - 4E □□□ 100C32	E82MV 302_4B
0.3	9598	0.8	8542	1.1	2.8	9598	1.2	5	5516	513.121	GKS14 - 4E □□□ 100C32	E82MV 302_4B
0.2	10815	0.7	9625	1.0	2.5	10815	1.1	4	6215	578.164	GKS14 - 4E □□□ 100C32	E82MV 302_4B
0.2	11649	0.7	10367	0.9	2.3	11649	1.0	4	6695	622.742	GKS14 - 4E □□□ 100C32	E82MV 302_4B
0.2	13125	0.6	11682	0.8	2.0	13125	0.9	4	7543	701.681	GKS14 - 4E □□□ 100C32	E82MV 302_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]				
										Dimensions see page 6-30 onwards			

P₁ = 4 kW

22	162	65	140	89	224	162	1.6	389	93	6.485	GKS06 - 3E □□□ 112C22	E82MV 402_4B
24	149	71	128	97	244	149	3.2	424	86	5.955	GKS07 - 3E □□□ 112C22	E82MV 402_4B
18	207	51	178	70	176	207	2.6	306	119	8.254	GKS07 - 3E □□□ 112C22	E82MV 402_4B
16	230	46	198	63	158	230	1.6	274	132	9.196	GKS06 - 3E □□□ 112C22	E82MV 402_4B
16	230	46	197	63	158	230	3.2	275	132	9.171	GKS07 - 3E □□□ 112C22	E82MV 402_4B
14	254	41	218	57	143	254	1.6	249	146	10.147	GKS06 - 3E □□□ 112C22	E82MV 402_4B
14	253	42	218	57	143	253	3.2	249	146	10.124	GKS07 - 3E □□□ 112C22	E82MV 402_4B
13	285	37	245	51	127	285	1.2	222	164	11.382	GKS06 - 3E □□□ 112C22	E82MV 402_4B
13	285	37	245	51	127	285	2.2	222	164	11.378	GKS07 - 3E □□□ 112C22	E82MV 402_4B
12	316	33	271	46	115	316	1.4	200	181	12.612	GKS06 - 3E □□□ 112C22	E82MV 402_4B
11	318	33	274	46	114	318	2.6	198	183	12.711	GKS07 - 3E □□□ 112C22	E82MV 402_4B
9.8	371	28	319	39	98	371	1.6	170	213	14.824	GKS06 - 3E □□□ 112C22	E82MV 402_4B
9.8	370	28	318	39	98	370	2.8	170	213	14.798	GKS07 - 3E □□□ 112C22	E82MV 402_4B
8.7	418	25	359	35	87	418	1.4	151	240	16.699	GKS06 - 3E □□□ 112C22	E82MV 402_4B
8.7	417	25	359	35	87	417	2.6	151	240	16.674	GKS07 - 3E □□□ 112C22	E82MV 402_4B
8.1	446	24	383	33	81	446	1.2	142	256	17.809	GKS06 - 3E □□□ 112C22	E82MV 402_4B
8.4	432	24	372	34	84	432	2.3	146	248	17.270	GKS07 - 3E □□□ 112C22	E82MV 402_4B
7.1	509	21	437	29	71	509	1.3	124	292	20.329	GKS06 - 3E □□□ 112C22	E82MV 402_4B
7.1	513	21	441	28	71	513	2.2	123	295	20.511	GKS07 - 3E □□□ 112C22	E82MV 402_4B
6.3	573	18	493	25	63	573	1.1	110	329	22.902	GKS06 - 3E □□□ 112C22	E82MV 402_4B
6.3	578	18	497	25	63	578	2.0	109	332	23.111	GKS07 - 3E □□□ 112C22	E82MV 402_4B
5.6	651	16	560	22	56	651	1.0	97	374	26.017	GKS06 - 3E □□□ 112C22	E82MV 402_4B
5.7	632	17	543	23	57	632	1.9	100	363	25.244	GKS07 - 3E □□□ 112C22	E82MV 402_4B
5.1	712	15	612	20	51	712	1.0	89	409	28.461	GKS06 - 3E □□□ 112C22	E82MV 402_4B
5.1	708	15	608	21	51	708	1.7	89	407	28.274	GKS07 - 3E □□□ 112C22	E82MV 402_4B
4.6	797	13	686	18	46	797	1.5	79	458	31.858	GKS07 - 3E □□□ 112C22	E82MV 402_4B
4.0	902	12	776	16	40	902	1.4	70	519	36.063	GKS07 - 3E □□□ 112C22	E82MV 402_4B
3.5	1024	10	880	14	35	1024	1.3	62	588	40.906	GKS07 - 3E □□□ 112C22	E82MV 402_4B
3.7	992	11	853	15	37	992	3.0	64	570	39.662	GKS09 - 3E □□□ 112C22	E82MV 402_4B
3.3	1105	9.5	951	13	33	1105	1.2	57	635	44.178	GKS07 - 3E □□□ 112C22	E82MV 402_4B
3.4	1080	9.7	928	13	34	1080	2.8	58	620	43.146	GKS09 - 3E □□□ 112C22	E82MV 402_4B
2.9	1260	8.4	1083	12	29	1260	1.0	50	724	50.345	GKS07 - 3E □□□ 112C22	E82MV 402_4B
3.0	1217	8.6	1046	12	30	1217	2.5	52	699	48.625	GKS09 - 3E □□□ 112C22	E82MV 402_4B
2.5	1439	7.3	1237	10	25	1439	0.9	44	827	57.501	GKS07 - 3E □□□ 112C22	E82MV 402_4B
2.5	1463	7.2	1258	9.9	25	1463	2.1	43	841	58.456	GKS09 - 3E □□□ 112C22	E82MV 402_4B
2.5	1443	7.3	1241	10	25	1443	3.2	44	830	57.683	GKS11 - 3E □□□ 112C22	E82MV 402_4B
2.2	1648	6.4	1418	8.8	22	1648	1.8	38	947	65.879	GKS09 - 3E □□□ 112C22	E82MV 402_4B
2.2	1626	6.5	1399	8.9	22	1626	3.2	39	935	64.995	GKS11 - 3E □□□ 112C22	E82MV 402_4B
2.0	1776	5.9	1527	8.2	20	1776	1.7	36	1021	70.982	GKS09 - 3E □□□ 112C22	E82MV 402_4B
2.1	1774	5.9	1525	8.2	21	1774	2.7	36	1019	70.887	GKS11 - 3E □□□ 112C22	E82MV 402_4B
1.8	2002	5.3	1721	7.2	18	2002	1.5	32	1150	79.996	GKS09 - 3E □□□ 112C22	E82MV 402_4B
1.8	1999	5.3	1719	7.3	18	1999	2.7	32	1149	79.873	GKS11 - 3E □□□ 112C22	E82MV 402_4B
1.6	2299	4.6	1977	6.3	16	2299	1.3	27	1321	91.860	GKS09 - 3E □□□ 112C22	E82MV 402_4B
1.6	2295	4.6	1974	6.3	16	2295	2.2	28	1319	91.737	GKS11 - 3E □□□ 112C22	E82MV 402_4B
1.6	2266	4.6	1949	6.4	16	2266	2.7	28	1302	90.551	GKS14 - 3E □□□ 112C22	E82MV 402_4B
1.4	2590	4.1	2228	5.6	14	2590	1.2	24	1489	103.524	GKS09 - 3E □□□ 112C22	E82MV 402_4B
1.4	2586	4.1	2224	5.6	14	2586	2.2	24	1486	103.365	GKS11 - 3E □□□ 112C22	E82MV 402_4B
1.4	2553	4.1	2196	5.7	14	2553	2.7	25	1467	102.029	GKS14 - 3E □□□ 112C22	E82MV 402_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[rpm]	[Nm]	50 Hz	[rpm]			
										Dimensions see page 6-30 onwards		

Dimensions see page 6-30 onwards

P₁ = 4 kW

1.3	2790	3.8	2399	5.2	13	2790	1.1	23	1603	111.484	GKS09 - 3E □□□ 112C22	E82MV 402_4B
1.3	2786	3.8	2396	5.2	13	2786	1.8	23	1601	111.335	GKS11 - 3E □□□ 112C22	E82MV 402_4B
1.3	2750	3.8	2365	5.3	13	2750	2.3	23	1580	109.896	GKS14 - 3E □□□ 112C22	E82MV 402_4B
1.2	3144	3.3	2704	4.6	12	3144	1.0	20	1807	125.641	GKS09 - 3E □□□ 112C22	E82MV 402_4B
1.2	3139	3.4	2700	4.6	12	3139	1.8	20	1804	125.448	GKS11 - 3E □□□ 112C22	E82MV 402_4B
1.2	3098	3.4	2665	4.7	12	3098	2.3	20	1781	123.826	GKS14 - 3E □□□ 112C22	E82MV 402_4B
1.0	3521	3	3028	4.1	10	3521	1.5	18	2024	140.732	GKS11 - 3E □□□ 112C22	E82MV 402_4B
1.0	3476	3	2989	4.2	10	3476	1.8	18	1998	138.913	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.9	3968	2.7	3412	3.7	9.1	3968	1.5	16	2280	158.571	GKS11 - 3E □□□ 112C22	E82MV 402_4B
0.9	3917	2.7	3368	3.7	9.3	3917	1.8	16	2251	156.522	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.8	4668	2.3	4015	3.1	7.8	4668	1.3	14	2683	186.572	GKS11 - 3E □□□ 112C22	E82MV 402_4B
0.8	4668	2.3	4015	3.1	7.8	4668	2.5	14	2683	186.572	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.7	5260	2	4524	2.8	6.9	5260	1.1	12	3023	210.222	GKS11 - 3E □□□ 112C22	E82MV 402_4B
0.7	5260	2	4524	2.8	6.9	5260	2.2	12	3023	210.222	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.6	5666	1.9	4873	2.6	6.4	5666	1.1	11	3256	226.431	GKS11 - 3E □□□ 112C22	E82MV 402_4B
0.6	5666	1.9	4873	2.6	6.4	5666	2.0	11	3256	226.431	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.6	6384	1.6	5490	2.3	5.7	6384	0.9	10	3669	255.133	GKS11 - 3E □□□ 112C22	E82MV 402_4B
0.6	6384	1.6	5490	2.3	5.7	6384	1.8	10	3669	255.133	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.5	7162	1.5	6159	2.0	5.1	7162	0.8	9	4116	286.219	GKS11 - 3E □□□ 112C22	E82MV 402_4B
0.5	7162	1.5	6159	2.0	5.1	7162	1.6	9	4116	286.219	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.5	8070	1.3	6940	1.8	4.5	8070	1.4	8	4638	322.500	GKS14 - 3E □□□ 112C22	E82MV 402_4B
0.4	8917	1.2	7668	1.6	4.0	8917	1.3	7	5124	362.512	GKS14 - 4E □□□ 112C22	E82MV 402_4B
0.4	9609	1.1	8264	1.5	3.7	9609	1.2	6	5523	390.671	GKS14 - 4E □□□ 112C22	E82MV 402_4B
0.3	10827	1	9311	1.3	3.3	10827	1.1	6	6223	440.193	GKS14 - 4E □□□ 112C22	E82MV 402_4B
0.3	12621	0.8	10854	1.1	2.8	12621	0.9	5	7254	513.121	GKS14 - 4E □□□ 112C22	E82MV 402_4B
0.3	14221	0.7	12230	1.0	2.5	14221	0.8	4	8173	578.164	GKS14 - 4E □□□ 112C22	E82MV 402_4B

P₁ = 5.5 kW

22	224	65	193	89	223	224	1.2	388	129	6.485	GKS06 - 3E □□□ 112C32	E82MV 552_4B
24	206	70	177	97	243	206	2.3	422	118	5.955	GKS07 - 3E □□□ 112C32	E82MV 552_4B
18	285	51	245	70	175	285	1.9	305	164	8.254	GKS07 - 3E □□□ 112C32	E82MV 552_4B
16	318	46	273	63	157	318	1.2	273	182	9.196	GKS06 - 3E □□□ 112C32	E82MV 552_4B
16	317	46	272	63	158	317	2.3	274	182	9.171	GKS07 - 3E □□□ 112C32	E82MV 552_4B
14	350	41	301	57	142	350	1.2	248	201	10.147	GKS06 - 3E □□□ 112C32	E82MV 552_4B
14	350	41	301	57	143	350	2.3	248	201	10.124	GKS07 - 3E □□□ 112C32	E82MV 552_4B
13	393	37	338	51	127	393	0.8	221	226	11.382	GKS06 - 3E □□□ 112C32	E82MV 552_4B
13	393	37	338	51	127	393	1.6	221	226	11.378	GKS07 - 3E □□□ 112C32	E82MV 552_4B
11	435	33	374	46	115	435	1.0	199	250	12.612	GKS06 - 3E □□□ 112C32	E82MV 552_4B
11	439	33	377	45	114	439	1.9	198	252	12.711	GKS07 - 3E □□□ 112C32	E82MV 552_4B
9.8	512	28	440	39	98	512	1.2	170	294	14.824	GKS06 - 3E □□□ 112C32	E82MV 552_4B
9.8	511	28	439	39	98	511	2.0	170	294	14.798	GKS07 - 3E □□□ 112C32	E82MV 552_4B
8.7	577	25	496	35	87	577	1.0	151	331	16.699	GKS06 - 3E □□□ 112C32	E82MV 552_4B
8.7	576	25	495	35	87	576	1.9	151	331	16.674	GKS07 - 3E □□□ 112C32	E82MV 552_4B
9.0	557	26	479	36	90	557	3.2	156	320	16.122	GKS09 - 3E □□□ 112C32	E82MV 552_4B
8.1	615	24	529	32	81	615	0.8	141	353	17.809	GKS06 - 3E □□□ 112C32	E82MV 552_4B
8.4	596	24	513	33	84	596	1.7	146	343	17.270	GKS07 - 3E □□□ 112C32	E82MV 552_4B
8.2	605	24	521	33	82	605	3.2	143	348	17.536	GKS09 - 3E □□□ 112C32	E82MV 552_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
Dimensions see page 6-30 onwards												

P₁ = 5.5 kW

7.1	702	21	604	28	71	702	0.9	124	403	20.329	GKS06 - 3E □□□ 112C32	E82MV 552_4B
7.0	708	20	609	28	70	708	1.6	123	407	20.511	GKS07 - 3E □□□ 112C32	E82MV 552_4B
6.3	798	18	686	25	63	798	1.5	109	459	23.111	GKS07 - 3E □□□ 112C32	E82MV 552_4B
5.7	872	17	750	23	57	872	1.4	100	501	25.244	GKS07 - 3E □□□ 112C32	E82MV 552_4B
5.6	886	16	762	23	56	886	3.2	98	509	25.649	GKS09 - 3E □□□ 112C32	E82MV 552_4B
5.1	976	15	839	20	51	976	1.2	89	561	28.274	GKS07 - 3E □□□ 112C32	E82MV 552_4B
4.9	1009	14	868	20	49	1009	2.9	86	580	29.228	GKS09 - 3E □□□ 112C32	E82MV 552_4B
4.5	1100	13	946	18	45	1100	1.1	79	632	31.858	GKS07 - 3E □□□ 112C32	E82MV 552_4B
4.4	1137	13	978	18	44	1137	2.6	76	654	32.940	GKS09 - 3E □□□ 112C32	E82MV 552_4B
4.0	1245	12	1071	16	40	1245	1.0	70	716	36.063	GKS07 - 3E □□□ 112C32	E82MV 552_4B
4.1	1215	12	1045	16	41	1215	2.5	71	698	35.193	GKS09 - 3E □□□ 112C32	E82MV 552_4B
3.5	1412	10	1215	14	35	1412	0.9	61	812	40.906	GKS07 - 3E □□□ 112C32	E82MV 552_4B
3.6	1369	11	1178	15	36	1369	2.2	63	787	39.662	GKS09 - 3E □□□ 112C32	E82MV 552_4B
3.3	1525	9.5	1312	13	33	1525	0.9	57	877	44.178	GKS07 - 3E □□□ 112C32	E82MV 552_4B
3.4	1490	9.7	1281	13	34	1490	2.0	58	856	43.146	GKS09 - 3E □□□ 112C32	E82MV 552_4B
3.0	1679	8.6	1444	12	30	1679	1.8	52	965	48.625	GKS09 - 3E □□□ 112C32	E82MV 552_4B
2.5	2018	7.2	1736	9.9	25	2018	1.5	43	1160	58.456	GKS09 - 3E □□□ 112C32	E82MV 552_4B
2.5	1992	7.3	1713	10	25	1992	2.4	44	1145	57.683	GKS11 - 3E □□□ 112C32	E82MV 552_4B
2.2	2274	6.4	1956	8.8	22	2274	1.3	38	1307	65.879	GKS09 - 3E □□□ 112C32	E82MV 552_4B
2.2	2244	6.4	1930	8.9	22	2244	2.4	39	1290	64.995	GKS11 - 3E □□□ 112C32	E82MV 552_4B
2.0	2451	5.9	2108	8.2	20	2451	1.2	35	1408	70.982	GKS09 - 3E □□□ 112C32	E82MV 552_4B
2.0	2447	5.9	2105	8.2	20	2447	2.0	35	1407	70.887	GKS11 - 3E □□□ 112C32	E82MV 552_4B
1.8	2762	5.2	2375	7.2	18	2762	1.1	31	1587	79.996	GKS09 - 3E □□□ 112C32	E82MV 552_4B
1.8	2758	5.2	2372	7.2	18	2758	2.0	31	1585	79.873	GKS11 - 3E □□□ 112C32	E82MV 552_4B
1.6	3171	4.6	2727	6.3	16	3171	1.0	27	1823	91.860	GKS09 - 3E □□□ 112C32	E82MV 552_4B
1.6	3167	4.6	2724	6.3	16	3167	1.6	27	1820	91.737	GKS11 - 3E □□□ 112C32	E82MV 552_4B
1.6	3126	4.6	2689	6.4	16	3126	2.0	28	1797	90.551	GKS14 - 3E □□□ 112C32	E82MV 552_4B
1.4	3574	4	3074	5.6	14	3574	0.9	24	2054	103.524	GKS09 - 3E □□□ 112C32	E82MV 552_4B
1.4	3569	4.1	3069	5.6	14	3569	1.6	24	2051	103.365	GKS11 - 3E □□□ 112C32	E82MV 552_4B
1.4	3523	4.1	3029	5.7	14	3523	2.0	25	2024	102.029	GKS14 - 3E □□□ 112C32	E82MV 552_4B
1.3	3844	3.8	3306	5.2	13	3844	1.3	23	2209	111.335	GKS11 - 3E □□□ 112C32	E82MV 552_4B
1.3	3794	3.8	3263	5.2	13	3794	1.6	23	2181	109.896	GKS14 - 3E □□□ 112C32	E82MV 552_4B
1.2	4331	3.3	3725	4.6	12	4331	1.3	20	2489	125.448	GKS11 - 3E □□□ 112C32	E82MV 552_4B
1.2	4275	3.4	3677	4.7	12	4275	1.6	20	2457	123.826	GKS14 - 3E □□□ 112C32	E82MV 552_4B
1.0	4859	3	4178	4.1	10	4859	1.1	18	2792	140.732	GKS11 - 3E □□□ 112C32	E82MV 552_4B
1.0	4796	3	4124	4.2	10	4796	1.3	18	2756	138.913	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.9	5475	2.6	4708	3.6	9.1	5475	1.1	16	3146	158.571	GKS11 - 3E □□□ 112C32	E82MV 552_4B
0.9	5404	2.7	4647	3.7	9.2	5404	1.3	16	3106	156.522	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.8	6441	2.2	5540	3.1	7.7	6441	0.9	13	3702	186.572	GKS11 - 3E □□□ 112C32	E82MV 552_4B
0.8	6441	2.2	5540	3.1	7.7	6441	1.8	13	3702	186.572	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.7	7258	2	6242	2.7	6.9	7258	0.8	12	4171	210.222	GKS11 - 3E □□□ 112C32	E82MV 552_4B
0.7	7258	2	6242	2.7	6.9	7258	1.6	12	4171	210.222	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.6	7817	1.9	6723	2.6	6.4	7817	1.5	11	4493	226.431	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.6	8808	1.6	7575	2.3	5.7	8808	1.3	10	5062	255.133	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.5	9882	1.5	8498	2.0	5.1	9882	1.2	9	5679	286.219	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.4	11134	1.3	9575	1.8	4.5	11134	1.0	8	6399	322.500	GKS14 - 3E □□□ 112C32	E82MV 552_4B
0.4	12303	1.2	10580	1.6	4.0	12303	0.9	7	7071	362.512	GKS14 - 4E □□□ 112C32	E82MV 552_4B
0.4	13258	1.1	11402	1.5	3.7	13258	0.9	6	7620	390.671	GKS14 - 4E □□□ 112C32	E82MV 552_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
Dimensions see page 6-30 onwards												
P ₁ = 7.5 kW												
24	278	71	239	98	244	278	1.7	425	160	5.955	GKS07 - 3E □□□ 132C22	E82MV 752_4B
18	386	51	332	71	176	386	1.4	307	222	8.254	GKS07 - 3E □□□ 132C22	E82MV 752_4B
16	429	46	369	63	159	429	1.7	276	246	9.171	GKS07 - 3E □□□ 132C22	E82MV 752_4B
14	473	42	407	57	144	473	1.7	250	272	10.124	GKS07 - 3E □□□ 132C22	E82MV 752_4B
13	532	37	457	51	128	532	1.2	223	306	11.378	GKS07 - 3E □□□ 132C22	E82MV 752_4B
11	594	33	511	46	115	594	1.4	199	342	12.711	GKS07 - 3E □□□ 132C22	E82MV 752_4B
12	574	34	494	47	119	574	2.8	206	330	12.283	GKS09 - 3E □□□ 132C22	E82MV 752_4B
9.8	692	29	595	39	98	692	1.5	171	398	14.798	GKS07 - 3E □□□ 132C22	E82MV 752_4B
11	625	32	537	44	109	625	2.8	190	359	13.360	GKS09 - 3E □□□ 132C22	E82MV 752_4B
8.7	780	25	670	35	87	780	1.4	152	448	16.674	GKS07 - 3E □□□ 132C22	E82MV 752_4B
9.0	754	26	648	36	90	754	2.4	157	433	16.122	GKS09 - 3E □□□ 132C22	E82MV 752_4B
8.4	808	24	694	34	84	808	1.2	147	464	17.270	GKS07 - 3E □□□ 132C22	E82MV 752_4B
8.3	820	24	705	33	83	820	2.4	144	471	17.536	GKS09 - 3E □□□ 132C22	E82MV 752_4B
7.1	959	21	825	28	71	959	1.2	123	551	20.511	GKS07 - 3E □□□ 132C22	E82MV 752_4B
7.5	914	22	786	30	75	914	2.8	130	525	19.541	GKS09 - 3E □□□ 132C22	E82MV 752_4B
6.3	1081	18	929	25	63	1081	1.1	110	621	23.111	GKS07 - 3E □□□ 132C22	E82MV 752_4B
6.6	1030	19	886	26	66	1030	2.6	115	592	22.022	GKS09 - 3E □□□ 132C22	E82MV 752_4B
5.8	1180	17	1015	23	58	1180	1.0	100	678	25.244	GKS07 - 3E □□□ 132C22	E82MV 752_4B
5.7	1199	16	1031	23	57	1199	2.4	99	689	25.649	GKS09 - 3E □□□ 132C22	E82MV 752_4B
5.2	1322	15	1137	21	52	1322	0.9	90	760	28.274	GKS07 - 3E □□□ 132C22	E82MV 752_4B
5.0	1367	14	1175	20	50	1367	2.1	87	785	29.228	GKS09 - 3E □□□ 132C22	E82MV 752_4B
4.4	1540	13	1324	18	44	1540	1.9	77	885	32.940	GKS09 - 3E □□□ 132C22	E82MV 752_4B
4.1	1646	12	1415	17	41	1646	1.8	72	946	35.193	GKS09 - 3E □□□ 132C22	E82MV 752_4B
3.7	1854	11	1595	15	37	1854	1.6	64	1066	39.662	GKS09 - 3E □□□ 132C22	E82MV 752_4B
3.6	1883	10	1619	14	36	1883	3.1	63	1082	40.272	GKS11 - 3E □□□ 132C22	E82MV 752_4B
3.4	2017	9.8	1735	13	34	2017	1.5	59	1159	43.146	GKS09 - 3E □□□ 132C22	E82MV 752_4B
3.3	2047	9.6	1761	13	33	2047	2.8	58	1176	43.783	GKS11 - 3E □□□ 132C22	E82MV 752_4B
3.0	2274	8.7	1955	12	30	2274	1.3	52	1307	48.625	GKS09 - 3E □□□ 132C22	E82MV 752_4B
3.0	2307	8.6	1984	12	30	2307	2.6	51	1326	49.333	GKS11 - 3E □□□ 132C22	E82MV 752_4B
2.5	2733	7.2	2350	10.0	25	2733	1.1	43	1571	58.456	GKS09 - 3E □□□ 132C22	E82MV 752_4B
2.5	2697	7.3	2319	10	25	2697	2.2	44	1550	57.683	GKS11 - 3E □□□ 132C22	E82MV 752_4B
2.2	3080	6.4	2649	8.8	22	3080	1.0	38	1770	65.879	GKS09 - 3E □□□ 132C22	E82MV 752_4B
2.2	3039	6.5	2613	9.0	22	3039	2.0	39	1746	64.995	GKS11 - 3E □□□ 132C22	E82MV 752_4B
2.1	3319	5.9	2854	8.2	21	3319	0.9	36	1907	70.982	GKS09 - 3E □□□ 132C22	E82MV 752_4B
2.1	3314	6	2850	8.2	21	3314	1.8	36	1905	70.887	GKS11 - 3E □□□ 132C22	E82MV 752_4B
1.8	3740	5.3	3217	7.3	18	3740	0.8	32	2150	79.996	GKS09 - 3E □□□ 132C22	E82MV 752_4B
1.8	3735	5.3	3212	7.3	18	3735	1.6	32	2146	79.873	GKS11 - 3E □□□ 132C22	E82MV 752_4B
1.9	3632	5.4	3124	7.5	19	3632	3.2	33	2087	77.681	GKS14 - 3E □□□ 132C22	E82MV 752_4B
1.6	4289	4.6	3689	6.4	16	4289	1.4	28	2465	91.737	GKS11 - 3E □□□ 132C22	E82MV 752_4B
1.6	4234	4.7	3641	6.4	16	4234	2.7	28	2433	90.551	GKS14 - 3E □□□ 132C22	E82MV 752_4B
1.4	4833	4.1	4156	5.6	14	4833	1.3	24	2778	103.365	GKS11 - 3E □□□ 132C22	E82MV 752_4B
1.4	4770	4.1	4103	5.7	14	4770	2.4	25	2742	102.029	GKS14 - 3E □□□ 132C22	E82MV 752_4B
1.3	5206	3.8	4477	5.2	13	5206	1.1	23	2992	111.335	GKS11 - 3E □□□ 132C22	E82MV 752_4B
1.3	5138	3.8	4419	5.3	13	5138	2.3	23	2953	109.896	GKS14 - 3E □□□ 132C22	E82MV 752_4B
1.2	5865	3.4	5044	4.6	12	5865	1.0	20	3371	125.448	GKS11 - 3E □□□ 132C22	E82MV 752_4B
1.2	5790	3.4	4979	4.7	12	5790	2.0	20	3327	123.826	GKS14 - 3E □□□ 132C22	E82MV 752_4B
1.1	6495	3	5586	4.2	11	6495	1.8	18	3733	138.913	GKS14 - 3E □□□ 132C22	E82MV 752_4B

Thermal power limit not considered (see page 2-5)

*) Observe current derating (see page 2-2)

Selection tables - Helical-bevel gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical-bevel geared motor	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz					
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
Dimensions see page 6-30 onwards												
P ₁ = 7.5 kW												
0.9	7318	2.7	6294	3.7	9.3	7318	1.6	16	4206	156.522	GKS14 - 3E □□□ 132C22	E82MV 752_4B
0.8	8723	2.3	7502	3.1	7.8	8723	1.3	14	5013	186.572	GKS14 - 3E □□□ 132C22	E82MV 752_4B
0.7	9829	2	8453	2.8	6.9	9829	1.2	12	5649	210.222	GKS14 - 3E □□□ 132C22	E82MV 752_4B
0.6	10587	1.9	9105	2.6	6.4	10587	1.1	11	6084	226.431	GKS14 - 3E □□□ 132C22	E82MV 752_4B
0.6	11929	1.7	10259	2.3	5.7	11929	1.0	10	6856	255.133	GKS14 - 3E □□□ 132C22	E82MV 752_4B
0.5	13382	1.5	11509	2.0	5.1	13382	0.9	9	7691	286.219	GKS14 - 3E □□□ 132C22	E82MV 752_4B

Thermal power limit not considered (see page 2-5)

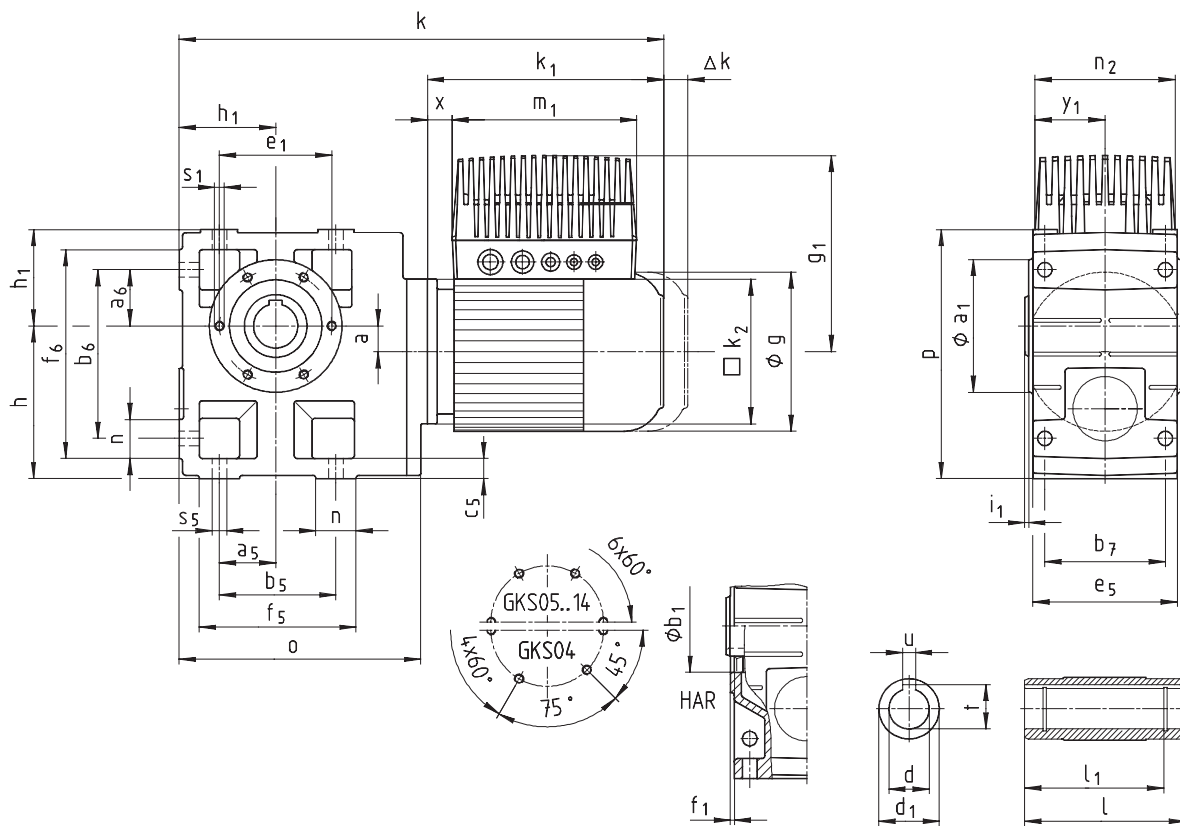
*) Observe current derating (see page 2-2)



Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

GKS□□ - 3E H□R



Dimensions - Helical-bevel gearboxes
Geared motors with 8200 motec

Geared motor							Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22					
GKS□□ - 3E H□□							8200 motec E82MV□□□							251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g						123				138				156		176		196		220		261			
	k ₁						188				207				225		276		309		319		363		404	
	k ₂						120				120				145		180		180		222		265			
	Δk** Brake						40				52				73		70		79		90		109			
	Separate fan						130				128				128		127		109		102		115			
	Brake + separate fan						170				165				184		180		170		183		201			
8200 motec	g ₁						171				180	225	221	237	242	253	268			278		297				
	g ₁ ¹⁾						207		216																	
	m ₁						190		190		202	202	230	230	230	327			327		327					
	n ₂						138		138		156	156	176	176	176	213			213		213					
	x						20		23		10	3	3	8	9	0			2		11					
	y ₁						69		69		78	78	88	88	88	107			107		107					
Gearbox size	Gearbox						Total length																			
	o	l*	p*	h*	h ₁	a	k																			
04	203	115	171	100	71	20	399		419		441		502													
05	232	140	205	125	80	23	419		439		461		522		556											
06	291	160	250	150	100	28	475		495		517		578		612				628		672					
07	354	200	310	190	120	34					573		634		668				684		728					
09	429	240	386	236	150	41							705		739				755		799					
11	527	290	485	300	185	54									830				846		938					
14	636	350	605	375	230	67													945		1037					

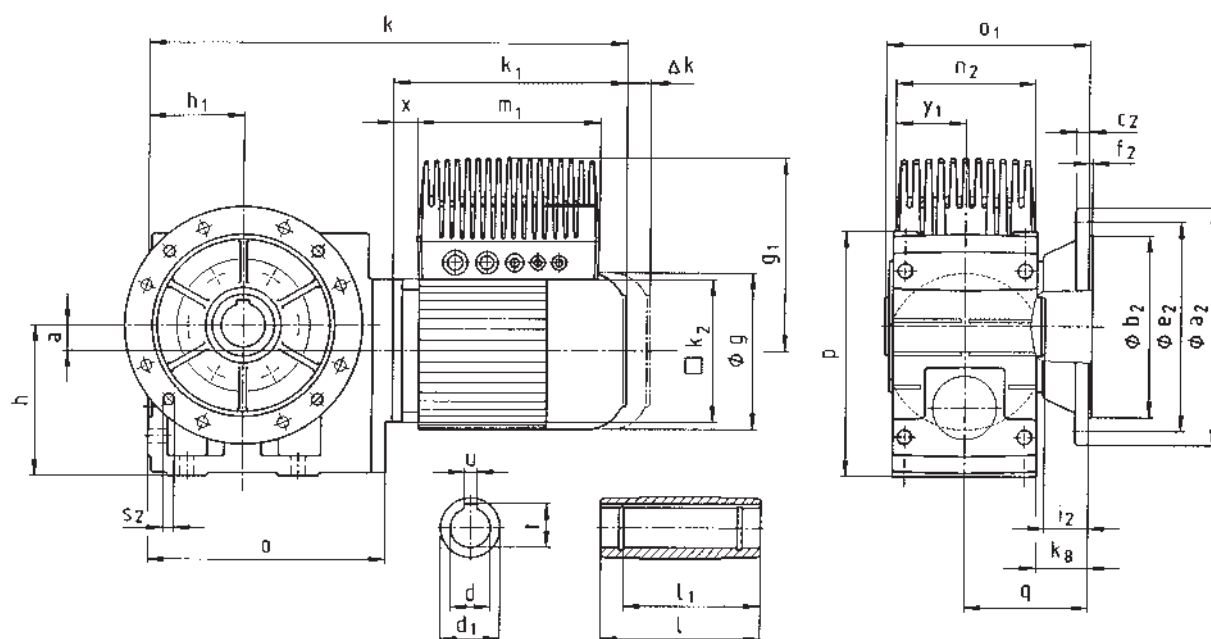
Gearbox size	Hollow shaft						Pitch circle						Foot												
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁	a ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	s ₅		
04	25 30	115	45	100	8 8	28.3 33.3	105	75	90	3	2.5	M6x12	45	45	110	119	85	14	105	132	141	22	9		
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	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	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	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	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	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	33		

Dimensions in [mm] * Please note dimension k₂. On gearbox size 04 with motor frame size 090, dimension k₂ / 2 > h-a
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

GKS□□ - 3E HAK



Dimensions - Helical-bevel gearboxes
Geared motors with 8200 motec



Geared motor		Motor frame size							063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22				
GKS□□ - 3E HAK		8200 motec E82MV□□□□							251	251	251	371	551	751	152	152	222	302	402	552	752				
Motor	g							123			138			156			176		196		220		261		
	k ₁							188			207			225			276		309		319	363	404		
	k ₂							120			120			145			180		180		222		265		
	Δk** Brake							40			52			73			70		79		90		109		
	Separate fan							130			128			128			127		109		102		115		
	Brake + separate fan							170			165			184			180		170		183		201		
8200 motec	g ₁							171			180		225	221	237	242	253	268	278		297				
	g ₁ ¹⁾							207			216														
	m ₁							190			190		202	202	230	230	230	327	327		327				
	n ₂							138			138		156	156	176	176	176	213	213		213				
	x							20			23		10	3	3	8	9	0	2		11				
	y ₁							69			69		78	78	88	88	88	107	107		107				
Gearbox size	Gearbox								Total length																
	o	o ₁ *	p*	h*	h ₁	a	k ₈	q	k																
04	203	148	171	100	71	20	38	90.5	399			419			441			502							
05	232	173	205	125	80	23	40	103	419			439			461			522		556					
06	291	201	250	150	100	28	49	121	475			495			517			578		612		628		672	
07	354	255	310	190	120	34	65	155				573			634			668				684		728	776
09	429	300	386	236	150	41	69	180							705			739				755		799	847
11	527	350	485	300	185	54	70	205										830				846		890	938
14	636	410	605	375	230	67	71	235														945		989	1037

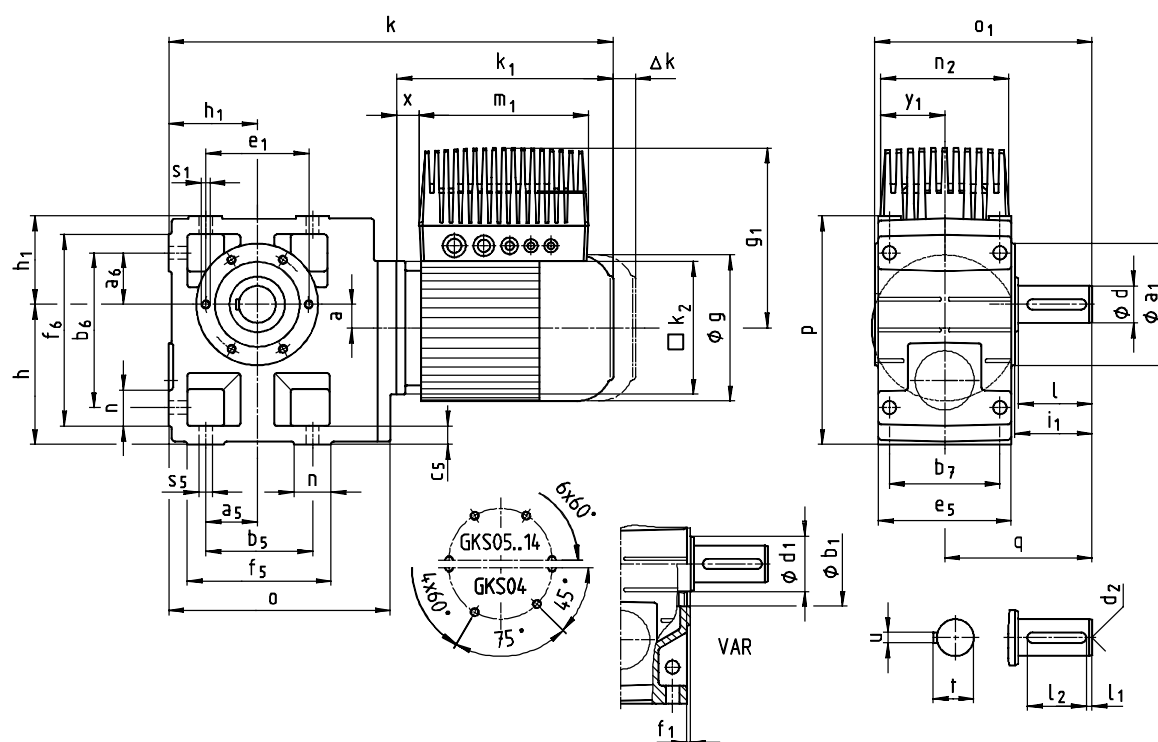
Gearbox size	Hollow shaft						Output flange						
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
04	25 30	115	45	100	8 8	28.3 33.3	160	110	10	130	3.5	33	4 x 9
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 265	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 k₂. On gearbox size 04 with motor frame size 090, dimension k₂ / 2 > h-a
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

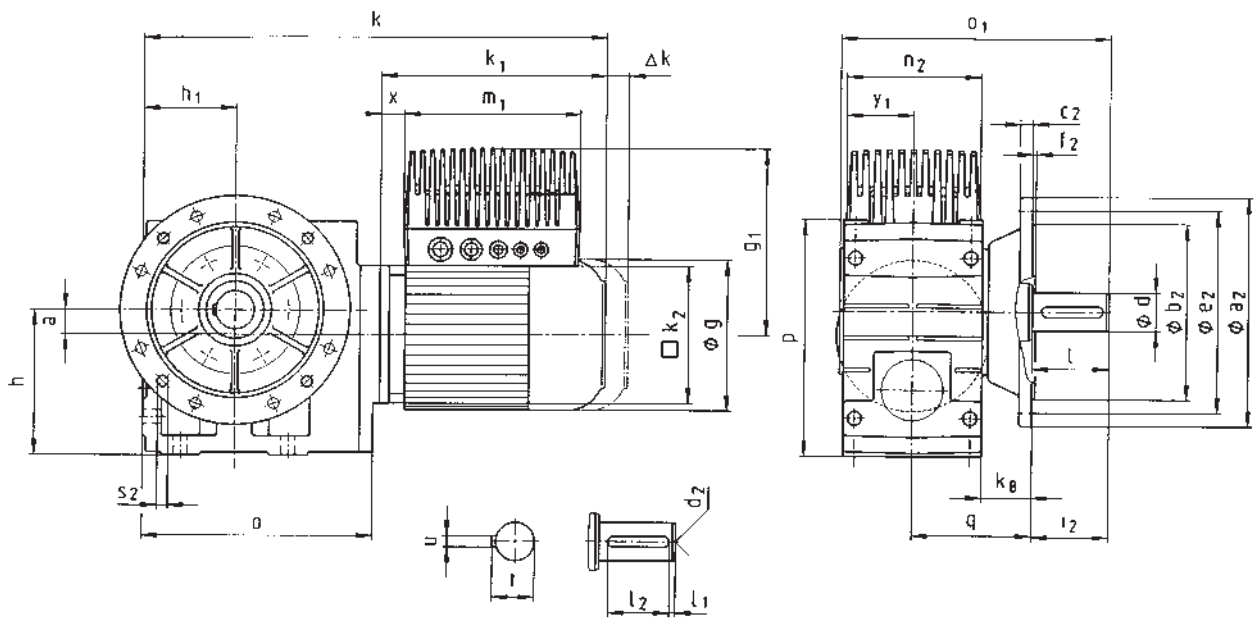
GKS□□ - 3E V□R



Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

GKS□□ - 3E VAK



Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22	
GKS□□ - 3E VAK		8200 motec E82MV□□□□		251	251	251	371	551	751	152	152	222	302	402	552	752	
Motor	g		123				138		156		176	196		220		261	
	k ₁		188				207		225		276	309		319	363	404	
	k ₂		120				120		145		180	180		222		265	
	Δk** Brake		40				52		73		70	79		90		109	
	Separate fan		130				128		128		127	109		102		115	
	Brake + separate fan		170				165		184		180	170		183		201	
8200 motec	g ₁		171				180	225	221	237	242	253	268	278		297	
	g ₁ ¹⁾		207				216										
	m ₁		190				190	202	202	230	230	230	327	327		327	
	n ₂		138				138	156	156	176	176	176	213	213		213	
	x		20				23	10	3	3	8	9	0	2		11	
	y ₁		69				69	78	78	88	88	88	107	107		107	
Gearbox size	Gearbox								Total length k								
	o	o ₁ *	p*	h*	h ₁	a	k ₈	q									
04	203	196	171	100	71	20	38	90.5	399		419		441		502		
05	232	230	205	125	80	23	40	103	419		439		461		522	556	
06	291	277	250	150	100	28	49	121	475		495		517		578	612	628
07	354	351	310	190	120	34	65	155					573		634	668	684
09	429	416	386	236	150	41	69	180					705		739	755	799
11	527	505	485	300	185	54	70	205							830	846	890
14	636	604	605	375	230	67	71	235								945	989

Gearbox size	Solid shaft								Output flange						
	d	l	l ₁	l ₂	d ₂	u	t		a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
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

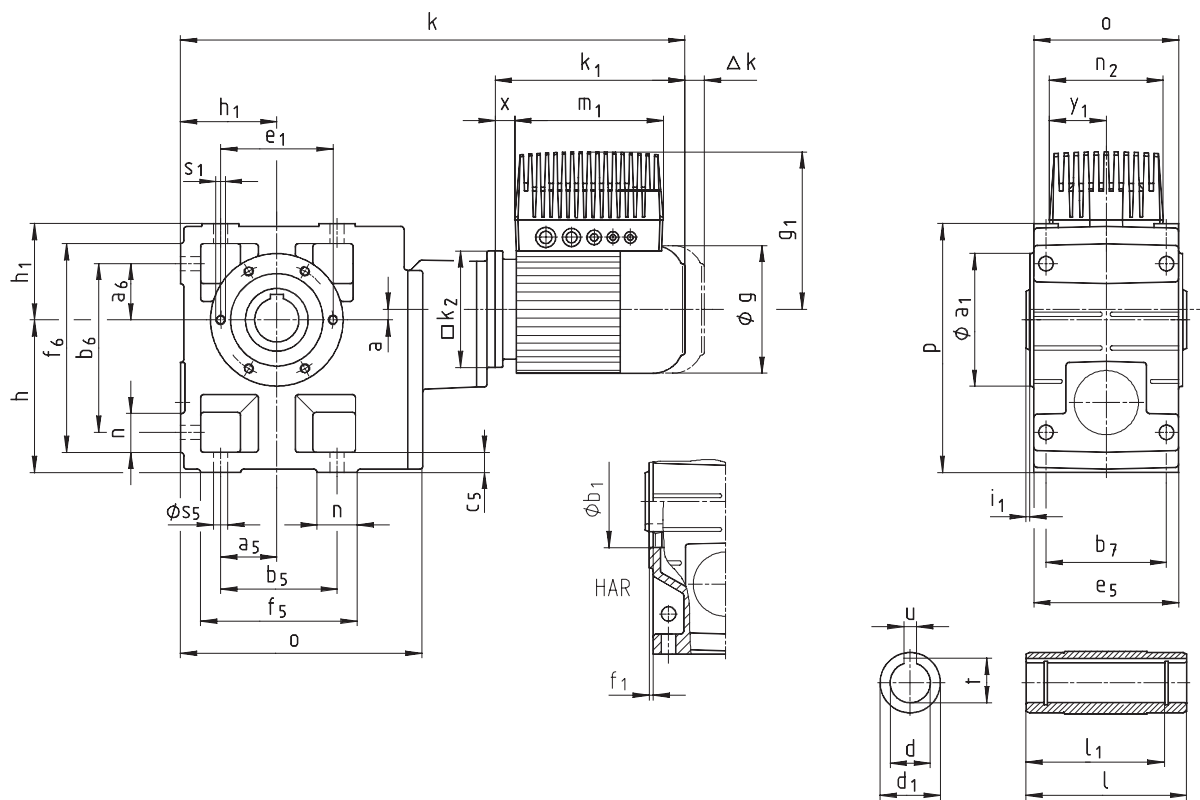
Dimensions in [mm] d ≤ 50 mm: k6 * Please note dimension k₂. On gearbox size 04 with motor frame size 090, dimension k₂ / 2 > h-a
d > 50 mm: m6 ** See chapter 8 for more built-on accessories

¹⁾ 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

GKS□□ - 4E H□R



Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size					063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22			
GKS□□ - 4E H□R		8200 motec E82MV□□□□					251	251	251	371	551	751	152	152	222	302	402	552	752			
Motor							g		123		138		156		176		196		220		261	
							k ₁		188		207		225		276		309		319	363	404	
							k ₂		120		120		145		180		180		222		265	
	Δk** Brake						40				52		73		70		79		90		109	
	Separate fan						130				128		128		127		109		102		115	
	Brake + separate fan						170				165		184		180		170		183		201	
8200 motec							g ₁		171		180		225	221	237	242	253	268	278		297	
							g ₁ ¹⁾		207		216											
							m ₁		190		190		202	202	230	230	230	327	327		327	
							n ₂		138		138		156	156	176	176	176	213	213		213	
							x		20		23		10	3	3	8	9	0	2		11	
							y ₁		69		69		78	78	88	88	88	107	107		107	
Gearbox size	Gearbox						Total length															
	o	l*	p*	h	h ₁	a	k															
05	226	140	205	125	80	13	496		515		538											
06	288	160	250	150	100	8	569		588		611		672									
07	351	200	310	190	120	11	636		655		678		739								772	
09	426	240	386	236	150	15	725		744		767		828		861		877		921			
11	523	290	485	300	185	16					877		938		971		987		1031			
14	632	350	605	375	230	22							1071		1104		1120		1164		1213	

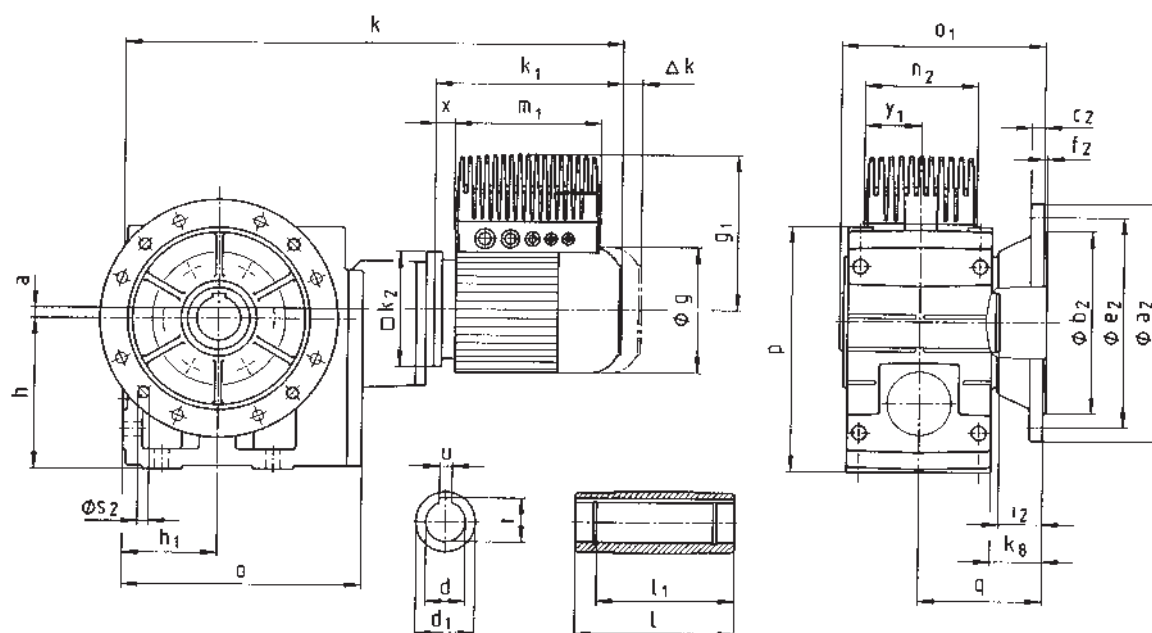
Gearbox size	Hollow shaft						Pitch circle						Foot										
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁ 6x60°	a ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	s ₅
05	30 35	140	50	124	8 10	33.3 38.3	118	80	100	4	4	M8x15	47.5	47.5	115	140	105	17	127	144	169	29	11
06	40 45	160	65	140	12 14	43.3 48.8	140	100	120	4	5	M10x16	60	60	155	170	120	20	145	191	206	36	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	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	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	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	33

Dimensions in [mm] * Please note dimension k₂
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

GKS□□ - 4E HAK



Dimensions - Helical-bevel gearboxes
Geared motors with 8200 motec

Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22		
GKS□□ - 4E HAK		8200 motec E82MV□□□		251	251	251	371	551	751	152	152	222	302	402	552	752		
Motor	g			123			138		156		176		196		220		261	
	k ₁			188			207		225		276		309		319	363	404	
	k ₂			120			120		145		180		180		222		265	
	Δk** Brake			40			52		73		70		79		90		109	
	Separate fan			130			128		128		127		109		102		115	
	Brake + separate fan			170			165		184		180		170		183		201	
8200 motec	g ₁			171			180	225	221	237	242	253	268	278		297		
	g ₁ ¹⁾			207			216											
	m ₁			190			190	202	202	230	230	230	327	327		327		
	n ₂			138			138	156	156	176	176	176	213	213		213		
	x			20			23	10	3	3	8	9	0	2		11		
	y ₁			69			69	78	78	88	88	88	107	107		107		
Gearbox size	Gearbox								Total length									
	o	o ₁ *	p*	h	h ₁	a	k ₈	q	k									
05	226	173	205	125	80	13	40	103	496		515		538					
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			
09	426	300	386	236	150	15	69	180	725		744		767		828			
11	523	350	485	300	185	16	70	205			877		938		971			
14	632	410	605	375	230	22	71	235					1071		1104			
													1120		1164			
													1213					

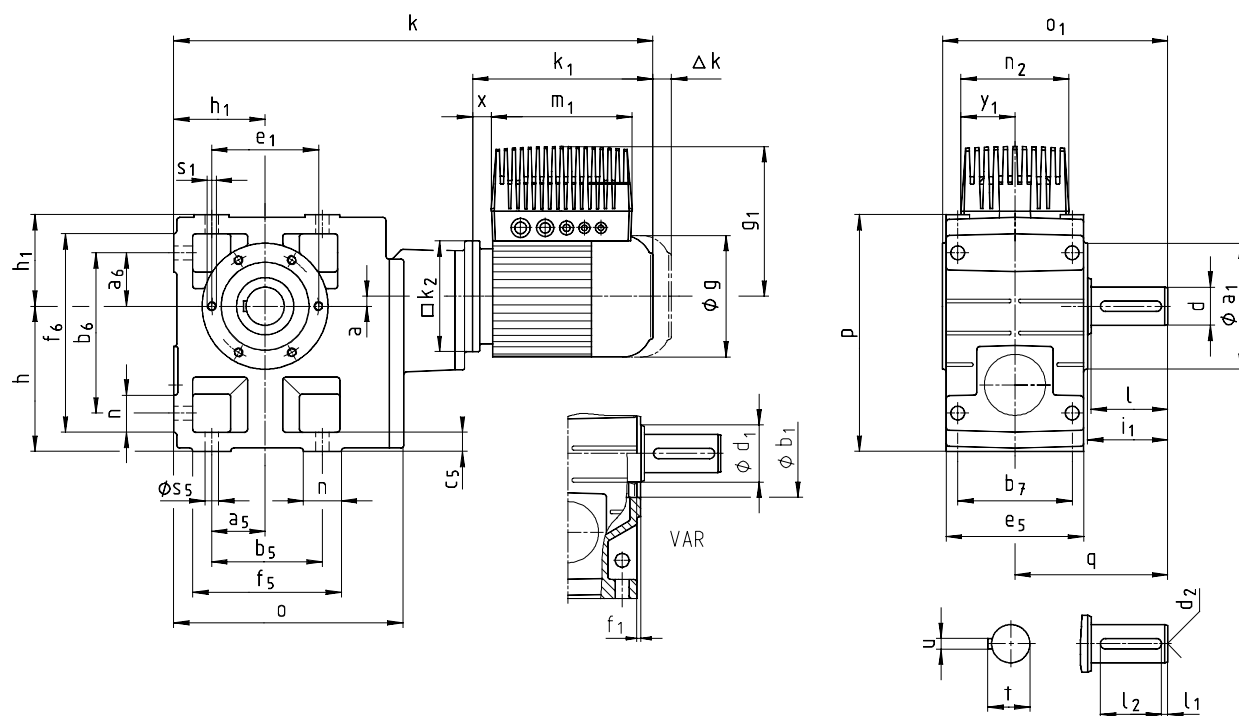
Gearbox size	Hollow shaft						Output flange						
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
05	30 35	140	50	124	8 10	33.3 38.3	200	130	12	165	3.5	33	4 x 11
06	40 45	160	65	140	12 14	43.3 48.8	200 250	130 180	12 14.5	165 215	3.5 4	42 41	4 x 11 4 x 14
07	50 55	200	75	175	14 16	53.8 59.3	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 k₂
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

GKS□□ - 4E V□R



Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size						063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
GKS□□ - 4E V□R		8200 motec E82MV□□□□						251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g						123			138			156		176	196		220		261
	k ₁						188			207			225		276	309		319	363	404
	k ₂						120			120			145		180	180		222		265
	Δk** Brake						40			52			73		70	79		90		109
	Separate fan						130			128			128		127	109		102		115
	Brake + separate fan						170			165			184		180	170		183		201
8200 motec	g ₁						171			180	225	221	237	242	253	268	278		297	
	g ₁ ¹⁾						207			216										
	m ₁						190			190	202	202	230	230	230	327	327		327	
	n ₂						138			138	156	156	176	176	176	213	213		213	
	x						20			23	10	3	3	8	9	0	2		11	
	y ₁						69			69	78	78	88	88	88	107	107		107	
Gearbox size	Gearbox							Total length												
	o	o ₁ *	p*	h	h ₁	a	q	k												
05	226	197	205	125	80	13	130	496		515		538								
06	288	236	250	150	100	8	160	569		588		611		672						
07	351	296	310	190	120	11	200	636		655		678		739						
09	426	356	386	236	150	15	240	725		744		767		828	861		877	921		
11	523	445	485	300	185	16	305					877		938	971		987	1031	1080	
14	632	544	605	375	230	22	375							1071	1104		1120	1164	1213	

Gearbox size	Solid shaft									Pitch circle						Foot									
	d	l	d ₁	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁ 6x60°	a ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	s ₅
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	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	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	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	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	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	33

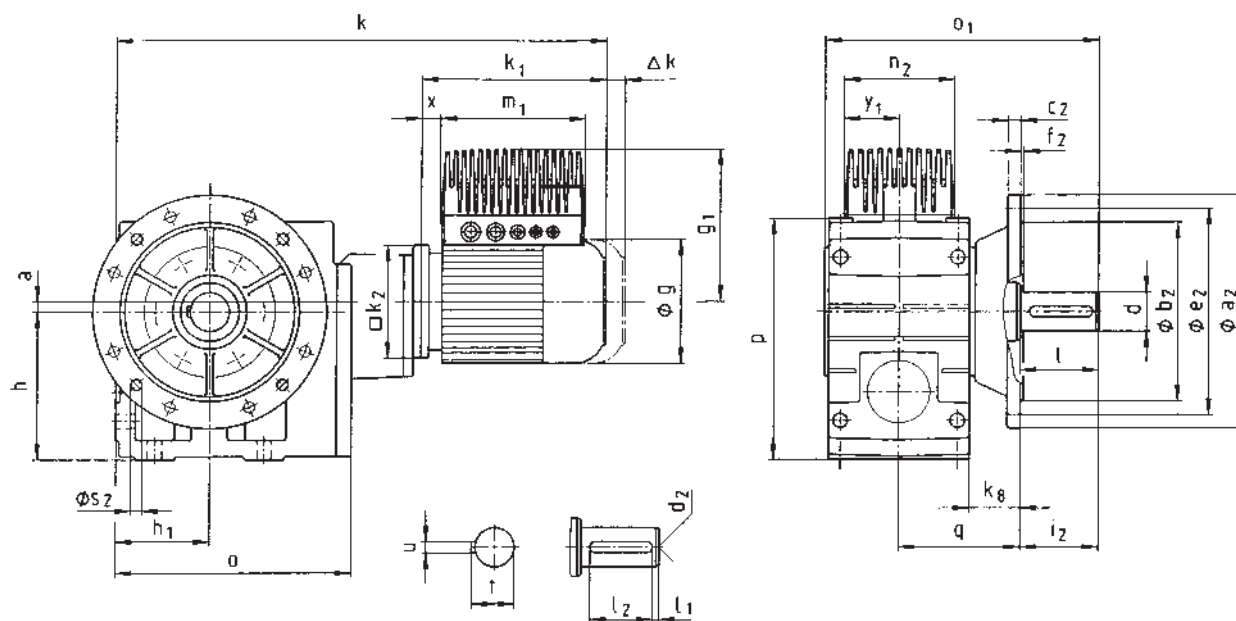
Dimensions in [mm] d ≤ 50 mm: k6 * Please note dimension k₂.
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec

GKS□□ - 4E VAK



Dimensions - Helical-bevel gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22	
GKS□□ - 4E VAK		8200 motec E82MV□□□□		251	251	251	371	551	751	152	152	222	302	402	552	752	
Motor	g			123			138		156		176		196		220		261
	k ₁			188			207		225		276		309		319	363	404
	k ₂			120			120		145		180		180		222		265
	Δk** Brake			40			52		73		70		79		90		109
	Separate fan			130			128		128		127		109		102		115
	Brake + separate fan			170			165		184		180		170		183		201
8200 motec	g ₁			171			180	225	221	237	242	253	268	278		297	
	g ₁ ¹⁾			207			216										
	m ₁			190			190	202	202	230	230	230	327	327		327	
	n ₂			138			138	156	156	176	176	176	213	213		213	
	x			20			23	10	3	3	8	9	0	2		11	
	y ₁			69			69	78	78	88	88	88	107	107		107	
Gearbox size	Gearbox								Total length								
	o	o ₁ *	p*	h	h ₁	a	k ₈	q	k								
05	226	230	205	125	80	13	40	103	496		515		538				
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		
09	426	416	386	236	150	15	69	180	725		744		767		828		
11	523	505	485	300	185	16	70	205			877		938		971		
14	632	604	605	375	230	22	71	235					1071		1104		
														877		938	
														971		1031	
														1120		1164	
														1213			

Gearbox size	Solid shaft							Output flange						
	d	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
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	215 165	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

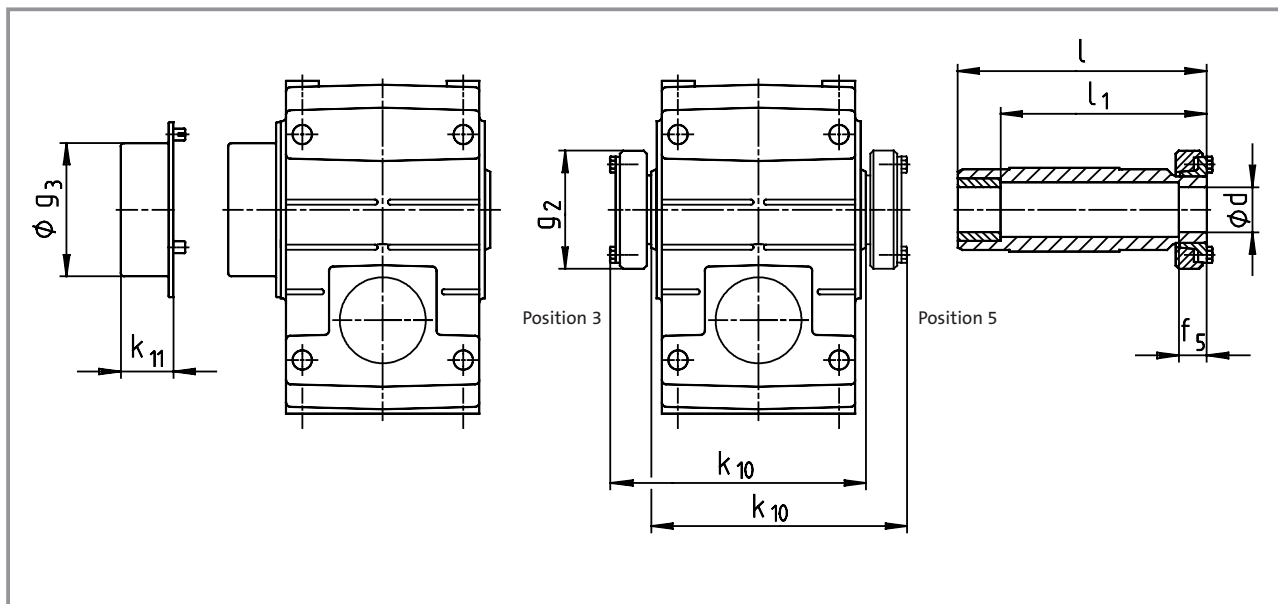
Dimensions in [mm] d ≤ 50 mm: k6 * Please note dimension k₂.
 d > 50 mm: m6 ** See chapter 8 for more built-on accessories

¹⁾ 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-bevel gearboxes

Further dimensions GKS□□

Hollow shaft with shrink disc



Gearbox size	Machine shaft*		Hollow shaft			Gearbox		Protection cover	
	d	Fit	l	l ₁	f ₅	g ₂	k ₁₀	g ₃	k ₁₁
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

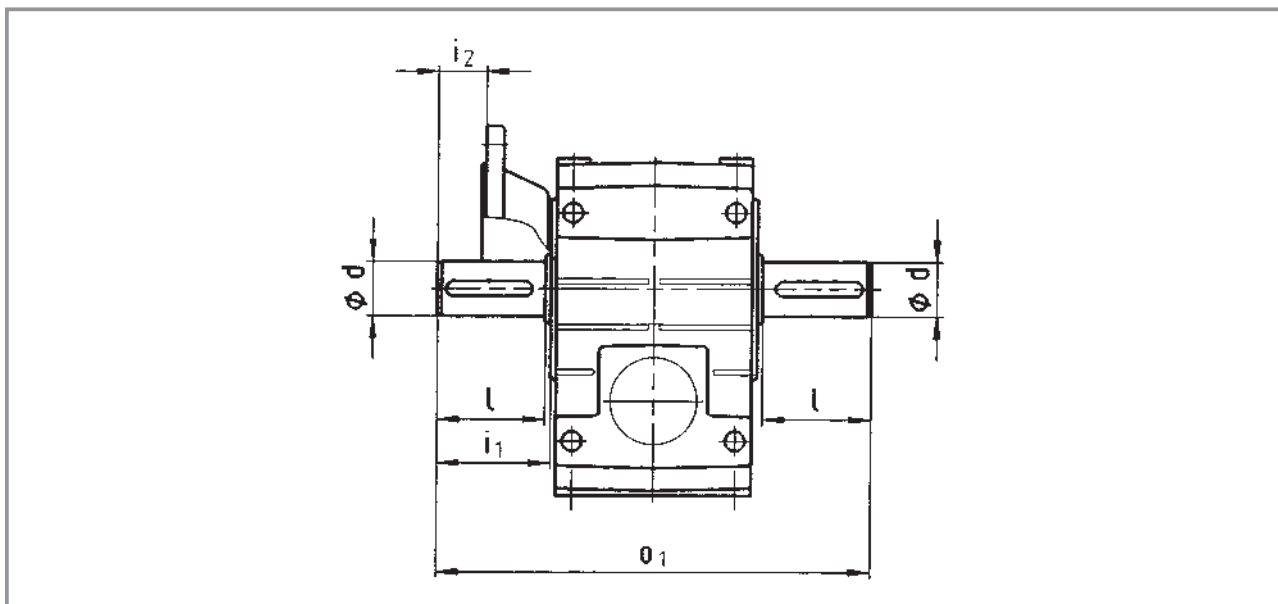
Dimensions in [mm]

* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4), the torque values given in the selection tables can be transmitted without restriction. If less rigid materials are being used, please contact us. The average surface roughness Rz should not exceed 15 µm (turning is sufficient).

Dimensions - Helical-bevel gearboxes

Further dimensions GKS□□

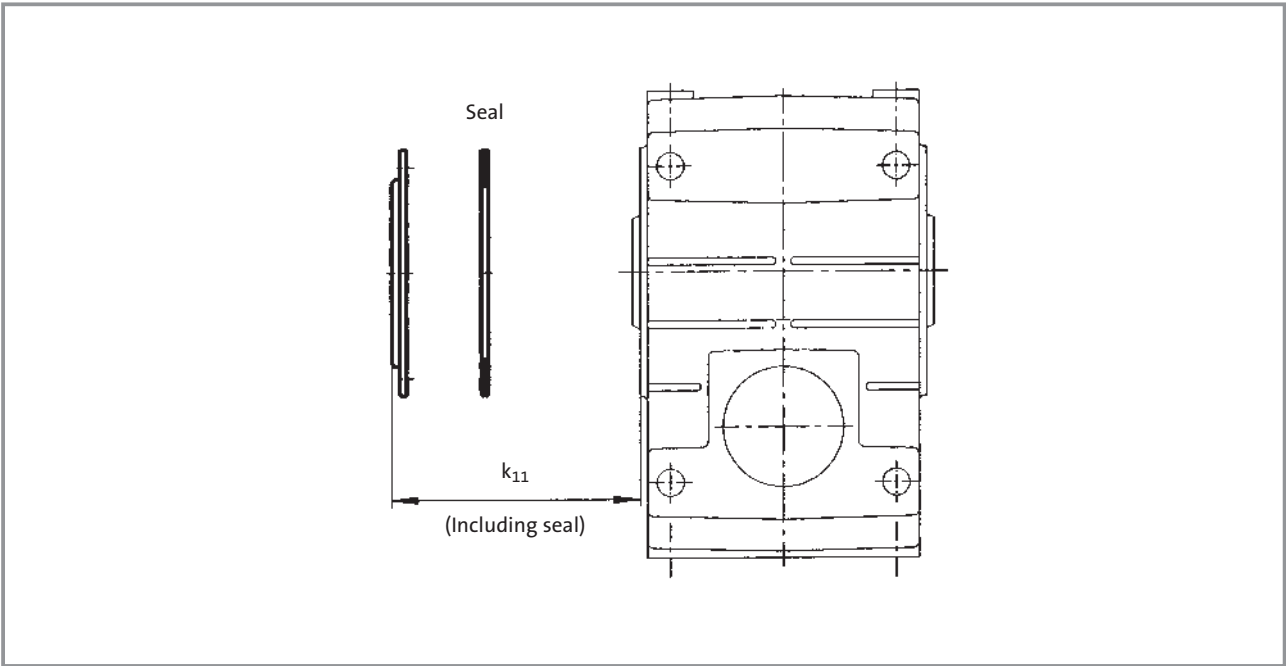
Gearbox with 2nd output shaft end



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]

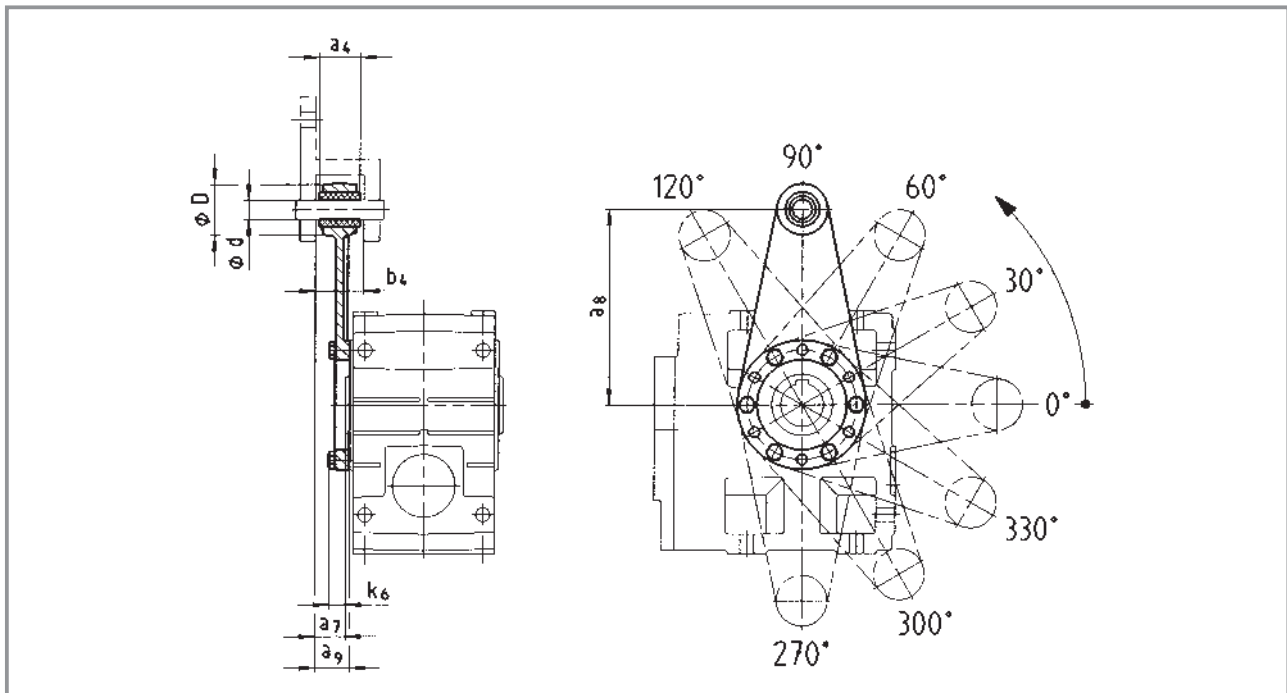
Hoseproof hollow shaft cover



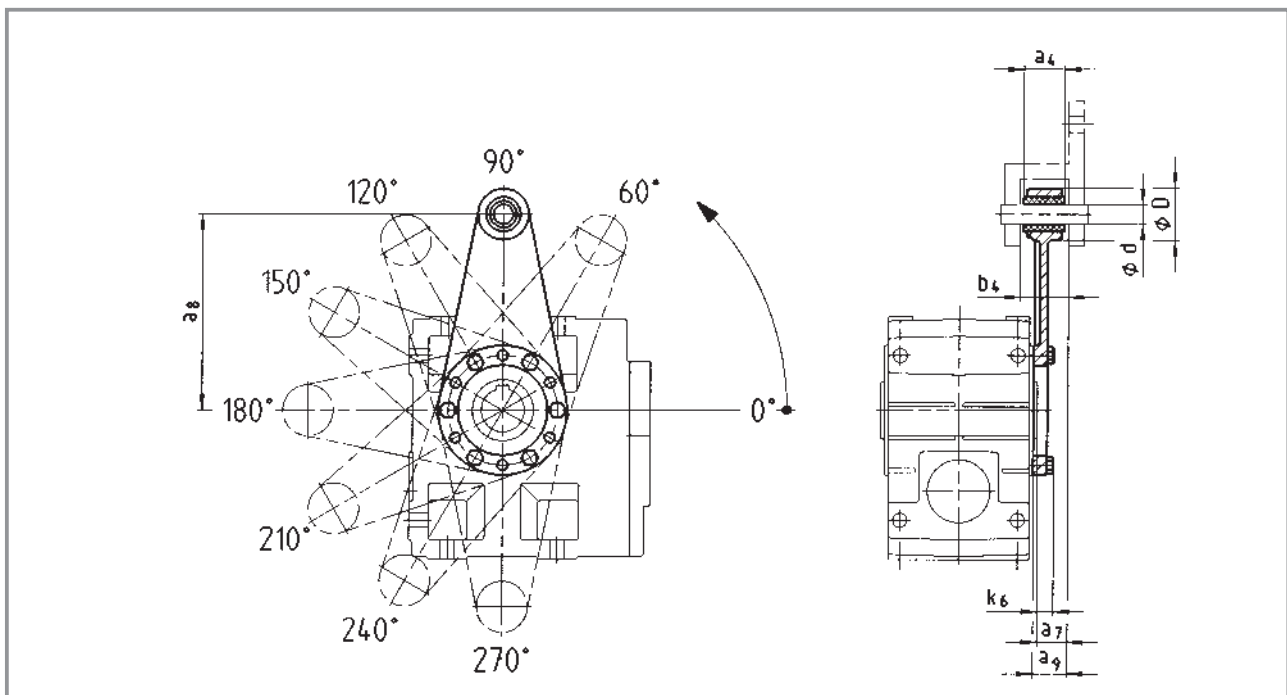
Gearbox size	Protection cover k_{11}
04	9
05	10
06	11
07	11
09	54
11	67
14	80

Dimensions in [mm]

Torque plate at pitch circle, position 3



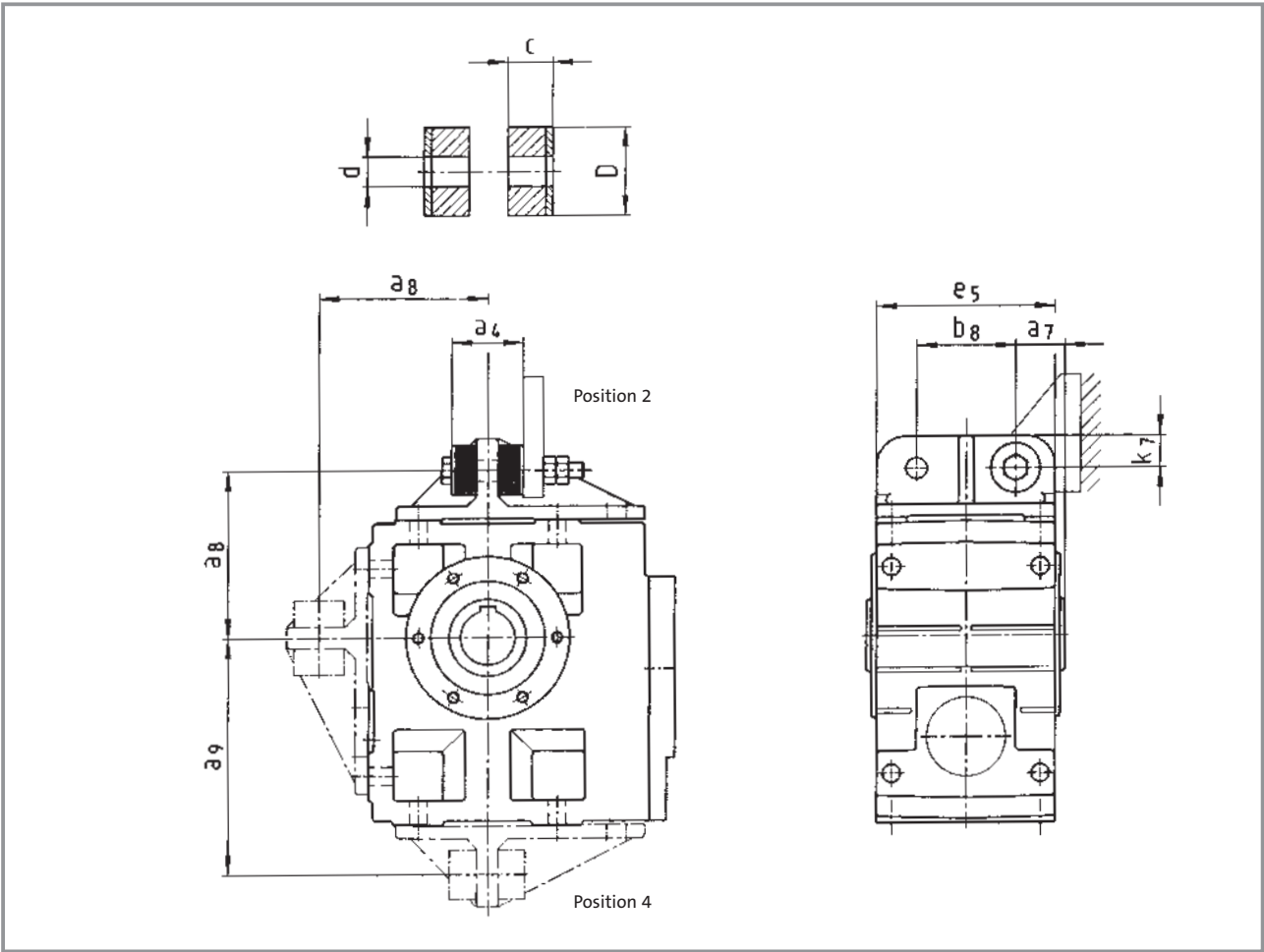
Torque plate at pitch circle, position 5



Gearbox-size	Assembly space		Torque plate					
	a ₇	b ₄	a ₄	a ₈	a ₉	d	D	k ₆
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]

Torque plate at housing foot

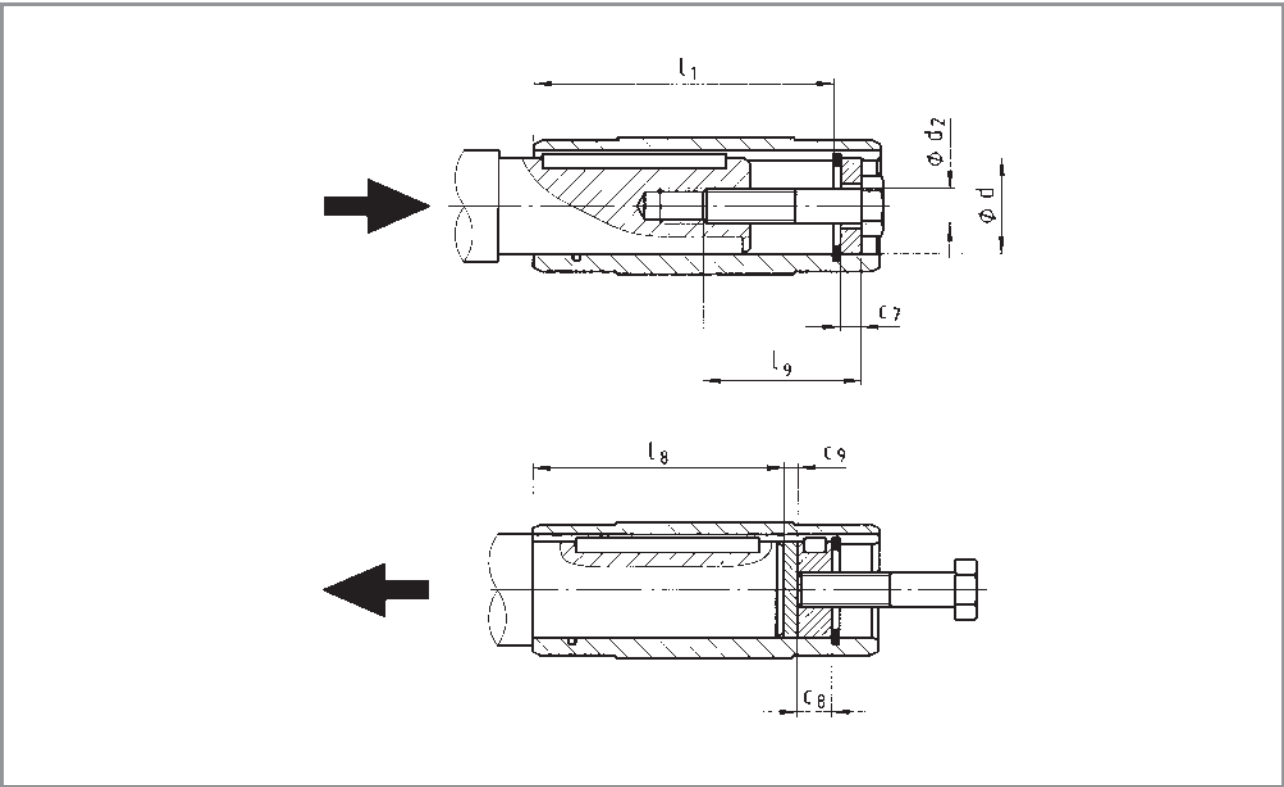


Gearbox size	a ₄	a ₇	a ₈	a ₉	b ₈	c	d	D	e ₅	k ₇
04	41	27.5	106	135	60	14.5	11	30	100	20
05	45	35	115	160	70	15	13	40	127	25
06	72	40	145	195	80	27	17	50	145	28
07	78	50	170	240	100	28	21	60	180	35
09	86	60	214	300	120	29	26	72	222	46
11	94	72.5	260	375	145	30	33	92	270	55
14	100	85	320	465	180	30	39	110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

Dimensions in [mm]



Mounting set for hollow shaft circlip - Proposed design for auxiliary tools



Gearbox size	Gearbox Hollow shaft (design H)			Mounting set for hollow shaft circlip (auxiliary tool assembly)			Auxiliary tool disassembly		Machine shaft max l8
	l	l1	d H7	d2	l9	c7	c8	c9	
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]



Helical-worm gearboxes | G-motion motec

Technical data

Permissible radial and axial forces

Output	7-2
Start-up efficiency	7-4
Ventilation	7-5
Position of ventilation, oil filler plug and oil drain plug	7-5
Weights	7-7

Selection tables

Geared motors with 8200 motec	7-8

Dimensions

Geared motors with 8200 motec	7-24
Further dimensions	7-33
Hollow shaft with shrink disc	7-33
Gearbox with 2nd output shaft end	7-34
Hoseproof hollow shaft cover	7-35
Torque plate at pitch circle	7-36
Torque plate at housing foot	7-37
Mounting set for hollow shaft circlip	7-38
Proposed design for auxiliary tools	7-38

Technical data - Helical-worm gearboxes

Permissible radial and axial forces - Output

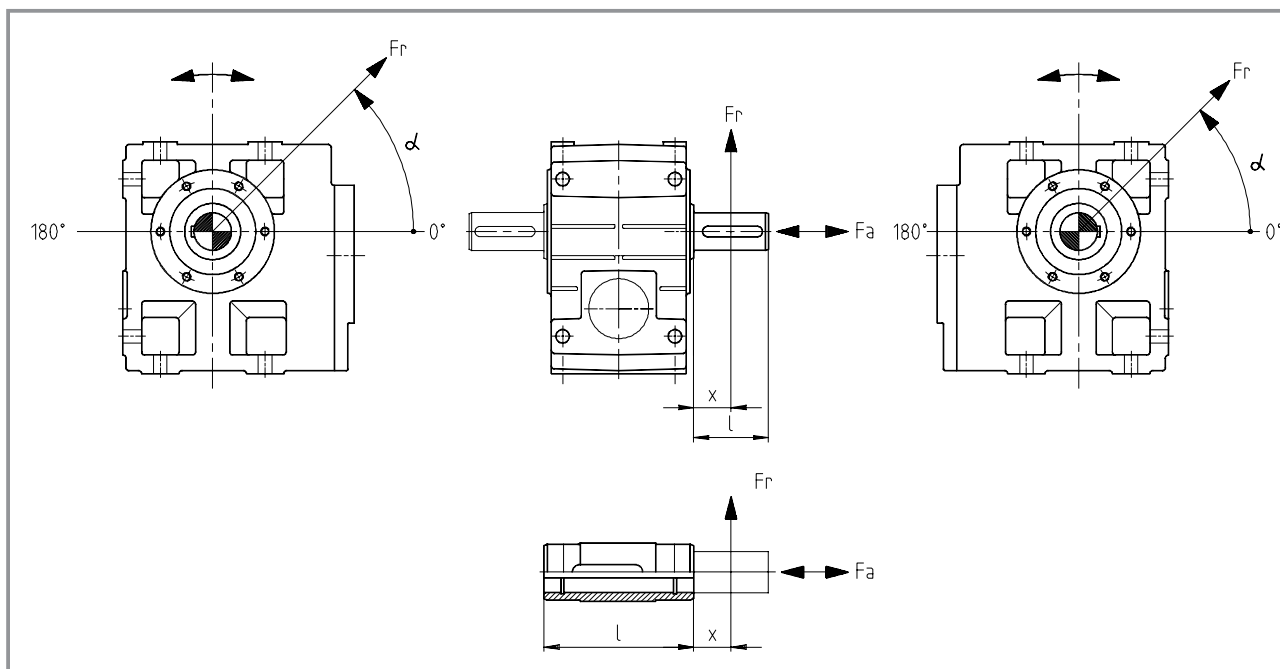
Permissible radial force

$$F_{rperm} = f_w \cdot f_\alpha \cdot F_{rTab} \leq f_w \cdot F_{rmax}$$

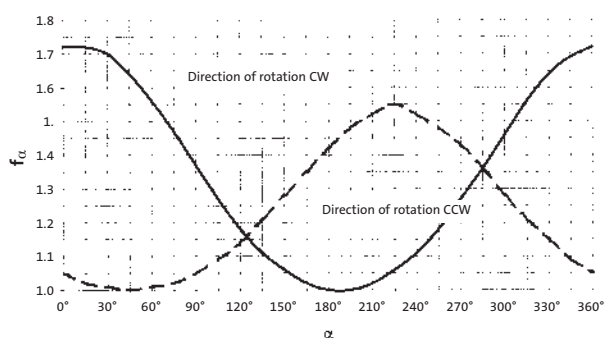
Permissible axial force

$$F_{aperm} = F_{aTab} \quad \text{at } F_r = 0$$

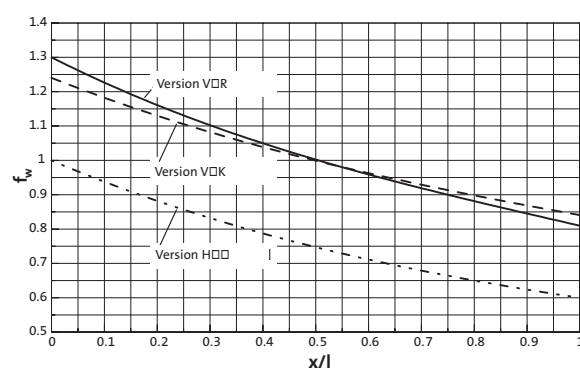
Contact Lenze if F_r and $F_a \neq 0$



f_α Effective direction factor at output shaft



f_w Additional load factor at output shaft



Technical data - Helical-worm gearboxes

Permissible radial and axial forces - Output

VAK	Solid shaft with flange Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
n_2 [rpm]	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	10000	14000
$F_{r max}$	4700	—	4900	—	9400	—	14000	—

VOR	Solid shaft without flange Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$							
	GSS 04		GSS 05		GSS 06		GSS 07	
n_2 [rpm]	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
$F_{r max}$	4200	—	4300	—	8500	—	12000	—

H□□	Hollow shaft Application of force F_r : 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 [rpm]	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
$F_{r max}$	6000	—	7500	—	11500	—	16000	—

Neither radial nor axial forces are permitted on hollow shafts with shrink discs (S□□).

Technical data - Helical-worm gearboxes

Start-up efficiency

During start-up, the start-up efficiency η_A of a helical-worm gearbox is lower than its operative efficiency η at rated speed.

The start-up efficiency η_A must therefore always be considered when starting under load.

The start-up efficiency is determined by the oil temperature and the degree to which the tooth faces have been run in.

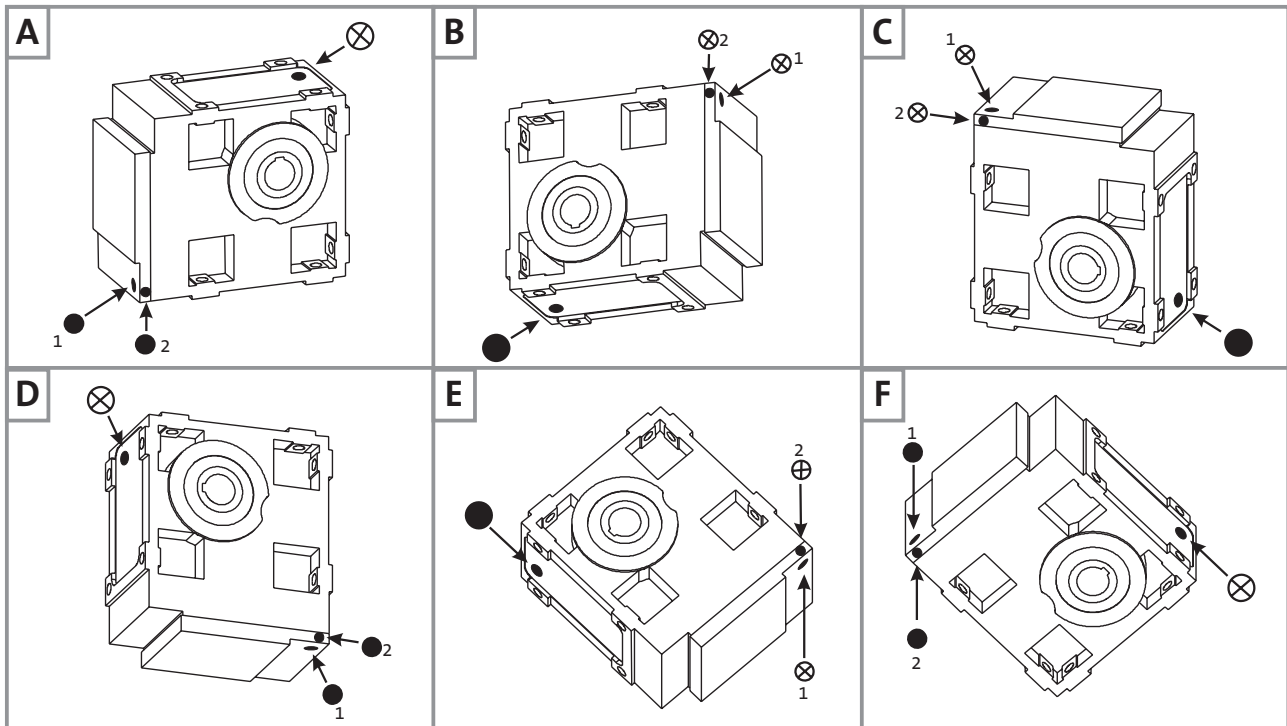
The values given in the tables are theoretical values and are valid with a tolerance of $\pm 10\%$.

Ratio i_{rated}	Start-up efficiency η_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

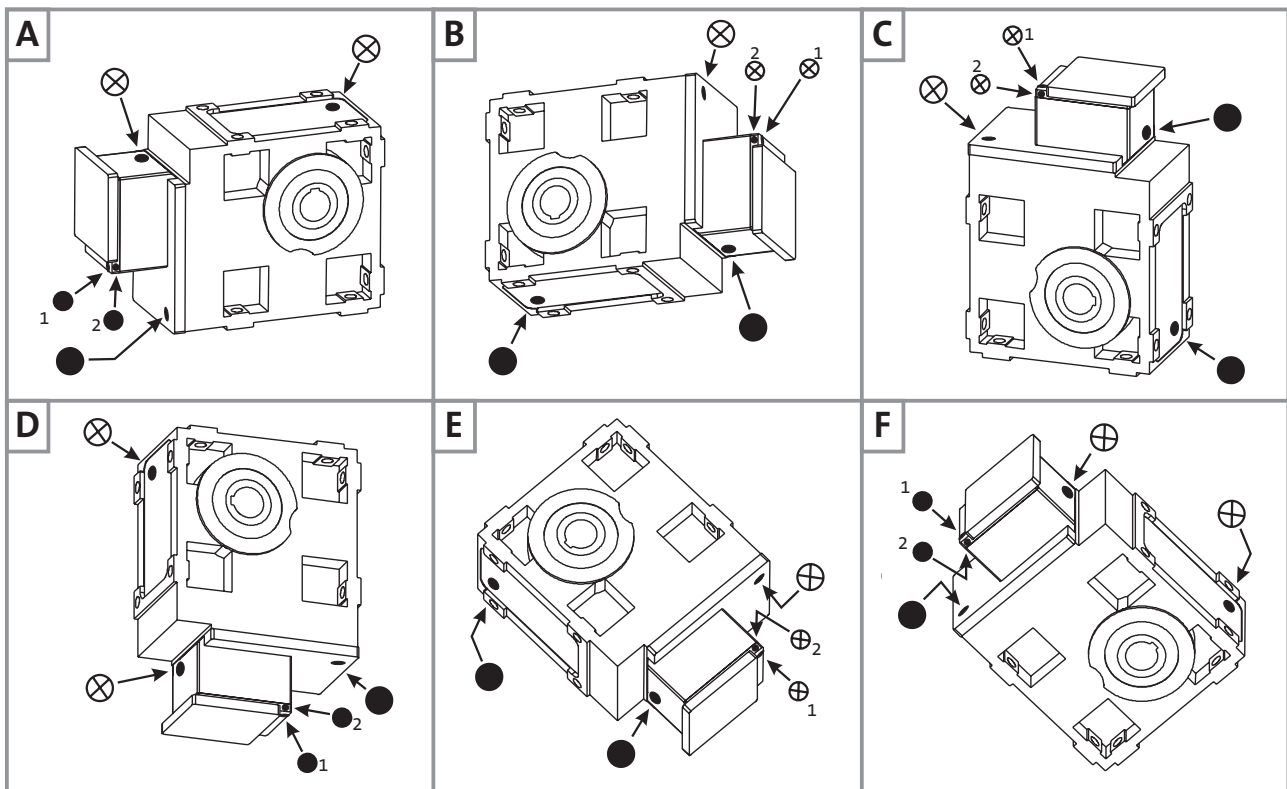
Ratio i_{rated}	Start-up efficiency η_A
40	0.55
45	0.67
50	0.55
56	0.55
63	0.55
71	0.55
80	0.55
90	0.55
100	0.55
112	0.55
125	0.55
140	0.55
160	0.55
180	0.55
200	0.55

Position of ventilation, oil filler plug and oil drain plug

Helical-worm gearboxes GSS 05 ... 07-2



Helical-worm gearboxes GSS 05 ... 07-3



(A ... F) Mounting position

⊗ Ventilation/oil filler plug
● Oil drain plug

Pos. 1 or 2 depending on version
(see table on page 7-6)

On the **versions listed** in the table, the ventilation/oil filler plug or oil drain plug is in **position 2** in the cover on the side.
On the **versions not listed**, the ventilation/oil filler plug or oil drain plug is in **position 1**.

Helical-worm gearboxes

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

Helical-worm gearboxes GSS□□-2

Geared motors GSS□□-2E H□R	Motor frame size										
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
	8200 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	50	56			
06	40	42	43	47	49	56	63	69	77	84	
07				72	74	81	88	94	102	109	139

Helical-worm gearboxes GSS□□-3

Geared motors GSS□□-3E H□R	Motor frame size							
	063	071C32	071C42	080C32	080C42	090C32	100C12	100C32
	8200 motec E82MV □□□							
	251	371	551	751	152	152	222	302
05	28	30	31	36	38			
06	43	45	46	51	53	59		
07	72	75	76	80	82	88	95	101

Additional weights

Gearbox size	Solid shaft	2nd output shaft end	Hollow shaft with shrink disc	Flange	Torque plate	Torque plate
	V□□	V□□	S□□	□AK	Housing foot	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 capacity for mounting position A. All data is approximate

Selection tables - Helical-worm gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂ 20 Hz	n ₂ 50 Hz	M ₂	c 50 Hz	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				
P ₁ = 0.12 kW													
13	8	38	6.6	53	132	8	5.4	229	4.3	10.827	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
10	10	30	8.4	41	103	10	5.0	180	5.5	13.810	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
8.2	12	24	10.3	33	82	12	5.4	143	6.7	17.360	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
6.4	15	19	13	26	64	15	5.0	112	8.7	22.143	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
4.2	22	12	19	17	42	22	5.5	73	13	34.100	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
3.6	23	11	21	15	36	23	5.4	63	14	39.200	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
3.2	29	9.4	25	13	32	29	4.6	56	17	43.917	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
2.9	29	8.3	26	11	29	29	5.0	50	18	50.000	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
2.1	41	6.1	35	8.4	21	41	4.2	36	25	68.200	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
1.9	45	5.4	38	7.4	19	45	3.9	32	28	77.000	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
1.6	52	4.7	44	6.5	16	52	3.3	28	32	87.833	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
1.4	57	4.2	48	5.8	14	57	3.1	25	36	99.167	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
1.3	66	3.7	54	5.1	13	66	2.7	22	41	111.318	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
1.1	72	3.3	59	4.5	11	72	2.5	20	46	125.682	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
1.0	82	3	66	4.1	10	82	2.2	18	51	139.500	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
0.9	89	2.6	72	3.6	9.1	89	2.0	16	57	157.500	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
0.8	106	2.2	84	3.1	7.8	106	1.7	13	67	183.786	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
0.7	116	2	92	2.7	6.9	116	1.5	12	74	207.500	GSS04 - 2E □□□ 063C12	E82MV 251_2B	
0.6	131	1.9	99	2.6	6.4	131	2.7	11	79	222.133	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.6	148	1.6	110	2.3	5.7	148	2.4	10	89	250.952	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.5	163	1.5	122	2.0	5.0	163	2.2	9	100	283.333	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.5	169	1.3	137	1.8	4.6	169	4.1	8	110	310.689	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.4	187	1.2	155	1.6	4.1	187	3.7	7	124	350.778	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.4	218	1.1	167	1.5	3.7	218	1.6	6	134	386.467	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.3	239	0.9	189	1.3	3.3	239	1.5	6	150	436.333	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.3	230	0.9	194	1.3	3.3	230	3.0	6	153	436.333	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.3	272	0.8	217	1.1	2.9	272	1.3	5	168	497.722	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.3	263	0.8	222	1.1	2.9	263	2.7	5	172	497.722	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.3	298	0.7	245	1.0	2.5	298	1.2	4	187	561.944	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.3	290	0.7	250	1.0	2.5	290	2.4	4	193	561.944	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.2	335	0.7	276	0.9	2.3	335	1.1	4	207	630.803	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.2	327	0.7	282	0.9	2.3	327	2.2	4	214	630.803	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.2	367	0.6	312	0.8	2.0	367	1.0	3	231	712.197	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.2	361	0.6	318	0.8	2.0	361	2.0	3	240	712.197	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.2	407	0.5	346	0.7	1.8	407	0.9	3	252	790.500	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.2	415	0.5	366	0.7	1.8	415	1.7	3	270	816.333	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.2	445	0.5	392	0.6	1.6	445	0.8	3	280	892.500	GSS05 - 3E □□□ 063C12	E82MV 251_2B	
0.2	459	0.4	414	0.6	1.6	459	1.6	3	301	921.667	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.1	512	0.4	461	0.6	1.4	512	1.4	2	330	1023.000	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.1	567	0.4	521	0.5	1.2	567	1.3	2	368	1155.000	GSS06 - 3E □□□ 063C12	E82MV 251_2B	
0.1	614	0.3	561	0.5	1.2	614	1.2	2	391	1241.550	GSS06 - 3E □□□ 063C12	E82MV 251_2B	

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
P ₁ = 0.12 kW												
0.1	681	0.3	635	0.4	1.0	681	1.1	2	435	1401.750	GSS06 - 3E □□□ 063C12	E82MV 251_2B
0.1	797	0.3	742	0.3	0.9	797	0.9	2	497	1635.693	GSS06 - 3E □□□ 063C12	E82MV 251_2B
0.1	886	0.2	839	0.3	0.8	886	0.8	1	555	1846.750	GSS06 - 3E □□□ 063C12	E82MV 251_2B
P ₁ = 0.18 kW												
13	12	37	10.6	50	126	12	3.4	219	6.9	10.827	GSS04 - 2E □□□ 063C32	E82MV 251_2B
9.9	16	29	13.5	40	99	16	3.2	172	8.9	13.810	GSS04 - 2E □□□ 063C32	E82MV 251_2B
7.9	19	23	16	31	79	19	3.4	137	11	17.360	GSS04 - 2E □□□ 063C32	E82MV 251_2B
6.2	24	18	21	25	62	24	3.2	107	14	22.143	GSS04 - 2E □□□ 063C32	E82MV 251_2B
4.0	36	12	31	16	40	36	3.5	70	21	34.100	GSS04 - 2E □□□ 063C32	E82MV 251_2B
3.5	37	10	33	14	35	37	3.4	61	22	39.200	GSS04 - 2E □□□ 063C32	E82MV 251_2B
3.1	46	9	39	12	31	46	2.9	54	28	43.917	GSS04 - 2E □□□ 063C32	E82MV 251_2B
2.7	47	7.9	41	11	27	47	3.2	48	28	50.000	GSS04 - 2E □□□ 063C32	E82MV 251_2B
2.0	65	5.8	55	8.0	20	65	2.7	35	40	68.200	GSS04 - 2E □□□ 063C32	E82MV 251_2B
1.8	72	5.1	61	7.1	18	72	2.5	31	44	77.000	GSS04 - 2E □□□ 063C32	E82MV 251_2B
1.6	83	4.5	69	6.2	16	83	2.1	27	51	87.833	GSS04 - 2E □□□ 063C32	E82MV 251_2B
1.4	91	4	76	5.5	14	91	2.0	24	57	99.167	GSS04 - 2E □□□ 063C32	E82MV 251_2B
1.2	104	3.6	86	4.9	12	104	1.7	21	65	111.318	GSS04 - 2E □□□ 063C32	E82MV 251_2B
1.1	114	3.1	93	4.4	11	114	1.6	19	72	125.682	GSS04 - 2E □□□ 063C32	E82MV 251_2B
1.0	129	2.8	104	3.9	9.8	129	1.4	17	81	139.500	GSS04 - 2E □□□ 063C32	E82MV 251_2B
0.9	141	2.5	113	3.5	8.7	141	1.3	15	90	157.500	GSS04 - 2E □□□ 063C32	E82MV 251_2B
0.7	168	2.2	132	3.0	7.4	168	1.1	13	106	183.786	GSS04 - 2E □□□ 063C32	E82MV 251_2B
0.7	183	1.9	144	2.6	6.6	183	1.0	11	117	207.500	GSS04 - 2E □□□ 063C32	E82MV 251_2B
0.6	208	1.8	156	2.5	6.1	208	1.7	11	125	222.133	GSS05 - 3E □□□ 063C32	E82MV 251_2B
0.5	235	1.6	174	2.2	5.4	235	1.5	9	141	250.952	GSS05 - 3E □□□ 063C32	E82MV 251_2B
0.5	258	1.4	193	1.9	4.8	258	1.4	8	158	283.333	GSS05 - 3E □□□ 063C32	E82MV 251_2B
0.5	233	1.5	192	2.0	5.1	233	3.0	9	153	269.500	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.4	270	1.3	220	1.8	4.4	270	2.6	8	175	310.689	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.4	299	1.1	248	1.6	3.9	299	2.4	7	196	350.778	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.4	344	1	264	1.4	3.5	344	1.0	6	210	386.467	GSS05 - 3E □□□ 063C32	E82MV 251_2B
0.4	331	1	273	1.4	3.5	331	2.1	6	215	386.467	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.3	377	0.9	299	1.3	3.1	377	1.0	5	235	436.333	GSS05 - 3E □□□ 063C32	E82MV 251_2B
0.3	365	0.9	308	1.3	3.1	365	1.9	5	242	436.333	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.3	429	0.8	342	1.1	2.7	429	0.8	5	263	497.722	GSS05 - 3E □□□ 063C32	E82MV 251_2B
0.3	417	0.8	352	1.1	2.7	417	1.7	5	272	497.722	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.2	460	0.7	397	1.0	2.4	460	1.6	4	304	561.944	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.2	518	0.6	446	0.9	2.2	518	1.4	4	338	630.803	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.2	572	0.6	503	0.8	1.9	572	1.3	3	377	712.197	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.2	656	0.5	578	0.7	1.7	656	1.1	3	424	816.333	GSS06 - 3E □□□ 063C32	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[rpm]	[Nm]	50 Hz	[rpm]			

P₁ = 0.18 kW

0.1	725	0.4	654	0.6	1.5	725	1.0	3	472	921.667	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.1	808	0.4	727	0.5	1.3	808	0.9	2	518	1023.000	GSS06 - 3E □□□ 063C32	E82MV 251_2B
0.1	895	0.3	822	0.5	1.2	895	0.8	2	575	1155.000	GSS06 - 3E □□□ 063C32	E82MV 251_2B

P₁ = 0.25 kW

24	9	70	7.7	97	243	9	4.5	423	4.8	5.639	GSS04 - 2E □□□ 063C42	E82MV 251_2B
18	12	51	10.5	71	177	12	4.5	308	6.7	7.733	GSS04 - 2E □□□ 063C42	E82MV 251_2B
15	13	44	11.9	61	152	13	4.5	264	7.6	9.042	GSS04 - 2E □□□ 063C42	E82MV 251_2B
14	15	40	13.2	55	138	15	5.2	241	8.6	9.897	GSS04 - 2E □□□ 063C42	E82MV 251_2B
13	17	37	14.6	51	127	17	4.5	220	9.5	10.827	GSS05 - 2E □□□ 063C42	E82MV 251_2B
11	18	32	16	44	111	18	4.5	192	10	12.400	GSS04 - 2E □□□ 063C42	E82MV 251_2B
9.9	21	29	18	40	99	21	4.8	173	12	13.810	GSS04 - 2E □□□ 063C42	E82MV 251_2B
8.6	23	25	20	35	86	23	5.2	150	13	15.869	GSS04 - 2E □□□ 063C42	E82MV 251_2B
7.9	26	23	23	32	79	26	4.5	137	15	17.360	GSS05 - 2E □□□ 063C42	E82MV 251_2B
6.7	27	19	24	27	67	27	4.5	117	15	20.417	GSS04 - 2E □□□ 063C42	E82MV 251_2B
6.2	32	18	28	25	62	32	4.8	108	19	22.143	GSS04 - 2E □□□ 063C42	E82MV 251_2B
5.5	34	16	30	22	55	34	4.5	96	19	24.800	GSS04 - 2E □□□ 063C42	E82MV 251_2B
5.1	39	15	34	20	51	39	4.3	88	23	27.125	GSS04 - 2E □□□ 063C42	E82MV 251_2B
4.3	43	13	38	17	43	43	4.1	75	25	31.738	GSS04 - 2E □□□ 063C42	E82MV 251_2B
4.0	50	12	43	16	40	50	3.5	70	29	34.100	GSS04 - 2E □□□ 063C42	E82MV 251_2B
3.5	52	10	46	14	35	52	3.4	61	31	39.200	GSS04 - 2E □□□ 063C42	E82MV 251_2B
3.1	64	9	54	12	31	64	2.8	54	38	43.917	GSS04 - 2E □□□ 063C42	E82MV 251_2B
2.7	66	7.9	57	11	27	66	2.7	48	39	50.000	GSS04 - 2E □□□ 063C42	E82MV 251_2B
2.5	73	7.3	63	10	25	73	2.4	44	44	54.250	GSS04 - 2E □□□ 063C42	E82MV 251_2B
2.2	80	6.5	69	9.0	22	80	2.2	39	49	61.250	GSS04 - 2E □□□ 063C42	E82MV 251_2B
2.0	91	5.8	77	8.0	20	91	2.0	35	55	68.200	GSS04 - 2E □□□ 063C42	E82MV 251_2B
1.8	100	5.2	85	7.1	18	100	1.8	31	62	77.000	GSS04 - 2E □□□ 063C42	E82MV 251_2B
1.7	110	5	89	6.9	17	110	3.2	30	64	79.722	GSS05 - 2E □□□ 063C42	E82MV 251_2B
1.6	116	4.5	97	6.2	16	116	1.5	27	72	87.833	GSS04 - 2E □□□ 063C42	E82MV 251_2B
1.6	122	4.5	99	6.2	16	122	2.9	27	72	87.833	GSS05 - 2E □□□ 063C42	E82MV 251_2B
1.4	127	4	106	5.5	14	127	1.4	24	80	99.167	GSS04 - 2E □□□ 063C42	E82MV 251_2B
1.4	136	4	109	5.5	14	136	2.6	24	80	99.167	GSS05 - 2E □□□ 063C42	E82MV 251_2B
1.2	145	3.6	119	4.9	12	145	1.2	21	91	111.318	GSS04 - 2E □□□ 063C42	E82MV 251_2B
1.2	158	3.5	125	4.8	12	158	2.2	21	93	113.667	GSS05 - 2E □□□ 063C42	E82MV 251_2B
1.1	159	3.2	130	4.4	11	159	1.1	19	100	125.682	GSS04 - 2E □□□ 063C42	E82MV 251_2B
1.1	174	3.1	137	4.3	11	174	2.0	19	104	128.333	GSS05 - 2E □□□ 063C42	E82MV 251_2B
1.0	180	2.8	145	3.9	9.8	180	1.0	17	113	139.500	GSS04 - 2E □□□ 063C42	E82MV 251_2B
1.0	190	2.9	148	4.0	9.9	190	1.9	17	113	137.950	GSS05 - 2E □□□ 063C42	E82MV 251_2B
1.0	182	2.9	150	4.0	9.9	182	3.2	17	112	137.950	GSS06 - 2E □□□ 063C42	E82MV 251_2B
0.9	196	2.5	158	3.5	8.7	196	0.9	15	125	157.500	GSS04 - 2E □□□ 063C42	E82MV 251_2B
0.9	210	2.6	162	3.5	8.8	210	1.7	15	126	155.750	GSS05 - 2E □□□ 063C42	E82MV 251_2B
0.9	202	2.6	168	3.5	8.8	202	3.2	15	126	155.750	GSS06 - 2E □□□ 063C42	E82MV 251_2B
0.8	240	2.3	184	3.1	7.8	240	1.4	14	143	176.313	GSS05 - 2E □□□ 063C42	E82MV 251_2B
0.8	228	2.3	186	3.1	7.9	228	2.6	14	142	174.375	GSS06 - 2E □□□ 063C42	E82MV 251_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan								Motor cooling with integral fan							
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec			
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂						
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]						

P₁ = 0.25 kW

0.7	265	2	201	2.8	6.9	265	1.4	12	159	199.063	GSS05 - 2E □□□ 063C42	E82MV 251_2B
0.7	254	2	207	2.8	7.0	254	2.6	12	159	196.875	GSS06 - 2E □□□ 063C42	E82MV 251_2B
0.7	254	2	217	2.7	6.8	254	4.3	12	162	201.746	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.6	289	1.8	218	2.5	6.2	289	1.2	11	174	222.133	GSS05 - 3E □□□ 063C42	E82MV 251_2B
0.6	269	1.8	225	2.5	6.2	269	2.6	11	175	220.000	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.5	326	1.6	242	2.2	5.5	326	1.1	9	196	250.952	GSS05 - 3E □□□ 063C42	E82MV 251_2B
0.6	294	1.7	242	2.3	5.7	294	2.4	10	189	238.700	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.5	359	1.4	269	1.9	4.8	359	1.0	8	219	283.333	GSS05 - 3E □□□ 063C42	E82MV 251_2B
0.5	327	1.5	269	2.0	5.1	327	2.2	9	213	269.500	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.4	390	1.3	292	1.8	4.5	390	0.9	8	236	307.417	GSS05 - 3E □□□ 063C42	E82MV 251_2B
0.4	378	1.3	308	1.8	4.4	378	1.9	8	244	310.689	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.4	402	1.2	333	1.7	4.3	402	3.0	7	257	321.673	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.4	429	1.1	330	1.6	4.0	429	0.8	7	264	347.083	GSS05 - 3E □□□ 063C42	E82MV 251_2B
0.4	418	1.1	347	1.6	3.9	418	1.7	7	274	350.778	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.4	447	1.1	375	1.5	3.8	447	2.7	7	290	363.179	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.4	462	1	382	1.4	3.5	462	1.5	6	300	386.467	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.3	488	1	406	1.4	3.5	488	2.5	6	314	394.245	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.3	510	0.9	430	1.3	3.1	510	1.4	5	337	436.333	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.3	542	0.9	456	1.2	3.1	542	2.3	5	353	445.116	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.3	582	0.8	491	1.1	2.8	582	1.2	5	379	497.722	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.3	599	0.8	502	1.1	2.8	599	2.1	5	387	490.403	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.2	641	0.7	553	1.0	2.4	641	1.1	4	423	561.944	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.2	664	0.7	564	1.0	2.5	664	1.9	4	433	553.681	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.2	721	0.6	621	0.9	2.2	721	1.0	4	470	630.803	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.2	760	0.6	645	0.9	2.2	760	1.6	4	493	634.639	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.2	796	0.6	700	0.8	1.9	796	0.9	3	524	712.197	GSS06 - 3E □□□ 063C42	E82MV 251_2B
0.2	842	0.6	727	0.8	1.9	842	1.5	3	551	716.528	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.2	977	0.5	848	0.7	1.6	977	1.3	3	631	833.556	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.1	1081	0.4	959	0.6	1.5	1081	1.2	3	704	941.111	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.1	1168	0.4	1032	0.5	1.4	1168	1.1	2	752	1011.633	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.1	1292	0.3	1167	0.5	1.2	1292	1.0	2	838	1142.167	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.1	1399	0.3	1256	0.4	1.1	1399	0.9	2	893	1227.755	GSS07 - 3E □□□ 063C42	E82MV 251_2B
0.1	1546	0.3	1420	0.4	1.0	1546	0.8	2	994	1386.175	GSS07 - 3E □□□ 063C42	E82MV 251_2B

P₁ = 0.37 kW

25	12	73	11.1	100	250	12	4.0	435	7	5.639	GSS04 - 2E □□□ 071C32	E82MV 371_2B
18	17	53	15.1	73	182	17	4.0	317	9.7	7.733	GSS04 - 2E □□□ 071C32	E82MV 371_2B
16	19	45	17	62	156	19	4.0	271	11	9.042	GSS04 - 2E □□□ 071C32	E82MV 371_2B
14	22	41	19	57	143	22	4.5	248	12	9.897	GSS04 - 2E □□□ 071C32	E82MV 371_2B
13	24	38	21	52	130	24	4.0	227	14	10.827	GSS05 - 2E □□□ 071C32	E82MV 371_2B
11	26	33	24	45	114	26	4.0	198	15	12.400	GSS04 - 2E □□□ 071C32	E82MV 371_2B
10	31	30	27	41	102	31	4.2	178	17	13.810	GSS04 - 2E □□□ 071C32	E82MV 371_2B
8.9	34	26	30	36	89	34	4.5	155	19	15.869	GSS04 - 2E □□□ 071C32	E82MV 371_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂ 20 Hz	n ₂ 50 Hz	M ₂	c 50 Hz	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
P ₁ = 0.37 kW												
8.1	37	24	33	32	81	37	4.0	141	22	17.360	GSS05 - 2E □□□ 071C32	E82MV 371_2B
6.9	39	20	35	28	69	39	3.8	120	22	20.417	GSS04 - 2E □□□ 071C32	E82MV 371_2B
6.4	47	18	41	25	64	47	3.7	111	27	22.143	GSS04 - 2E □□□ 071C32	E82MV 371_2B
5.7	49	16	43	23	57	49	3.4	99	28	24.800	GSS04 - 2E □□□ 071C32	E82MV 371_2B
5.2	57	15	50	21	52	57	3.1	90	34	27.125	GSS04 - 2E □□□ 071C32	E82MV 371_2B
4.4	62	13	55	18	44	62	2.8	77	36	31.738	GSS04 - 2E □□□ 071C32	E82MV 371_2B
4.1	72	12	63	17	41	72	2.5	72	43	34.100	GSS04 - 2E □□□ 071C32	E82MV 371_2B
3.6	75	10	67	14	36	75	2.3	63	44	39.200	GSS04 - 2E □□□ 071C32	E82MV 371_2B
3.2	93	9.3	79	13	32	93	1.9	56	55	43.917	GSS04 - 2E □□□ 071C32	E82MV 371_2B
3.2	95	9.3	80	13	32	95	3.2	56	55	43.917	GSS05 - 2E □□□ 071C32	E82MV 371_2B
2.8	96	8.2	84	11	28	96	1.9	49	57	50.000	GSS04 - 2E □□□ 071C32	E82MV 371_2B
2.6	106	7.5	91	10	26	106	1.7	45	64	54.250	GSS04 - 2E □□□ 071C32	E82MV 371_2B
2.3	116	6.7	101	9.2	23	116	1.5	40	71	61.250	GSS04 - 2E □□□ 071C32	E82MV 371_2B
2.1	132	6	113	8.3	21	132	1.4	36	80	68.200	GSS04 - 2E □□□ 071C32	E82MV 371_2B
2.0	143	5.8	118	8.0	20	143	2.5	35	83	70.611	GSS05 - 2E □□□ 071C32	E82MV 371_2B
1.8	145	5.3	124	7.3	18	145	1.2	32	89	77.000	GSS04 - 2E □□□ 071C32	E82MV 371_2B
1.8	159	5.1	131	7.1	18	159	2.2	31	93	79.722	GSS05 - 2E □□□ 071C32	E82MV 371_2B
1.6	168	4.7	141	6.4	16	168	1.1	28	104	87.833	GSS04 - 2E □□□ 071C32	E82MV 371_2B
1.6	178	4.7	144	6.4	16	178	2.0	28	104	87.833	GSS05 - 2E □□□ 071C32	E82MV 371_2B
1.4	184	4.1	154	5.7	14	184	1.0	25	115	99.167	GSS04 - 2E □□□ 071C32	E82MV 371_2B
1.4	198	4.1	159	5.7	14	198	1.8	25	116	99.167	GSS05 - 2E □□□ 071C32	E82MV 371_2B
1.3	210	3.7	173	5.1	13	210	0.9	22	131	111.318	GSS04 - 2E □□□ 071C32	E82MV 371_2B
1.2	229	3.6	182	5.0	12	229	1.6	22	135	113.667	GSS05 - 2E □□□ 071C32	E82MV 371_2B
1.2	218	3.6	184	5.0	12	218	3.2	22	133	113.667	GSS06 - 2E □□□ 071C32	E82MV 371_2B
1.1	253	3.2	200	4.4	11	253	1.4	19	150	128.333	GSS05 - 2E □□□ 071C32	E82MV 371_2B
1.1	244	3.2	206	4.4	11	244	2.9	19	151	128.333	GSS06 - 2E □□□ 071C32	E82MV 371_2B
1.0	275	3	215	4.1	10	275	1.3	18	163	137.950	GSS05 - 2E □□□ 071C32	E82MV 371_2B
1.0	264	3	219	4.1	10	264	2.7	18	162	137.950	GSS06 - 2E □□□ 071C32	E82MV 371_2B
0.9	303	2.6	236	3.6	9.1	303	1.2	16	182	155.750	GSS05 - 2E □□□ 071C32	E82MV 371_2B
0.9	294	2.6	245	3.6	9.1	294	2.4	16	183	155.750	GSS06 - 2E □□□ 071C32	E82MV 371_2B
0.8	347	2.3	267	3.2	8.0	347	1.0	14	207	176.313	GSS05 - 2E □□□ 071C32	E82MV 371_2B
0.8	330	2.3	270	3.2	8.1	330	2.1	14	205	174.375	GSS06 - 2E □□□ 071C32	E82MV 371_2B
0.7	383	2.1	292	2.8	7.1	383	0.9	12	231	199.063	GSS05 - 2E □□□ 071C32	E82MV 371_2B
0.7	368	2.1	302	2.9	7.2	368	1.9	12	231	196.875	GSS06 - 2E □□□ 071C32	E82MV 371_2B
0.7	371	2	318	2.8	7.0	371	3.3	12	236	201.746	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.6	418	1.8	316	2.5	6.4	418	0.9	11	252	222.133	GSS05 - 3E □□□ 071C32	E82MV 371_2B
0.6	391	1.9	328	2.6	6.4	391	1.8	11	254	220.000	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.6	414	1.8	355	2.5	6.2	414	2.9	11	266	227.778	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.6	427	1.7	353	2.4	5.9	427	1.7	10	275	238.700	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.6	453	1.7	383	2.3	5.7	453	2.7	10	289	247.139	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.5	474	1.5	392	2.1	5.2	474	1.5	9	310	269.500	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.5	504	1.5	426	2.0	5.1	504	2.4	9	327	279.028	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.5	547	1.3	447	1.8	4.5	547	1.3	8	354	310.689	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.4	585	1.3	487	1.8	4.4	585	2.1	8	375	321.673	GSS07 - 3E □□□ 071C32	E82MV 371_2B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz		50 Hz						
				[rpm]	[rpm]	[Nm]		[rpm]	[Nm]				

P₁ = 0.37 kW

0.4	605	1.2	503	1.6	4.0	605	1.2	7	397	350.778	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.4	650	1.1	546	1.6	3.9	650	1.9	7	421	363.179	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.4	668	1.1	554	1.5	3.7	668	1.1	6	435	386.467	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.4	709	1	591	1.4	3.6	709	1.7	6	457	394.245	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.3	737	0.9	624	1.3	3.2	737	1.0	6	488	436.333	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.3	787	0.9	664	1.3	3.2	787	1.6	6	514	445.116	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.3	841	0.8	710	1.1	2.8	841	0.9	5	549	497.722	GSS06 - 3E □□□ 071C32	E82MV 371_2B
0.3	869	0.8	729	1.2	2.9	869	1.4	5	562	490.403	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.3	963	0.7	820	1.0	2.6	963	1.3	4	628	553.681	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.2	1101	0.6	936	0.9	2.2	1101	1.1	4	714	634.639	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.2	1218	0.6	1053	0.8	2.0	1218	1.0	3	800	716.528	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.2	1413	0.5	1227	0.7	1.7	1413	0.9	3	914	833.556	GSS07 - 3E □□□ 071C32	E82MV 371_2B
0.2	1563	0.4	1387	0.6	1.5	1563	0.8	3	1019	941.111	GSS07 - 3E □□□ 071C32	E82MV 371_2B

P₁ = 0.55 kW

25	18	72	16	100	249	18	4.5	434	10	5.639	GSS04 - 2E □□□ 071C42	E82MV 551_4B
18	25	53	22	73	182	25	4.5	316	14	7.733	GSS04 - 2E □□□ 071C42	E82MV 551_4B
16	29	45	26	62	155	29	4.5	270	16	9.042	GSS04 - 2E □□□ 071C42	E82MV 551_4B
14	33	41	29	57	142	33	4.2	247	19	9.897	GSS04 - 2E □□□ 071C42	E82MV 551_4B
13	36	38	31	52	130	36	4.2	226	20	10.827	GSS04 - 2E □□□ 071C42	E82MV 551_4B
11	39	33	35	45	113	39	4.2	197	23	12.400	GSS04 - 2E □□□ 071C42	E82MV 551_4B
10	46	30	40	41	102	46	3.4	177	26	13.810	GSS04 - 2E □□□ 071C42	E82MV 551_4B
8.9	51	26	45	35	89	51	3.5	154	29	15.869	GSS04 - 2E □□□ 071C42	E82MV 551_4B
8.1	55	23	49	32	81	55	3.2	141	32	17.360	GSS04 - 2E □□□ 071C42	E82MV 551_4B
6.9	60	20	53	28	69	60	2.5	120	34	20.417	GSS04 - 2E □□□ 071C42	E82MV 551_4B
6.4	71	18	62	25	64	71	2.5	110	41	22.143	GSS04 - 2E □□□ 071C42	E82MV 551_4B
5.7	74	16	66	23	57	74	2.3	99	42	24.800	GSS04 - 2E □□□ 071C42	E82MV 551_4B
5.2	87	15	76	21	52	87	2.1	90	51	27.125	GSS04 - 2E □□□ 071C42	E82MV 551_4B
4.4	94	13	83	18	44	94	1.9	77	55	31.738	GSS04 - 2E □□□ 071C42	E82MV 551_4B
4.4	95	13	84	18	44	95	3.1	77	55	31.738	GSS05 - 2E □□□ 071C42	E82MV 551_4B
4.1	109	12	94	16	41	109	1.6	72	65	34.100	GSS04 - 2E □□□ 071C42	E82MV 551_4B
4.0	114	12	97	16	40	114	3.1	69	66	35.306	GSS05 - 2E □□□ 071C42	E82MV 551_4B
3.6	114	10	100	14	36	114	1.6	62	67	39.200	GSS04 - 2E □□□ 071C42	E82MV 551_4B
3.6	116	10	102	14	36	116	2.7	62	67	39.200	GSS05 - 2E □□□ 071C42	E82MV 551_4B
3.2	139	9.3	119	13	32	139	1.3	56	83	43.917	GSS04 - 2E □□□ 071C42	E82MV 551_4B
3.2	143	9.3	120	13	32	143	2.5	56	83	43.917	GSS05 - 2E □□□ 071C42	E82MV 551_4B
3.2	140	9.3	122	13	32	140	3.2	56	83	43.917	GSS06 - 2E □□□ 071C42	E82MV 551_4B
2.8	144	8.1	126	11	28	144	1.2	49	86	50.000	GSS04 - 2E □□□ 071C42	E82MV 551_4B
2.8	149	8.1	128	11	28	149	2.3	49	87	50.000	GSS05 - 2E □□□ 071C42	E82MV 551_4B
2.6	159	7.5	137	10	26	159	1.1	45	96	54.250	GSS04 - 2E □□□ 071C42	E82MV 551_4B
2.6	165	7.5	140	10	26	165	2.2	45	96	54.250	GSS05 - 2E □□□ 071C42	E82MV 551_4B
2.3	174	6.7	151	9.2	23	174	1.0	40	106	61.250	GSS04 - 2E □□□ 071C42	E82MV 551_4B
2.3	183	6.7	155	9.2	23	183	1.9	40	107	61.250	GSS05 - 2E □□□ 071C42	E82MV 551_4B
2.1	198	6	169	8.2	21	198	0.9	36	121	68.200	GSS04 - 2E □□□ 071C42	E82MV 551_4B
2.0	215	5.8	178	8.0	20	215	1.7	35	126	70.611	GSS05 - 2E □□□ 071C42	E82MV 551_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			

P₁ = 0.55 kW

1.8	217	5.3	186	7.3	18	217	0.8	32	134	77.000	GSS04 - 2E □□□ 071C42	E82MV 551_4B
1.8	240	5.1	197	7.0	18	240	1.5	31	140	79.722	GSS05 - 2E □□□ 071C42	E82MV 551_4B
1.8	232	5.1	201	7.0	18	232	3.0	31	140	79.722	GSS06 - 2E □□□ 071C42	E82MV 551_4B
1.6	268	4.6	217	6.4	16	268	1.3	28	157	87.833	GSS05 - 2E □□□ 071C42	E82MV 551_4B
1.6	257	4.6	219	6.4	16	257	2.7	28	155	87.833	GSS06 - 2E □□□ 071C42	E82MV 551_4B
1.4	297	4.1	239	5.7	14	297	1.2	25	175	99.167	GSS05 - 2E □□□ 071C42	E82MV 551_4B
1.4	287	4.1	246	5.7	14	287	2.5	25	175	99.167	GSS06 - 2E □□□ 071C42	E82MV 551_4B
1.2	344	3.6	273	5.0	12	344	1.0	22	202	113.667	GSS05 - 2E □□□ 071C42	E82MV 551_4B
1.2	330	3.6	278	5.0	12	330	2.2	22	201	113.667	GSS06 - 2E □□□ 071C42	E82MV 551_4B
1.1	379	3.2	300	4.4	11	379	1.0	19	225	128.333	GSS05 - 2E □□□ 071C42	E82MV 551_4B
1.1	368	3.2	311	4.4	11	368	1.9	19	228	128.333	GSS06 - 2E □□□ 071C42	E82MV 551_4B
1.0	413	3	323	4.1	10	413	0.9	18	245	137.950	GSS05 - 2E □□□ 071C42	E82MV 551_4B
1.0	398	3	330	4.1	10	398	1.8	18	244	137.950	GSS06 - 2E □□□ 071C42	E82MV 551_4B
0.9	443	2.6	370	3.6	9.0	443	1.6	16	276	155.750	GSS06 - 2E □□□ 071C42	E82MV 551_4B
0.8	498	2.3	407	3.2	8.1	498	1.4	14	308	174.375	GSS06 - 2E □□□ 071C42	E82MV 551_4B
0.7	554	2.1	455	2.9	7.1	554	1.3	12	348	196.875	GSS06 - 2E □□□ 071C42	E82MV 551_4B
0.7	561	2	482	2.8	7.0	561	2.2	12	356	201.746	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.6	589	1.9	494	2.6	6.4	589	1.2	11	381	220.000	GSS06 - 3E □□□ 071C42	E82MV 551_4B
0.6	625	1.8	537	2.5	6.2	625	2.0	11	402	227.778	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.6	642	1.7	530	2.4	5.9	642	1.1	10	413	238.700	GSS06 - 3E □□□ 071C42	E82MV 551_4B
0.6	684	1.6	577	2.3	5.7	684	1.8	10	436	247.139	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.5	712	1.5	589	2.1	5.2	712	1.0	9	465	269.500	GSS06 - 3E □□□ 071C42	E82MV 551_4B
0.5	761	1.5	643	2.0	5.0	761	1.6	9	492	279.028	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.5	821	1.3	671	1.8	4.5	821	0.9	8	531	310.689	GSS06 - 3E □□□ 071C42	E82MV 551_4B
0.4	881	1.3	733	1.7	4.4	881	1.4	8	564	321.673	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.4	978	1.1	822	1.5	3.9	978	1.3	7	633	363.179	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.4	1066	1	889	1.4	3.6	1066	1.2	6	686	394.245	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.3	1182	0.9	998	1.3	3.2	1182	1.1	5	771	445.116	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.3	1304	0.8	1095	1.1	2.9	1304	1.0	5	842	490.403	GSS07 - 3E □□□ 071C42	E82MV 551_4B
0.3	1445	0.7	1230	1.0	2.5	1445	0.9	4	942	553.681	GSS07 - 3E □□□ 071C42	E82MV 551_4B

P₁ = 0.75 kW

25	25	73	22	100	250	25	4.2	435	14	5.639	GSS04 - 2E □□□ 080C32	E82MV 751_4B
18	35	53	31	73	182	35	4.2	317	20	7.733	GSS04 - 2E □□□ 080C32	E82MV 751_4B
16	39	45	35	62	156	39	3.8	271	22	9.042	GSS04 - 2E □□□ 080C32	E82MV 751_4B
14	45	41	39	57	143	45	3.5	248	25	9.897	GSS04 - 2E □□□ 080C32	E82MV 751_4B
13	49	38	43	52	130	49	3.2	227	28	10.827	GSS04 - 2E □□□ 080C32	E82MV 751_4B
11	54	33	48	45	114	54	3.1	198	31	12.400	GSS04 - 2E □□□ 080C32	E82MV 751_4B
10	63	30	55	41	102	63	2.5	178	36	13.810	GSS04 - 2E □□□ 080C32	E82MV 751_4B
8.9	69	26	61	36	89	69	2.5	155	40	15.869	GSS04 - 2E □□□ 080C32	E82MV 751_4B
8.1	76	24	67	32	81	76	2.3	141	44	17.360	GSS04 - 2E □□□ 080C32	E82MV 751_4B
6.9	82	20	73	28	69	82	1.9	120	46	20.417	GSS04 - 2E □□□ 080C32	E82MV 751_4B
6.4	97	18	85	25	64	97	1.8	111	57	22.143	GSS04 - 2E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
[rpm]	[Nm]	[rpm]	[Nm]	[rpm]	[rpm]	[Nm]		[rpm]	[Nm]			
P ₁ = 0.75 kW												
5.7	101	16	90	23	57	101	1.7	99	58	24.800	GSS04 - 2E □□□ 080C32	E82MV 751_4B
5.2	118	15	103	21	52	118	1.5	90	70	27.125	GSS04 - 2E □□□ 080C32	E82MV 751_4B
5.2	120	15	103	21	52	120	2.9	90	69	27.125	GSS05 - 2E □□□ 080C32	E82MV 751_4B
4.4	129	13	114	18	44	129	1.4	77	75	31.738	GSS04 - 2E □□□ 080C32	E82MV 751_4B
4.4	131	13	115	18	44	131	2.3	77	75	31.738	GSS05 - 2E □□□ 080C32	E82MV 751_4B
4.1	148	12	129	17	41	148	1.2	72	88	34.100	GSS04 - 2E □□□ 080C32	E82MV 751_4B
4.0	157	12	134	16	40	157	2.3	69	91	35.306	GSS05 - 2E □□□ 080C32	E82MV 751_4B
3.6	155	10	137	14	36	155	1.2	63	91	39.200	GSS04 - 2E □□□ 080C32	E82MV 751_4B
3.6	159	10	139	14	36	159	2.0	63	92	39.200	GSS05 - 2E □□□ 080C32	E82MV 751_4B
3.2	190	9.3	163	13	32	190	1.0	56	114	43.917	GSS04 - 2E □□□ 080C32	E82MV 751_4B
3.2	196	9.3	164	13	32	196	1.8	56	114	43.917	GSS05 - 2E □□□ 080C32	E82MV 751_4B
3.2	191	9.3	166	13	32	191	2.9	56	113	43.917	GSS06 - 2E □□□ 080C32	E82MV 751_4B
2.8	196	8.2	172	11	28	196	0.9	49	117	50.000	GSS04 - 2E □□□ 080C32	E82MV 751_4B
2.8	204	8.2	175	11	28	204	1.7	49	119	50.000	GSS05 - 2E □□□ 080C32	E82MV 751_4B
2.6	217	7.5	187	10	26	217	0.8	45	130	54.250	GSS04 - 2E □□□ 080C32	E82MV 751_4B
2.6	226	7.5	191	10	26	226	1.6	45	131	54.250	GSS05 - 2E □□□ 080C32	E82MV 751_4B
2.3	251	6.7	211	9.2	23	251	1.4	40	146	61.250	GSS05 - 2E □□□ 080C32	E82MV 751_4B
2.0	294	5.8	244	8.0	20	294	1.2	35	171	70.611	GSS05 - 2E □□□ 080C32	E82MV 751_4B
2.0	285	5.8	246	8.0	20	285	2.5	35	170	70.611	GSS06 - 2E □□□ 080C32	E82MV 751_4B
1.8	328	5.1	269	7.1	18	328	1.1	31	191	79.722	GSS05 - 2E □□□ 080C32	E82MV 751_4B
1.8	318	5.1	277	7.1	18	318	2.2	31	192	79.722	GSS06 - 2E □□□ 080C32	E82MV 751_4B
1.6	365	4.7	296	6.4	16	365	1.0	28	214	87.833	GSS05 - 2E □□□ 080C32	E82MV 751_4B
1.6	352	4.7	301	6.4	16	352	2.0	28	212	87.833	GSS06 - 2E □□□ 080C32	E82MV 751_4B
1.4	405	4.1	326	5.7	14	405	0.9	25	238	99.167	GSS05 - 2E □□□ 080C32	E82MV 751_4B
1.4	393	4.1	338	5.7	14	393	1.8	25	240	99.167	GSS06 - 2E □□□ 080C32	E82MV 751_4B
1.2	452	3.6	381	5.0	12	452	1.6	22	275	113.667	GSS06 - 2E □□□ 080C32	E82MV 751_4B
1.2	462	3.6	396	5.0	12	462	2.7	22	278	113.667	GSS07 - 2E □□□ 080C32	E82MV 751_4B
1.1	503	3.2	426	4.4	11	503	1.4	19	311	128.333	GSS06 - 2E □□□ 080C32	E82MV 751_4B
1.1	516	3.2	444	4.4	11	516	2.4	19	314	128.333	GSS07 - 2E □□□ 080C32	E82MV 751_4B
1.0	544	3	452	4.1	10	544	1.3	18	334	137.950	GSS06 - 2E □□□ 080C32	E82MV 751_4B
1.0	560	3	473	4.1	10	560	2.2	18	339	137.950	GSS07 - 2E □□□ 080C32	E82MV 751_4B
0.9	605	2.6	505	3.6	9.1	605	1.2	16	377	155.750	GSS06 - 2E □□□ 080C32	E82MV 751_4B
0.9	623	2.6	530	3.6	9.1	623	2.0	16	383	155.750	GSS07 - 2E □□□ 080C32	E82MV 751_4B
0.8	679	2.3	556	3.2	8.1	679	1.1	14	421	174.375	GSS06 - 2E □□□ 080C32	E82MV 751_4B
0.8	701	2.3	586	3.2	8.1	701	1.8	14	428	174.375	GSS07 - 2E □□□ 080C32	E82MV 751_4B
0.7	755	2.1	622	2.9	7.2	755	1.0	12	475	196.875	GSS06 - 2E □□□ 080C32	E82MV 751_4B
0.7	782	2.1	656	2.9	7.2	782	1.6	12	484	196.875	GSS07 - 2E □□□ 080C32	E82MV 751_4B
0.7	768	2	660	2.8	7.0	768	1.6	12	488	201.746	GSS07 - 3E □□□ 080C32	E82MV 751_4B
0.6	803	1.9	674	2.6	6.4	803	0.9	11	520	220.000	GSS06 - 3E □□□ 080C32	E82MV 751_4B
0.6	855	1.8	735	2.5	6.2	855	1.5	11	550	227.778	GSS07 - 3E □□□ 080C32	E82MV 751_4B
0.6	876	1.7	724	2.4	5.9	876	0.8	10	563	238.700	GSS06 - 3E □□□ 080C32	E82MV 751_4B
0.6	935	1.7	790	2.3	5.7	935	1.3	10	596	247.139	GSS07 - 3E □□□ 080C32	E82MV 751_4B
0.5	1039	1.5	880	2.0	5.1	1039	1.2	9	672	279.028	GSS07 - 3E □□□ 080C32	E82MV 751_4B
0.4	1203	1.3	1002	1.8	4.4	1203	1.0	8	769	321.673	GSS07 - 3E □□□ 080C32	E82MV 751_4B
0.4	1335	1.1	1123	1.6	3.9	1335	0.9	7	864	363.179	GSS07 - 3E □□□ 080C32	E82MV 751_4B
0.4	1455	1	1213	1.4	3.6	1455	0.9	6	935	394.245	GSS07 - 3E □□□ 080C32	E82MV 751_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes
Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	30 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
25	37	71	32	148	247	37	3.9	429	21	5.639	GSS04 - 2E □□□ 080C42	E82MV 152_4B
18	52	52	44	108	180	52	3.0	313	30	7.733	GSS04 - 2E □□□ 080C42	E82MV 152_4B
15	59	45	50	92	154	59	2.6	267	34	9.042	GSS04 - 2E □□□ 080C42	E82MV 152_4B
14	67	41	56	84	140	67	2.4	244	38	9.897	GSS04 - 2E □□□ 080C42	E82MV 152_4B
13	74	37	61	77	128	74	2.2	223	42	10.827	GSS04 - 2E □□□ 080C42	E82MV 152_4B
11	82	33	68	67	112	82	2.1	195	47	12.400	GSS04 - 2E □□□ 080C42	E82MV 152_4B
10	95	29	78	60	101	95	1.7	175	54	13.810	GSS04 - 2E □□□ 080C42	E82MV 152_4B
10	94	29	77	60	101	94	2.9	175	54	13.810	GSS05 - 2E □□□ 080C42	E82MV 152_4B
8.8	104	25	87	53	88	104	1.7	152	60	15.869	GSS04 - 2E □□□ 080C42	E82MV 152_4B
8.8	104	25	87	53	88	104	2.8	152	60	15.869	GSS05 - 2E □□□ 080C42	E82MV 152_4B
8.0	114	23	95	48	80	114	1.6	139	66	17.360	GSS04 - 2E □□□ 080C42	E82MV 152_4B
8.0	114	23	95	48	80	114	2.7	139	66	17.360	GSS05 - 2E □□□ 080C42	E82MV 152_4B
6.8	123	20	103	41	68	123	1.2	118	69	20.417	GSS04 - 2E □□□ 080C42	E82MV 152_4B
6.8	123	20	105	41	68	123	2.0	118	70	20.417	GSS05 - 2E □□□ 080C42	E82MV 152_4B
6.3	145	18	120	38	63	145	1.2	109	85	22.143	GSS04 - 2E □□□ 080C42	E82MV 152_4B
6.3	147	18	121	38	63	147	2.3	109	85	22.143	GSS05 - 2E □□□ 080C42	E82MV 152_4B
6.3	145	18	122	38	63	145	4.5	109	84	22.143	GSS07 - 2E □□□ 080C42	E82MV 152_4B
5.6	152	16	127	34	56	152	1.1	98	87	24.800	GSS04 - 2E □□□ 080C42	E82MV 152_4B
5.6	153	16	128	34	56	153	1.8	98	87	24.800	GSS05 - 2E □□□ 080C42	E82MV 152_4B
5.1	177	15	146	31	51	177	1.0	89	105	27.125	GSS04 - 2E □□□ 080C42	E82MV 152_4B
5.1	180	15	147	31	51	180	2.0	89	104	27.125	GSS05 - 2E □□□ 080C42	E82MV 152_4B
4.4	193	13	160	26	44	193	0.9	76	112	31.738	GSS04 - 2E □□□ 080C42	E82MV 152_4B
4.4	196	13	163	26	44	196	1.5	76	113	31.738	GSS05 - 2E □□□ 080C42	E82MV 152_4B
4.4	194	13	162	26	44	194	3.1	76	112	31.738	GSS06 - 2E □□□ 080C42	E82MV 152_4B
3.9	235	11	189	24	39	235	1.5	69	136	35.306	GSS05 - 2E □□□ 080C42	E82MV 152_4B
3.9	229	11	189	24	39	229	3.1	69	135	35.306	GSS06 - 2E □□□ 080C42	E82MV 152_4B
3.6	239	10	197	21	36	239	1.3	62	139	39.200	GSS05 - 2E □□□ 080C42	E82MV 152_4B
3.6	238	10	200	21	36	238	2.6	62	139	39.200	GSS06 - 2E □□□ 080C42	E82MV 152_4B
3.2	293	9.2	232	19	32	293	1.2	55	170	43.917	GSS05 - 2E □□□ 080C42	E82MV 152_4B
3.2	285	9.2	234	19	32	285	2.5	55	169	43.917	GSS06 - 2E □□□ 080C42	E82MV 152_4B
3.2	283	9.3	235	19	32	283	3.1	56	167	43.271	GSS07 - 2E □□□ 080C42	E82MV 152_4B
2.8	306	8.1	248	17	28	306	1.2	48	178	50.000	GSS05 - 2E □□□ 080C42	E82MV 152_4B
2.8	303	8.1	253	17	28	303	2.3	48	179	50.000	GSS06 - 2E □□□ 080C42	E82MV 152_4B
2.6	338	7.4	270	15	26	338	1.1	45	196	54.250	GSS05 - 2E □□□ 080C42	E82MV 152_4B
2.6	331	7.4	272	15	26	331	2.1	45	195	54.250	GSS06 - 2E □□□ 080C42	E82MV 152_4B
2.3	375	6.6	298	14	23	375	1.0	39	219	61.250	GSS05 - 2E □□□ 080C42	E82MV 152_4B
2.3	370	6.6	306	14	23	370	1.9	39	221	61.250	GSS06 - 2E □□□ 080C42	E82MV 152_4B
2.0	440	5.7	343	12	20	440	0.8	34	256	70.611	GSS05 - 2E □□□ 080C42	E82MV 152_4B
2.0	428	5.7	349	12	20	428	1.7	34	255	70.611	GSS06 - 2E □□□ 080C42	E82MV 152_4B
2.0	434	5.7	359	12	20	434	2.8	34	257	70.611	GSS07 - 2E □□□ 080C42	E82MV 152_4B
1.7	478	5.1	392	10	17	478	1.5	30	289	79.722	GSS06 - 2E □□□ 080C42	E82MV 152_4B
1.7	487	5.1	403	10	17	487	2.5	30	291	79.722	GSS07 - 2E □□□ 080C42	E82MV 152_4B
1.6	528	4.6	426	9.5	16	528	1.4	28	318	87.833	GSS06 - 2E □□□ 080C42	E82MV 152_4B
1.6	531	4.7	435	9.7	16	531	2.3	28	317	86.542	GSS07 - 2E □□□ 080C42	E82MV 152_4B
1.4	589	4.1	477	8.4	14	589	1.2	24	360	99.167	GSS06 - 2E □□□ 080C42	E82MV 152_4B
1.4	594	4.1	489	8.5	14	594	2.1	25	358	97.708	GSS07 - 2E □□□ 080C42	E82MV 152_4B
1.2	676	3.5	537	7.3	12	676	1.1	21	412	113.667	GSS06 - 2E □□□ 080C42	E82MV 152_4B
1.2	694	3.5	561	7.3	12	694	1.8	21	418	113.667	GSS07 - 2E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		30 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	30 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			
				[rpm]	[rpm]							
P ₁ = 1.1 kW												
1.1	753	3.1	601	6.5	11	753	1.0	19	465	128.333	GSS06 - 2E □□□ 080C42	E82MV 152_4B
1.1	774	3.1	629	6.5	11	774	1.6	19	472	128.333	GSS07 - 2E □□□ 080C42	E82MV 152_4B
1.0	814	2.9	637	6.1	10	814	0.9	18	499	137.950	GSS06 - 2E □□□ 080C42	E82MV 152_4B
1.0	840	2.9	669	6.1	10	840	1.5	18	508	137.950	GSS07 - 2E □□□ 080C42	E82MV 152_4B
0.9	934	2.6	749	5.4	8.9	934	1.3	16	573	155.750	GSS07 - 2E □□□ 080C42	E82MV 152_4B
0.8	1051	2.3	828	4.8	8.0	1051	1.2	14	641	174.375	GSS07 - 2E □□□ 080C42	E82MV 152_4B
0.7	1171	2	926	4.2	7.1	1171	1.1	12	723	196.875	GSS07 - 2E □□□ 080C42	E82MV 152_4B
0.7	1150	2	931	4.1	6.9	1150	1.1	12	729	201.746	GSS07 - 3E □□□ 080C42	E82MV 152_4B
0.6	1280	1.8	1037	3.7	6.1	1280	1.0	11	822	227.778	GSS07 - 3E □□□ 080C42	E82MV 152_4B
0.6	1398	1.6	1114	3.4	5.6	1398	0.9	10	891	247.139	GSS07 - 3E □□□ 080C42	E82MV 152_4B
0.5	1554	1.4	1240	3.0	5.0	1554	0.8	9	1003	279.028	GSS07 - 3E □□□ 080C42	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			

P₁ = 1.5 kW

25	52	71	46	99	247	52	2.8	429	29	5.639	GSS04 - 2E □□□ 090C32	E82MV 152_4B
18	72	52	63	72	180	72	2.2	313	41	7.733	GSS04 - 2E □□□ 090C32	E82MV 152_4B
15	82	45	73	61	154	82	1.9	267	46	9.042	GSS04 - 2E □□□ 090C32	E82MV 152_4B
15	81	45	72	61	154	81	3.0	267	46	9.042	GSS05 - 2E □□□ 090C32	E82MV 152_4B
14	92	41	81	56	140	92	1.7	244	53	9.897	GSS04 - 2E □□□ 090C32	E82MV 152_4B
14	91	41	81	56	140	91	2.9	244	52	9.897	GSS05 - 2E □□□ 090C32	E82MV 152_4B
13	101	37	89	51	128	101	1.6	223	58	10.827	GSS04 - 2E □□□ 090C32	E82MV 152_4B
13	100	37	88	51	128	100	2.7	223	57	10.827	GSS05 - 2E □□□ 090C32	E82MV 152_4B
11	112	33	99	45	112	112	1.5	195	64	12.400	GSS04 - 2E □□□ 090C32	E82MV 152_4B
11	112	33	99	45	112	112	2.5	195	64	12.400	GSS05 - 2E □□□ 090C32	E82MV 152_4B
10	130	29	113	40	101	130	1.2	175	74	13.810	GSS04 - 2E □□□ 090C32	E82MV 152_4B
10	129	29	113	40	101	129	2.1	175	74	13.810	GSS05 - 2E □□□ 090C32	E82MV 152_4B
8.8	143	25	126	35	88	143	1.3	152	83	15.869	GSS04 - 2E □□□ 090C32	E82MV 152_4B
8.8	143	25	127	35	88	143	2.1	152	83	15.869	GSS05 - 2E □□□ 090C32	E82MV 152_4B
8.0	156	23	138	32	80	156	1.2	139	91	17.360	GSS04 - 2E □□□ 090C32	E82MV 152_4B
8.0	157	23	139	32	80	157	2.0	139	91	17.360	GSS05 - 2E □□□ 090C32	E82MV 152_4B
6.8	168	20	150	27	68	168	0.9	118	95	20.417	GSS04 - 2E □□□ 090C32	E82MV 152_4B
6.8	168	20	152	27	68	168	1.5	118	97	20.417	GSS05 - 2E □□□ 090C32	E82MV 152_4B
6.3	198	18	174	25	63	198	0.9	109	116	22.143	GSS04 - 2E □□□ 090C32	E82MV 152_4B
6.3	201	18	176	25	63	201	1.7	109	116	22.143	GSS05 - 2E □□□ 090C32	E82MV 152_4B
6.3	198	18	176	25	63	198	4.1	109	115	22.143	GSS07 - 2E □□□ 090C32	E82MV 152_4B
5.6	208	16	184	22	56	208	0.8	98	119	24.800	GSS04 - 2E □□□ 090C32	E82MV 152_4B
5.6	210	16	187	22	56	210	1.3	98	120	24.800	GSS05 - 2E □□□ 090C32	E82MV 152_4B
5.1	247	15	213	20	51	247	1.5	89	143	27.125	GSS05 - 2E □□□ 090C32	E82MV 152_4B
5.1	242	15	213	20	51	242	2.9	89	141	27.125	GSS06 - 2E □□□ 090C32	E82MV 152_4B
4.4	269	13	236	18	44	269	1.1	76	155	31.738	GSS05 - 2E □□□ 090C32	E82MV 152_4B
4.4	267	13	236	18	44	267	2.2	76	154	31.738	GSS06 - 2E □□□ 090C32	E82MV 152_4B
3.9	322	11	275	16	39	322	1.1	69	187	35.306	GSS05 - 2E □□□ 090C32	E82MV 152_4B
3.9	316	11	276	16	39	316	2.2	69	185	35.306	GSS06 - 2E □□□ 090C32	E82MV 152_4B
3.6	327	10	286	14	36	327	1.0	62	190	39.200	GSS05 - 2E □□□ 090C32	E82MV 152_4B
3.6	327	10	291	14	36	327	1.9	62	192	39.200	GSS06 - 2E □□□ 090C32	E82MV 152_4B
3.2	401	9.2	337	13	32	401	0.9	55	233	43.917	GSS05 - 2E □□□ 090C32	E82MV 152_4B
3.2	392	9.2	340	13	32	392	1.8	55	231	43.917	GSS06 - 2E □□□ 090C32	E82MV 152_4B
3.2	388	9.3	341	13	32	388	2.8	56	228	43.271	GSS07 - 2E □□□ 090C32	E82MV 152_4B
2.8	418	8.1	359	11	28	418	0.8	48	244	50.000	GSS05 - 2E □□□ 090C32	E82MV 152_4B
2.8	416	8.1	368	11	28	416	1.7	48	246	50.000	GSS06 - 2E □□□ 090C32	E82MV 152_4B
2.8	420	8.1	374	11	28	420	2.9	48	247	50.000	GSS07 - 2E □□□ 090C32	E82MV 152_4B
2.6	454	7.4	396	10	26	454	1.6	45	267	54.250	GSS06 - 2E □□□ 090C32	E82MV 152_4B
2.3	507	6.6	445	9.1	23	507	1.4	39	303	61.250	GSS06 - 2E □□□ 090C32	E82MV 152_4B
2.0	587	5.7	507	7.9	20	587	1.2	34	350	70.611	GSS06 - 2E □□□ 090C32	E82MV 152_4B
2.0	597	5.7	523	7.9	20	597	2.1	34	353	70.611	GSS07 - 2E □□□ 090C32	E82MV 152_4B
1.7	654	5.1	569	7.0	17	654	1.1	30	395	79.722	GSS06 - 2E □□□ 090C32	E82MV 152_4B
1.7	669	5.1	588	7.0	17	669	1.8	30	400	79.722	GSS07 - 2E □□□ 090C32	E82MV 152_4B
1.6	723	4.6	618	6.3	16	723	1.0	28	436	87.833	GSS06 - 2E □□□ 090C32	E82MV 152_4B
1.6	729	4.7	633	6.4	16	729	1.7	28	435	86.542	GSS07 - 2E □□□ 090C32	E82MV 152_4B
1.4	806	4.1	692	5.6	14	806	0.9	24	493	99.167	GSS06 - 2E □□□ 090C32	E82MV 152_4B
1.4	816	4.1	711	5.7	14	816	1.5	25	492	97.708	GSS07 - 2E □□□ 090C32	E82MV 152_4B
1.2	952	3.5	816	4.9	12	952	1.3	21	573	113.667	GSS07 - 2E □□□ 090C32	E82MV 152_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]	[Nm]			

P₁ = 1.5 kW

1.1	1062	3.1	914	4.3	11	1062	1.2	19	647	128.333	GSS07 - 2E □□□ 090C32	E82MV 152_4B
1.0	1151	2.9	972	4.0	10	1151	1.1	18	696	137.950	GSS07 - 2E □□□ 090C32	E82MV 152_4B
0.9	1279	2.6	1088	3.6	8.9	1279	1.0	16	785	155.750	GSS07 - 2E □□□ 090C32	E82MV 152_4B
0.8	1438	2.3	1201	3.2	8.0	1438	0.9	14	878	174.375	GSS07 - 2E □□□ 090C32	E82MV 152_4B
0.8	1364	2.3	1191	3.2	7.9	1364	0.9	14	868	175.000	GSS07 - 3E □□□ 090C32	E82MV 152_4B

P₁ = 2.2 kW

26	73	74	66	102	255	73	3.0	444	42	5.639	GSS05 - 2E □□□ 100C12	E82MV 222_4B
19	101	54	90	74	186	101	2.6	324	58	7.733	GSS05 - 2E □□□ 100C12	E82MV 222_4B
16	115	46	103	64	159	115	2.1	277	66	9.042	GSS05 - 2E □□□ 100C12	E82MV 222_4B
15	131	42	116	58	146	131	2.1	253	75	9.897	GSS05 - 2E □□□ 100C12	E82MV 222_4B
13	143	39	126	53	133	143	1.9	231	82	10.827	GSS05 - 2E □□□ 100C12	E82MV 222_4B
12	159	34	142	46	116	159	1.7	202	92	12.400	GSS05 - 2E □□□ 100C12	E82MV 222_4B
12	158	34	140	46	116	158	3.2	202	90	12.400	GSS06 - 2E □□□ 100C12	E82MV 222_4B
10	184	30	161	42	104	184	1.5	181	105	13.810	GSS05 - 2E □□□ 100C12	E82MV 222_4B
10	189	29	166	40	101	189	2.7	175	108	14.286	GSS06 - 2E □□□ 100C12	E82MV 222_4B
9.1	204	26	181	36	91	204	1.5	158	118	15.869	GSS05 - 2E □□□ 100C12	E82MV 222_4B
9.1	203	26	180	36	91	203	2.9	158	117	15.869	GSS06 - 2E □□□ 100C12	E82MV 222_4B
8.3	224	24	198	33	83	224	1.4	144	129	17.360	GSS05 - 2E □□□ 100C12	E82MV 222_4B
8.3	222	24	196	33	83	222	2.8	144	128	17.360	GSS06 - 2E □□□ 100C12	E82MV 222_4B
7.1	240	20	217	28	71	240	1.1	123	137	20.417	GSS05 - 2E □□□ 100C12	E82MV 222_4B
7.1	244	20	219	28	71	244	2.0	123	139	20.417	GSS06 - 2E □□□ 100C12	E82MV 222_4B
6.5	286	19	251	26	65	286	1.2	113	166	22.143	GSS05 - 2E □□□ 100C12	E82MV 222_4B
6.5	282	19	250	26	65	282	2.3	113	164	22.143	GSS06 - 2E □□□ 100C12	E82MV 222_4B
6.5	280	19	250	26	65	280	4.2	113	163	22.143	GSS07 - 2E □□□ 100C12	E82MV 222_4B
5.8	298	17	266	23	58	298	0.9	101	170	24.800	GSS05 - 2E □□□ 100C12	E82MV 222_4B
5.8	298	17	265	23	58	298	1.9	101	171	24.800	GSS06 - 2E □□□ 100C12	E82MV 222_4B
5.3	351	15	304	21	53	351	1.0	92	203	27.125	GSS05 - 2E □□□ 100C12	E82MV 222_4B
5.3	346	15	305	21	53	346	2.0	92	202	27.125	GSS06 - 2E □□□ 100C12	E82MV 222_4B
4.5	383	13	337	18	45	383	0.8	79	220	31.738	GSS05 - 2E □□□ 100C12	E82MV 222_4B
4.5	381	13	338	18	45	381	1.6	79	220	31.738	GSS06 - 2E □□□ 100C12	E82MV 222_4B
4.7	376	13	334	19	47	376	2.8	81	216	31.000	GSS07 - 2E □□□ 100C12	E82MV 222_4B
4.1	450	12	395	16	41	450	1.6	71	264	35.306	GSS06 - 2E □□□ 100C12	E82MV 222_4B
4.1	451	12	399	16	41	451	2.7	71	264	35.306	GSS07 - 2E □□□ 100C12	E82MV 222_4B
3.7	466	11	416	15	37	466	1.4	64	273	39.200	GSS06 - 2E □□□ 100C12	E82MV 222_4B
3.7	472	11	422	15	37	472	2.5	64	275	39.200	GSS07 - 2E □□□ 100C12	E82MV 222_4B
3.3	558	9.5	486	13	33	558	1.3	57	330	43.917	GSS06 - 2E □□□ 100C12	E82MV 222_4B
3.3	552	9.7	487	13	33	552	2.2	58	325	43.271	GSS07 - 2E □□□ 100C12	E82MV 222_4B
2.9	592	8.4	525	12	29	592	1.2	50	350	50.000	GSS06 - 2E □□□ 100C12	E82MV 222_4B
2.9	601	8.4	536	12	29	601	2.1	50	353	50.000	GSS07 - 2E □□□ 100C12	E82MV 222_4B
2.7	646	7.7	564	11	27	646	1.1	46	381	54.250	GSS06 - 2E □□□ 100C12	E82MV 222_4B
2.7	657	7.7	580	11	27	657	1.9	46	385	54.250	GSS07 - 2E □□□ 100C12	E82MV 222_4B
2.4	722	6.8	635	9.4	24	722	1.0	41	430	61.250	GSS06 - 2E □□□ 100C12	E82MV 222_4B
2.4	736	6.8	653	9.4	24	736	1.7	41	435	61.250	GSS07 - 2E □□□ 100C12	E82MV 222_4B

Thermal power limit not considered (see page 2-5)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan													
Motor cooling with integral fan *)													
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂				
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[rpm]	[Nm]	50 Hz	[rpm]				[Nm]

P₁ = 2.2 kW

2.0	834	5.9	723	8.2	20	834	0.9	35	497	70.611	GSS06 - 2E □□□ 100C12	E82MV 222_4B
2.0	851	5.9	748	8.2	20	851	1.5	35	504	70.611	GSS07 - 2E □□□ 100C12	E82MV 222_4B
1.8	954	5.2	841	7.2	18	954	1.3	31	569	79.722	GSS07 - 2E □□□ 100C12	E82MV 222_4B
1.7	1038	4.8	904	6.6	17	1038	1.2	29	619	86.542	GSS07 - 2E □□□ 100C12	E82MV 222_4B
1.5	1161	4.3	1015	5.9	15	1161	1.1	26	700	97.708	GSS07 - 2E □□□ 100C12	E82MV 222_4B
1.3	1354	3.7	1165	5.1	13	1354	0.9	22	815	113.667	GSS07 - 2E □□□ 100C12	E82MV 222_4B
1.1	1509	3.3	1305	4.5	11	1509	0.8	20	920	128.333	GSS07 - 2E □□□ 100C12	E82MV 222_4B

P₁ = 3 kW

25	102	74	91	101	254	102	2.2	441	58	5.639	GSS05 - 2E □□□ 100C32	E82MV 302_4B
18	140	54	125	74	185	140	1.9	322	80	7.733	GSS05 - 2E □□□ 100C32	E82MV 302_4B
16	159	46	143	63	158	159	1.6	275	91	9.042	GSS05 - 2E □□□ 100C32	E82MV 302_4B
16	160	46	142	63	158	160	2.6	275	91	9.042	GSS06 - 2E □□□ 100C32	E82MV 302_4B
14	181	42	160	58	145	181	1.5	251	103	9.897	GSS05 - 2E □□□ 100C32	E82MV 302_4B
14	185	41	164	56	140	185	2.8	243	106	10.238	GSS06 - 2E □□□ 100C32	E82MV 302_4B
13	198	38	175	53	132	198	1.4	230	113	10.827	GSS05 - 2E □□□ 100C32	E82MV 302_4B
13	203	37	180	51	128	203	2.5	222	116	11.200	GSS06 - 2E □□□ 100C32	E82MV 302_4B
12	220	33	196	46	115	220	1.3	201	126	12.400	GSS05 - 2E □□□ 100C32	E82MV 302_4B
12	219	33	195	46	115	219	2.4	201	125	12.400	GSS06 - 2E □□□ 100C32	E82MV 302_4B
10	254	30	222	41	104	254	1.1	180	145	13.810	GSS05 - 2E □□□ 100C32	E82MV 302_4B
10	261	29	230	40	100	261	2.0	174	150	14.286	GSS06 - 2E □□□ 100C32	E82MV 302_4B
9.0	282	26	249	36	90	282	1.1	157	163	15.869	GSS05 - 2E □□□ 100C32	E82MV 302_4B
9.0	281	26	249	36	90	281	2.1	157	161	15.869	GSS06 - 2E □□□ 100C32	E82MV 302_4B
8.2	309	24	272	33	82	309	1.0	143	178	17.360	GSS05 - 2E □□□ 100C32	E82MV 302_4B
8.2	307	24	272	33	82	307	2.0	143	177	17.360	GSS06 - 2E □□□ 100C32	E82MV 302_4B
8.2	306	24	273	33	82	306	3.2	143	177	17.360	GSS07 - 2E □□□ 100C32	E82MV 302_4B
7.0	337	20	303	28	70	337	1.4	122	192	20.417	GSS06 - 2E □□□ 100C32	E82MV 302_4B
6.5	395	19	345	26	65	395	0.9	112	228	22.143	GSS05 - 2E □□□ 100C32	E82MV 302_4B
6.5	391	19	346	26	65	391	1.7	112	227	22.143	GSS06 - 2E □□□ 100C32	E82MV 302_4B
6.5	389	19	347	26	65	389	3.0	112	226	22.143	GSS07 - 2E □□□ 100C32	E82MV 302_4B
5.8	412	17	366	23	58	412	1.4	100	236	24.800	GSS06 - 2E □□□ 100C32	E82MV 302_4B
5.3	478	15	421	21	53	478	1.5	92	279	27.125	GSS06 - 2E □□□ 100C32	E82MV 302_4B
5.3	478	15	425	21	53	478	2.6	92	279	27.125	GSS07 - 2E □□□ 100C32	E82MV 302_4B
4.5	525	13	466	18	45	525	1.2	78	304	31.738	GSS06 - 2E □□□ 100C32	E82MV 302_4B
4.6	521	13	463	18	46	521	2.0	80	300	31.000	GSS07 - 2E □□□ 100C32	E82MV 302_4B
4.1	621	12	544	16	41	621	1.2	70	365	35.306	GSS06 - 2E □□□ 100C32	E82MV 302_4B
4.1	624	12	553	16	41	624	2.0	70	366	35.306	GSS07 - 2E □□□ 100C32	E82MV 302_4B
3.7	643	11	573	15	37	643	1.0	63	377	39.200	GSS06 - 2E □□□ 100C32	E82MV 302_4B
3.7	653	11	584	15	37	653	1.8	63	381	39.200	GSS07 - 2E □□□ 100C32	E82MV 302_4B
3.3	770	9.4	670	13	33	770	0.9	57	454	43.917	GSS06 - 2E □□□ 100C32	E82MV 302_4B
3.3	764	9.6	673	13	33	764	1.6	58	450	43.271	GSS07 - 2E □□□ 100C32	E82MV 302_4B
2.9	817	8.3	723	11	29	817	0.9	50	483	50.000	GSS06 - 2E □□□ 100C32	E82MV 302_4B
2.9	831	8.3	741	11	29	831	1.5	50	488	50.000	GSS07 - 2E □□□ 100C32	E82MV 302_4B
2.6	891	7.6	778	11	26	891	0.8	46	525	54.250	GSS06 - 2E □□□ 100C32	E82MV 302_4B
2.6	908	7.6	800	11	26	908	1.4	46	531	54.250	GSS07 - 2E □□□ 100C32	E82MV 302_4B
2.3	1016	6.8	901	9.3	23	1016	1.2	41	601	61.250	GSS07 - 2E □□□ 100C32	E82MV 302_4B

Thermal power limit not considered (see page 2-5)

^{*)} Observe current derating (see page 2-2)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz			87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec	
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂				M ₂
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[Nm]	50 Hz	[rpm]				[Nm]

P₁ = 3 kW

2.0	1175	5.9	1031	8.1	20	1175	1.1	35	695	70.611	GSS07 - 2E □□□ 100C32	E82MV 302_4B
1.8	1315	5.2	1158	7.2	18	1315	1.0	31	785	79.722	GSS07 - 2E □□□ 100C32	E82MV 302_4B
1.7	1432	4.8	1246	6.6	17	1432	0.9	29	854	86.542	GSS07 - 2E □□□ 100C32	E82MV 302_4B

P₁ = 4 kW

25	139	72	120	99	249	139	2.5	433	79	5.833	GSS06 - 2E □□□ 112C22	E82MV 402_4B
18	191	53	164	73	181	191	2.5	315	109	8.000	GSS06 - 2E □□□ 112C22	E82MV 402_4B
16	212	47	182	64	160	212	2.0	279	120	9.042	GSS06 - 2E □□□ 112C22	E82MV 402_4B
16	212	46	183	64	160	212	2.9	278	121	9.086	GSS07 - 2E □□□ 112C22	E82MV 402_4B
14	246	41	210	57	142	246	2.1	246	141	10.238	GSS06 - 2E □□□ 112C22	E82MV 402_4B
13	269	38	230	52	130	269	1.9	225	154	11.200	GSS06 - 2E □□□ 112C22	E82MV 402_4B
13	268	38	230	52	130	268	3.2	225	154	11.200	GSS07 - 2E □□□ 112C22	E82MV 402_4B
12	290	34	249	47	117	290	1.8	203	166	12.400	GSS06 - 2E □□□ 112C22	E82MV 402_4B
12	294	33	254	46	115	294	2.7	200	169	12.594	GSS07 - 2E □□□ 112C22	E82MV 402_4B
10	345	29	293	41	102	345	1.5	177	198	14.286	GSS06 - 2E □□□ 112C22	E82MV 402_4B
10	344	29	294	41	102	344	2.6	177	197	14.286	GSS07 - 2E □□□ 112C22	E82MV 402_4B
9.1	371	26	318	37	91	371	1.6	159	213	15.869	GSS06 - 2E □□□ 112C22	E82MV 402_4B
9.4	362	27	312	37	94	362	2.5	163	209	15.500	GSS07 - 2E □□□ 112C22	E82MV 402_4B
8.4	406	24	348	33	84	406	1.5	145	234	17.360	GSS06 - 2E □□□ 112C22	E82MV 402_4B
8.4	406	24	350	33	84	406	2.5	145	234	17.360	GSS07 - 2E □□□ 112C22	E82MV 402_4B
7.1	446	21	386	28	71	446	1.1	124	254	20.417	GSS06 - 2E □□□ 112C22	E82MV 402_4B
7.1	453	20	394	28	71	453	1.7	123	259	20.517	GSS07 - 2E □□□ 112C22	E82MV 402_4B
6.6	516	19	442	26	66	516	1.3	114	300	22.143	GSS06 - 2E □□□ 112C22	E82MV 402_4B
6.6	516	19	445	26	66	516	2.3	114	300	22.143	GSS07 - 2E □□□ 112C22	E82MV 402_4B
5.9	544	17	467	23	59	544	1.0	102	311	24.800	GSS06 - 2E □□□ 112C22	E82MV 402_4B
5.8	560	17	483	23	58	560	1.6	100	320	25.188	GSS07 - 2E □□□ 112C22	E82MV 402_4B
5.4	631	16	538	21	54	631	1.1	93	368	27.125	GSS06 - 2E □□□ 112C22	E82MV 402_4B
5.4	633	16	544	21	54	633	2.0	93	369	27.125	GSS07 - 2E □□□ 112C22	E82MV 402_4B
4.6	693	13	594	18	46	693	0.9	79	401	31.738	GSS06 - 2E □□□ 112C22	E82MV 402_4B
4.7	689	14	592	19	47	689	1.5	81	396	31.000	GSS07 - 2E □□□ 112C22	E82MV 402_4B
4.1	825	12	706	16	41	825	1.5	71	483	35.306	GSS07 - 2E □□□ 112C22	E82MV 402_4B
3.7	863	11	746	15	37	863	1.4	64	503	39.200	GSS07 - 2E □□□ 112C22	E82MV 402_4B
3.4	1009	9.7	860	13	34	1009	1.2	58	594	43.271	GSS07 - 2E □□□ 112C22	E82MV 402_4B
2.9	1098	8.4	946	12	29	1098	1.1	50	645	50.000	GSS07 - 2E □□□ 112C22	E82MV 402_4B
2.7	1198	7.8	1022	11	27	1198	1.0	47	701	54.250	GSS07 - 2E □□□ 112C22	E82MV 402_4B
2.4	1341	6.9	1149	9.5	24	1341	0.9	41	793	61.250	GSS07 - 2E □□□ 112C22	E82MV 402_4B
2.1	1549	6	1316	8.2	21	1549	0.8	36	916	70.611	GSS07 - 2E □□□ 112C22	E82MV 402_4B

P₁ = 5.5 kW

25	193	72	167	99	248	193	1.8	431	110	5.833	GSS06 - 2E □□□ 112C32	E82MV 552_4B
25	194	71	167	99	247	194	2.7	429	111	5.862	GSS07 - 2E □□□ 112C32	E82MV 552_4B
18	265	52	228	72	181	265	1.8	314	151	8.000	GSS06 - 2E □□□ 112C32	E82MV 552_4B
18	270	52	232	71	178	270	2.5	309	154	8.125	GSS07 - 2E □□□ 112C32	E82MV 552_4B
16	294	46	252	64	160	294	1.4	278	167	9.042	GSS06 - 2E □□□ 112C32	E82MV 552_4B
16	295	46	255	64	159	295	2.1	277	169	9.086	GSS07 - 2E □□□ 112C32	E82MV 552_4B

Thermal power limit not considered (see page 2-5)

^{*)} Observe current derating (see page 2-2)

Selection tables - Helical-worm gearboxes

Geared motors with 8200 motec

Motor cooling with separate fan												
Motor cooling with integral fan *)												
5 Hz		14.5 Hz		20 - 50 Hz				87 Hz		i	Helical- worm geared motor Dimensions see page 7-24 onwards	8200 motec
n ₂	M ₂	n ₂	M ₂	n ₂	n ₂	M ₂	c	n ₂	M ₂			
[rpm]	[Nm]	[rpm]	[Nm]	20 Hz	50 Hz	[rpm]	[Nm]	50 Hz	[rpm]			

P₁ = 5.5 kW

14	341	41	292	56	141	341	1.5	246	195	10.238	GSS06 - 2E □□□ 112C32	E82MV 552_4B
14	333	42	286	58	145	333	2.4	251	191	10.000	GSS07 - 2E □□□ 112C32	E82MV 552_4B
13	374	37	319	52	129	374	1.4	224	214	11.200	GSS06 - 2E □□□ 112C32	E82MV 552_4B
13	373	37	320	52	129	373	2.3	224	214	11.200	GSS07 - 2E □□□ 112C32	E82MV 552_4B
12	402	34	346	47	117	402	1.3	203	230	12.400	GSS06 - 2E □□□ 112C32	E82MV 552_4B
11	409	33	353	46	115	409	1.9	200	235	12.594	GSS07 - 2E □□□ 112C32	E82MV 552_4B
10	479	29	407	40	101	479	1.1	176	274	14.286	GSS06 - 2E □□□ 112C32	E82MV 552_4B
10	478	29	409	40	101	478	1.9	176	275	14.286	GSS07 - 2E □□□ 112C32	E82MV 552_4B
9.1	514	26	441	36	91	514	1.2	158	296	15.869	GSS06 - 2E □□□ 112C32	E82MV 552_4B
9.3	504	27	434	37	93	504	1.8	162	290	15.500	GSS07 - 2E □□□ 112C32	E82MV 552_4B
8.3	563	24	482	33	83	563	1.1	145	324	17.360	GSS06 - 2E □□□ 112C32	E82MV 552_4B
8.3	564	24	486	33	83	564	1.8	145	326	17.360	GSS07 - 2E □□□ 112C32	E82MV 552_4B
7.0	629	20	546	28	70	629	1.2	123	359	20.517	GSS07 - 2E □□□ 112C32	E82MV 552_4B
6.5	715	19	612	26	65	715	0.9	114	415	22.143	GSS06 - 2E □□□ 112C32	E82MV 552_4B
6.5	717	19	618	26	65	717	1.7	114	417	22.143	GSS07 - 2E □□□ 112C32	E82MV 552_4B
5.7	777	17	669	23	57	777	1.2	100	444	25.188	GSS07 - 2E □□□ 112C32	E82MV 552_4B
5.3	874	15	745	21	53	874	0.8	93	510	27.125	GSS06 - 2E □□□ 112C32	E82MV 552_4B
5.3	879	15	755	21	53	879	1.4	93	512	27.125	GSS07 - 2E □□□ 112C32	E82MV 552_4B
4.7	955	14	821	19	47	955	1.1	81	549	31.000	GSS07 - 2E □□□ 112C32	E82MV 552_4B
4.1	1143	12	979	16	41	1143	1.1	71	670	35.306	GSS07 - 2E □□□ 112C32	E82MV 552_4B
3.7	1195	11	1034	15	37	1195	1.0	64	697	39.200	GSS07 - 2E □□□ 112C32	E82MV 552_4B
3.3	1397	9.7	1191	13	33	1397	0.9	58	823	43.271	GSS07 - 2E □□□ 112C32	E82MV 552_4B
2.9	1520	8.4	1310	12	29	1520	0.8	50	893	50.000	GSS07 - 2E □□□ 112C32	E82MV 552_4B

P₁ = 7.5 kW

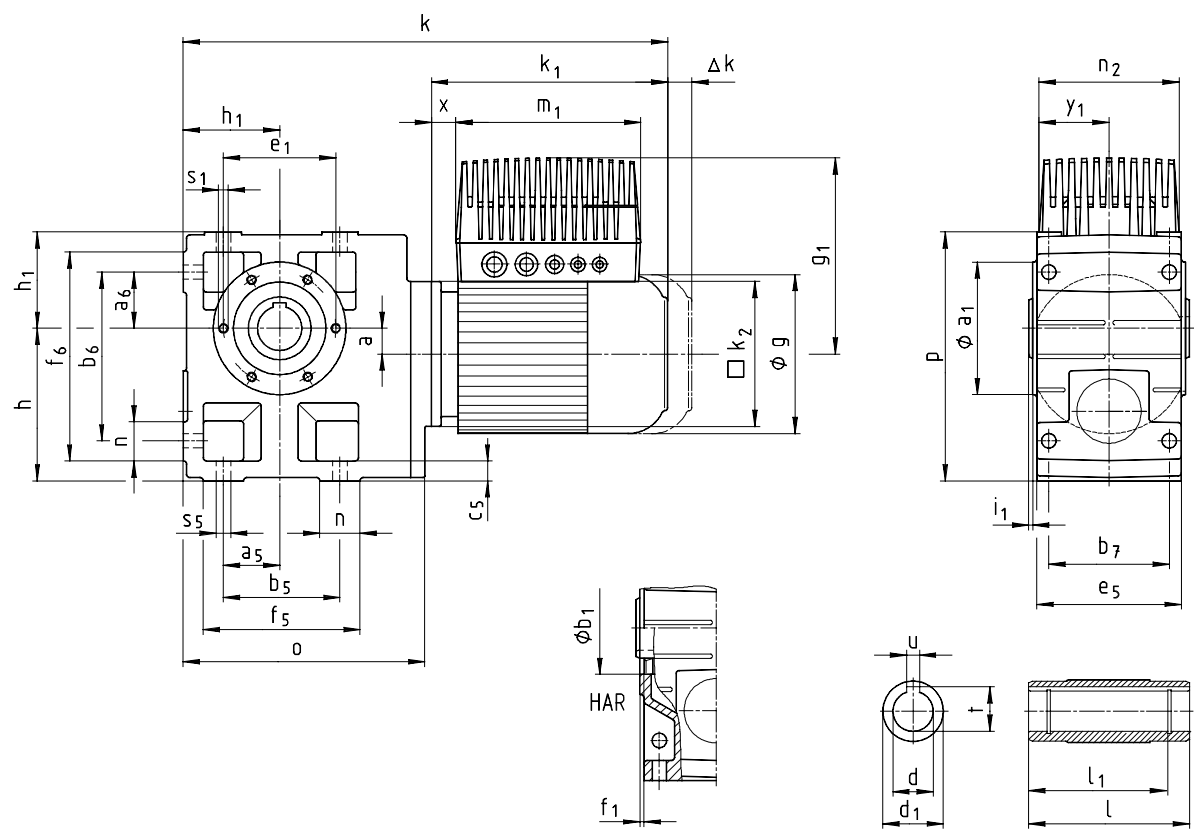
25	264	72	228	99	248	264	2.0	432	151	5.862	GSS07 - 2E □□□ 132C22	E82MV 752_4B
18	368	52	317	72	179	368	1.8	312	210	8.125	GSS07 - 2E □□□ 132C22	E82MV 752_4B
16	402	46	347	64	160	402	1.6	279	230	9.086	GSS07 - 2E □□□ 132C22	E82MV 752_4B
15	454	42	389	58	146	454	1.7	253	260	10.000	GSS07 - 2E □□□ 132C22	E82MV 752_4B
13	508	38	436	52	130	508	1.7	226	292	11.200	GSS07 - 2E □□□ 132C22	E82MV 752_4B
12	557	34	481	46	116	557	1.4	201	320	12.594	GSS07 - 2E □□□ 132C22	E82MV 752_4B
10	650	30	555	41	102	650	1.6	177	373	14.286	GSS07 - 2E □□□ 132C22	E82MV 752_4B
9.4	686	27	591	38	94	686	1.4	163	395	15.500	GSS07 - 2E □□□ 132C22	E82MV 752_4B
8.4	768	24	662	34	84	768	1.3	146	443	17.360	GSS07 - 2E □□□ 132C22	E82MV 752_4B
7.1	854	21	742	28	71	854	0.9	123	488	20.517	GSS07 - 2E □□□ 132C22	E82MV 752_4B
6.6	976	19	841	26	66	976	1.2	114	567	22.143	GSS07 - 2E □□□ 132C22	E82MV 752_4B
5.8	1056	17	910	23	58	1056	0.9	101	604	25.188	GSS07 - 2E □□□ 132C22	E82MV 752_4B
5.4	1195	16	1027	21	54	1195	1.0	93	697	27.125	GSS07 - 2E □□□ 132C22	E82MV 752_4B
4.7	1298	14	1115	19	47	1298	0.8	82	746	31.000	GSS07 - 2E □□□ 132C22	E82MV 752_4B

Thermal power limit not considered (see page 2-5)

^{*)} Observe current derating (see page 2-2)



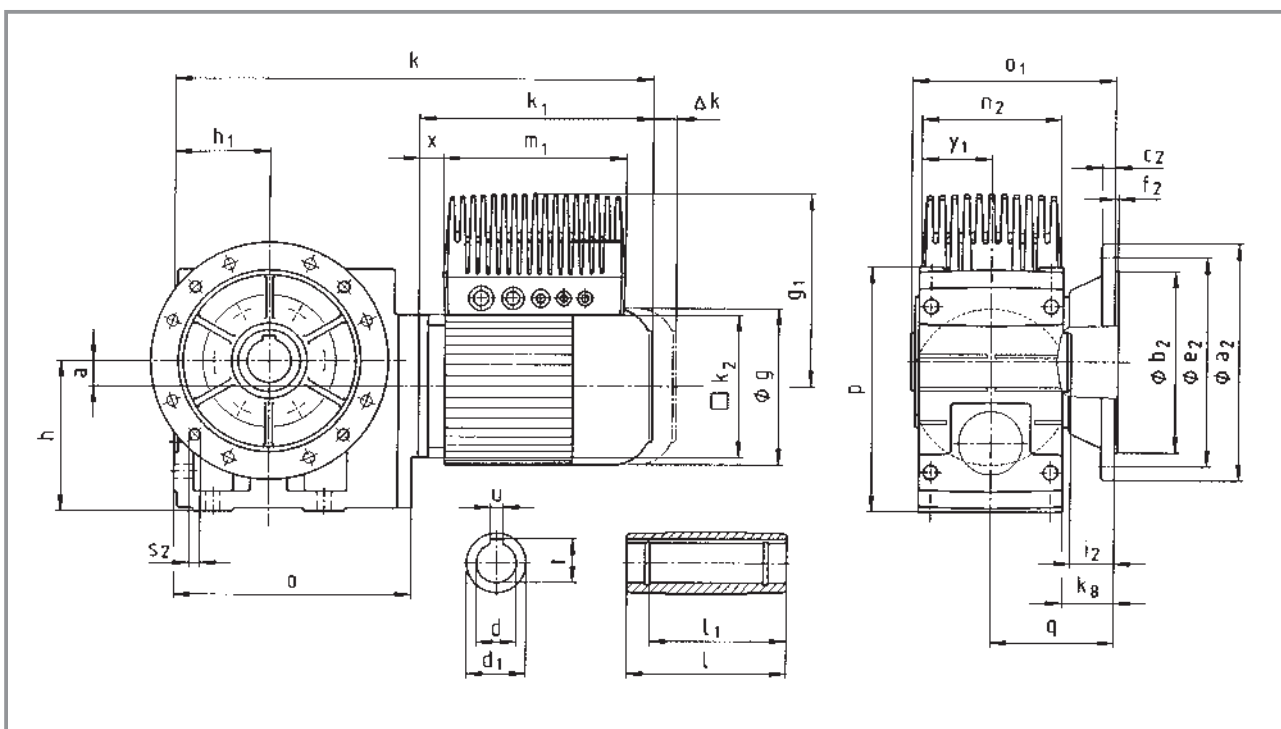
GSS□□ - 2E H□R



Dimensions - Helical-worm gearboxes
Geared motors with 8200 motec

Geared motor		Motor frame size					063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22	
GSS□□ - 2E H□R		8200 motec E82MV□□□					251	251	251	371	551	751	152	152	222	302	402	552	752	
Motor	g						123		138		156		176		196		220		261	
	k ₁						188		207		225		276		309		319	363	404	
	k ₂						120		120		145		180		180		222		265	
	Δk** Brake						40		52		73		70		79		90		109	
	Separate fan						130		128		128		127		109		102		115	
	Brake + separate fan						170		165		184		180		170		183		201	
8200 motec	g ₁						171		180		225	221	237	242	253	268	278		297	
	g ₁ ¹⁾						207		216											
	m ₁						190		190		202	202	230	230	230	327	327		327	
	n ₂						138		138		156	156	176	176	176	213	213		213	
	x						20		23		10	3	3	8	9	0	2		11	
	y ₁						69		69		78	78	88	88	88	107	107		107	
Gearbox size	Gearbox						Total length													
	o	l*	p*	h*	h ₁	a	k													
04	181	115	171	100	71	20	378		397		420		481							
05	212	140	205	125	80	23	399		419		441		502	536						
06	255	160	250	150	100	26	439		459		481		542	576		592		636		
07	305	200	310	190	120	33					524		585	619		635		679	727	

Dimensions - Helical-worm gearboxes



Geared motor		Motor frame size		063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22	
GSS□□ - 2E HAK		8200 motec E82MV□□□		251	251	251	371	551	751	152	152	222	302	402	552	752	
Motor		g		123		138		156		176		196		220		261	
		k ₁		188		207		225		276		309		319	363	404	
		k ₂		120		120		145		180		180		222		265	
		Δk** Brake		40		52		73		70		79		90		109	
		Separate fan		130		128		128		127		109		102		115	
		Brake + separate fan		170		165		184		180		170		183		201	
8200 motec		g ₁		171		180		225	221	237	242	253	268	278		297	
		g ₁ ¹⁾		207		216											
		m ₁		190		190		202	202	230	230	230	327	327		327	
		n ₂		138		138		156	156	176	176	176	213	213		213	
		x		20		23		10	3	3	8	9	0	2		11	
		y ₁		69		69		78	78	88	88	88	107	107		107	
Gearbox size	Gearbox								Total length								
	o	o ₁ *	p*	h*	h ₁	a	k ₈	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		441		502	536	
06	255	201	250	150	100	26	49	121	439		459		481		542	576	592 636
07	305	255	310	190	120	33	65	155			524		585		619	635 679	727

Gearbox size	Hollow shaft						Output flange						
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
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

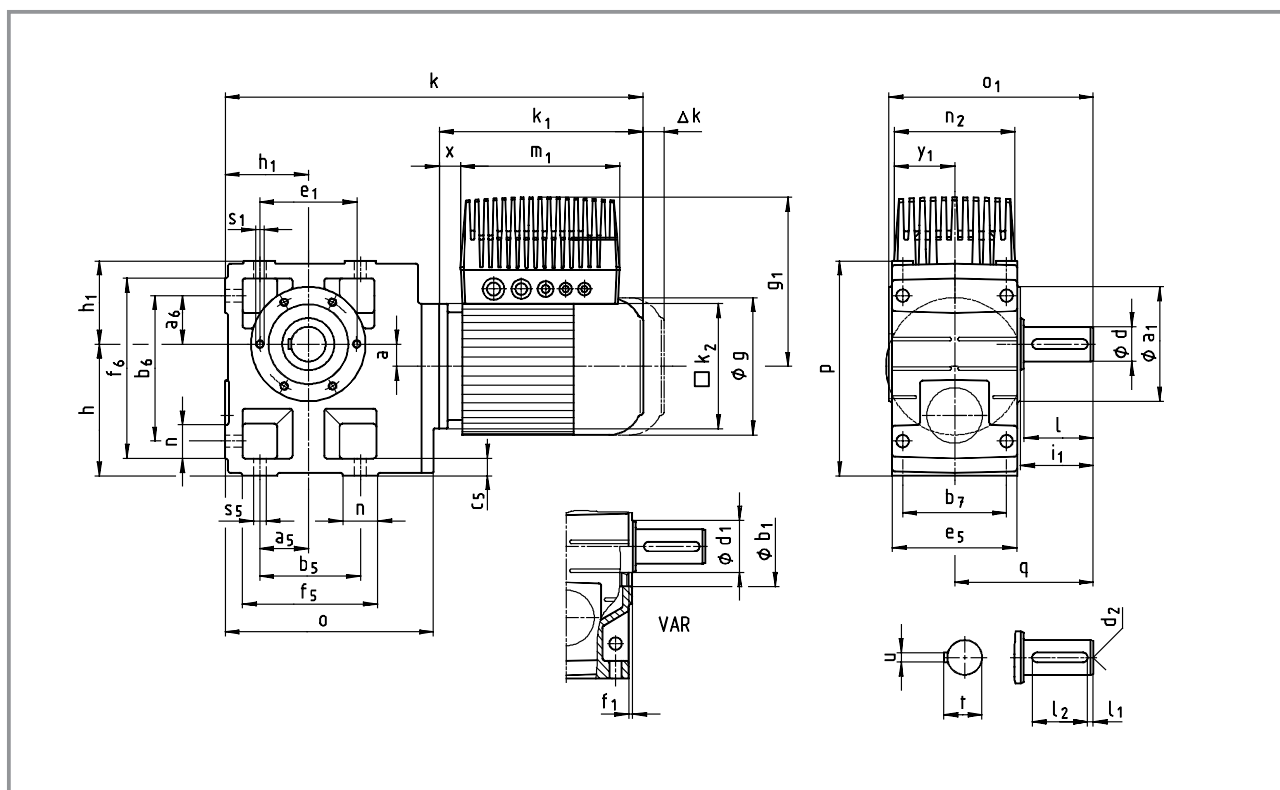
Dimensions in [mm] * Please note dimension k_2 . On gearbox size 04 with motor frame size 090, dimension $k_2 / 2 > h-a$

** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-worm gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
GSS□□ - 2E V□R		8200 motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156		176		196		220	261
	k_1		188			207		225		276		309	319	363	404
	k_2		120			120		145		180		180		222	265
	Δk^{**}	Brake	40			52		73		70		79		90	109
		Separate fan	130			128		128		127		109		102	115
		Brake + separate fan	170			165		184		180		170		183	201
8200 motec	g_1		171			180	225	221	237	242	253	268		278	297
	$g_1^{1)}$		207			216									
	m_1		190			190	202	202	230	230	230	327		327	327
	n_2		138			138	156	156	176	176	176	213		213	213
	x		20			23	10	3	3	8	9	0		2	11
	y_1		69			69	78	78	88	88	88	107		107	107
Gearbox size	Gearbox							Total length							
	o	o_1^*	p^*	h^*	h_1	a	q	k							
04	181	163	171	100	71	20	107.5	378		397	420	481			
05	212	197	205	125	80	23	130	399		419	441	502	536		
06	255	236	250	150	100	26	160	439		459	481	542	576	592	636
07	305	296	310	190	120	33	200				524	585	619	635	679 727

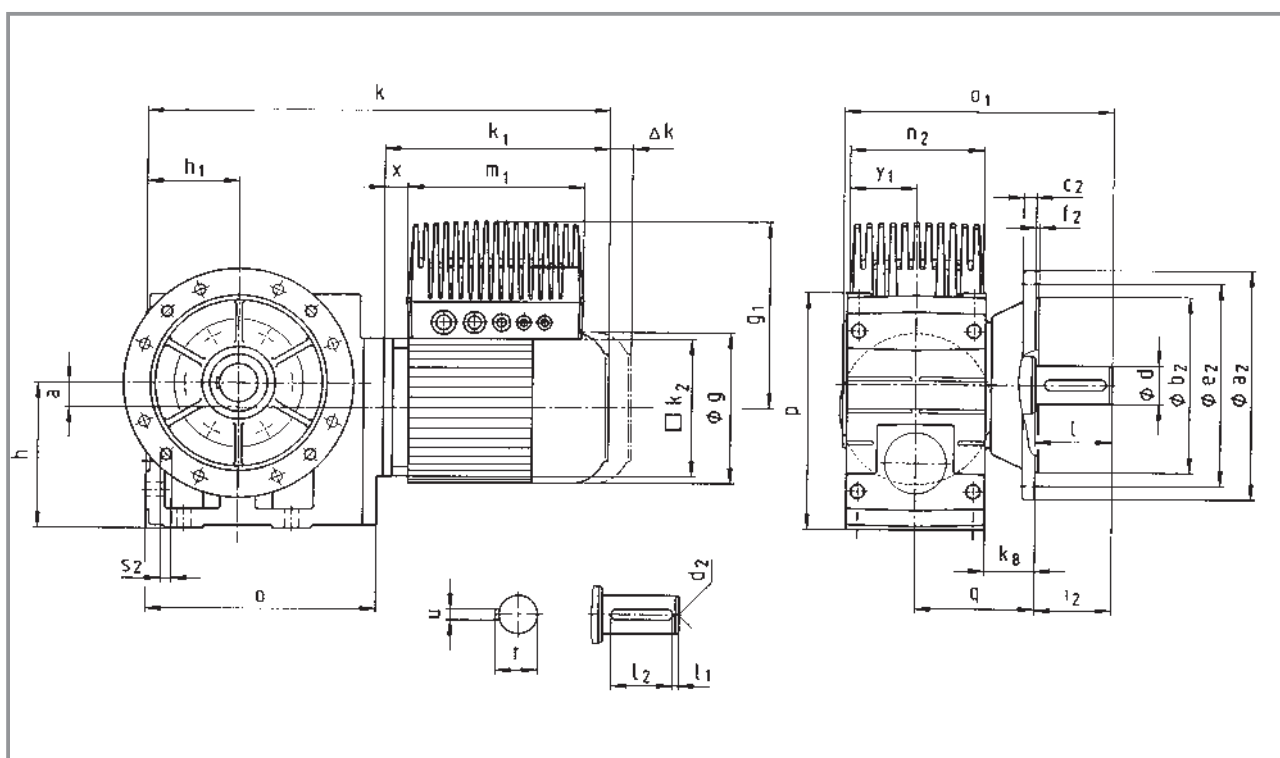
Gearbox size	Solid shaft								Pitch circle						Foot										
	d	l	d ₁	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁ 6x60°	a ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	s ₅
04	25	50	45	4	40	M10	8	28	105	75	90	3	52.5	M6x12	45	45	90	119	85	14	100	112	141	22	9
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	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	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	18

Dimensions in [mm] $d \leq 50$ mm: k6 $d > 50$ mm: m6 * Please note dimension k_2 . On gearbox size 04 with motor frame size 090, dimension $k_2 / 2 > h-a$ ** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-worm gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32	112C22	112C32	132C22
GSS□□ - 2E VAK		8200 motec E82MV□□□	251	251	251	371	551	751	152	152	222	302	402	552	752
Motor	g		123			138		156		176		196		220	261
	k_1		188			207		225		276		309	319	363	404
	k_2		120			120		145		180		180		222	265
	Δk^{**} Brake		40			52		73		70		79		90	109
	Separate fan		130			128		128		127		109		102	115
	Brake + separate fan		170			165		184		180		170		183	201
8200 motec	g_1		171			180	225	221	237	242	253	268		278	297
	$g_1^{1)}$		207			216									
	m_1		190			190	202	202	230	230	230	327		327	327
	n_2		138			138	156	156	176	176	176	213		213	213
	x		20			23	10	3	3	8	9	0		2	11
	y_1		69			69	78	78	88	88	88	107		107	107
Gearbox size	Gearbox								Total length						
	o	o_1^*	p^*	h^*	h_1	a	k_8	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	441	502	536	
06	255	277	250	150	100	26	49	121	439		459	481	542	576	592 636
07	305	351	310	190	120	33	65	155				524	585	619	635 679 727

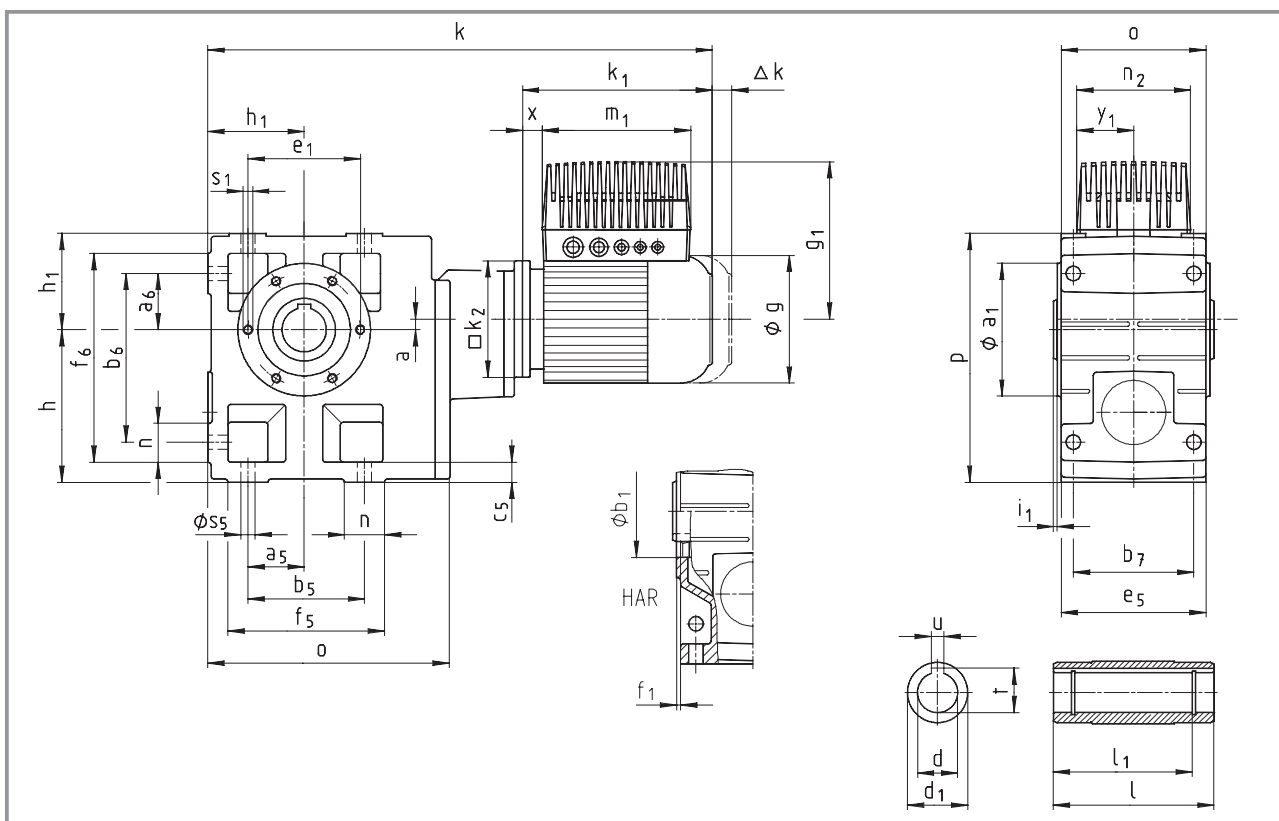
Gearbox size	Solid shaft							Output flange						
	d	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂
04	25	50	4	40	M10	8	28	160	110	10	130	3.5	50	4 x 9
05	30	60	6	45	M10	8	33	200	130	12	165	3.5	60	4 x 11
06	40	80	7	63	M16	12	43	250	180	14.5	215	4	80	4 x 14
07	50	100	8	80	M16	14	53.5	250 300	180 230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

Dimensions in [mm] $d \leq 50$ mm: k6 $d > 50$ mm: m6 * Please note dimension k_2 . On gearbox size 04 with motor frame size 090, dimension $k_2 / 2 > h-a$
 ** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-worm gearboxes

Geared motors with 8200 motec



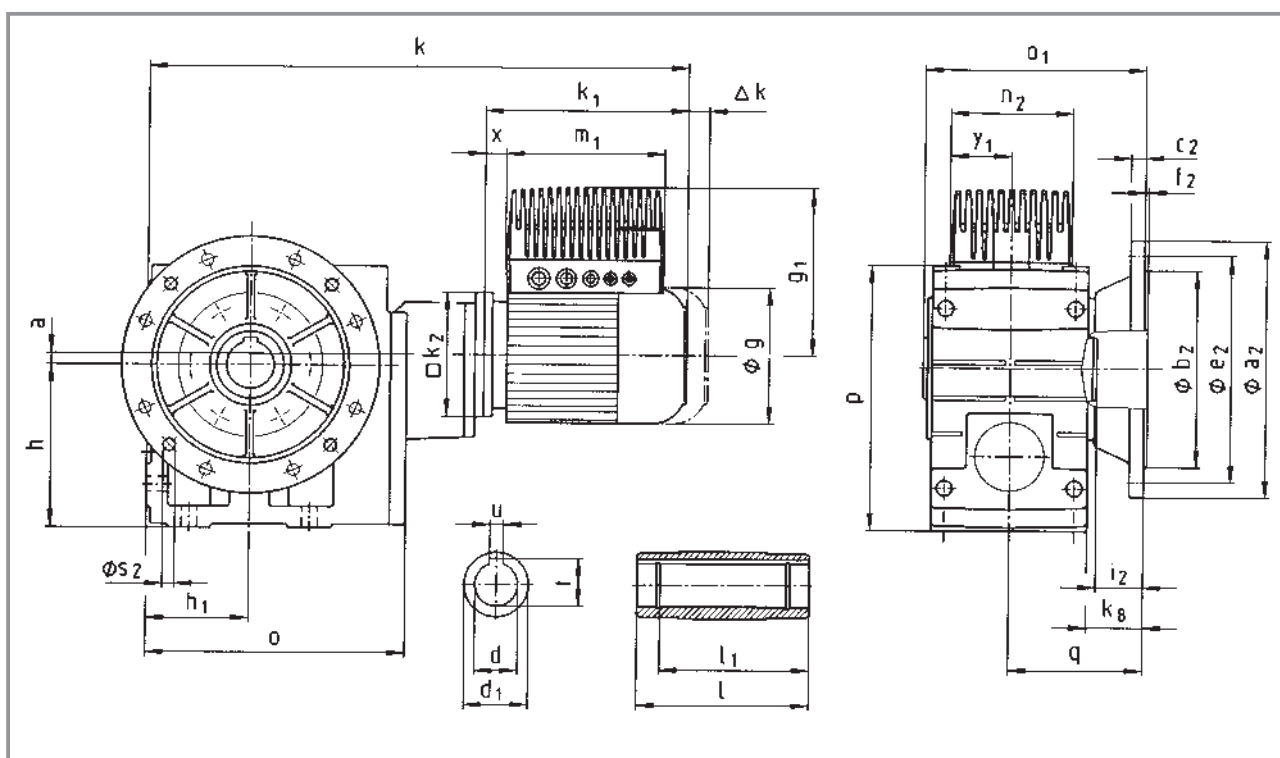
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32
GSS□□ - 3E H□R		8200 motec E82MV□□□	251	251	251	371	551	751	152	152	222	302
Motor	g		123			138		156		176	196	
	k_1		188			207		225		276	309	
	k_2		120			120		145		180	180	
	Δk^{**}	Brake	40			52		73		70	79	
		Separate fan	130			128		128		127	109	
		Brake + separate fan	170			165		184		180	170	
8200 motec	g_1		171			180	225	221	237	242	253	268
	$g_1^{1)}$		207			216						
	m_1		190			190	202	202	230	230	230	327
	n_2		138			138	156	156	176	176	176	213
	x		20			23	10	3	3	8	9	0
	y_1		69			69	78	78	88	88	88	107
Gearbox size	Gearbox						Total length					
	o	l^*	p^*	h	h_1	a	k					
05	209	140	205	125	80	13	476		495	518		
06	252	160	250	150	100	10	533		552	575	636	
07	299	200	310	190	120	12	587		606	629	690	723

Gearbox size	Hollow shaft						Pitch circle						Foot										
	d H7	l	d ₁	l ₁	u JS9	t +0.2	a ₁	b ₁ H7	e ₁	f ₁	i ₁	s ₁ 6x60°	a ₅	a ₆	b ₅	b ₆	b ₇	c ₅	e ₅	f ₅	f ₆	n	s ₅
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	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	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	18

Dimensions in [mm] * Please note dimension k_2
** See chapter 8 for more built-on accessories
1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-worm gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32
GSS□□ - 3E HAK		8200 motec E82MV□□□□	251	251	251	371	551	751	152	152	222	302
Motor	g		123			138		156		176		196
	k_1		188			207		225		276		309
	k_2		120			120		145		180		180
	Δk^{**} Brake		40			52		73		70		79
	Separate fan		130			128		128		127		109
	Brake + separate fan		170			165		184		180		170
8200 motec	g_1		171			180	225	221	237	242	253	268
	$g_1^{1)}$		207			216						
	m_1		190			190	202	202	230	230	230	327
	n_2		138			138	156	156	176	176	176	213
	x		20			23	10	3	3	8	9	0
	y_1		69			69	78	78	88	88	88	107
Gearbox size	Gearbox								Total length			
	o	o_1^*	p^*	h	h_1	a	k_8	q	k			
05	209	173	205	125	80	13	40	103	476	495	518	
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
												723

Gearbox size	Hollow shaft						Output flange						
	d H7	l	d_1	l_1	u JS9	t +0.2	a_2	b_2 j7	c_2	e_2	f_2	i_2	s_2
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]

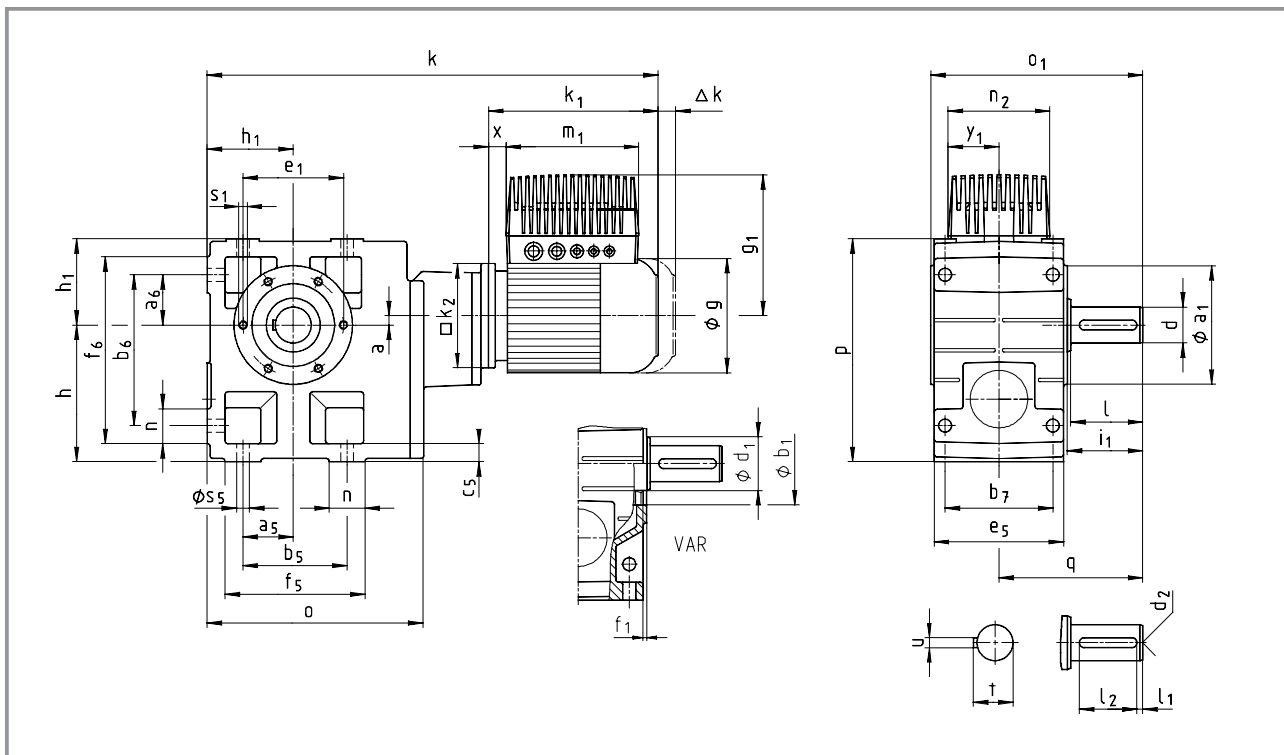
* Please note dimension k_2

** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-worm gearboxes

Geared motors with 8200 motec



Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32
GSS□□ - 3E V□R		8200 motec E82MV□□□	251	251	251	371	551	751	152	152	222	302
Motor	g		123			138		156		176		196
	k_1		188			207		225		276		309
	k_2		120			120		145		180		180
	Δk^{**} Brake		40			52		73		70		79
	Separate fan		130			128		128		127		109
	Brake + separate fan		170			165		184		180		170
8200 motec	g_1		171			180	225	221	237	242	253	268
	$g_1^{1)}$		207			216						
	m_1		190			190	202	202	230	230	230	327
	n_2		138			138	156	156	176	176	176	213
	x		20			23	10	3	3	8	9	0
	y_1		69			69	78	78	88	88	88	107
Gearbox size	Gearbox							Total length				
	o	o_1^*	p^*	h	h_1	a	q	k				
05	209	197	205	125	80	13	130	476	495	518		
06	252	236	250	150	100	10	160	533	552	575	636	
07	299	296	310	190	120	12	200	587	606	629	690	723

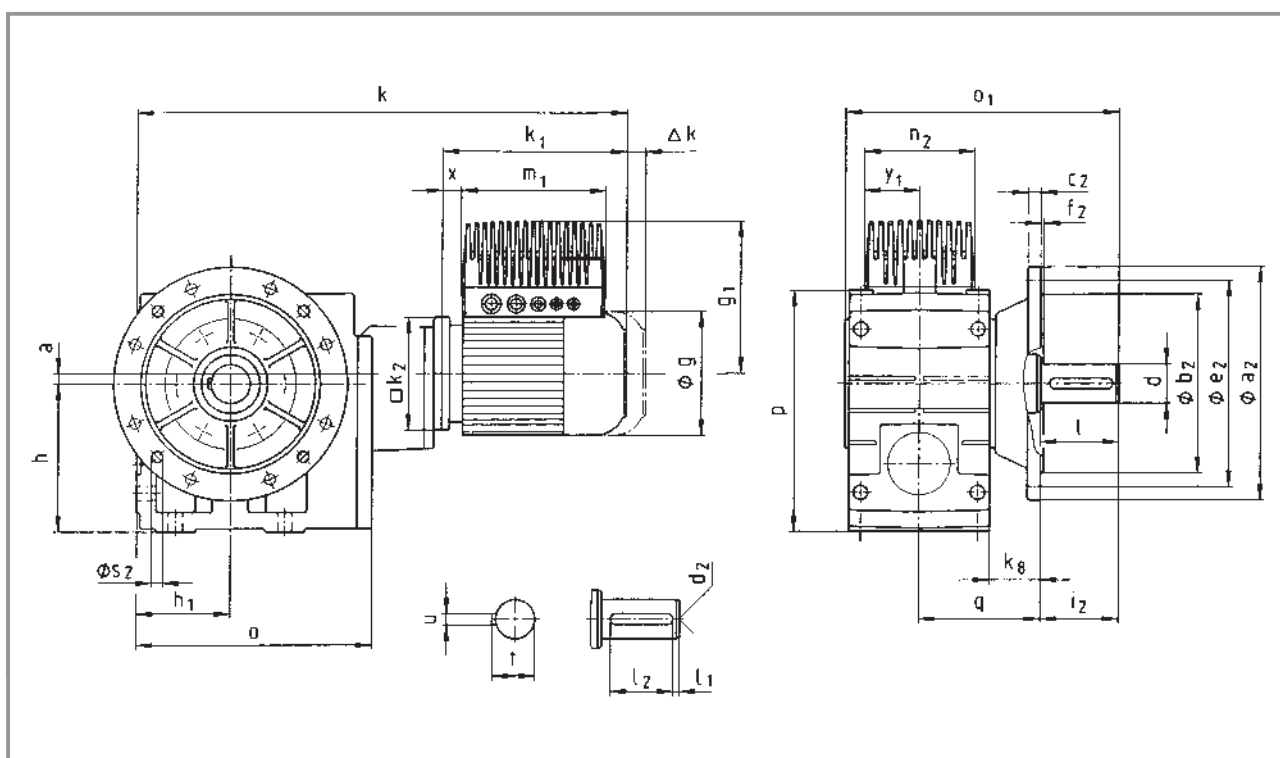
Gearbox size	Solid shaft										Pitch circle					Foot									
	d	l	d_1	l_1	l_2	d_2	u	t	a_1	b_1 H7	e_1	f_1	i_1	s_1 6x60°	a_5	a_6	b_5	b_6	b_7	c_5	e_5	f_5	f_6	n	s_5
05	30	60	50	6	45	M10	8	33	118	80	100	4	64	M8x15	47.5	47.5	95	140	105	17	127	124	169	29	11
06	40	80	65	7	63	M16	12	43	140	100	120	4	85	M10x16	60	60	120	170	120	20	145	156	206	36	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	18

Dimensions in [mm] $d \leq 50$ mm: k6 $d > 50$ mm: m6 * Please note dimension k_2 . ** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Dimensions - Helical-worm gearboxes

Geared motors with 8200 motec



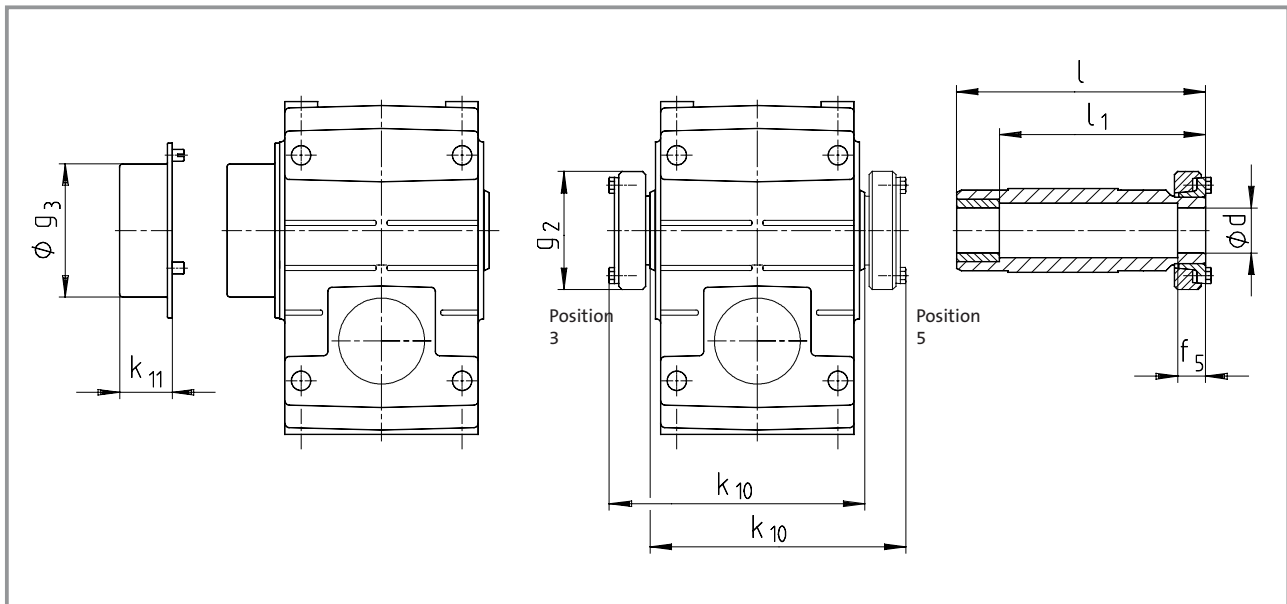
Geared motor		Motor frame size	063C12	063C32	063C42	071C32	071C42	080C32	080C42	090C32	100C12	100C32
GSS□□ - 3E VAK		8200 motec E82MV□□□	251	251	251	371	551	751	152	152	222	302
Motor	g		123			138		156		176		196
	k_1		188			207		225		276		309
	k_2		120			120		145		180		180
	Δk^{**} Brake		40			52		73		70		79
	Separate fan		130			128		128		127		109
	Brake + separate fan		170			165		184		180		170
	g_1		171			180	225	221	237	242	253	268
	$g_1^{1)}$		207			216						
	m_1		190			190	202	202	230	230	230	327
	n_2		138			138	156	156	176	176	176	213
8200 motec	x		20			23	10	3	3	8	9	0
	y_1		69			69	78	78	88	88	88	107
Gearbox size	Gearbox								Total length			
	o	o_1^*	p^*	h	h_1	a	k_8	q	k			
05	209	230	205	125	80	13	40	103	476	495	518	
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
												723

Gearbox size	Solid shaft								Output flange					
	d	l	l_1	l_2	d_2	u	t	a_2	b_2 j_7	c_2	e_2	f_2	i_2	s_2
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] $d \leq 50$ mm: k_6 $d > 50$ mm: m_6 * Please note dimension k_2 . ** See chapter 8 for more built-on accessories

1) 8200 motec only, option: bus I/O, system terminal or brake rectifier

Hollow shaft with shrink disc

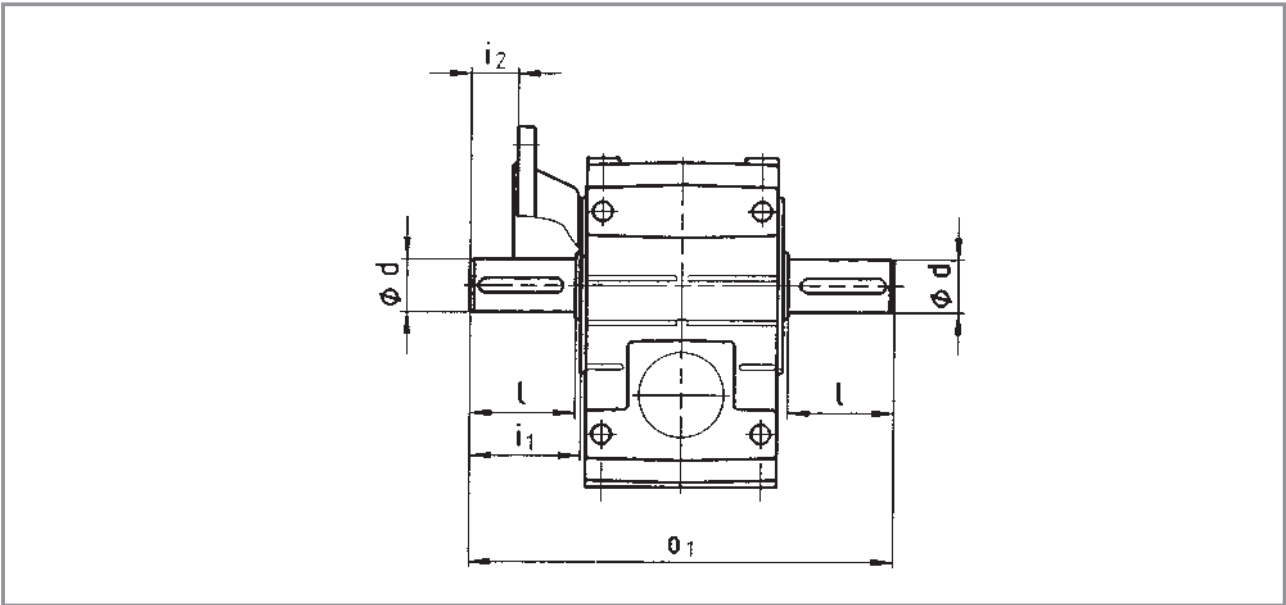


Gearbox size	Machine shaft*		Hollow shaft			Gearbox		Protection cover	
	d	Fit	l	l ₁	f ₅	g ₂	k ₁₀	g ₃	k ₁₁
04	25 30	h6	142	122	26	72	146	79	41
05	35	h6	168	148	28	80	171	90	43
06	40	h6	194	164	30	90	197	100	49
07	50	h6	232	192	26	110	234	124	49

Dimensions in [mm]

* Ensure sufficient shaft material strength when using shrink disc models. If common steel is used (e.g. C45, 42CrMo4), the torque values given in the selection tables can be transmitted without restriction. If less rigid materials are being used, please contact us. The average surface roughness R_z should not exceed 15 μm (turning is sufficient).

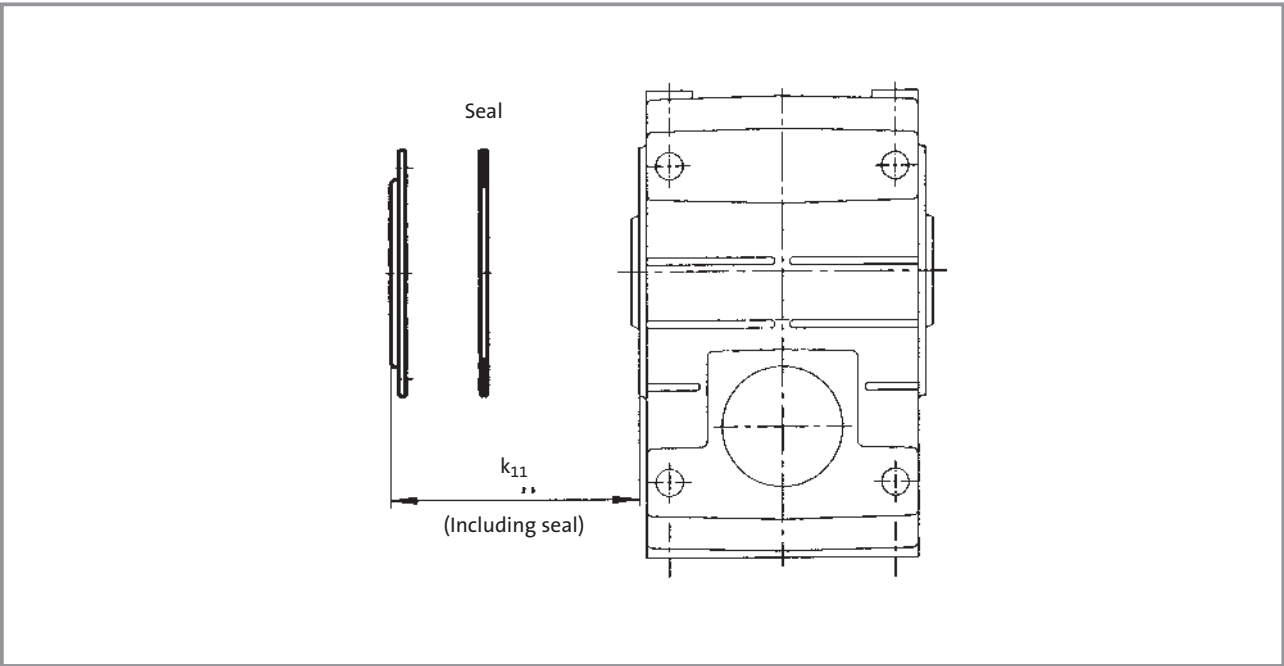
Gearbox with 2nd output shaft end



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]

Hoseproof hollow shaft cover



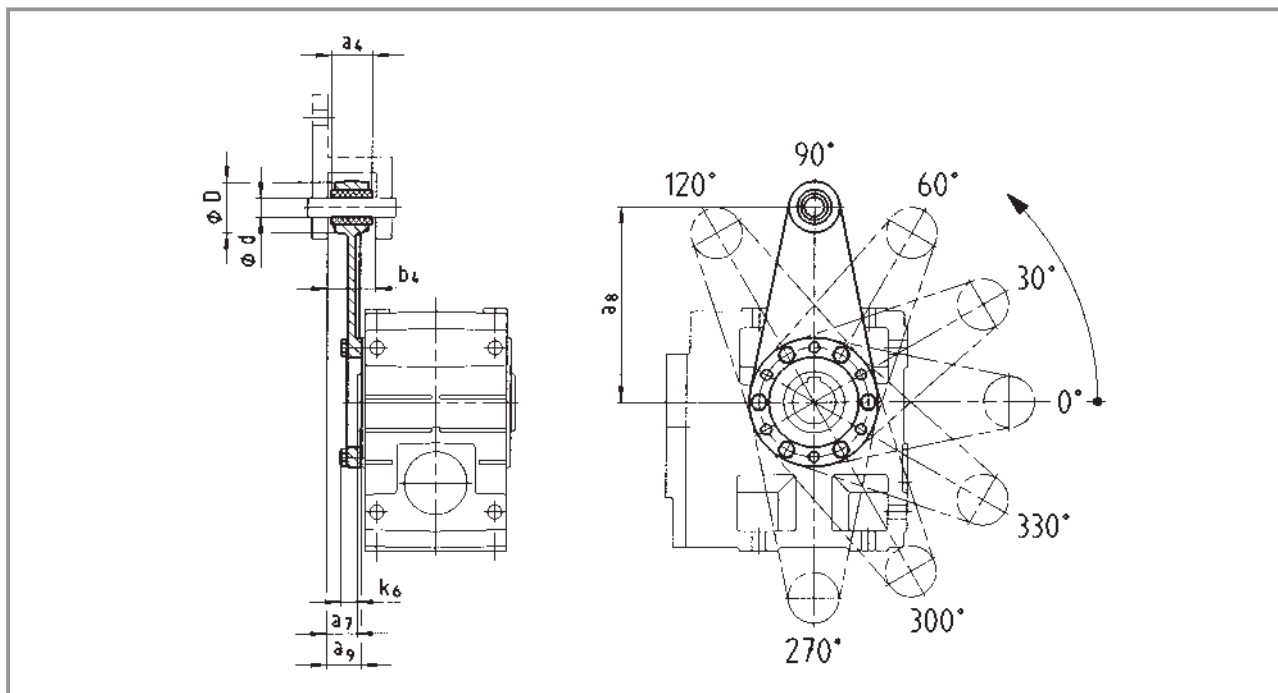
Gearbox size	Protection cover k_{11}
04	9
05	10
06	11
07	11

Dimensions in [mm]

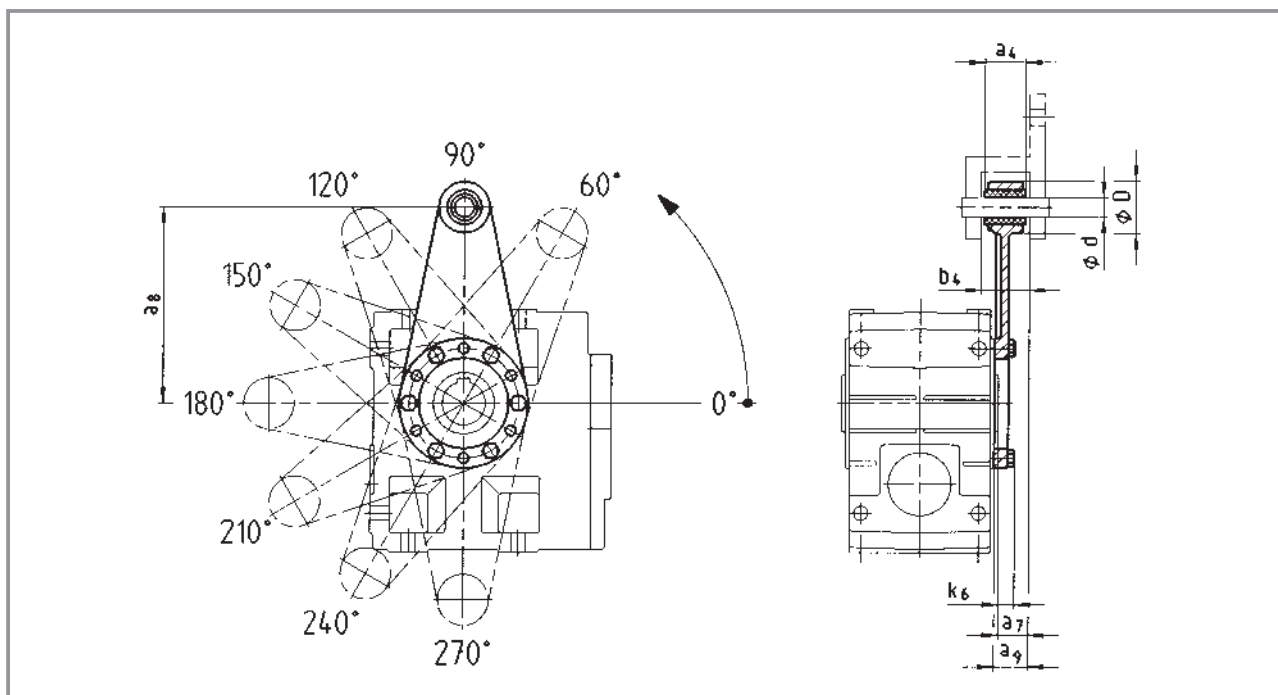
Dimensions - Helical-worm gearboxes

Further dimensions GSS□□

Torque plate at pitch circle, position 3



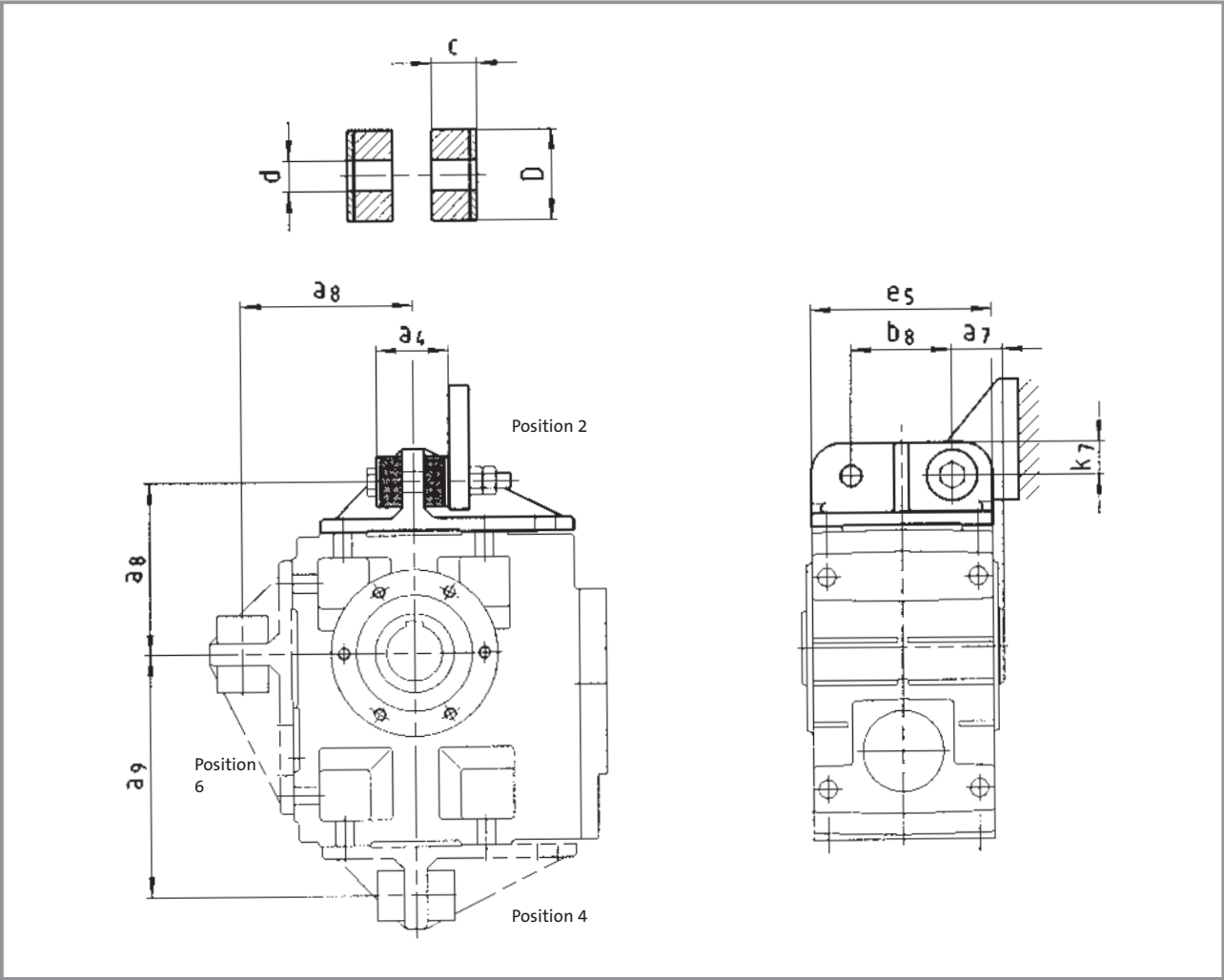
Torque plate at pitch circle, position 5



Gearbox-size	Assembly space		Torque plate					
	a ₇	b ₄	a ₄	a ₈	a ₉	d	D	k ₆
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]

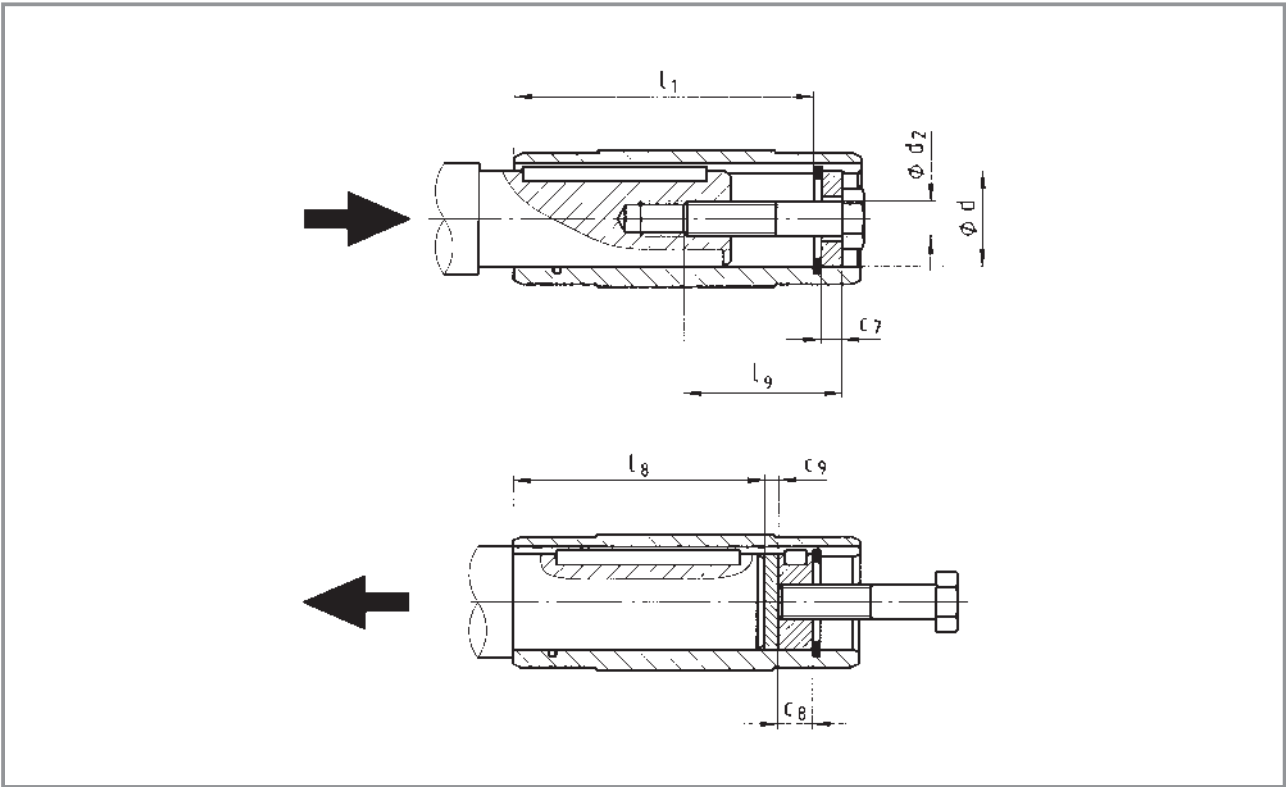
Torque plate at housing foot



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	28
07	78	50	170	240	100	28	21	60	180	35

Dimensions in [mm]

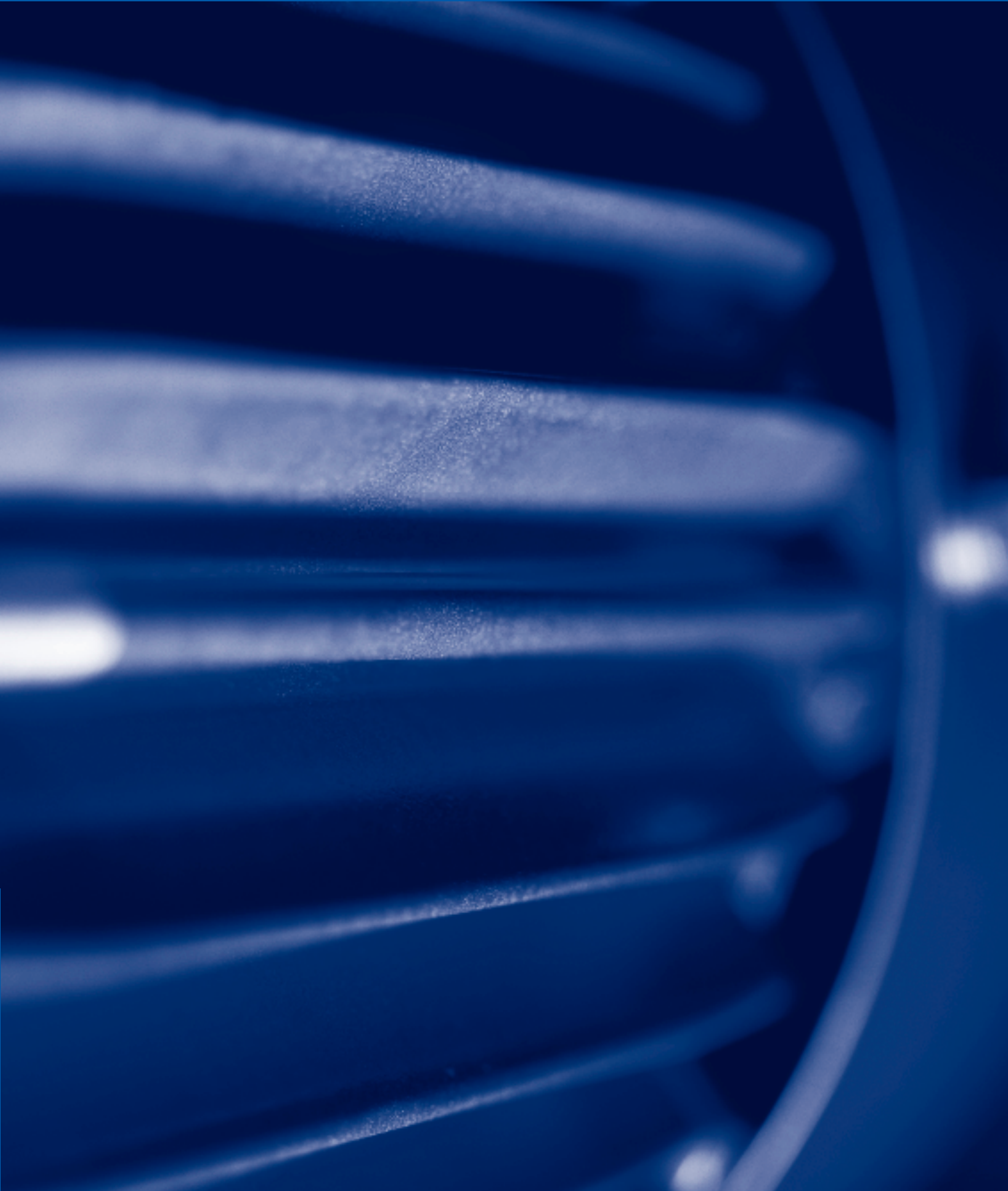
Mounting set for hollow shaft circlip/Proposed design for auxiliary tools



Gearbox size	Hollow shaft (design H)			Mounting set for hollow shaft circlip (auxiliary tool assembly)			Auxiliary tool disassembly		Machine shaft max l_8
	l	l_1	d H7	d_2	l_9	c_7	c_8	c_9	
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]





Motors | G-motion motec

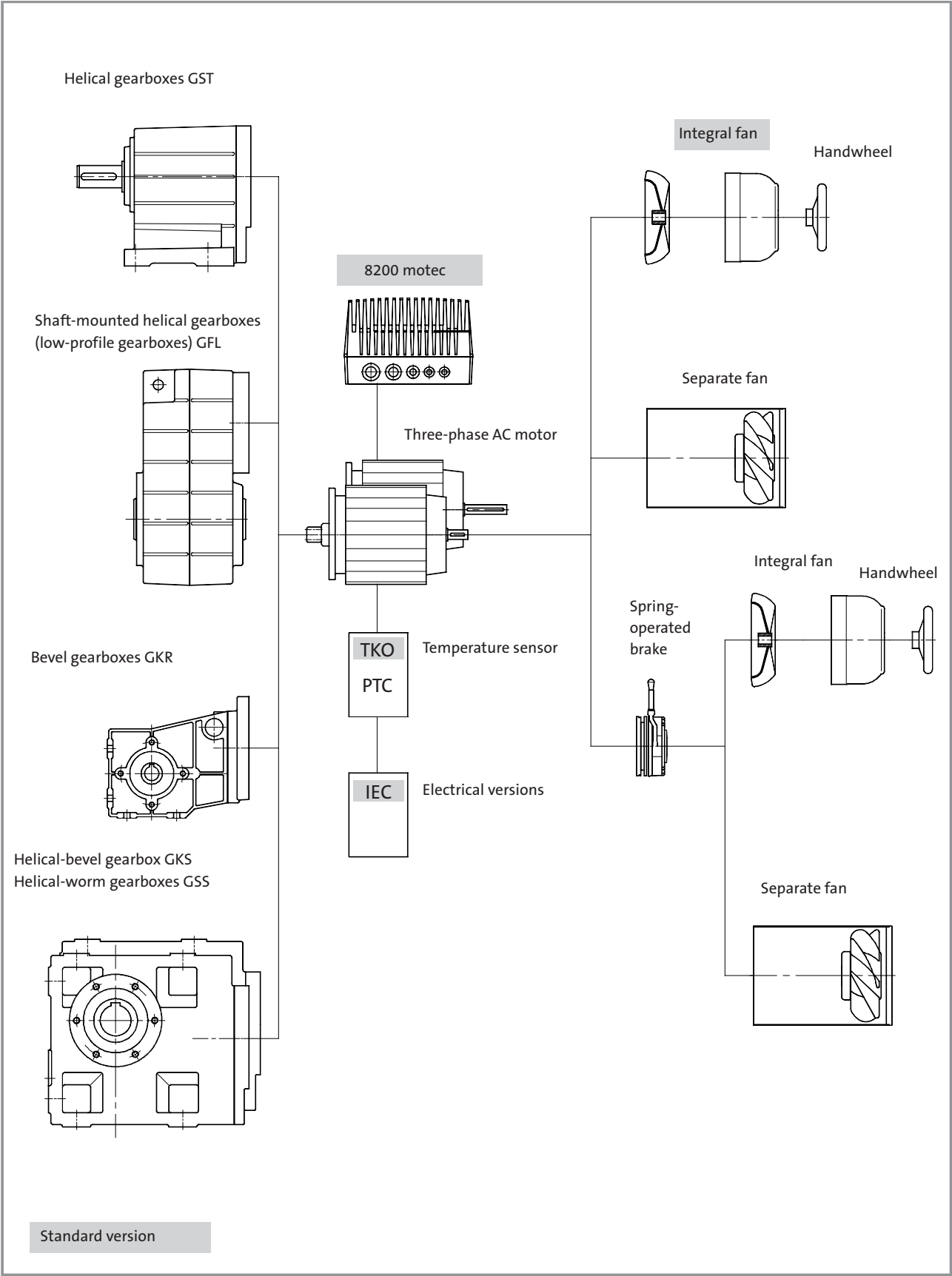
Technical data

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Dimensions

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Geared motor with manual release lever	8-15
Geared motor with 8200 motec add-on module	8-16

System overview





No. of pairs of poles 2 (4-pole)

Motor frame size	P _r [kW]	n _r [rpm]	I _r [A] Y/Δ	I _A /I _r	U [V] Y/Δ	f _r [Hz]	cos φ	η [%]	M _r [Nm]	M _{stall} [Nm]	M _A [Nm]	J [10 ⁻³ kgm ²]	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	10.8
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
100C12	2.2	1440	5.3/9.2	6.0	400/230	50	0.73	84	15.0	44.0	38.0	6.1	24
100C32	3	1430	7.2/12.5	4.6	400/230	50	0.75	83	20.5	50.0	43.0	6.1	24
112C22	4	1450	9.3/16.1	6.2	400/230	50	0.73	86	26.4	95.0	70.0	10.7	31
112C32	5.5	1445	12.5/21.7	6.1	400/230	50	0.77	86	36.6	120	95	13.5	38
132C22	7.5	1455	17.0/29.3	5.9	400/230	50	0.76	88	49.5	150	100	33.6	66

Values are guide values



The temperature sensors are integrated into the windings.

Thermal contacts

Motor frame size	Function	Operating temperature [°C]	Reset temperature [°C]	Current capacity [A]	Permissible voltage capacity [V] AC
All	NC contact	150 ± 5	90-135	2.5	250

PTC thermistor

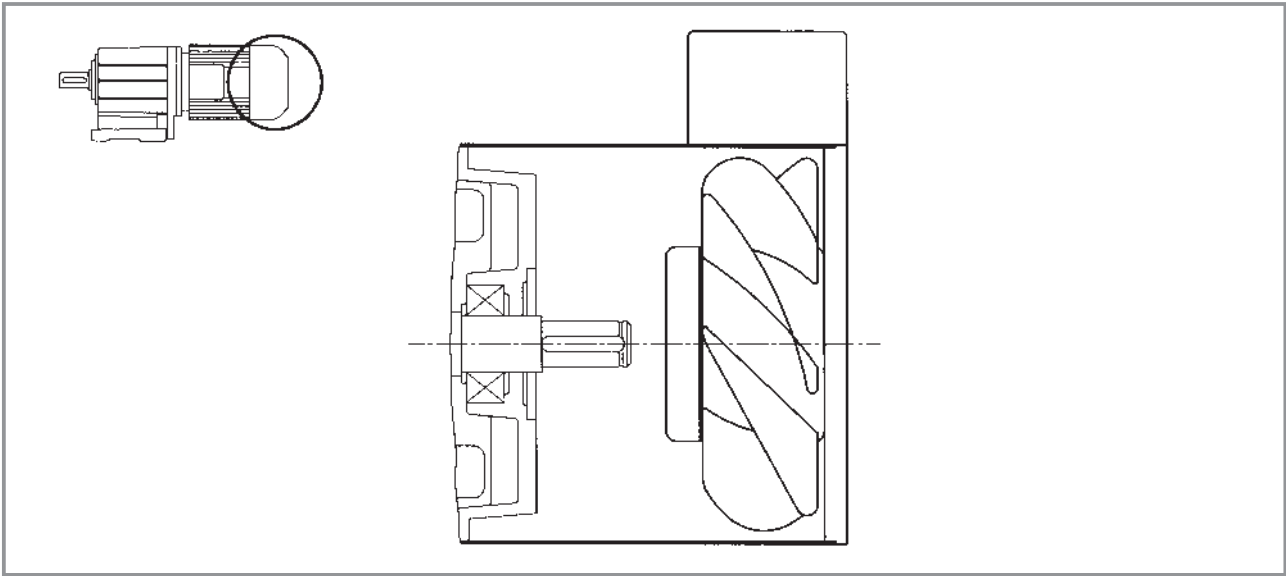
Motor frame size	Function	Operating temperature [°C]	Resistance at		Standards
			155°C [Ω]	-20...+140° [Ω]	
All	Abrupt change in resistance	150 ± 5	550	30...250	DIN 44080 VDE 0660 Part 303



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

General data

Number of poles	4-pole
Motor frame size	063C□2 ... 132C□2
Type	1~ or 3~
Enclosure	IP66
Thermal class	F
Operating mode	S1





Technical data - Motors

Separate fan

Rated data

Motor frame size	Version	Connection	U _r ± 5% [V]	f _r [Hz]	I _r 50 Hz [A]	P _r 50 Hz [W]	Weight m [kg]
063C12 063C32 063C42	1~		230-277	50 (60)	0.10	27	2.2
	3~	Y	380-500		0.05	29	
	3~	Δ	220-290		0.10	27	
071C32 071C42	1~		230-277	50 (60)	0.10	28	2.4
	3~	Y	380-500		0.05	30	
	3~	Δ	220-290		0.10	30	
080C32 080C42	1~		230-277	50 (60)	0.11	29	2.3
	3~	Y	380-500		0.05	29	
	3~	Δ	220-290		0.10	29	
090C32	1~		230-277	50 (60)	0.26	72	3.1
	3~	Y	380-500		0.16	82	
	3~	Δ	220-290		0.28	86	
100C12 100C32	1~		230-277	50 (60)	0.25	70	3.5
	3~	Y	380-500		0.16	83	
	3~	Δ	220-290		0.27	86	
112C22 112C32	1~		230-277	50 (60)	0.26	73	3.9
	3~	Y	380-500		0.15	82	
	3~	Δ	220-290		0.27	85	
132C22	1~		230-277	50 (60)	0.39	115	5.3
	3~	Y	380-500		0.24	138	
	3~	Δ	220-290		0.44	130	



Spring-operated brake

Brake motors are fitted with Lenze spring-operated brakes. The rectifier required for mains operation is located in the 8200 motec and is included in the scope of supply. The connection between the brake coil and the rectifier is assembled in the factory. A schematic diagram of the brake appears on page 8-8.

The brakes are engaged once the supply voltage has been disconnected (closed-circuit principle). The braking torques indicated are valid for quasi-static dimensioning with low rates of wear and the brake operating as a holding brake.

The air gap is factory-set and if required can be adjusted according to the level of wear.

General data

Version	Single-disc spring-operated brake, low noise
Operating principle	Braking torque at zero current
Enclosure	IP54
Thermal class	F
Friction linings	Asbestos-free
Option	► Manual release

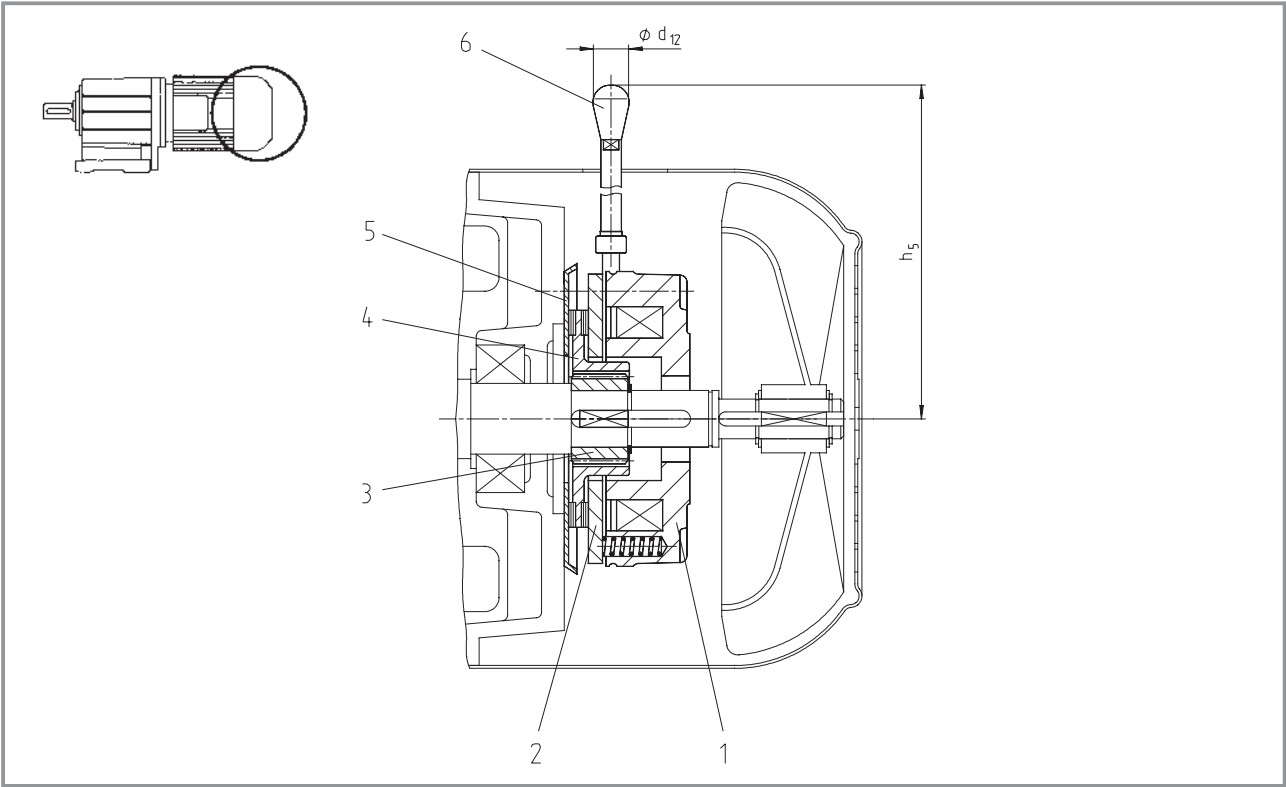
Rated data and possible combinations

Rated data	Brake size					
	06	08	10	12	14	16
P ₂₀ * [W]	20	25	30	40	50	55
M _B [Nm]	4	8	16	32	60	80
J _B [10 ⁻³ kgm ²]	0.015	0.061	0.20	0.45	0.63	1.5
m [kg]	0.9	1.5	2.6	4.2	5.8	8.7
Motor frame size	Possible combinations					
063	●					
071C32	●					
071C42	●	●				
080C32		●				
080C42		●	●			
090		●	●			
100			●	●		
112				●	●	
132					●	●

Voltages see chapter 9 Accessories for the 8200 motec - Braking operation

Spring-operated brake

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

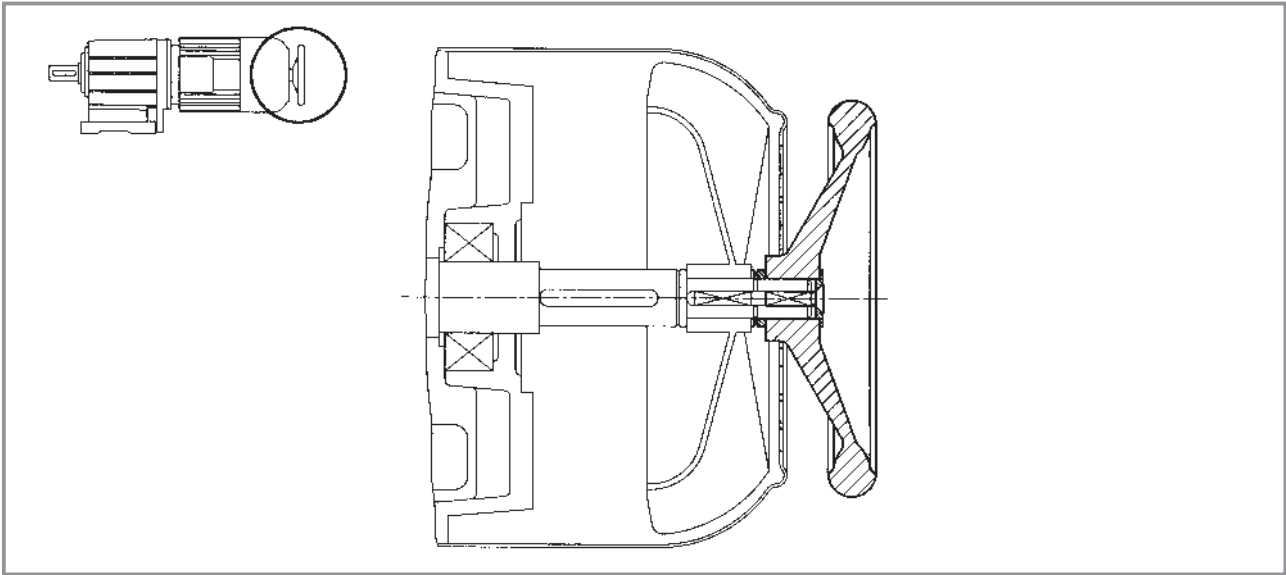


Spring-operated brake size	d ₁₂	h ₅
06	13	107
08	13	116
10	13	132
12	13	161
14	24	195
16	24	240



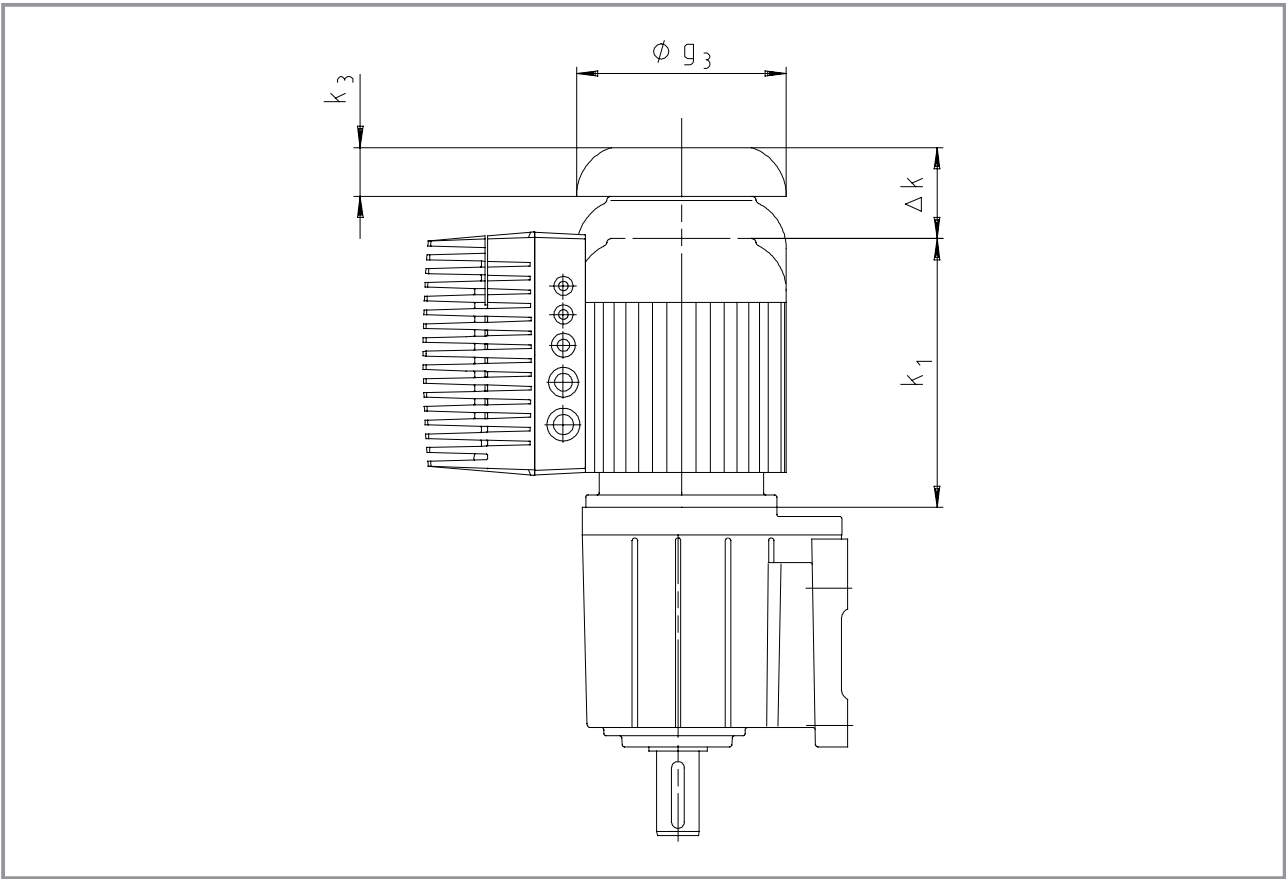
Version	Handwheel made from light metal, smooth wheel surface
Operation	Manual operation: ► Emergency operation ► Setting-up operation for machines/systems
Technical note	The increased moment of inertia should be taken into account during configuration! For frequent switching operations, in particular if the direction of rotation changes: Please contact Lenze.

Motor frame size	Diameter d [mm]	Handwheel Additional moment of inertia [10 ⁻³ kgm ²]	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



Dimensions - Motors

Geared motor with integral fan and protection cover



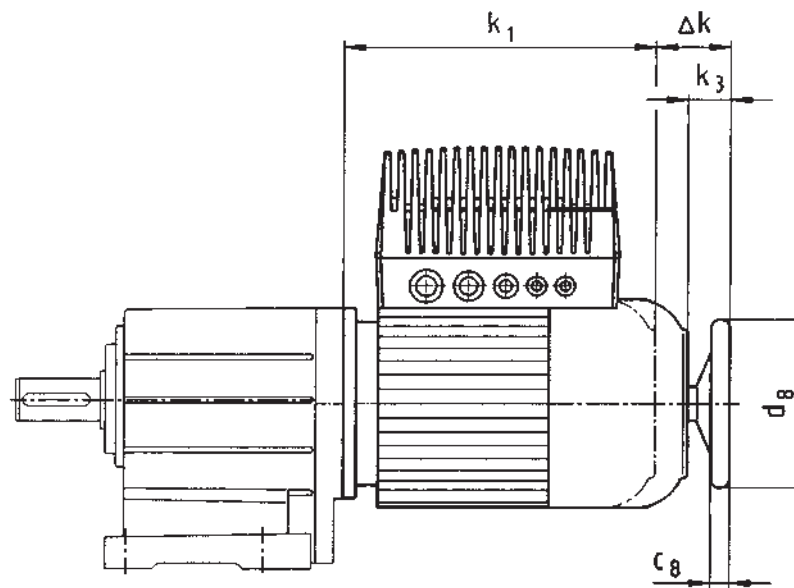
Geared motor 4-pole		Motor frame size						
		071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22
Motor	g ₁	138	156	176	194	218		257
	k ₁ ¹⁾	207	225	276	309	319	363	404
	k ₃	13	17	16	18	18		21
Options		Δk						
Fan		13	17	16	18	18		21
Brake + fan		65	90	86	97	108		130

Dimensions in [mm]

¹⁾ Dimensions without options

Dimensions - Motors

Geared motor with integral fan and handwheel



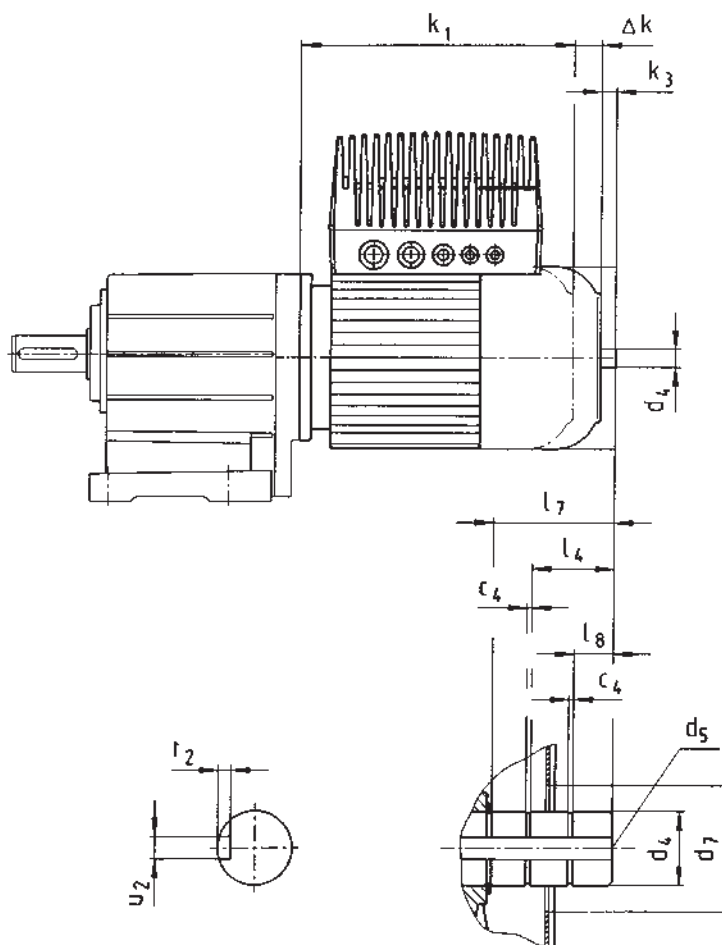
Geared motor 4-pole		Motor frame size						
		071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22
Motor	k ₁ ¹⁾	207	225	276	309	319	374	404
	k ₃	34	32	32	42	39		50
Handwheel	d ₈	160	160	160	160	160		250
	c ₈	18	18	18	18	18		26
Options		Δk						
Integral fan Brake + integral fan		70	91	80	94	107		126

Dimensions in [mm]

¹⁾ Motor length without options

Dimensions - Motors

Geared motor with integral fan and 2nd shaft end



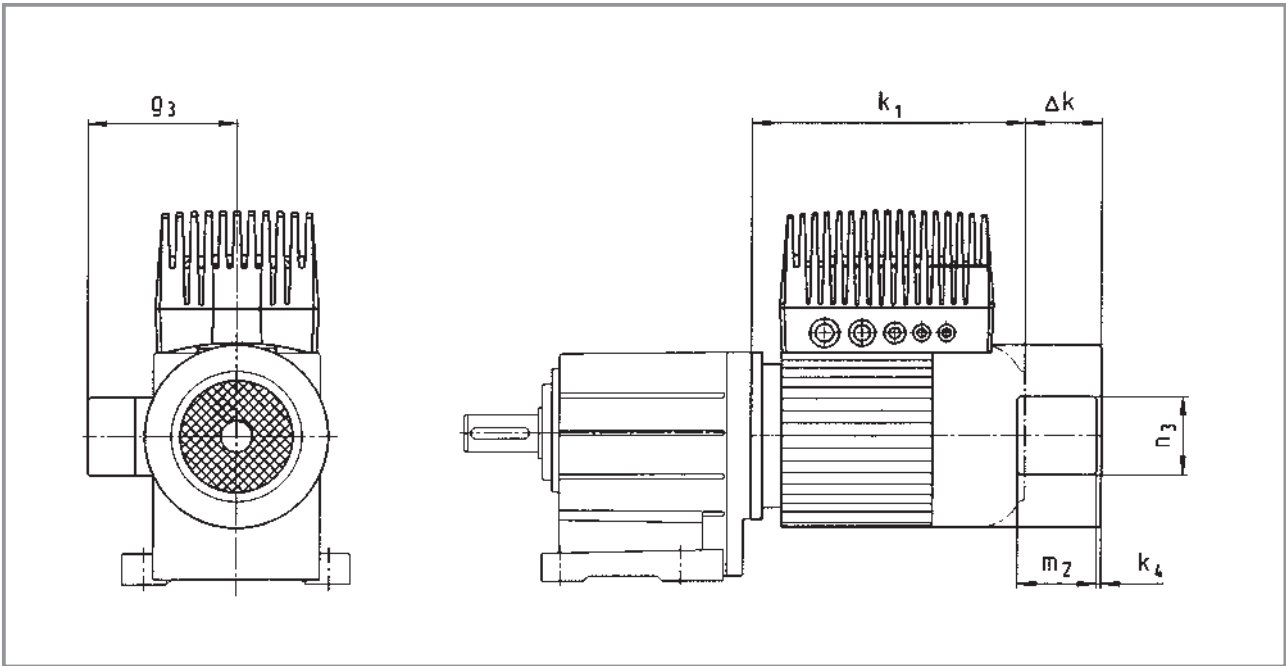
Geared motor 4-pole		Motor frame size						
		071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22
Motor	$k_1^{1)}$	207	225	276	309	319	363	404
	k_3	11	9	9	19	16		25
Shaft end	c_4	1.1	1.1	1.1	1.3	1.3		1.6
	d_4	14 h6	14 h6	14 h6	20 j6	20 j6		30 j6
	d_5	M5	M5	M5	M6	M6		M10
	$d_7^{2)}$	34	34	34	34	34		46
	l_4	-	-	-	17	17		24.5
	l_7	19	19	19	32.5	28.5		42
	l_8	3	4.5	5	10.5	7		8.5
	u_2	5	5	5	6	6		8
	t_2	3	3	3	3.5	3.5		4
Options		Δk						
Integral fan		47	68	57	71	84		101
Brake + integral fan								

Dimensions in [mm]

¹⁾ Motor length without options

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

Dimensions - Motors
Geared motor with separate fan

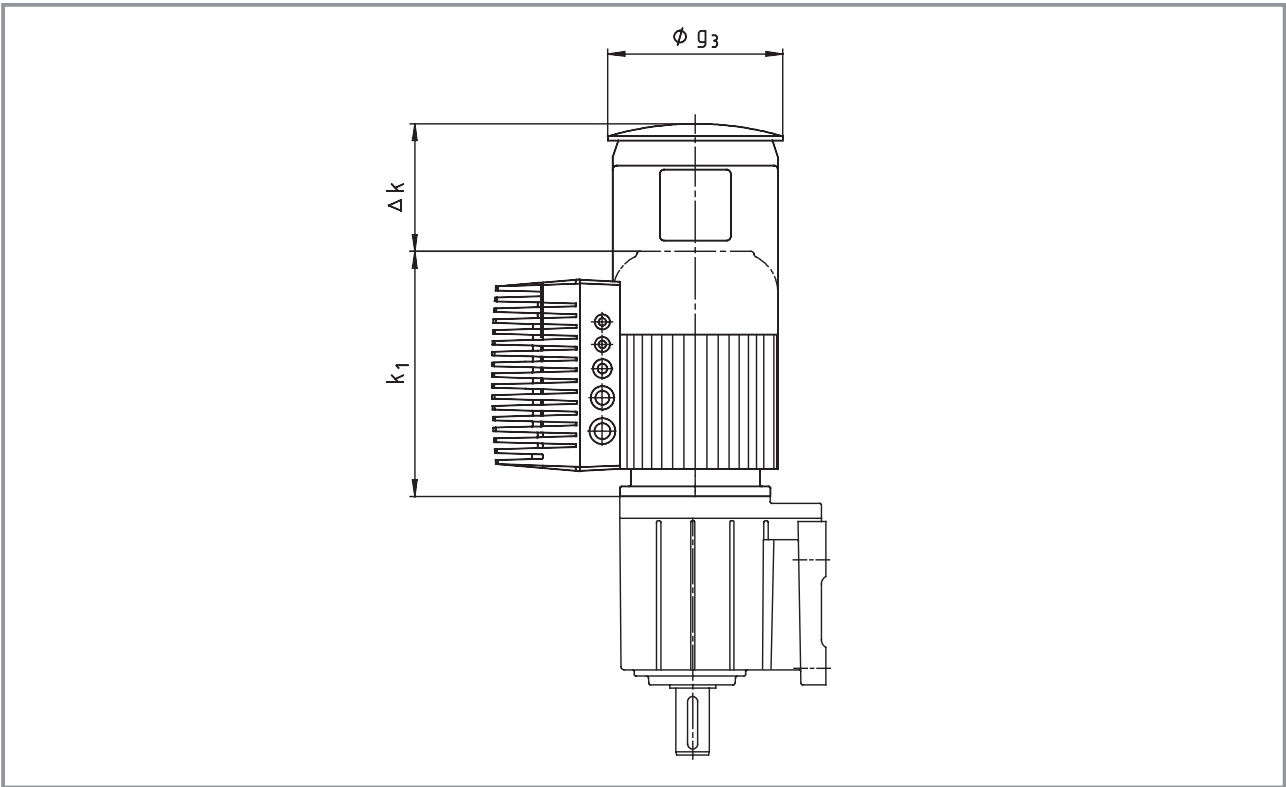


Geared motor 4-pole		Motor frame size							
		063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22
Separate fan	g_3	115	122	131	141	150	162		182
	k_4	12	12	12	22	22	22		32
	m_2	96	96	96	96	96	96		96
	n_3	106	106	106	106	106	106		106
Cable glands	Position 4	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5	1x M16x1.5		1x M16x1.5
Motor length without options	k_1	188	207	225	276	309	319	363	404
Options		Δk							
Separate fan		130	128	128	127	109	102		115
Brake + separate fan		170	165	184	180	170	183		201

Dimensions in [mm]
Position of cable glands in relation to separate fan terminal box in position 5
Caution! The 8200 motec and separate fan terminal box cannot be in the same position!

Dimensions - Motors

Geared motor with separate fan and protection cover



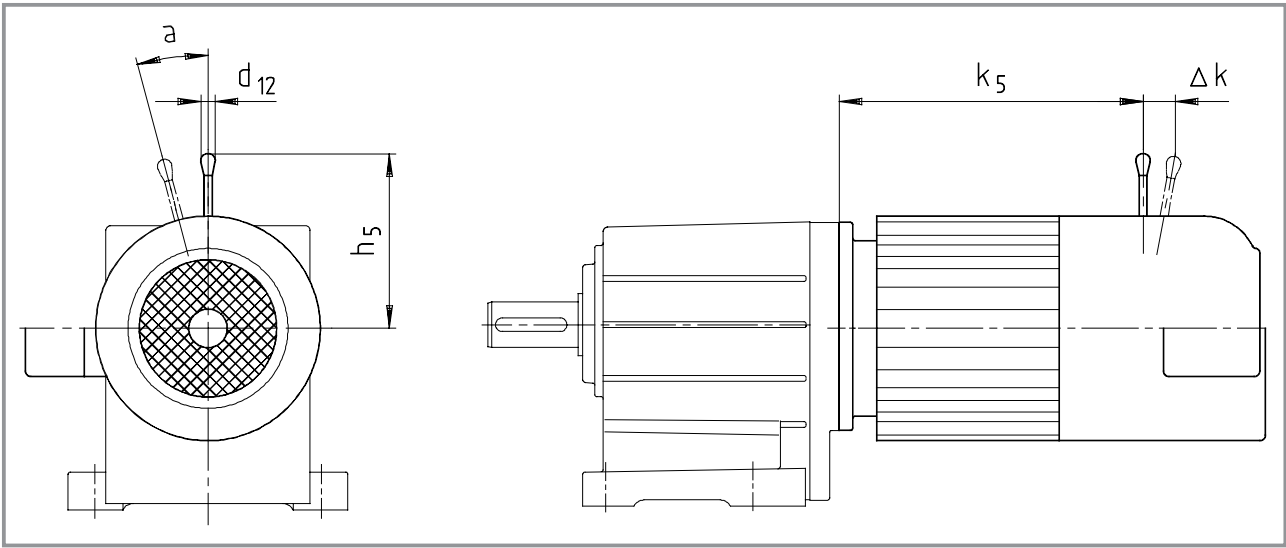
Geared motor 4-pole		Motor frame size							
		063C12 063C32 063C42	071C32 071C42	080C32 080C42	090C32	100C12 100C32	112C22	112C32	132C22
Motor	g ₃	133	150	170	188	210	249		300
	k ₁ ¹⁾	188	207	225	276	309	319	363	404
Options		Δk							
Separate fan		169	165	168	157	137	135		140
Brake + separate fan		209	202	224	210	198	216		226

Dimensions in [mm]

¹⁾ Dimensions without options

Caution! The 8200 motec and separate fan terminal box cannot be in the same position!

Dimensions - Motors
Geared brake motors with manual release lever

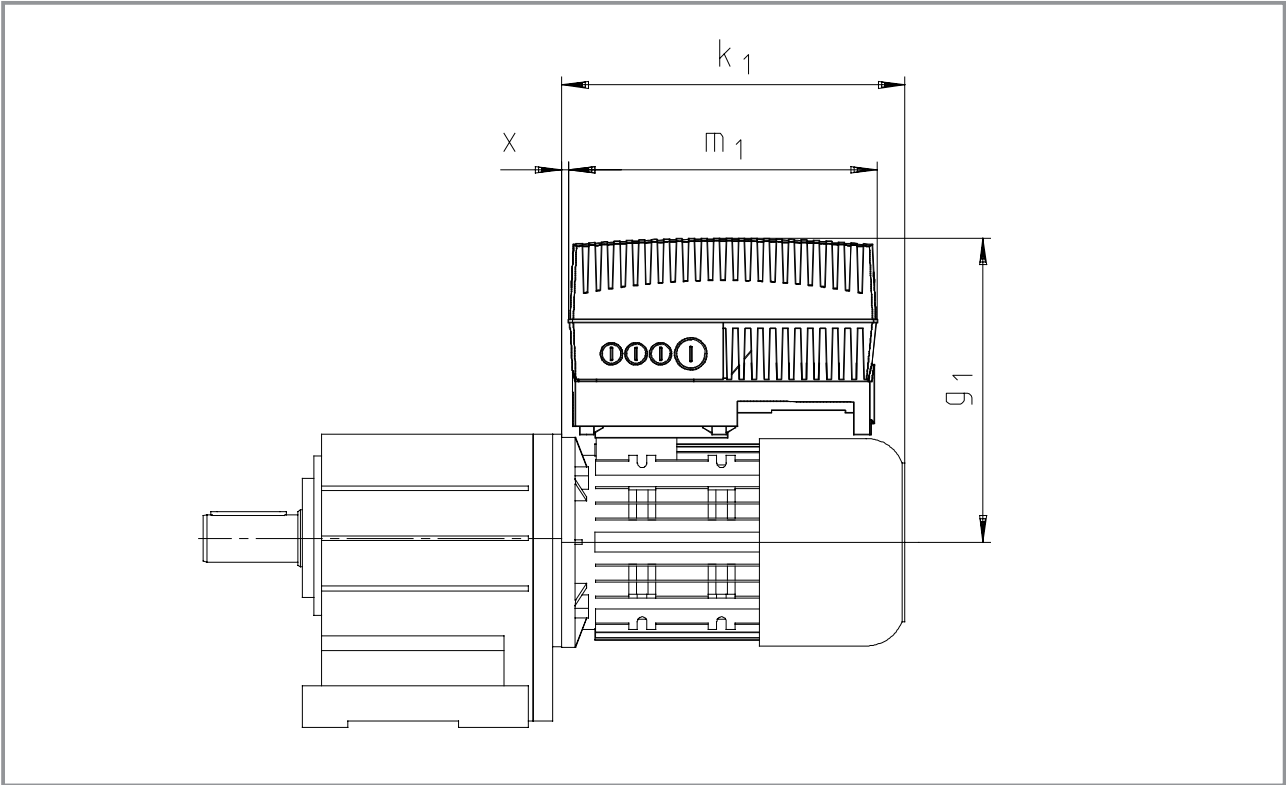


Geared motor 4-pole				Motor frame size										
				063C02 063C22	063C12 063C32 063C42	071C32	071C42	080C32	080C42	090C32	100C12 100C32	112C22	112C32	132C22
a				0°	0°	15°	15°	15°	15°	0°	0°	0°	0°	0°
Brake size	d ₁₂	h ₅	Δk	k ₅										
06	13	107	29	185	173	186	186							
08	13	116	27				187	207	207	245				
10	13	132	28						218	256	279			
12	13	161	37								281	292	336	
14	24	195	41									296	340	373
16	24	240	55											377

Dimensions in [mm]
Caution! The 8200 motec and manual release lever cannot be in the same position!

Dimensions - Motors

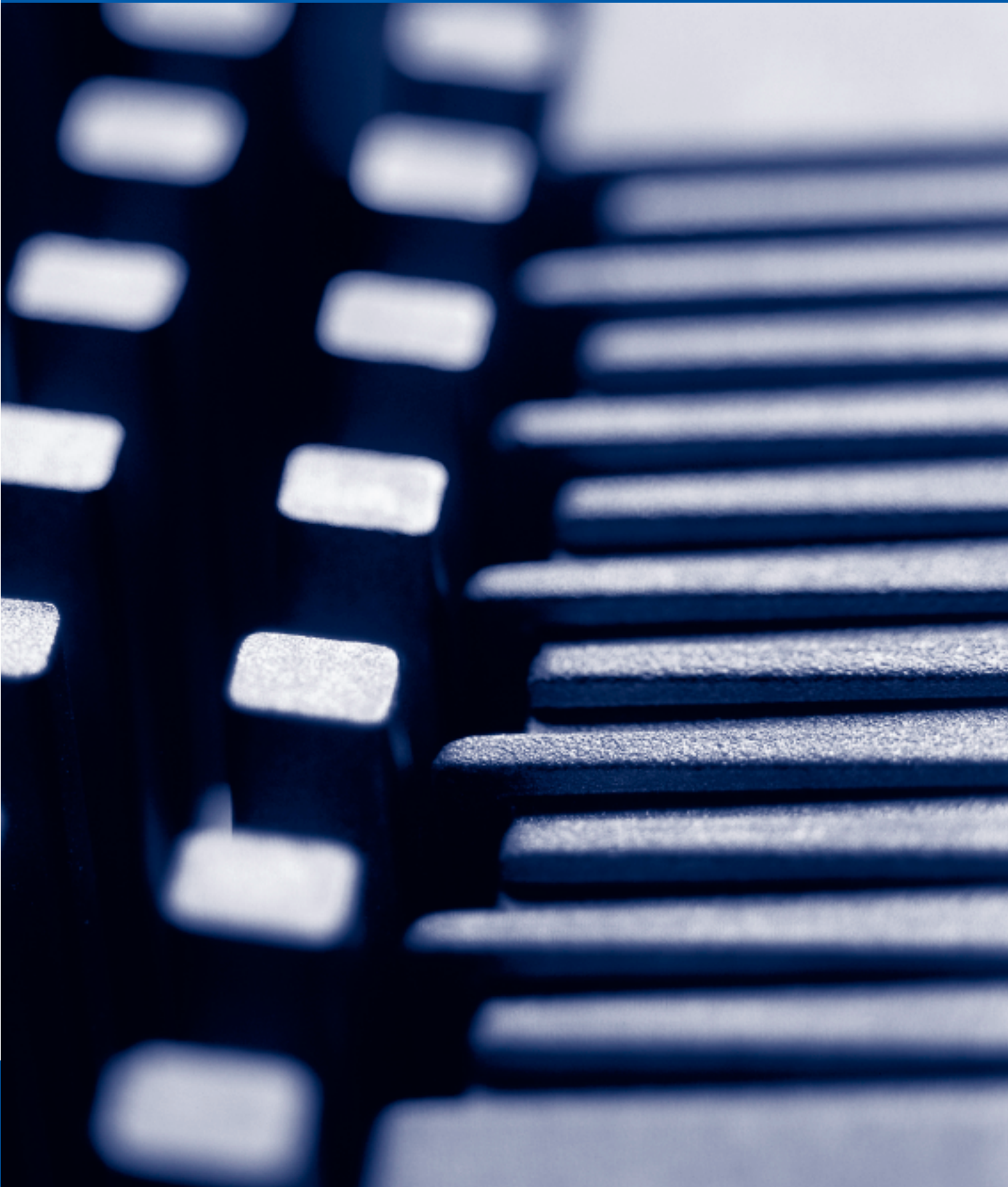
Geared motor with 8200 motec add-on module



Geared motor	Motor frame size	100C32	112C22	112C32	132C22
4-pole	8200 motec E82MV□□□	302	402	552	752
8200 motec	g ₁	312	322		341
	m ₁	327	327		327
	X	0	2		11

Dimensions in [mm]
 8200 motec add-on module for geared motors with separate fan not required.





8200 motec | G-motion motec

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Product information 8200 motec

Distributed drive solutions

Current expectations of drive technology in mechanical and system engineering can be summarised in terms of the following key issues:

- ▶ Simple drive concepts to minimise the time and money spent on project-planning
- ▶ Easy handling, installation and assembly to reduce assembly times
- ▶ Less time and money spent on maintenance and replacements for high plant availability
- ▶ Reusability due to entire systems based on modules
- ▶ Adaptability due to flexible use of drive components

Distributed drive solutions can provide the ideal solution to these requirements.

Lenze can provide you with the components you require for consistent implementation.

The features and functions required in order to be able to set up drive solutions using frequency inverters efficiently are described in more detail below.

Distributed drive solutions with startec motor starters are described in a separate catalogue.
Please contact us for more information.

Power range

8200 motec frequency inverter for single-phase and three-phase mains connection

Power ratings 230 V, 0.25-0.37 kW
 400/500 V, 0.55-7.5 kW

How this can help you:

- Consistent and universal implementation of distributed drive solutions thanks to wide power range
- Options for use all over the world thanks to input voltage range of up to 500 V (+10%) and certification to international standards



Universal

The 8200 motec features the same range of functions as the 8200 vector (IP20 enclosure). Many elements, including parameterisation, operation, diagnostics and fieldbus interfacing, are identical.

How this can help you:

- Any combination of central and distributed drive elements, in accordance with the system concept
- Reduced project planning and training requirements

Adaptability

The modular structure of the 8200 motec means that it can be optimised for your application.

Whether as a "stand-alone" inverter with setpoint preselection via potentiometer or as a networked inverter with speed feedback in master/slave mode, the range of functions can be adapted in accordance with the features required to suit the application in question.

How this can help you:

- Cost-effective drive solutions thanks to optimised components

Flexibility

The 8200 motec supports most common fieldbus systems.

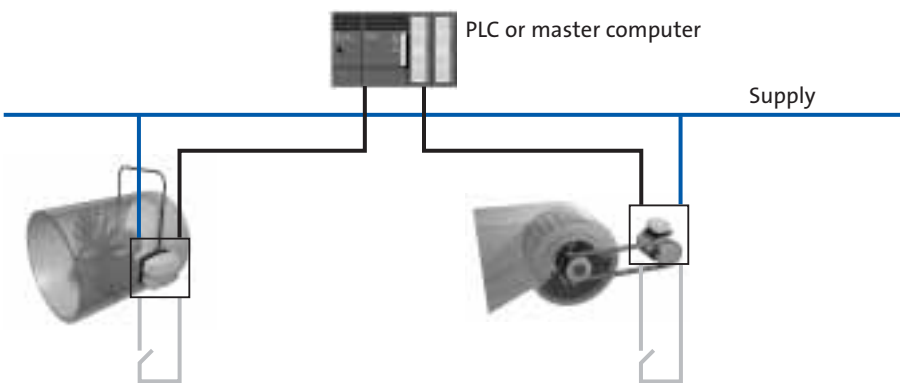
How this can help you:

- Always the ideal bus system (CAN, PROFIBUS-DP, INTERBUS, AS-Interface) for the application and use



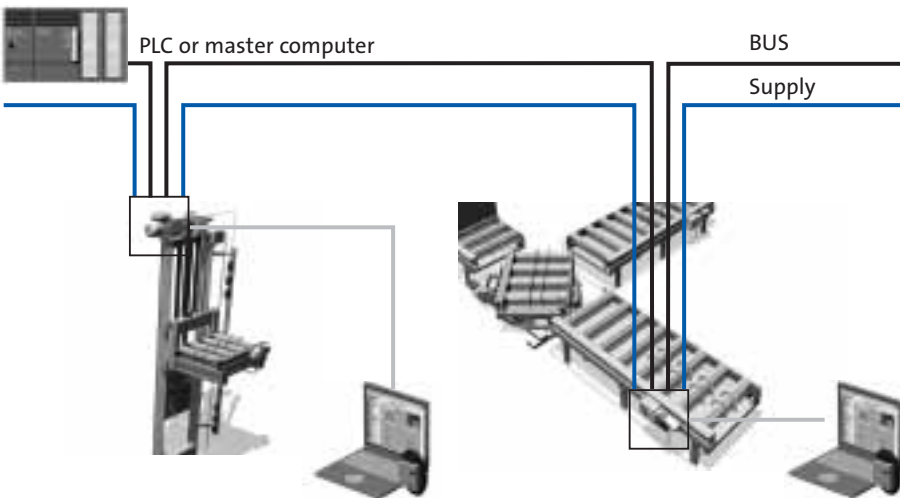
1. Distributed single drives

Open-loop/closed-loop control with digital and analog inputs and outputs

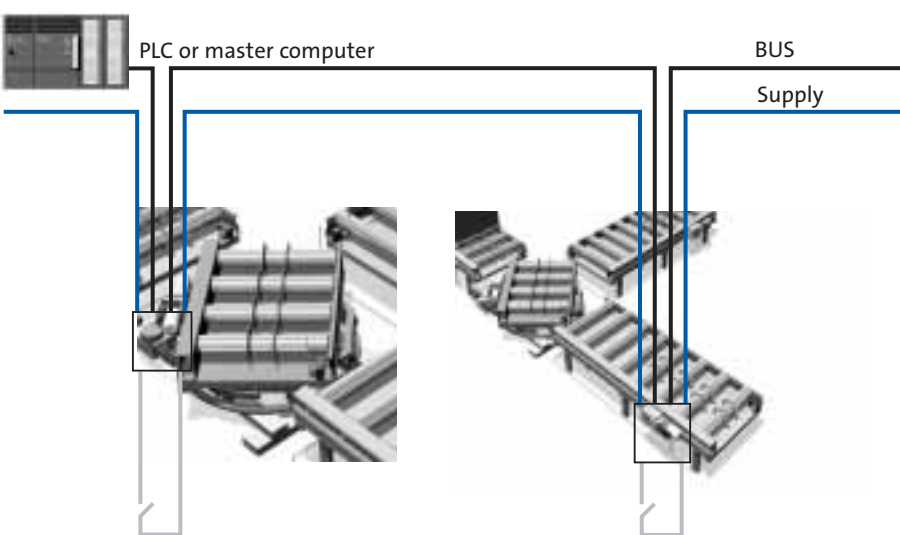


2. Distributed drive systems

2.1 Networking via fieldbus, parameterisation and diagnostics also supported locally via local controls and PC



2.2 Networking via fieldbus and open-loop/closed-loop control with digital and analog inputs and outputs



Product information 8200 motec

Distributed drive solutions

Operation and maintenance

All the cables (mains and control cables) are connected in the carrier housing (terminal tray) of the 8200 motec. Should servicing be required, remove the inverter by unscrewing the four screws and then reconnect it to the carrier housing.

Status LEDs have been provided for local diagnostics. Alternatively, you can access all the information you need via the user-friendly keypad or PC interface.

How this can help you:

- Less machine down time because components can be replaced and diagnosed locally

The keypad, or, for the 8200 motec, the Keypad XT, is available for visualising operating parameters. 8 keys and a text display provide quick and easy access to the inverter parameters via the transparent menu structure. The Keypad XT is also used for the purposes of status display and error diagnostics. In addition, its built-in memory can be used to transfer settings to other inverters.

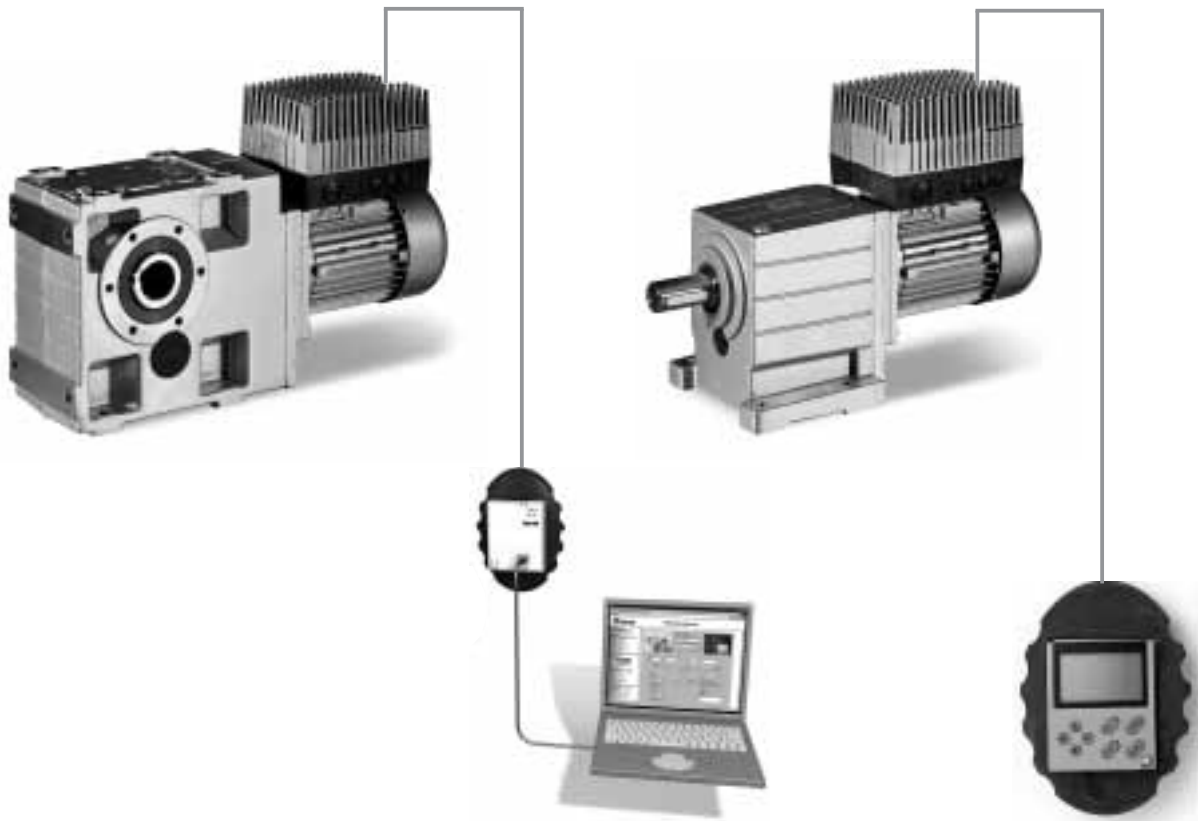
How this can help you:

- Ease of operation

The Global Drive Control (GDC) parameterisation software features a transparent menu structure and assisted commissioning.

How this can help you:

- Quick and easy parameterisation and diagnostics



- ▶ What are the power and voltage requirements?
- ▶ How should the drive parameters be set?

In order to support you when configuring your distributed drive system, we have provided a selection guide in the form of a flow chart. You need to answer just a few questions on the way to finding the ideal solution for your requirements.

Mains voltage/power range

Operation/control

Open-loop control Parameterisation

Mains connection
Mains loops

Components for mains connection

Braking operation

Braking operation with short ramps and high moment of inertia

Actuation of a spring-operated brake

8200 motec



1ph 230 V	0.25...0.37 kW
3ph 400/500 V	0.55...7.5 kW

I/O keypad/RS232 fieldbus

X	X	X
-	X	X

I/O function module
>> page 9-28 onwards



Diagnosis terminal
with keypad
>> page 9-22 onwards



Fieldbus function module
>> page 9-34 onwards



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Brake resistor,
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Brake control
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8200 motec basic inverters

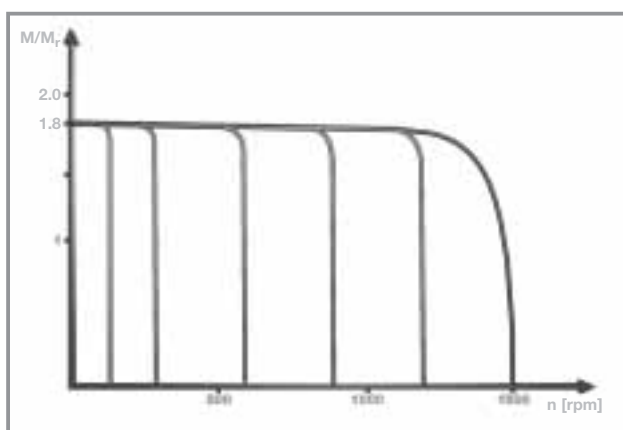
Overview

The concept of the 8200 motec frequency inverter is based on a modular system of complementary components for distributed drive systems. The inverter can be combined with a Lenze geared motor to create an electronic variable speed drive with a wide range of functions. These rugged drives can be used for speed control in numerous industries and applications, e.g. materials handling technology, HVAC technology, automation, etc.

In addition to the features listed in the product information for distributed drive solutions, the 8200 motec frequency inverter also boasts:

Vector control

- 1.8x torque
- High speed setting range
- Excellent smooth running characteristics
- Torque setting range up to 1:10



Versatile

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

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

It couldn't be easier to retrofit or extend systems

The mains supply is the only control voltage needed to run the 8200 motec. This means that even systems which were previously unregulated can be retrofitted relatively quickly and inexpensively for the purpose of process optimisation.

Adaptability

The selectable form of the U/f characteristic enables the frequency inverter to be adapted to loads with constant or square-law torque.

Power-optimised

The frequency inverters can be power-optimised by means of operation at increased rated power – Advantage:

- Use of a more powerful motor in continuous operation

Applications: e.g. pumps, HVAC units, etc.

Braking operation

You can use a brake rectifier (see chapter Accessories) to supply power to and control an electronic spring-operated brake directly from the 8200 motec.

Standard functions

- ▶ Flying restart circuit on coasting motor
- ▶ Slip and mains voltage compensation
- ▶ PID controller
- ▶ Load loss/V-belt monitoring
- ▶ Smooth starting and stopping with S-shaped ramps
- ▶ DC braking
- ▶ Motor potentiometer
- ▶ Elimination of mechanical resonance
- ▶ Manual/remote change-over
- ▶ Up to 3/7 fixed frequencies per parameter set
- ▶ 4 freely-assignable parameter sets can be changed over online
- ▶ Elapsed time meter

Protection functions

- ▶ Short-circuit-proof, earth-fault-proof during operation
- ▶ Configurable current limitation, warnings and error messages in the event of overcurrent
- ▶ Overvoltage and undervoltage protection
- ▶ Warnings and error messages in the event of frequency inverter overtemperature
- ▶ Input for PTC or thermal contact and I²t monitoring for motor protection
- ▶ Motor phase failure detection
- ▶ Integrated brake transistor
- ▶ Integrated RFI filters to EN 55011 Class A or B

Control and operation

- ▶ Keypad/Keypad XT with plain text display and menu structure
- ▶ Copy function for transferring inverter settings
- ▶ Password protection
- ▶ Global Drive Control easy control and parameterisation software (download via Internet)

Power range

0.25 kW...0.37 kW 230 V/240 V (+10%)
0.55 kW...7.5 kW 400 V (+10%)

Overload capability

180% (rated torque for 60 seconds)

Operating modes

- ▶ U/f linear
- ▶ U/f quadratic
- ▶ Vector control
- ▶ Sensorless torque control

Switching frequency 2, 4, 8, 16 kHz

Output frequency up to 650 Hz

Fieldbus communication

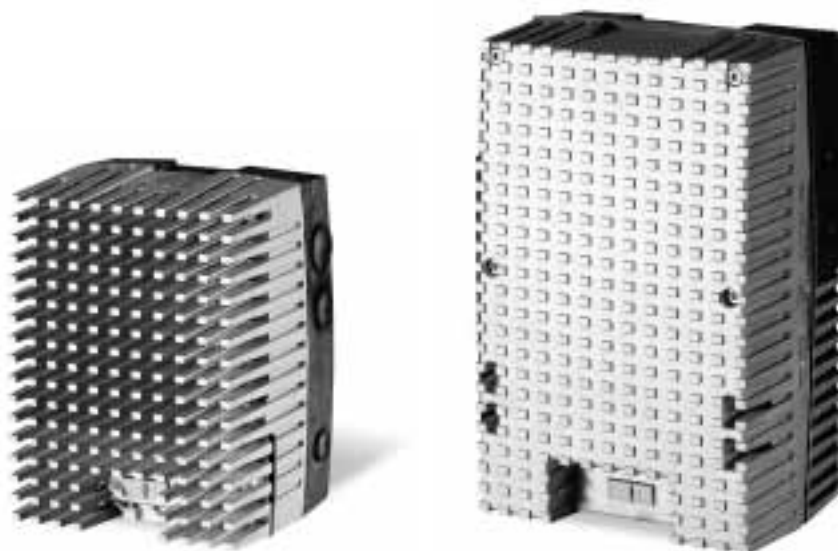
- ▶ RS232 serial interfaces
- ▶ Bus interface to most common fieldbus systems (CAN, PROFIBUS-DP, INTERBUS, AS-Interface)

Input and output terminals

- ▶ Up to 2 analog inputs, bipolar as an option (0-10 V, -10 V...+10 V, 0-20 mA, 4-20 mA; resolution 10 bits)
- ▶ Up to 2 analog outputs (0-10 V, 0-20 mA, 4-20 mA; resolution 10 bits)
- ▶ Up to 6 potential-free digital inputs with change-over logic
- ▶ Up to 2 digital outputs and one frequency output
- ▶ 1 relay output (also for direct mains connection 240 V AC)
- ▶ Evaluation option for incremental encoder

Actuation

- ▶ Via digital inputs/outputs and/or
- ▶ Via fieldbuses



Standards and operating conditions

Conformity	CE	Low-Voltage Directive (73/23/EEC)
Approvals	UL 508C	Underwriter Laboratories (File No. E132659) Power Conversion Equipment
Vibration resistance	Accelerational stability up to 2 g (Germanischer Lloyd, general conditions)	
Climatic conditions	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)	
Degree of pollution	VDE 0110 Part 2 Degree of pollution 2	
Packaging (DIN 4180)	Dust packaging	
Permissible temperature ranges		
	Transport	-25°C ... +70°C
	Storage	-25°C ... +60°C
	Operation	-20°C ... +60°C Above +40°C, derate the rated output current by 2.5%/°K
Permissible site altitude	0 ... 4000 m amsl	Above 1000 m amsl, derate the rated output current by 5%/1000 m
Mounting positions	All mounting positions and mounting orientations permissible	
Free space		
	Above/below	≥100 mm
	To the side	≥100 mm
DC-bus operation	Not possible	

General electrical data

EMC	Compliance with requirements to EN 61800-3/A11	
Noise emission	Motor assembly	Compliance with threshold classes A and B to EN 55011
	Wall mounting	Compliance with threshold class A to EN 55011 (up to 10 m shielded motor cable) Compliance with threshold class B to EN 55011 (up to 1 m shielded motor cable)
Noise immunity	Requirements to EN 61800-3 incl. A11 noise immunity	
	Requirements	Standard Severity
	ESD	EN 61000-4-2 3. i.e. 8 kV for air discharge, 6 kV for contact discharge
	Cable-guided high-frequency	EN 61000-4-6 150 kHz ... 80 MHz, 10 V/m 80% AM (1 kHz)
	RF interference (housing)	EN 61000-4-3 80 MHz ... 1000 MHz, 10 V/m 80% AM (1 kHz)
	Burst	EN 61000-4-4 3/4. i.e. 2 kV/5 kHz
	Surge (surge voltage on mains cable)	EN 61000-4-5 3. i.e. 1.2/50 µs, 1 kV phase-phase, 2 kV phase-PE
Insulation resistance	Overvoltage category III to VDE 0110	
Leakage current to PE (to EN 50178)	> 3.5 mA, i.e. fixed installation required, PE must be reinforced	
Enclosure	IP65/NEMA4 (IP54 for 8200 motec 3.0-7.5 kW for operation with E82ZMV add-on module)	
Protective measures against	Short circuit, earth fault (earth-fault-proof during operation, limited protection against earth faults on power-up), overvoltage, motor instability, motor overtemperature (input for PTC or thermal contact, I ² t monitoring)	
Protective insulation of control circuits	Safe disconnection from supply: Dual/reinforced insulation to EN 50178	
Permissible supply forms	Operation on TT systems, TN systems or systems with earthed neutral without additional measures	
	Operation on IT systems not possible	
Operation on public supply systems	Limitation of harmonic currents to EN 61000-3-2	
	Total power on mains	Complies with requirements ¹⁾
	< 0.5 kW	With mains choke
	0.5 kW...1 kW	With active filter (in preparation)
	> 1 kW	Without additional measures

¹⁾ The additional measures listed enable the controller alone to meet the requirements of EN 61000-3-2. Responsibility for adherence to requirements on the part of the machine/system lies with the machine/system manufacturer.

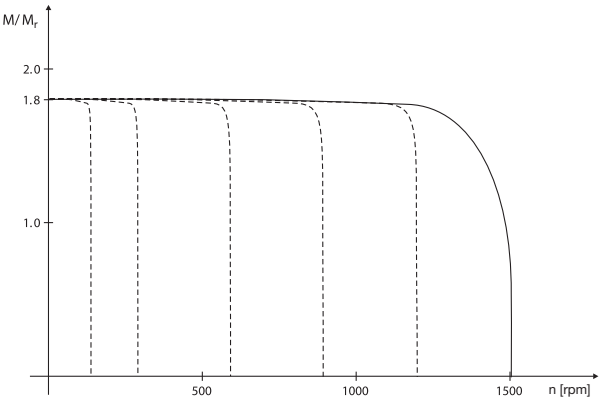
8200 motec basic inverters

Technical data

Inputs and outputs

Analog inputs Analog outputs	With standard I/O	1 input, bipolar as an option 1 output
	With application I/O	2 inputs, bipolar as an option 2 outputs
Digital inputs Digital outputs	With standard I/O	4 inputs, optional 1 frequency input single-track 0 ... 10 kHz; two-track 0 ... 1 kHz 1 input for controller inhibit 1 output
	With application I/O	6 inputs, optional 1 frequency input single-track/two-track 0 ... 100 kHz; 1 input for controller inhibit 2 outputs, 1 frequency output 50 Hz ... 10 kHz
Cycle times	Digital inputs	1 ms
	Digital outputs	4 ms
	Analog inputs	2 ms
	Analog outputs	4 ms (smoothing time: $\tau = 10$ ms)
Relay output		1 relay output AC 250 V/3 A, DC 24 V/2 A ... 240 V/0.22 A (change-over contact)
Generator mode		Integrated brake transistor

Open-loop and closed-loop control

Open-loop and closed-loop methods		U/f characteristic control (linear, quadratic), vector control, torque preselection	
Switching frequency		2 kHz, 4 kHz, 8 kHz, 16 kHz	
Torque characteristic	Maximum torque	1.8 x M _r for 60 s	If rated motor power = rated controller power
	Setting range	1 :10	In speed range 3 ... 50 Hz, accuracy < 8%
	Torque/speed characteristic		
Sensorless speed control	Minimum output frequency	1.0 Hz (0 ...M _r)	
	Setting range	1:50	Related to 50 Hz and M _r
	Accuracy	±0.5%	
	Smooth running	±0.1 Hz	In speed range 3 ... 50 Hz
Output frequency	Range	-650 Hz ... +650 Hz	
	Resolution absolute	0.02 Hz	
	Resolution standardised	Parameter data: 0.01%, process data: 0.006% (= 2 ⁻¹⁴)	
Digital setpoint selection	Accuracy	±0.005 Hz (= ±100 ppm)	
Analog setpoint selection	Linearity	±0.5%	Related to instantaneous value
	Temperature sensitivity	+0.3% (0 ... +60°C)	Related to instantaneous value
	Offset	±0%	
	A/D converter	Resolution 10 bits A/D converter	
		Error 1 digit	≡ 0.1% related to final value

8200 motec basic inverters

Operation at rated power (normal operation)

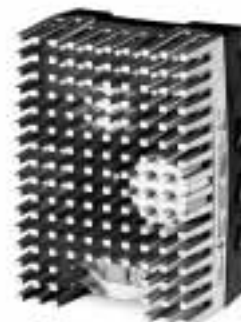
Rated data at mains voltage 230 V

Typical motor power		P _r [kW]	0.25	0.37
Three-phase asynchronous motor (4-pole)		P _r [hp]	0.34	0.5
8200 motec type			E82MV251_2B	E82MV371_2B
Mains voltage		U _{mains} [V]	1/N/PE AC 180 V-0%...264 V +0%; 45 Hz -0%...65 Hz +0%	
Data for operation at 1/N/PE AC 230 V				
Mains rated current		I _{mains} [A]	3.4	5.0
Output power U, V, W (at 8 kHz)		S _r [kVA]	0.68	1.0
Rated output current at switching frequency	2 kHz	I _r [A]	2.0	2.9
	4 kHz			
	8 kHz	I _r [A]	1.7	2.4
	16 kHz 2)	I _r [A]	1.1	1.6
Max. permissible output current for 60 s at switching frequency 1)	2 kHz	I _{max} [A]	2.5	3.6
	4 kHz			
	8 kHz	I _{max} [A]	2.5	3.6
	16 kHz 2)	I _{max} [A]	1.7	2.3
Output voltage		U _M [V]	3~ 0 ... U _{mains} / 0 ... 650 Hz	
Power loss (operation with I _r at 8 kHz)		P _v [W]	30	40
Dimensions		H x W x D [mm]	190 x 138 x 100	
Weight		m [kg]	1.8	1.8

Bold print = Data for operation at a switching frequency of 8 kHz (Lenze setting)

¹⁾ Currents for periodic load change cycle: 1 min overcurrent duration at I_{max} and 2 min base load duration at 75% I_r

²⁾ For protection against shutdown due to impermissible temperature, the switching frequency is automatically reduced to 4 kHz before the shutdown temperature is reached.



8200 motec basic inverters

Operation at rated power (normal operation)

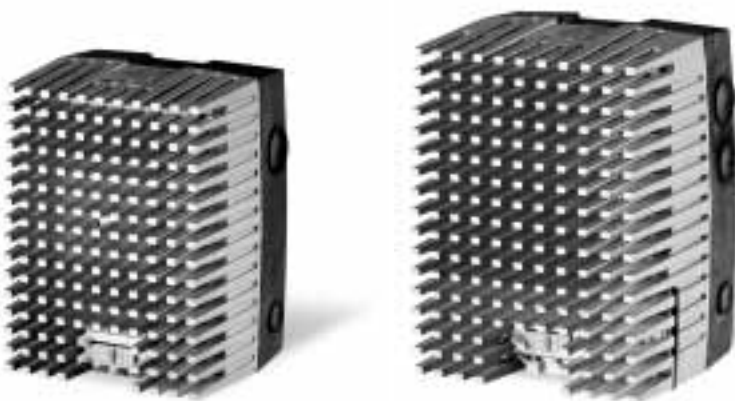
Rated data at mains voltage 400 V

Typical motor power		P _r [kW]	0.55	0.75	1.5	2.2
Three-phase asynchronous motor (4-pole)		P _r [hp]	0.75	1.0	2.0	3.0
8200 motec type			E82MV551_4B	E82MV751_4B	E82MV152_4B	E82MV222_4B
Mains voltage		U _{mains} [V]	3/PE AC 320 V - 0%...550 V + 0%; 45 Hz - 0%...65 Hz + 0%			
Data for operation at 3/PE AC 400 V						
Mains rated current		I _{mains} [A]	1.8	2.4	3.8	5.5
Output power U, V, W (at 8 kHz)		S _r [kVA]	1.3	1.7	2.7	3.9
Rated output current at switching frequency	2 kHz	I _r [A]	2.1	2.9	4.6	6.7
	4 kHz					
	8 kHz	I _r [A]	1.8	2.4	3.9	5.6
	16 kHz 2)	I _r [A]	1.2	1.6	2.5	3.6
Max. permissible output current for 60 s at switching frequency 1)	2 kHz	I _{max} [A]	2.7	3.6	5.8	8.4
	4 kHz					
	8 kHz	I _{max} [A]	2.7	3.6	5.8	8.4
	16 kHz 2)	I _{max} [A]	1.8	2.4	3.9	5.3
Output voltage		U _M [V]	3~ 0 ... U _{mains} / 0 ... 650 Hz			
Power loss (operation with I _r at 8 kHz)		P _v [W]	35	45	70	95
Dimensions		H x W x D [mm]	202 x 156 x 151		230 x 176 x 167	
Weight		m [kg]	2.8		4.1	

Bold print = Data for operation at a switching frequency of 8 kHz (Lenze setting)

¹⁾ Currents for periodic load change cycle: 1 min overcurrent duration at I_{max} and 2 min base load duration at 75% I_r

²⁾ For protection against shutdown due to impermissible temperature, the switching frequency is automatically reduced to 4 kHz before the shutdown temperature is reached.



8200 motec basic inverters

Operation at rated power (normal operation)

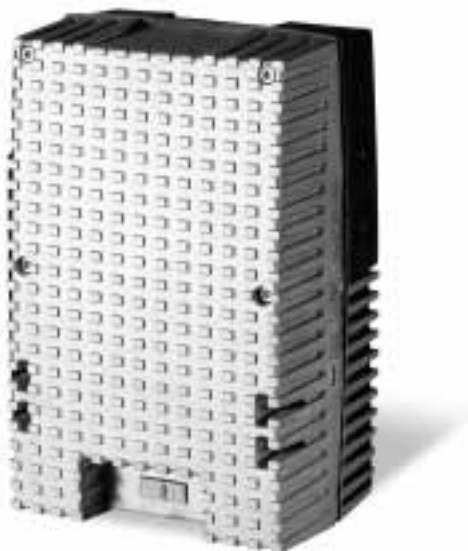
Rated data at mains voltage 400 V

Typical motor power		P _r [kW]	3.0	4.0	5.5	7.5
Three-phase asynchronous motor (4-pole)		P _r [hp]	4.1	5.4	7.5	10.2
8200 motec type			E82MV302_4B	E82MV402_4B	E82MV552_4B	E82MV752_4B
Mains voltage		U _{mains} [V]	3/PE AC 320 V - 0% ... 550 V + 0% ; 45 Hz - 0% ... 65 Hz + 0%			
Data for operation at 3/PE AC 400 V						
Mains rated current		I _{mains} [A]	9.5	12.3	16.8	21.5
Output power U, V, W (at 8 kHz)		S _r [kVA]	5.1	6.6	9.0	11.4
Rated output current at switching frequency	2 kHz	I _r [A]	8.8	11.4	15.6	16.5
	4 kHz					
	8 kHz	I _r [A]	7.3	9.5	13.0	16.5
	16 kHz 2)	I _r [A]	4.7	6.1	8.4	10.7
Max. permissible output current for 60 s at switching frequency 1)	2 kHz	I _{max} [A]	11.0	14.2	19.5	24.8
	4 kHz					
	8 kHz	I _{max} [A]	11.0	14.2	19.5	24.8
	16 kHz 2)	I _{max} [A]	7.1	9.1	12.7	16.1
Output voltage		U _M [V]	3~ 0 ... U _{mains} / 0 ... 650 Hz			
Power loss (operation with I _r at 8 kHz)		P _v [W]	140	180	230	290
Dimensions		H x W x D [mm]	325 x 213 x 163 (223) ³⁾			
Weight		m [kg]	9.7 (11.4) ³⁾			

¹⁾ Currents for periodic load change cycle: 1 min overcurrent duration at I_{max} and 2 min base load duration at 75% I_r

²⁾ For protection against shutdown due to impermissible temperature, the switching frequency is automatically reduced to 4 kHz before the shutdown temperature is reached.

³⁾ For wall mounting or with E82MV add-on module



8200 motec basic inverters

Operation at rated power (normal operation)

Current derating

Depending on the operating conditions and the use of the 8200 motec, the rated output current may need to be derated on E82MV302_4B to EMV752_4B types if:

8200 motec mounted on...	Current derating
...Lenze motor/geared motor with separate fan	Not required
...Lenze motor/geared motor with integral fan	See Figure 1
...Lenze motor/geared motor with integral fan and E82ZMV add-on module	Not required
... Third-party motor/geared motor ⇒ E82ZMV add-on module always required	Not required
...The wall (wall mounting) ⇒ E82ZMV add-on module always required	Not required

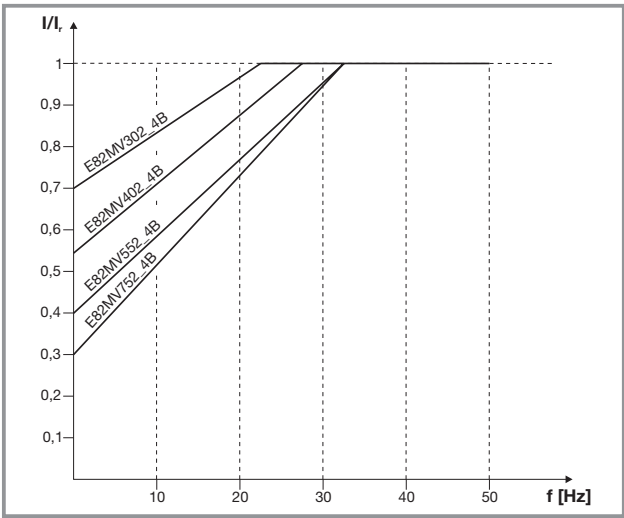
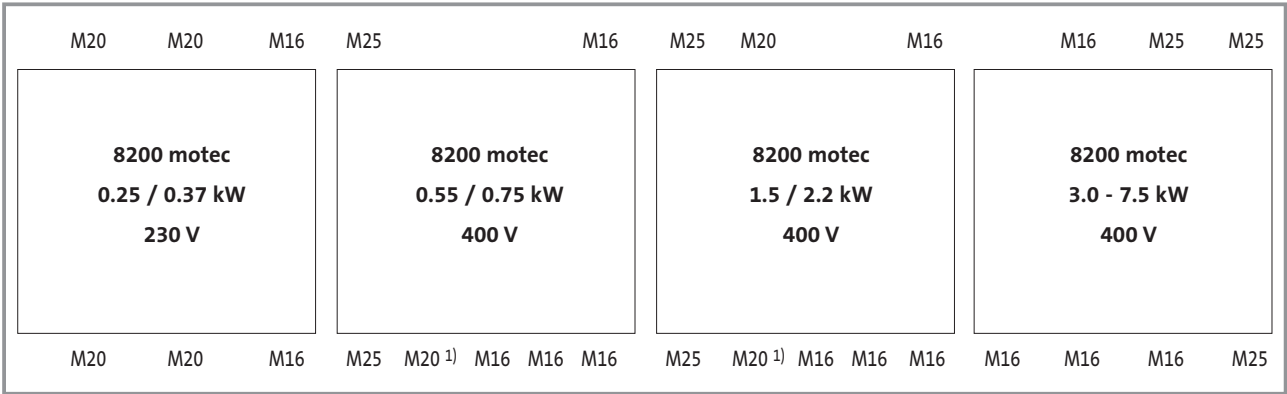


Figure 1:
Derating of rated output current in continuous operation at 40°C ambient temperature and switching frequency 4 kHz or at 35°C and 8 kHz.

- I Derated output current 8200 motec
- I_r Rated output current 8200 motec at 4 kHz/8 kHz switching frequency
- f Output frequency 8200 motec [Hz]

Note: Remember the torque derating on motors with integral fans.

View from above, carrier housing



- Features of metric cable glands
 - ▶ With internal thread
 - ¹⁾ Exception: no internal thread
 - ▶ 8200 motec 0.55-2.2 kW with blanking plug
 - ▶ 8200 motec 0.25-0.37 kW and 3.0-7.5 kW with rupture points



Function and communication modules

Lenze can provide a wide range of components for integration into the automation of the machine or system.

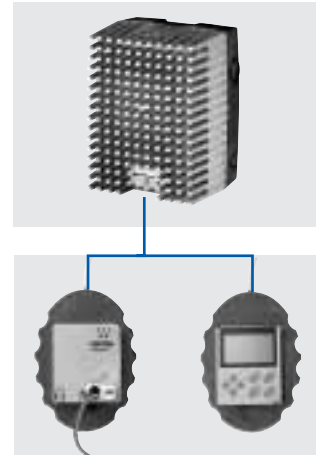
The function modules and communication modules enable the inverter to be adapted according to the specific requirements of the application in terms of the number of digital and analog inputs and outputs and in terms of interfacing with the fieldbus.

The distributed drive components provide two interfaces, one for a communication module and the other for a function module. The possible combinations of function and communication modules are listed in the table on page 9-19. The use of the BUS I/O function module provides the 8200 motec with a further interface for an additional function module.

This makes it possible, for example, to operate the frequency inverter in parallel during simultaneous bus and I/O operation. This makes commissioning and diagnostics easier, in particular in complex applications (mixed fieldbus and I/O operation).

Connection communication module, e.g.

keypad
LECOM-A (RS232)

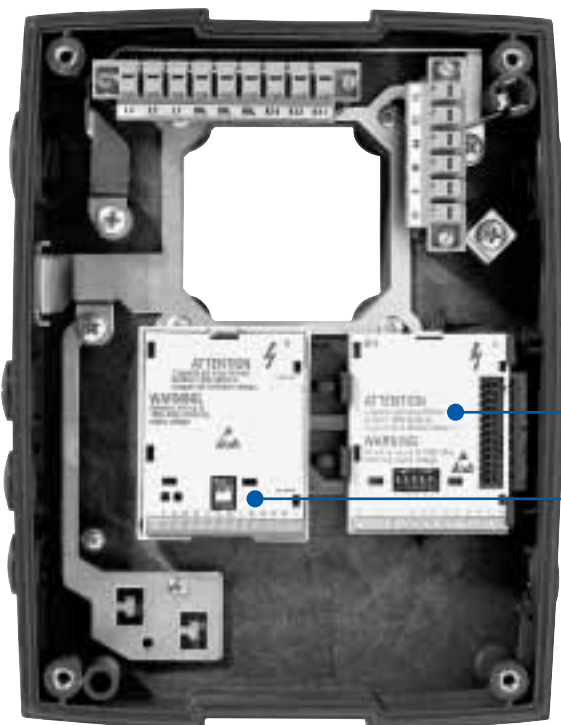


8200 motec Slot 1 e.g. for function module

Standard I/O
Application I/O
BUS I/O
CAN (system bus)
CAN I/O (system bus)
CANopen
DeviceNet
PROFIBUS-DP
INTERBUS
LECOM-B (RS485)
AS-Interface

Slot 2 (only available if a BUS I/O is plugged into slot 1) e.g. for fieldbus function module

CAN (system bus)
PROFIBUS-DP
INTERBUS
LECOM-B (RS485)





Possible applications for function and communication modules in 8200 motec

		8200 motec	8200 motec with BUS I/O
Communication modules	Type		
Keypad	E82ZBB	●	●
Keypad XT	E82ZBBXC	●	●
LECOM-A RS232	E82ZBL-C	●	●
Function modules	Type		
Standard I/O	E82ZAFSC001	●	—
Application I/O	E82ZAFAC001	●	—
BUS I/O	E82ZAFBxx1	●	—
CAN (system bus)	E82ZAFCC001	●	●
CAN I/O (system bus)	E82ZAFCC201	●	—
CANopen	E82ZAFUC001	●	●
DeviceNet	E82ZAFVC001	●	●
PROFIBUS-DP	E82ZAFPC001	●	●
INTERBUS	E82ZAFIC001	●	●
LECOM-B (RS485)	E82ZAFLC001	●	●
AS-Interface	E82ZAFFC001	●	—

All function modules (with the exception of the BUS I/O module) can also be used in conjunction with the 8200 vector frequency inverter. The Keypad XT and Global Drive Control easy (GDC easy) PC software, which simplify and speed up the operation of the inverter by means of a simple menu structure and assisted dialogue boxes, are available for parameterisation and diagnostics.

8200 motec automation

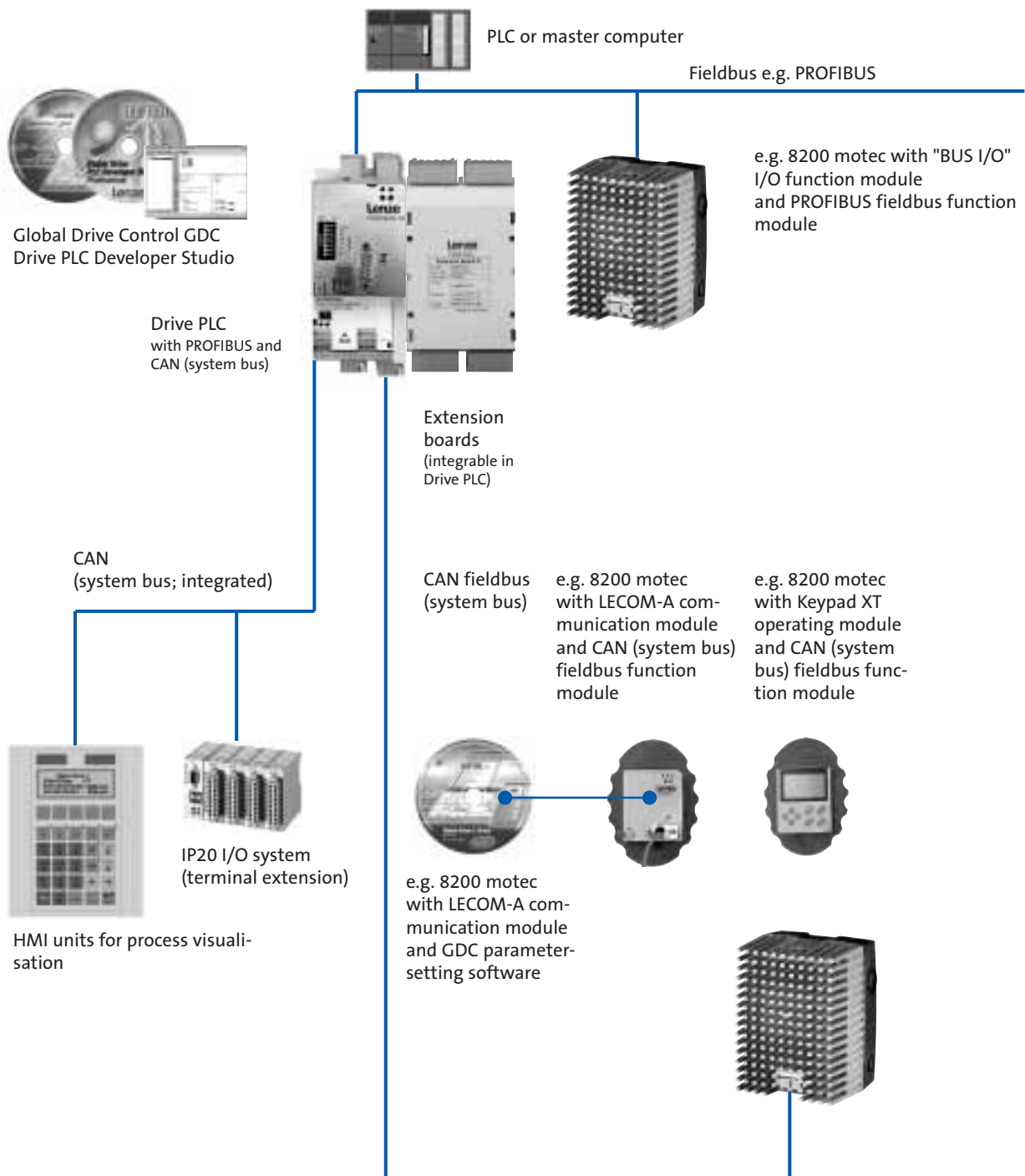
Overview

Automation components

Bus-compatible HMI units which can be integrated into control cabinets are available in various sizes for the visualisation of inverter parameters and process data. The Drive PLC is a freely-programmable drive PLC operating in accordance with international standard EN 61131-3. In conjunction with the frequency inverter, it can be used to implement distributed control tasks. Extension boards can

be used to extend the input and output terminals on the Drive PLC.

The range is completed by bus-compatible, freely-programmable I/O terminals, which are used for interfacing sensors and actuators with the bus.

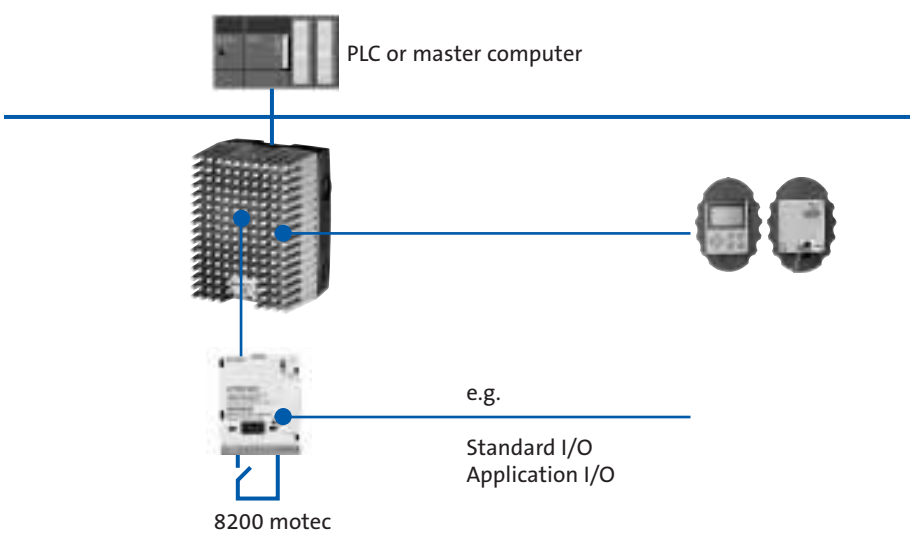


The large selection of function and communication modules enables a variety of operation and communication concepts to be set up to meet individual requirements. The

overview provides examples of options for control, operation and parameterisation:

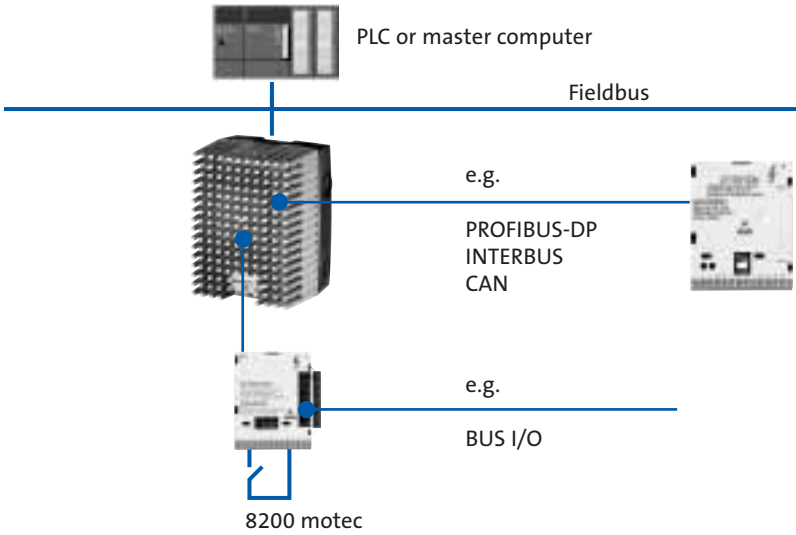
1.

Control and operation via keypad, RS232 (GDC) and/or control terminals



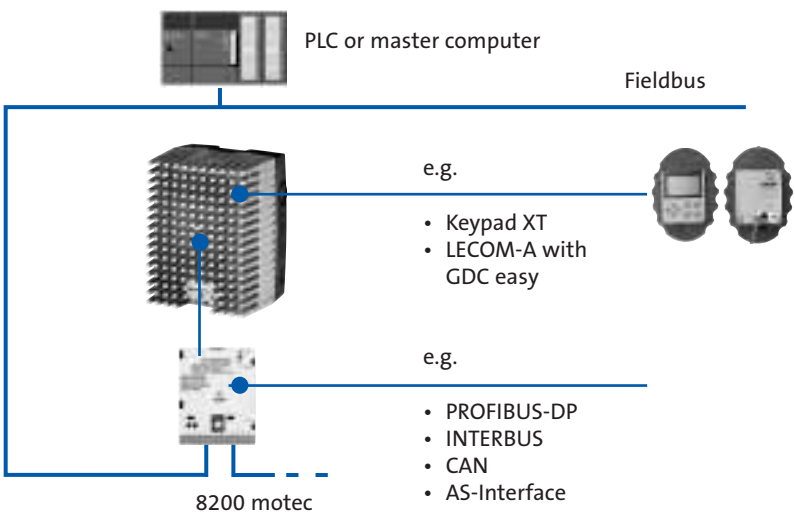
2.

Networking via fieldbus and open-loop/closed-loop control with digital and analog inputs and outputs



3.

Parameterisation and diagnostics during fieldbus operation



8200 motec automation

Diagnostics and parameterisation

Keypad XT operating module

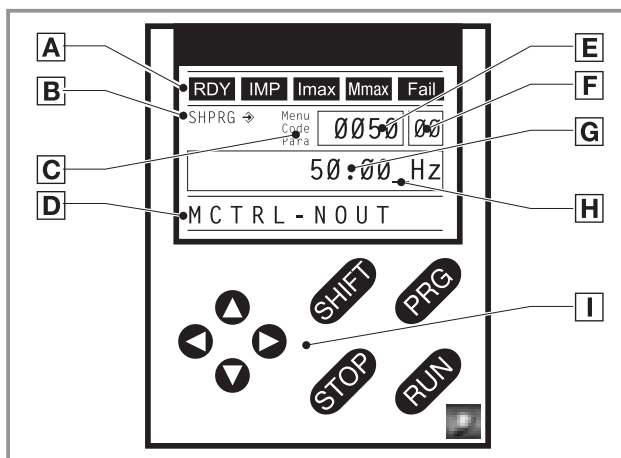
Diagnosis terminal (complete with Keypad XT)	Order no.	E82ZBBXC
Diagnosis terminal (complete with keypad)	Order no.	E82ZBB

The Keypad XT is available for visualising operating parameters and parameter settings for the inverter. 8 keys and a text display provide quick and easy access to the inverter parameters via the transparent menu structure. The Keypad XT is also used for the purposes of status display and error diagnostics. In addition, its built-in memory can be used to transfer settings to other inverters. To facilitate handling, the Keypad XT is installed in an ergo-

nomous diagnosis terminal. The Keypad XT is equally suitable for use on starttec, 8200 vector, 9300 vector, 9300 servo and Drive PLC devices.

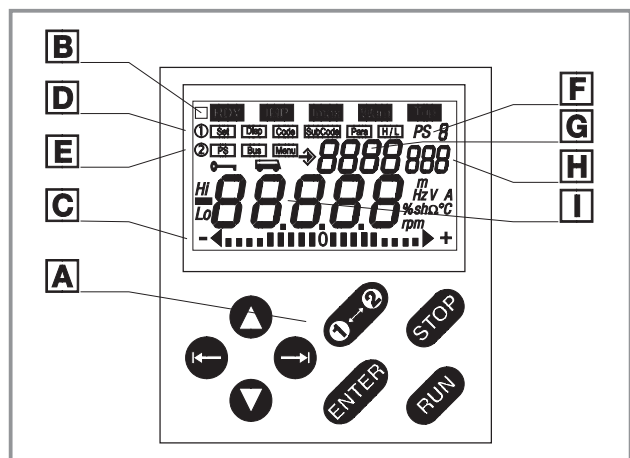
The keypad is suitable for installation in the control cabinet. The differences between the Keypad XT and keypad are listed in the "Features" overview.

A connecting cable is required for connection to the 8200 motec.



Keypad XT

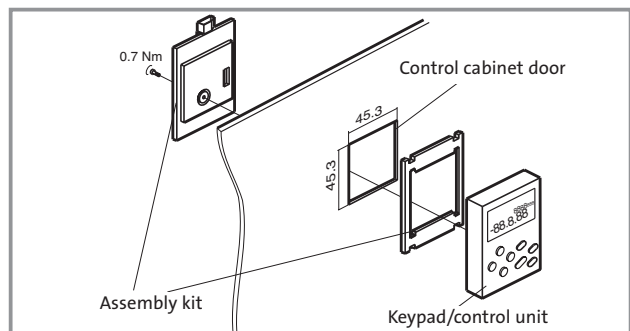
- A Status displays
- B Transfer parameters
- C Active level
- D Help text
- E Menu or code numbers
- F Menu or subcode numbers
- G Parameters
- H Cursor
- I Function keys



Keypad

- A Function keys
- B Status displays
- C Bar graph display
- D Function bar 1
- E Function bar 2
- F Parameters for modification
- G Code number
- H Subcode number
- I Parameter value with unit

Dimensions of assembly kit for control cabinet (keypad only)



Features

	Keypad XT	Keypad
Plain text display	●	
Menu structure	●	
Predefined basic configuration	●	
Text display	●	●
Control keys	8	8
Non-volatile memory for parameter transfer	●	●
Password protection	●	●
Control cabinet installation		●
Configurable menu ("user menu")	●	●
Application-specific menus	●	
"Quick start" menu	●	
Can be used with the	8200 vector, 8200 motec, Drive PLC, 9300 vector, 9300 servo, starttec	8200 vector, 8200 motec, starttec
Diagnosis terminal	●	●
Enclosure	IP20	IP55



Diagnosis terminal with Keypad XT and connecting cable

Additional accessories	Order no.
Keypad (without diagnosis terminal) ³⁾	E82ZBC
Control cabinet assembly kit ²⁾	E82ZBHT
2.5 m connecting cable ¹⁾	E82ZWL025
5 m connecting cable ¹⁾	E82ZWL050
10 m connecting cable ¹⁾	E82ZWL100

¹⁾ The connecting cable is required to connect the diagnosis terminal or control cabinet assembly kit to the 8200 motec.

²⁾ The additional control cabinet assembly kit is required if the keypad (E82ZBC version only) is to be installed in the door of the control cabinet (IP55 enclosure).

³⁾ Can only be used on the 8200 motec in conjunction with the E82ZBHT control cabinet assembly kit.

8200 motec automation

Diagnostics and parameterisation

LECOM-A (RS232)

LECOM-A (RS232); complete with diagnosis terminal

Order no.

E82ZBL-C

Parameterisation made easy with the RS232 interface and Global Drive parameter-setting software.

This module provides a medium for communication in accordance with Lenze's LECOM protocol. This interface is used to set the parameters of the 8200 motec with the "Global Drive Control (GDC) easy" or "Global Drive Control" software.

Global Drive Control is based on familiar Windows technology and is very easy to use, thereby ensuring quick and safe commissioning.

A variety of monitors are also available for visualising process and control status, e.g. device utilisation. Additional connecting cables are required for connection to the 8200 motec and to the PC.

Protocol	LECOM-AB V2.0
Communication medium	RS232 (LECOM-A)
Transmission character format	7-bit ASCII, 1 stop bit, 1 start bit, 1 parity bit (even)
Baud rate [bps]	1200, 2400, 4800, 9600, 19200
Network topology	Point-to-point
Max. no. of nodes	1
Max. cable length	15 m
PC connection	9-pin Sub-D socket
Insulation voltage to reference earth/PE	50 V AC
Enclosure	IP20
Ambient temperature	Operation: 0 ... +50°C Transport: -25 ... +70°C Storage: -25 ... +55°C
Humidity	Humidity class F without condensation (average relative humidity 85%)

Pin assignment 9-pin Sub-D socket				Basic structure
Pin	Designation	Input (I)/ Output (O)	Explanation	 8200 motec
1	—	—	Not assigned	
2	RxD	I	"Data reception" cable	
3	TxD	O	"Data transmission" cable	
4	DTR	O	Transmission control	
5	GND	—	Reference potential	
6	DSR	I	Not assigned	
7	—	—	Not assigned	
8	—	—	Not assigned	
9	GND		Reference potential for T/R (A), T/R (B) and +5 V	



Diagnosis terminal with PC interface (RS232) (type E82ZBL-C) and RS232 PC system cable (EWL0048)

Additional connecting cables are required for connection to the 8200 motec and to the PC.

Additional accessories	Order no.
2.5 m connecting cable ¹⁾	E82ZWL025
5 m connecting cable ¹⁾	E82ZWL050
10 m connecting cable ¹⁾	E82ZWL100
0.5 m RS232 PC system cable	EWL0048
5 m RS232 PC system cable	EWL0020
10 m RS232 PC system cable	EWL0021

¹⁾ The connecting cable is required to connect the diagnosis terminal or control cabinet assembly kit to the 8200 motec.

8200 motec automation

Diagnostics and parameterisation

Parameterisation software Global Drive Control – GDC easy

GDC easy	Order no.	ESP-GDC2-E
GDC	Order no.	ESP-GDC2

The Global Drive Control easy software is an easy-to-use, transparent tool for operating, parameterising and diagnosing 8200 frequency inverters like the 8200 motec.

Essential features include:

- ▶ Operation in interactive mode
- ▶ Monitor window for displaying operating parameters and diagnostics
- ▶ Extensive help functions
- ▶ Loading and saving of parameter files from and to the inverter
- ▶ Saving and printing out of parameter settings as code lists

One of the ways you can get Global Drive Control easy is to download it free of charge from the Internet at www.Lenze.com. Alternatively, you can contact your nearest Lenze representative.

It offers the following advantages:

- ▶ Easy, intuitive operation
- ▶ Even suitable for beginners
(no programming knowledge required)

Global Drive Control – GDC easy parameterisation software



The Global Drive Control parameterisation software features all the functions described here. If you simply wish to parameterise the frequency inverter, use Global Drive Control **easy**:

Feature	GDC easy	GDC
Short set-up:		
startec	●	●
8200	●	●
8200 vector/motec	●	●
9300 vector		●
9300 servo		●
Technology functions ¹⁾		●
Code lists	●	●
Monitor window	●	●
Function block editor		●
Oscilloscope functions ²⁾		●
Order number:	ESP-GDC2-E	ESP-GDC2

¹⁾ For 9300 servo devices

²⁾ For 9300 devices

GDC (easy) system requirements

Hardware:

- IBM-AT or compatible PC
- CPU
 - Pentium 90 or higher
- RAM
 - 64 MB
- At least 120 MB free hard disk space
- Super VGA graphics card
- CD-ROM drive
- One free serial interface for RS232 or one free parallel interface for system bus adapter (CAN)

Software:

- Windows 95/98/Me/NT 4.0/2000/XP

Standard I/O

Standard I/O	Order no.	E82ZAF5C001

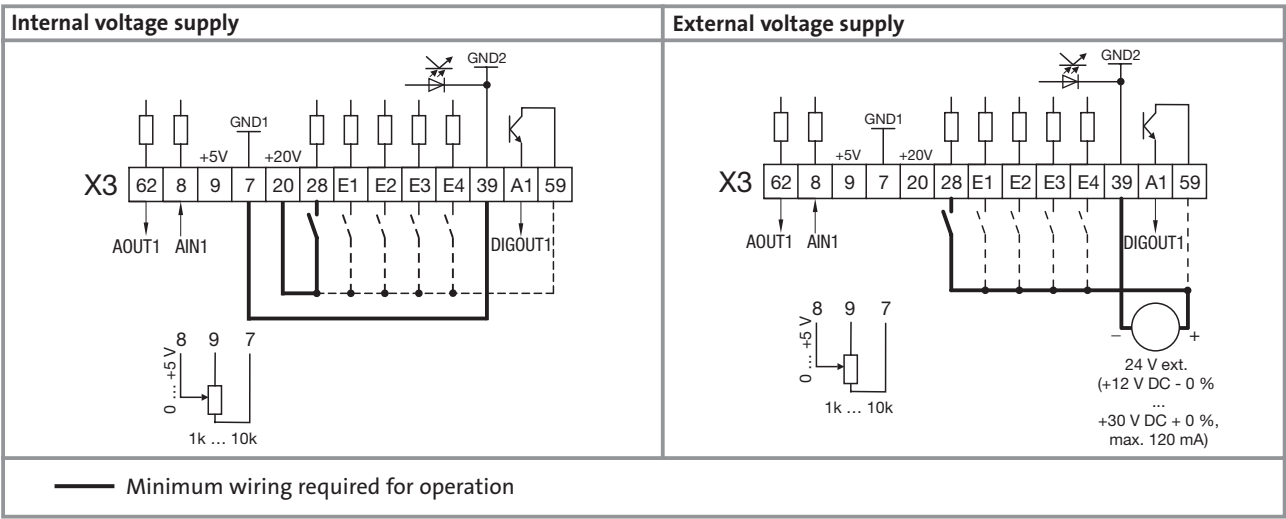
The "standard I/O" I/O function module provides the inverter with digital inputs and outputs for standard applications. The function module is installed in the carrier housing of the 8200 motec.

Available input/output terminals

Analog IN	Analog OUT	Digital IN	Digital OUT
1	1	4 ¹⁾	1

¹⁾ Optional frequency input 0...10 kHz single-track (via I1) or 0...1 kHz two-track (via I1 and I2) 8200 motec E82MVxxx_XXXXXXxx2x or later

Terminal assignment



Standard I/O

X3	Signal type	Function (bold = Lenze setting)	Level	Technical data
8	Analog input	Actual or setpoint input	0 ... +5 V 0 ... +10 V -10 V ... +10 V 0 ... +20 mA +4 ... +20 mA +4 ... +20 mA (open-circuit-monitored)	Resolution: 10 bits Linearity error: $\pm 0.5\%$ Temperature error: 0.3% (0 ... +60°C) Input resistance – Voltage signal: > 50 k Ω – Current signal: 250 Ω
62	Analog output	Output frequency	0 ... +10 V	Resolution: 10 bits Linearity error: $\pm 0.5\%$ Temperature error: 0.3% (0 ... +60°C) Load capacity: Max. 2 mA
28		Controller inhibit	1 = START	Input resistance: 3.3 k Ω 1 = High (+12...+30 V) 0 = Low (0...+3 V) (PLC level, HTL)
I1 ¹⁾	Digital inputs	Activation of fixed frequencies (JOG)		
I2 ¹⁾		JOG1 = 20 Hz	JOG1 1 0	
		JOG2 = 30 Hz	JOG2 0 1	
		JOG3 = 40 Hz	JOG3 1 1	
I3		DC injection brake (DCB)	1 = DCB active	
I4		Reversal CW/CCW rotation	I4 CW 0 CCW 1	
O1	Digital output	Ready for operation	0/+20 V at DC internal 0/+24 V at DC external	Load capacity: 10 mA 50 mA
9		Internal, stabilised DC-voltage source for setpoint potentiometer	+5.2 V (reference: X3/7)	Load capacity: max. 10 mA
20		Internal DC voltage source for controlling digital inputs and outputs	+20 V $\pm 10\%$ (reference: X3/7)	Max. load capacity: $\sum I = 40$ mA
59		DC supply for O1	+20 V (internal, bridge to X3/20) +24 V (external)	
7		GND1, reference potential for analog signals		Isolated from GND2
39		GND2, reference potential for digital signals		Isolated from GND1

¹⁾ Optional frequency input 0...10 kHz single-track (via I1) or 0...1 kHz two-track (via I1 and I2) 8200 motec E82MVxxx_XXXXXXxx2x or later

Electrical connection	Screw terminals
Connection options	 Rigid: 1.5 mm ² (AWG 16)
	Flexible:
	 1.0 mm ² (AWG 18) without wire end ferrule
	 0.5 mm ² (AWG 20) with wire end ferrule without plastic sleeve
	 0.5 mm ² (AWG 20) with wire end ferrule and plastic sleeve

Application I/O

Application I/O	Order no.	E82ZAFAC001

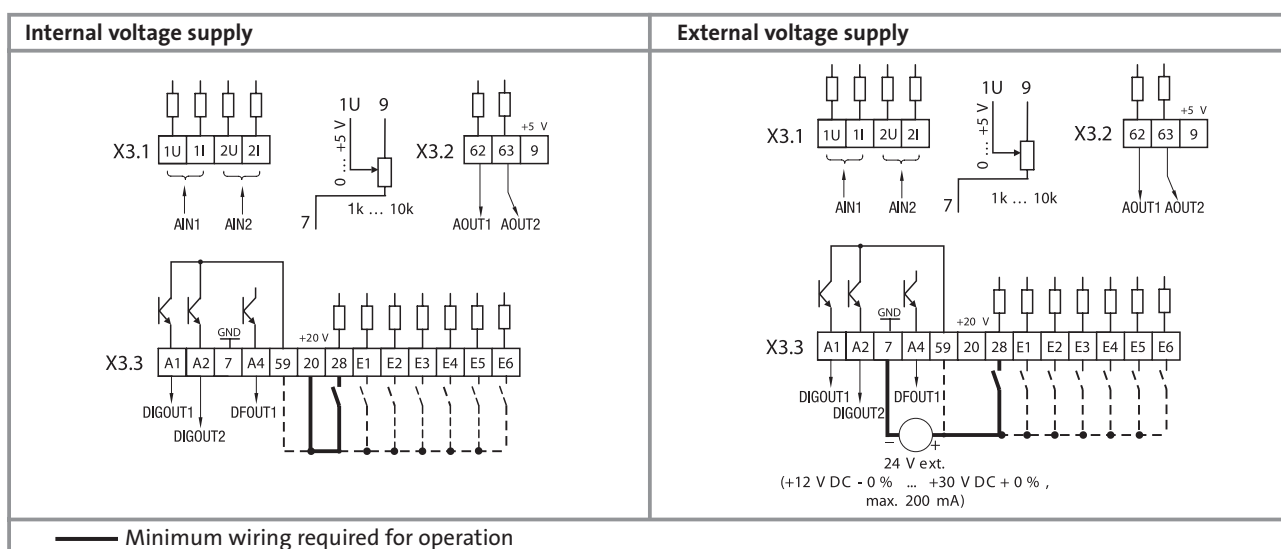
The "standard I/O" I/O function module provides the inverter with digital inputs and outputs for standard applications. The function module is installed in the carrier housing of the 8200 motec.

Available input/output terminals

Analog IN	Analog OUT	Digital IN	Digital OUT	Frequency OUT
2	2	6 ¹⁾	2	1

¹⁾ Optionally contains 1 frequency input (0...102.4 kHz, single-track or two-track)

Terminal assignment



Application I/O

X3	Signal type	Function (bold = Lenze setting)	Level	Technical data
1U/ 2U	Analog inputs	Actual or setpoint inputs (master voltage)	0 ... +5 V 0 ... +10 V -10 V ... +10 V	Resolution: 10 bits Linearity error: ±0.5%
1I/2I		Actual or setpoint inputs (master current)	0 ... +20 mA +4 ... +20 mA +4 ... +20 mA (open-circuit-monitored)	Input resistance – Voltage signal: > 50 kΩ – Current signal: 250 Ω
62	Analog outputs	Output frequency	0 ... +10 V 0 ... +20 mA +4 ... +20 mA	Resolution: 10 bits Linearity error: ±0.5% Temperature error: 0.6% (0 ... +60°C)
63		Motor current		Load capacity: (0...+10 V): max. 2 mA RL (0/4...20 mA) ≤ 500 Ω
28		Controller inhibit	1 = START	
1I ¹⁾	Digital inputs	Activation of fixed frequencies (JOG)		Input resistance: 3.2 kΩ 1 = High (+12...+30 V) 0 = Low (0...+3 V) (PLC level, HTL)
12 ¹⁾		JOG1 = 20 Hz	JOG1	
		JOG2 = 30 Hz	JOG2	
		JOG3 = 40 Hz	JOG3	
13		DC injection brake (DCB)	1 = DCB active	
14		Reversal	I4	
		CW/CCW rotation	CW	
			CCW	
15		Not preconfigured		
16		Not preconfigured		
O1	Digital outputs	Ready for operation		Load capacity: 10 mA 50 mA
O2		Not preconfigured	0/+20 V at DC internal 0/+24 V at DC external	
O4	Frequency output	DC bus voltage	HIGH: +18 V ... +24 V (HTL) LOW: 0 V	0.05 kHz ...10 kHz Load capacity: max. 8 mA
9		Internal, stabilised DC-voltage source for setpoint potentiometer	+5.2 V	Load capacity: max. 5 mA
20		Internal DC voltage source for controlling digital inputs and outputs	+20 V ±10%	Load capacity: max. 60 mA
59		DC supply for X3/O1 and X3/O2	+20 V (internal, bridge to X3/20) +24 V (external)	
7		GND, reference potential		

¹⁾ Optional frequency input 0 ... 102.4 kHz, single-track or two-track

Electrical connection	Screw terminals
Connection options	 Rigid: 1.5 mm² (AWG 16)
	Flexible:
	 1.0 mm² (AWG 18) without wire end ferrule
	 0.5 mm² (AWG 20) with wire end ferrule without plastic sleeve
	 0.5 mm² (AWG 20) with wire end ferrule and plastic sleeve

8200 motec automation

I/O function modules

BUS I/O

BUS I/O	– Can be used in 8200 motec 0.25 - 0.37 kW	Order no.	E82ZMFB001
	– Can be used in 8200 motec 0.55 - 2.2 kW	Order no.	E82ZAFB001
	– Can be used in 8200 motec 3.0 - 7.5 kW	Order no.	E82ZAFB201

The "BUS I/O" I/O function module provides the inverter with digital inputs and outputs for standard applications. Fieldbus communication is also possible in conjunction with a fieldbus function module. The function module is installed in the carrier housing of the 8200.

Note:

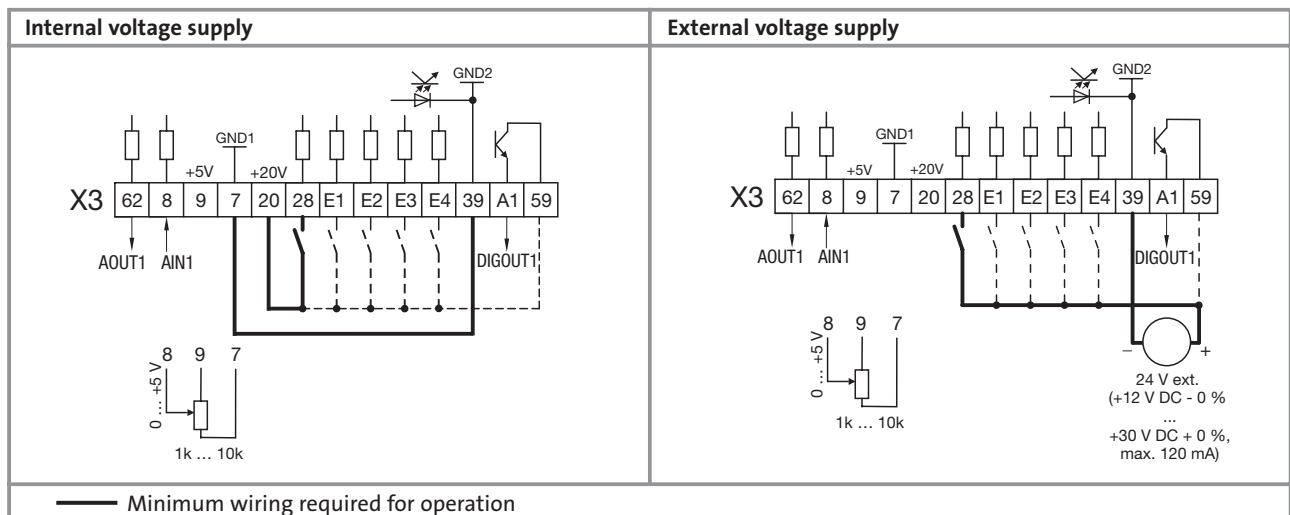
- Please note change in overall height on BUS I/O for 0.25/0.37 kW.
- When ordering the BUS I/O, always add a fieldbus function module to your order.

Available input/output terminals

Analog IN	Analog OUT	Digital IN	Digital OUT
1	1	4 ¹⁾	1

¹⁾ Optional frequency input 0...10 kHz single-track (via I1) or 0...1 kHz two-track (via I1 and I2) 8200 motec E82MVxxx_XXXXXXx2x or later (please note dimension g₁ in the dimensions tables for geared motors).

Terminal assignment



Electrical connection	Screw terminals
Connection options	Rigid: 1.5 mm ² (AWG 16)
	Flexible:
	1.0 mm ² (AWG 18) without wire end ferrule
	0.5 mm ² (AWG 20) with wire end ferrule without plastic sleeve
	0.5 mm ² (AWG 20) with wire end ferrule and plastic sleeve



BUS I/O

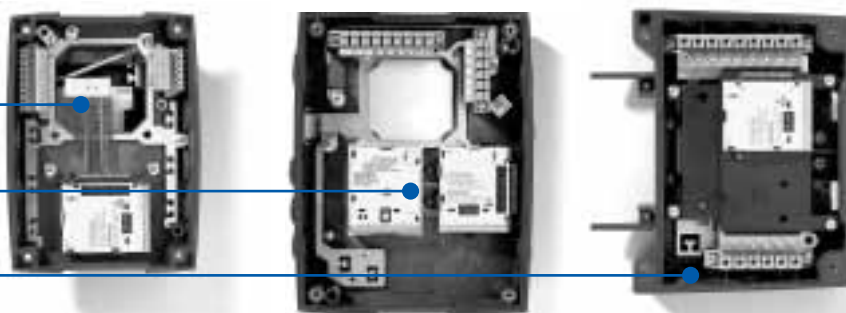
X3	Signal type	Function (bold = Lenze setting)	Level	Technical data
8	Analog input	Actual or setpoint input	0 ... +5 V 0 ... +10 V -10 V ... +10 V 0 ... +20 mA +4 ... +20 mA +4 ... +20 mA (open-circuit-monitored)	Resolution: 10 bits Linearity error: $\pm 0.5\%$ Temperature error: 0.3% (0 ... +60°C) Input resistance – Voltage signal: > 50 k Ω – Current signal: 250 Ω
62	Analog output	Output frequency	0 ... +10 V	Resolution: 10 bits Linearity error: $\pm 0.5\%$ Temperature error: 0.3% (0 ... +60°C) Load capacity: Max. 2 mA
28		Controller inhibit	1 = START	Input resistance: 3.3 k Ω 1 = High (+12...+30 V) 0 = Low (0...+3 V) (PLC level, HTL)
I1 ¹⁾	Digital inputs	Activation of fixed frequencies (JOG)		
I2 ¹⁾		JOG1 = 20 Hz	JOG1	
		JOG2 = 30 Hz	JOG2	
		JOG3 = 40 Hz	JOG3	
I3		DC injection brake (DCB)	1 = DCB active	
I4		Reversal		
		CW/CCW rotation	CW	
			CCW1	
O1	Digital output	Ready for operation	0/+20 V at DC internal 0/+24 V at DC external	Load capacity: 10 mA 50 mA
9		Internal, stabilised DC-voltage source for setpoint potentiometer	+5.2 V (reference: X3/7)	Load capacity: max. 10 mA
20		Internal DC voltage source for controlling digital inputs and outputs	+20 V $\pm 10\%$ (reference: X3/7)	Max. load capacity: $\sum I = 40$ mA
59		DC supply for O1	+20 V (internal, bridge to X3/20) +24 V (external)	
7		GND1, reference potential for analog signals		Isolated from GND2
39		GND2, reference potential for digital signals		Isolated from GND1

¹⁾ Optional frequency input 0...10 kHz single-track (via I1) or 0...1 kHz two-track (via I1 and I2) 8200 motec E82MVxxx_xxxxxXx2x or later

Use of E82ZMFB001
in 8200 motec 0.25-0.37 kW

Use of E82ZAFB001
in 8200 motec 0.55-2.2 kW

Use of E82ZAFB201
in 8200 motec 3.0-7.5 kW



8200 motec automation

Fieldbus function modules

CAN (system bus)

CAN (system bus)	Order no.	E82ZAFC001

The CAN (system bus) fieldbus function module can be used to interface the 8200 motec with the CAN (Controller Area Network) serial communication system.

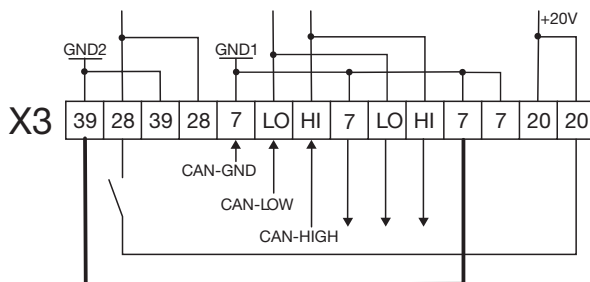
The function module enables the 8200 motec to perform additional functions, including:

- ▶ Parameter preselection/Remote parameter setting
- ▶ Data transfer between inverters
- ▶ Connection to external controllers (e.g. Drive PLC) and host systems
- ▶ Optional connection to:
 - IP20 I/O system (see also page 9-62)
 - Operator and input devices

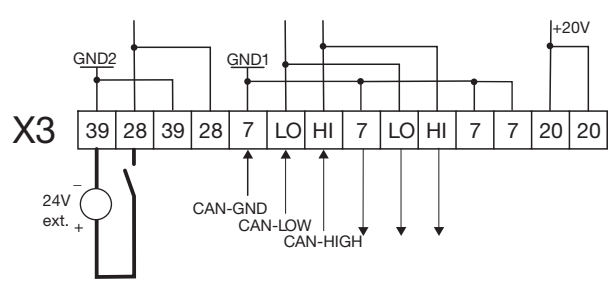
Terminal assignment

X3/	Designation	Function	Level
39	GND2	Reference potential 2 (only for X3/28)	
28	CINH	Controller inhibit	• Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 V ... +3 V)
7	GND1	Reference potential 1	
LO	CAN-LOW	System bus LOW (data line)	
HI	CAN-HIGH	System bus HIGH (data line)	
20		Internal DC voltage source for supply of controller inhibit (CINH)	+ 20 V (reference: X3/7)

Supply for controller inhibit (CINH) via internal voltage source (X3/20)



Supply for controller inhibit (CINH) via external voltage source



CAN (system bus)

General data and operating conditions

Communication medium	DIN ISO 11898				
Communication profile	Based on CANopen (CiA DS301)				
Network topology	Line (terminated at both ends with 120 Ω)				
System bus nodes	Master or slave				
Max. no. of nodes	63				
Baud rate [kbps]	20	50	125	250	500
Max. bus length [m] ¹⁾	3910	1510	590	250	80
No. of. logical process data channels	2				
No. of. logical parameter data channels	2				
Electrical connection	Screw terminals				
Connection options	 Rigid: 1.5 mm ² (AWG 16)				
	Flexible:				
	 1.0 mm ² (AWG 18) without wire end ferrule				
	 0.5 mm ² (AWG 20) with wire end ferrule without plastic sleeve				
	 0.5 mm ² (AWG 20) with wire end ferrule and plastic sleeve				
DC voltage supply for function module	Internal				
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%)				

¹⁾ You should be aware of the additional effect of the number of nodes and the cable cross-section used on the maximum bus cable lengths.

Note:

The scope of supply includes two bus terminating resistors (120 Ω).

Wiring instructions

We recommend the following signal cable is used for wiring:

System bus cable specification	Total length up to 300 m	Total length up to 1000 m
Cable type	LIYCY 2 x 2 x 0.5 mm ² (shielded twisted pairs)	CYPIMF 2 x 2 x 0.5 mm ² (shielded twisted pairs)
Specific resistance	$\leq 40 \Omega/\text{km}$	$\leq 40 \Omega/\text{km}$
Capacitance per unit length	$\leq 130 \text{ nF}/\text{km}$	$\leq 60 \text{ nF}/\text{km}$
Connection	Pair 1 (white/brown): CAN-LOW and CAN-HIGH Pair 2 (green/yellow): CAN-GND	

CAN I/O (system bus)

CAN I/O	Order no.	E82ZAFCC201

The CAN I/O (system bus) fieldbus function module can be used to interface the 8200 motec with the CAN (Controller Area Network) serial communication system. The module has two freely-programmable digital inputs for activating the controller inhibit via a digital signal and two more freely-assignable signals. Furthermore, the node address and baud rate can be preset easily via DIP switches.

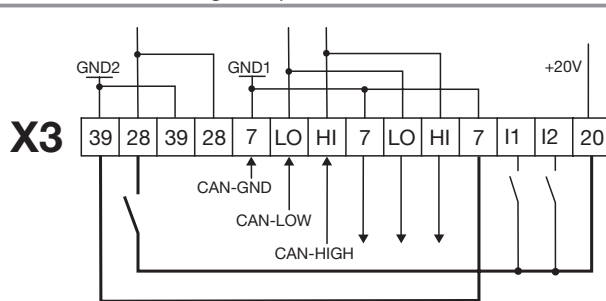
The function module enables the 8200 motec to perform additional functions, including:

- ▶ Parameter preselection/Remote parameter setting
- ▶ Data transfer between inverters
- ▶ Connection to external controllers (e.g. Drive PLC) and host systems
- ▶ Optional connection to:
 - IP20 I/O system (see also page 9-62)
 - Operator and input devices

X3/	Designation	Function	Level
39	GND2	Reference potential 2, controller inhibit (CINH) on X3/28	
28	CINH	Controller inhibit	• Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 V ... +3 V)
7	GND1	Reference potential 1	
LO	CAN-LOW	System bus LOW (data line)	
HI	CAN-HIGH	System bus HIGH (data line)	
I1	Digital inputs	User-defined	0 = LOW (0 ... +3 V) 1 = HIGH (+12 ... +30 V) (reference: GND1)
I2			

Supply via internal voltage source (X3/20):

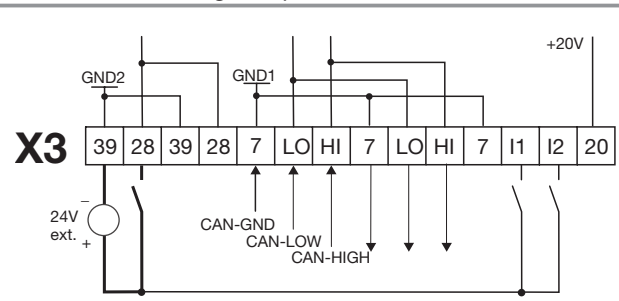
- X3/28, controller inhibit (CINH)
- X3/I1 and X3/I2, digital inputs



— Minimum wiring required for operation

Supply via external voltage source:

- X3/28, controller inhibit (CINH)
- X3/I1 and X3/I2, digital inputs



CAN I/O (system bus)

General data and operating conditions

Communication medium	DIN ISO 11898				
Communication profile	Based on CANopen (CiA DS301)				
Network topology	Line (terminated at both ends with 120 Ω)				
System bus nodes	Master or slave				
Max. no. of nodes	63				
Baud rate [kbps]	20	50	125	250	500
Max. bus length [m] ¹⁾	3910	1510	590	250	80
No. of. logical process data channels	2				
No. of. logical parameter data channels	2				
Electrical connection	Screw terminals				
Connection options	 Rigid: 1.5 mm² (AWG 16)				
	Flexible:				
	 1.0 mm² (AWG 18) without wire end ferrule				
	 0.5 mm² (AWG 20) with wire end ferrule without plastic sleeve				
	 0.5 mm² (AWG 20) with wire end ferrule and plastic sleeve				
DC voltage supply for function module	Internal				
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%)				

¹⁾ You should be aware of the additional effect of the number of nodes and the cable cross-section used on the maximum bus cable lengths.

Note:

The scope of supply includes two bus terminating resistors (120 Ω).

Wiring instructions

We recommend the following signal cable is used for wiring:

System bus cable specification	Total length up to 300 m	Total length up to 1000 m
Cable type	LIYCY 2 x 2 x 0.5 mm ² (shielded twisted pairs)	CYPIMF 2 x 2 x 0.5 mm ² (shielded twisted pairs)
Specific resistance	≤ 40 Ω /km	≤ 40 Ω /km
Capacitance per unit length	≤ 130 nF/km	≤ 60 nF/km
Connection	Pair 1 (white/brown): CAN-LOW and CAN-HIGH Pair 2 (green/yellow): CAN-GND	

8200 motec automation

Fieldbus function modules

CANopen

CANopen	Order no.	E82ZAFUC001

The CANopen fieldbus function module can be used to interface the 8200 motec with the serial CAN communication system running communication profile DS 301. The node address and baud rate can be preset easily via DIP switches.

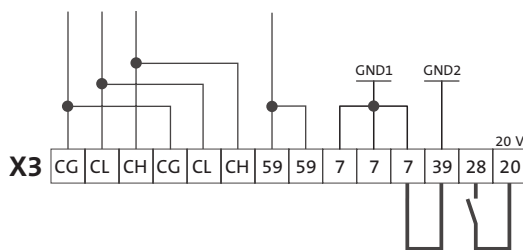
The function module enables the 8200 motec to perform additional functions, including:

- ▶ Parameter preselection/Remote parameter setting
- ▶ Interface with external control systems

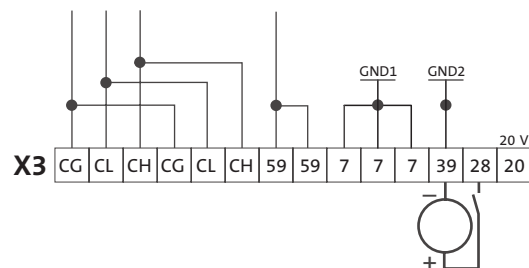
Terminal assignment

X3/	Designation	Function	Level
CG	CAN-GND	Reference potential for CAN	
CL	CAN-LOW	CAN data line (LOW)	
CH	CAN-HIGH	CAN data line (HIGH)	
59		External supply voltage	Please follow the instructions for external supplies!
7	GND1	Reference potential for X3/20, X3/59	
39	GND2	Reference potential, controller inhibit (CINH) on X3/28	
28	CINH	Controller inhibit	• Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 V ... +3 V)
20		DC voltage source for internal supply for controller enable (CINH)	+ 20 V (reference: GND1)

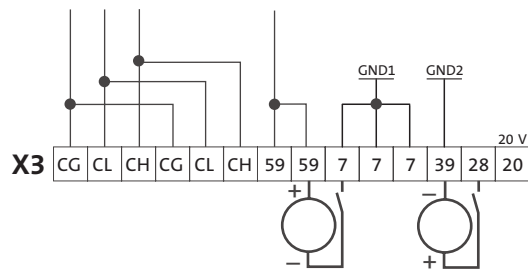
Supply for controller inhibit (CINH) via internal voltage source (X3/20)



Supply for controller inhibit (CINH) via external voltage source



Supply for function module and controller inhibit (CINH) via external voltage source



CANopen

General data and operating conditions

Communication medium	DIN ISO 11898					
Communication profile	CiA DS301 V4.02					
Network topology	Line (terminated at both ends with 120 Ω)					
System bus nodes	Master or slave					
Max. no. of nodes	63					
Baud rate [kbps]	20	50	125	250	500	1000
Max. bus length [m] ¹⁾	3934	1534	614	274	104	9
No. of. logical process data channels	4					
No. of. logical parameter data channels	Either 1 or 2					
Electrical connection	Screw terminals					
Connection options	 Rigid: 1.5 mm² (AWG 16)					
	Flexible:					
	 1.0 mm² (AWG 18) without wire end ferrule					
	 0.5 mm² (AWG 20) with wire end ferrule without plastic sleeve					
Connection options	 0.5 mm² (AWG 20) with wire end ferrule and plastic sleeve					
DC voltage supply for function module	Internal					
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%)					

¹⁾ You should be aware of the additional effect of the number of nodes and the cable cross-section used on the maximum bus cable lengths.

Note:

The scope of supply includes two bus terminating resistors (120 Ω).

Wiring instructions

We recommend the following signal cable is used for wiring:

System bus cable specification	Total length up to 300 m	Total length up to 1000 m
Cable type	LIYCY 2 x 2 x 0.5 mm ² (shielded twisted pairs)	CYPIMF 2 x 2 x 0.5 mm ² (shielded twisted pairs)
Specific resistance	≤ 40 Ω /km	≤ 40 Ω /km
Capacitance per unit length	≤ 130 nF/km	≤ 60 nF/km
Connection	Pair 1 (white/brown): CAN-LOW and CAN-HIGH Pair 2 (green/yellow): CAN-GND	

8200 motec automation

Fieldbus function modules

DeviceNet

DeviceNet	Order no.	E82ZAFVC001

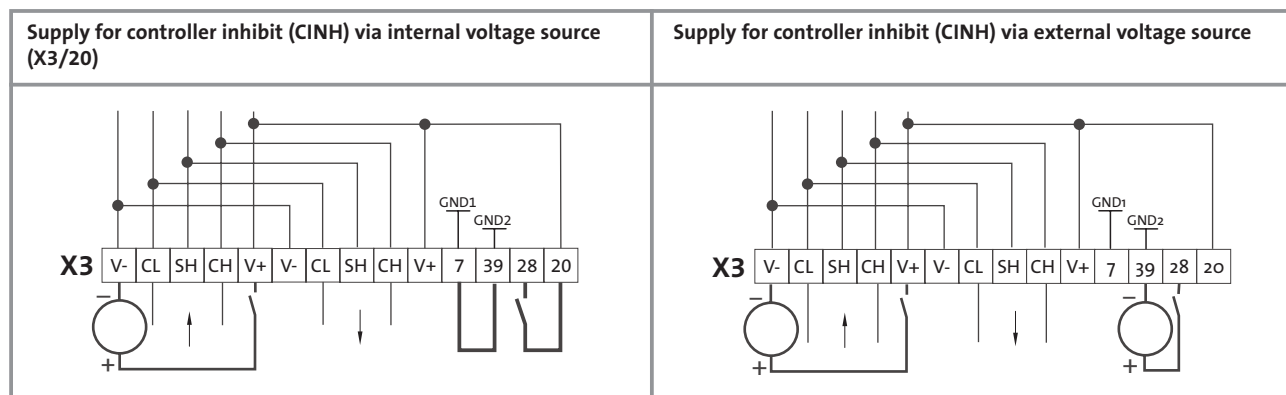
The DeviceNet fieldbus function module can be used to interface the 8200 motec with the DeviceNet serial communication system, which has been particularly successful in the American and Asian markets. The node address and baud rate can be preset easily via DIP switches.

The function module enables the 8200 motec to perform additional functions, including:

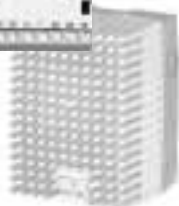
- ▶ Parameter preselection/Remote parameter setting
- ▶ Interface with external control systems

Terminal assignment

X3/	Designation	Function	Level
V-		Reference potential for external supply voltage	
CL	CAN-LOW	CAN data line (LOW)	
SH	SHIELD	Shield	
CH	CAN-HIGH	CAN data line (HIGH)	
V+		External supply voltage	Please follow the instructions for external supplies!
7	GND1	Reference potential for X3/20, X3/59	
39	GND2	Reference potential, controller inhibit (CINH) on X3/28	
28	CINH	Controller inhibit	• Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 V ... +3 V)
20		DC voltage source for internal supply for controller enable (CINH)	+ 20 V (reference: GND1)



— Minimum wiring required for operation



DeviceNet

General data and operating conditions

Communication medium	DIN ISO 11898		
Communication profile	DeviceNet		
Network topology	Line (terminated at both ends with 120 Ω)		
System bus nodes	Master or slave		
Max. no. of nodes	63		
Baud rate [kbps]	Baud rate (kbps)	Thin cable	Thick cable
Max. bus length [m] ¹⁾	125	100 m	500 M
	250		250 m
	500		100 m
Process data words (PCD) (16 bits)	16		
Electrical connection	Screw terminals		
Connection options	 Rigid: 1.5 mm² (AWG 16)		
	Flexible:		
		1.0 mm² (AWG 18) without wire end ferrule	
		0.5 mm² (AWG 20) with wire end ferrule without plastic sleeve	
		0.5 mm² (AWG 20) with wire end ferrule and plastic sleeve	
DC voltage supply for function module	Internal		
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%)		

¹⁾ You should be aware of the additional effect of the number of nodes and the cable cross-section used on the maximum bus cable lengths.

Note:

The scope of supply includes two bus terminating resistors (120 Ω).

Wiring instructions

A fieldbus cable meeting the requirements of the DeviceNet™ specification (Release 2.0) is used to connect the nodes to the bus system. Companies such as Belden Wire & Cable, Olflex Wire & Cable, C&M Corp. and Madison Cable produce DeviceNet™ "thick" and "thin" cables.

PROFIBUS-DP

PROFIBUS-DP	Order no.	E82ZAFPC001

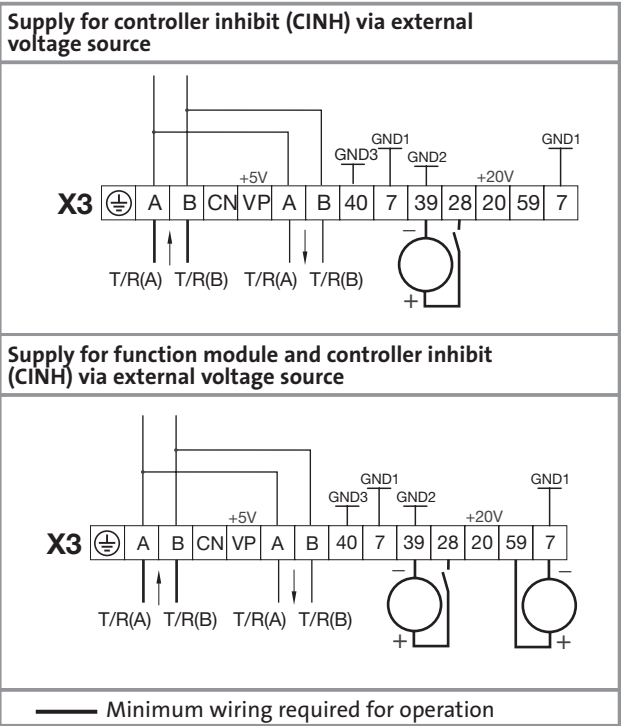
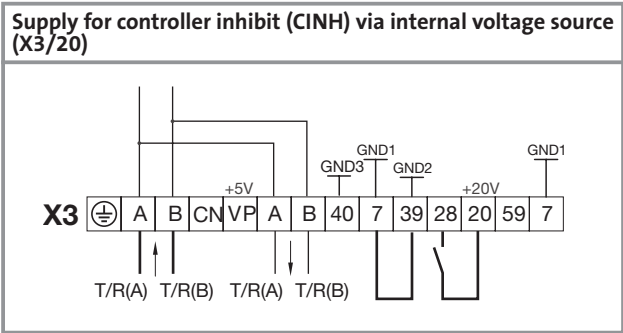
The PROFIBUS-DP fieldbus function module is a slave interface module with the PROFIBUS-DP profile.

It is used for networking between hosts and the 8200 motec.

Terminal assignment

X3/	Designation	Function	Level
⊕	PES	Additional HF shield termination	
A	T/R(A)	RS485 data line A	
B	T/R(B)	RS485 data line B	
CN	CNTR	See PROFIBUS-DP standard ¹⁾	For data transmission: CNTR = HIGH (+5 V, reference: GND3)
VP		See PROFIBUS-DP standard ¹⁾	+5 V (reference: GND3)
40	GND3	Reference potential for PROFIBUS-DP network ¹⁾	
7	GND1	Reference potential for X3/20	
39	GND2	Reference potential, controller inhibit (CINH) on X3/28	
28	CINH	Controller inhibit	• Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 ... +3 V)
20		DC voltage source for internal supply for controller inhibit (CINH)	+20 V (reference: GND1)
59		External DC supply for function module	U(ext.) = +24 V DC ±10% (reference: GND1)

¹⁾ e.g. connection of a repeater



PROFIBUS-DP

General data and operating conditions

Communication medium	RS485
Communication profile	PROFIBUS-DP (DIN 19245 Part 1 and Part 3)
Drive profile	DRIVECOM profile "Drive technology 20" or Lenze device control
Baud rate [kbps]	9.6 ... 12000 (automatic detection)
PROFIBUS-DP node	Slave
Network topology	Without repeaters: Line With repeaters: Line or tree
Process data words (PCD) (16 bits)	1 word ... 10 words
DP user data length	Parameter channel (4 words) + process data words
No. of nodes	Standard: 32 (= 1 bus segment) including host system With repeaters: 128 including host system and repeaters
Max. cable length per bus segment	1200 m (depending on baud rate and type of cable used)
Communication time	• Sum of cycle time and processing time in fieldbus nodes. The times are not interdependent. • Processing time in controller: – Parameter data and process data are not interdependent – Parameter data: approx. 30 ms + 20 ms tolerance – Process data: approx. 3 ms + 2 ms tolerance
Electrical connection	Screw terminals
Connection options	 Rigid: 1.5 mm ² (AWG 16) Flexible:  1.0 mm ² (AWG 18) without wire end ferrule  0.5 mm ² (AWG 20) with wire end ferrule without plastic sleeve  0.5 mm ² (AWG 20) with wire end ferrule and plastic sleeve
DC voltage supply for function module	• Internal • External – Necessary if bus nodes are not connected to the mains and communication with the master needs to be maintained – Necessary on bus nodes on which a bus terminating resistor has been activated and which are not connected to the mains although the bus system needs to remain active – Supply via separate power supply unit – +24 V DC ± 10%, max. 80 mA per function module
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%)

Note:

- ▶ The function module features two communication status LEDs.
- ▶ A configuration diskette for PROFIBUS-DP containing description files for the devices (EDS files) is included in the scope of supply.

Important:

The internal or external DC voltage supply to the controller inhibit terminal (X3/28) is provided **independently** of the internal or external DC voltage supply for the function module.

Tip:

The external DC voltage supply for 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.

INTERBUS

INTERBUS

Order no.

E82ZAFIC001

The INTERBUS fieldbus function module can be used to interface the 8200 motec directly with the remote bus. The interfacing of the 8200 motec supports the DRIVECOM

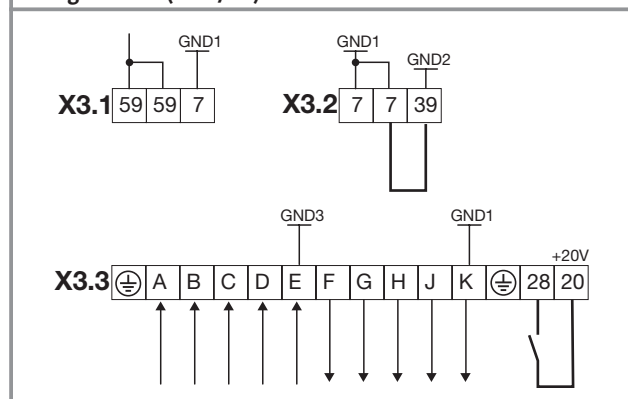
profile 20. DIP switches are used to set the process data volume, PCP communication and the last physical bus node.

Terminal assignment

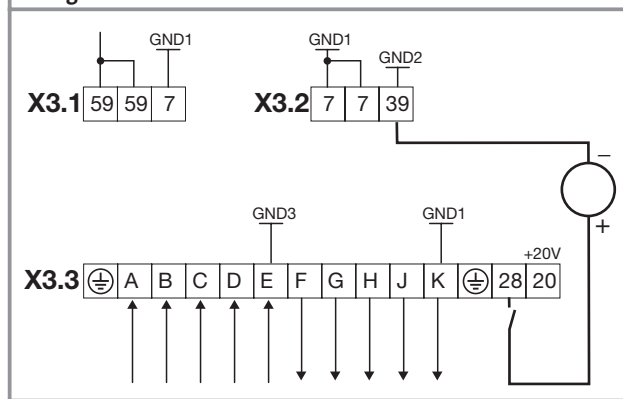
X3.1/	Designation	Function
59		External DC supply for function module
7	GND1	Reference potential for X3.3/20
X3.2/		
7	GND1	Reference potential for X3.3/20
39	GND2	Reference potential, controller inhibit (CINH) on X3.3/28
X3.3/		
⊕	PES	Additional HF shield termination
A	/DO1	RS485 data line (incoming)
B	DO1	
C	/DI1	
D	DI1	

X3.3/	Designation	Function
E	GND3	Reference potential for incoming data line
F	/DO2	RS485 data line (outgoing)
G	DO2	
H	/DI2	
J	DI2	
K	GND1	Reference potential for outgoing data line
⊕	PES	Additional HF shield termination
28	CINH	Controller inhibit • Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 ... +3 V)
20		DC voltage source for internal supply for controller inhibit (CINH) +20 V (reference: GND1)

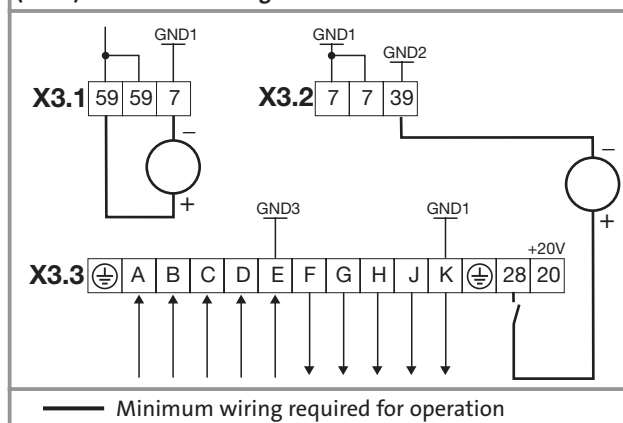
Supply for controller inhibit (CINH) via internal voltage source (X3.3/20)



Supply for controller inhibit (CINH) via external voltage source



Supply for function module and controller inhibit (CINH) via external voltage source



INTERBUS

General data and operating conditions

Communication medium	RS485
Drive profile	DRIVECOM profile "Drive technology 20" or Lenze device control
Baud rate [kbps]	500
INTERBUS node	Slave
Network topology	Ring (go and return lines in the same bus cable)
Process data words (PCD) (16 bits)	1 word ... 6 words
Parameter data words (PCP) (16 bits)	0/1 word
INTERBUS identification (ID code)	Decimal: 227 or 3 (without PCP); hex: E3 or 3 (without PCP)
Maximum PDU length	64 bytes
PCP services supported	Initiate, Abort, Status, Identify, Get-OV-Long, Read, Write
No. of nodes	Depends on host system (I/O area), max. 63
Max. distance between 2 nodes	400 m
Communication time	• Sum of cycle time and processing time in fieldbus nodes. The times are not interdependent. • Processing time in controller: – Parameter data and process data are not interdependent – Parameter data (PCP): approx. 30 ms + 20 ms tolerance – Process data: approx. 3 ms + 2 ms tolerance
Electrical connection	Screw terminals
Connection options	 Rigid: 1.5 mm ² (AWG 16) Flexible:  1.0 mm ² (AWG 18) without wire end ferrule  0.5 mm ² (AWG 20) with wire end ferrule without plastic sleeve  0.5 mm ² (AWG 20) with wire end ferrule and plastic sleeve
DC voltage supply for function module	• Internal • External – Only necessary if the communication ring must not be interrupted due to a shutdown or the failure of a bus node – Supply via separate power supply unit – +24 V DC ± 10%, max. 90 mA per function module – X3/59 can be loaded with a maximum of 3 A when the supply voltage is looped through to other bus nodes
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%)

Note:

The function module features two communication status LEDs.

Important:

The internal or external DC voltage supply to the controller inhibit terminal (X3/28) is provided **independently** of the internal or external DC voltage supply for the function module.

Tip:

The external DC voltage supply for the function module is provided via terminals X3/59 and X3/7 (see connection diagrams above).

LECOM-B (RS485)

LECOM-B (R5485)	Order no.	E82ZAFLC001

Lenze's LECOM profile is used for communication via the LECOM-B (RS485) fieldbus function module. This protocol is open for users.

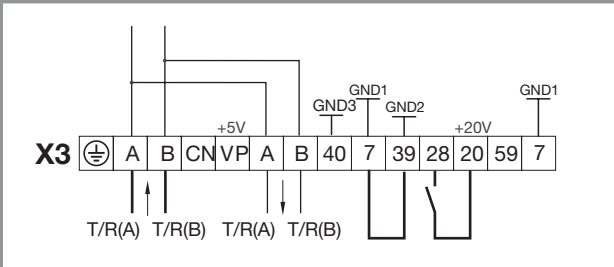
Components which support this protocol can be purchased for various systems (e.g. Simatic S5).

Terminal assignment

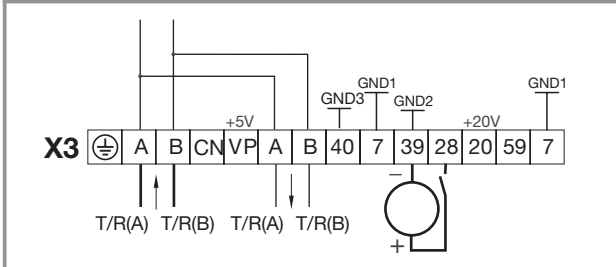
X3/	Designation	Function	Level
⊕	PES	Additional HF shield termination	
A	T/R(A)	RS485 data line A	
B	T/R(B)	RS485 data line B	
CN	CNTR	1)	For data transmission: CNTR = HIGH (+5 V, reference: GND3)
VP		1)	+5 V (reference: GND3)
40	GND3	Reference potential 3 for LECOM-B network ¹⁾	
7	GND1	Reference potential 1	
39	GND2	Reference potential 2, controller inhibit (CINH) on X3/28	
28	CINH	Controller inhibit	• Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 ... +3 V)
20		DC voltage source for internal supply for controller inhibit (CINH)	+20 V (reference: GND1)
59		External DC supply for function module	U(ext.) = +24 V DC ±10% (reference: GND1)

1) e.g. connection of a repeater

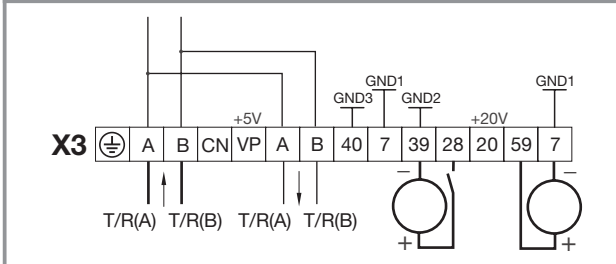
Supply for controller inhibit (CINH) via internal voltage source (X3/20)



Supply for controller inhibit (CINH) via external voltage source



Supply for function module and controller inhibit (CINH) via external voltage source



—— Minimum wiring required for operation



LECOM-B (RS485)

General data and operating conditions

Communication medium	RS485 (LECOM-B)
Communication protocol	LECOM-AB V2.0
Transmission character format	7E1: 7-bit ASCII, 1 stop bit, 1 start bit, 1 parity bit (even)
Baud rate [bps]	1200, 2400, 4800, 9600, 19200, 38400, 57600
LECOM-B node	Slave
Network topology	Without repeaters: Line With repeaters: Line or tree
Process data words (PCD) (16 bits)	2 words
Max. no. of nodes	32 (= 1 bus segment) including host system With repeaters: 90 slaves
Max. cable length per bus segment	1000 m (depending on baud rate and type of cable used)
Electrical connection	Screw terminals
Connection options	 Rigid: 1.5 mm ² (AWG 16) Flexible:  1.0 mm ² (AWG 18) without wire end ferrule  0.5 mm ² (AWG 20) with wire end ferrule without plastic sleeve  0.5 mm ² (AWG 20) with wire end ferrule and plastic sleeve
DC voltage supply for function module	• Internal • External – Necessary if bus nodes are not connected to the mains and communication with the master needs to be maintained – Necessary on bus nodes on which a bus terminating resistor has been activated and which are not connected to the mains although the bus system needs to remain active – Supply via separate power supply unit – +24 V DC ± 10%, max. 70 mA per function module
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%)

Note:

The function module features two communication status LEDs.

Important:

The internal or external DC voltage supply to the controller inhibit terminal (X3/28) is provided **independently** of the internal or external DC voltage supply for the function module.

Tip:

The external DC voltage supply for the function module is provided via terminals X3/59 and X3/7.
The connection diagrams above indicate the internal DC supply for the function module as an alternative option.

AS-Interface

AS-Interface	Order no.	E82ZAFFC001

The AS-Interface fieldbus function module enables the 8200 motec to be controlled with digital control signals via the "AS-Interface" bus system. It also has two digital inputs. The "AS-Interface" (AS-i) bus system is one of the most popular systems at the lowest field level and is used in particular for the transmission of digital signals. It is designed for applications in which the use of high-performance field-

bus systems is not absolutely essential but still need to benefit from serial communication.

The advantages of this system are:

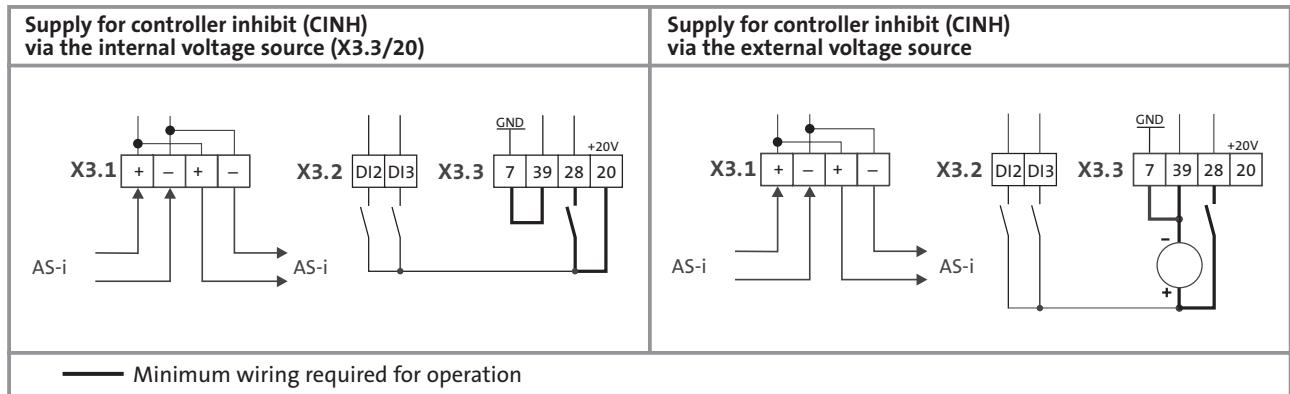
- ▶ Easy to use and set up
- ▶ Less wiring required
- ▶ Easy to integrate into existing systems
- ▶ Cost reductions

Terminal assignment function module E82ZAFFC001

X3.1/	Wire colour (IEC 757)	Function
+	BN (brown)	Please refer to the information included in the description of the AS-i system about the electrical connection of peripheral devices.
-	BU (blue)	

X3.2/	Designation	Function	Level
DI2	Digital input 1	User-defined	0 = LOW (0 V ... +3 V) 1 = HIGH (+12 V ... +30 V) Reference: GND
DI3	Digital input 2		

X3.3/	Designation	Function	Level
7	GND	Reference potential for X3.3/20	
39		Reference potential, controller inhibit (CINH) on X3.3/28	
28	CINH	Controller inhibit	• Start = HIGH (+12 V ... +30 V) • Stop = LOW (0 V ... +3 V)
20		DC voltage source for internal supply for controller inhibit (CINH)	+20 V (reference: GND)



AS-Interface

General data and operating conditions

Protocol/Communication medium	AS-i
Network topology	Tree
Node	Slave
Max. no. of nodes	31
Baud rate [kbps]	167
Cycle time [ms]	5 ms (31 nodes)
Max. bus length [m]	100
Electrical connection (terminal strip X3)	Screw terminals
Digital inputs	2
Connection options (terminal strip X3.2)	 Rigid: 1.5 mm ² (AWG 16)
	Flexible:  1.0 mm² (AWG 18) without wire end ferrule  0.5 mm² (AWG 20) with wire end ferrule without plastic sleeve  0.5 mm² (AWG 20) with wire end ferrule and plastic sleeve
Connection options (terminal strip X3.1)	 1.5 mm ² (AWG 16) with wire end ferrule and plastic sleeve
DC voltage supply for function module	Via the bus
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%)

Function module E82ZAFFC001

The following are available:

- 4 AS-i data bits to the 8200 motec (control)

The bits can be freely assigned in the 8200 motec.

Example:

- Bit 1 assigned with function "Fixed setpoint 1"
- Bit 2 assigned with function "Fixed setpoint 2"
- Bit 3 assigned with function "DC injection brake"
- Bit 4 assigned with function "Reversal of rotation direction"

- 1 AS-i data bit from the 8200 motec (feedback)

The bit can be freely assigned in the 8200 motec, e.g. with trip error message.

- 1 AS-i monitoring bit from the AS-i module
- 2 data bits digital inputs of the module

Note: The function module features two communication status LEDs.

Wiring the AS-i network

Wiring can be completed quickly and easily using an AS-i flat-cable connection (type E82ZMFF). The cables are secured in a cable entry in the carrier housing (M16).



AS-i flat-cable connection (type E82ZMFF)

Drive PLC – Description

Would you like to ...

- ▶ Rationalise the electrical part of your machine?
- ▶ Have more transparent PLC programs?
- ▶ Take the load off your bus system?
- ▶ Not have to keep learning new programming languages?
- ▶ Be able to implement drive-orientated control functions in the drive?
- ▶ Be able to use tried and tested systems for more complex drive solutions?

... then you should take a closer look at the Drive PLC.

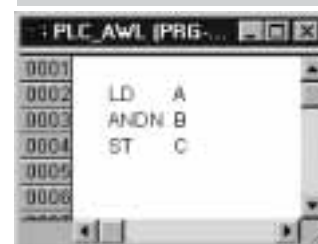
This is because the Drive PLC can offer:

- ▶ Programming in all five IEC 1131-3 programming languages and a powerful CFC editor for simple programming in graphic format
- ▶ Complex drive technology which continues to be solved using preconfigured technology functions
- ▶ Technology functions which can be integrated into the PLC program

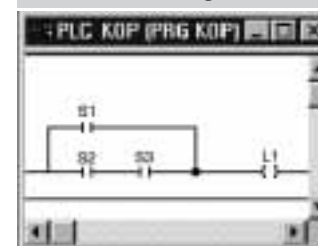
... and this is what you get:

- ▶ Distributed control of your machine
- ▶ The electrical part of the machine becomes more cost-effective whilst maintaining the same level of performance
- ▶ Faster set-up times thanks to the high-performance "Drive PLC Developer Studio" software development environment
- ▶ Increased availability due to the reduction in number of individual control components
- ▶ Reduced programming training requirements: IEC 61131-3 is an international standard

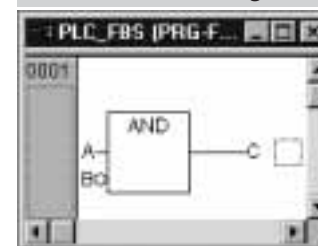
Instruction List



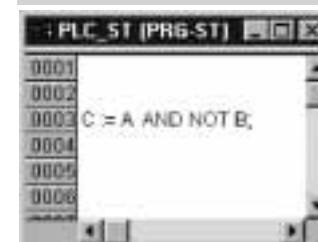
Ladder Diagram



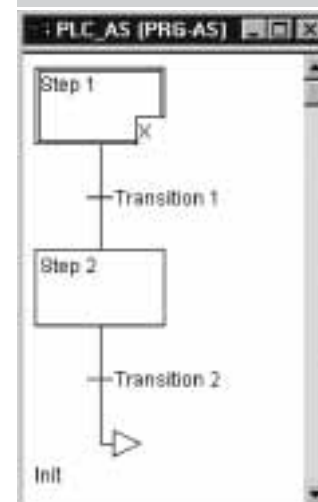
Function Block Diagram



Structured Text



Sequential Function Chart





Drive PLC – Description

The Drive PLC adds a freely-programmable drive PLC to the 8200 motec frequency inverter. This combination will not only control movement in your machine, but can also manage distributed control tasks. The system is programmed using the PLC languages of the international standard IEC 61131-3 and the user-friendly Drive PLC Developer Studio software development environment. Please refer to the Lenze "Automation" catalogue for more details.

Lenze can offer a full automation system for your application, from operating and display units (keypads) to geared motors.

As an additional bonus, Lenze can now save you time by providing the software that brings your machines to life from the basic configurations and technology functions, using the IEC 1131-3 languages you are already familiar with.

Why a Drive PLC?

What benefits does the Drive PLC offer over a standard PLC?

- ▶ Reduction of parallel wiring and unnecessary terminals through an integrated system bus interface (CAN) to the 8200 motec frequency inverter
- ▶ Straightforward engineering thanks to a special software library which makes it easy to integrate the 8200 motec into the PLC program
- ▶ Straightforward integration of all types of fieldbus via plug-in modules
- ▶ A cost-effective system with extensive basic functions
- ▶ No additional costs for gateway functions to higher-level bus systems such as INTERBUS or PROFIBUS

8200 motec automation

Automation components

Drive PLC – Technical data

Conformity	CE	Low-Voltage Directive (73/23/EEC)
Approvals	UL 508C	Underwriter Laboratories (File No. E132659) Power Conversion Equipment
Program memory		191 KB
Data memory		9.5 KB (1.3 KB flags + 8.2 KB variables)
EEProm buffered memory		800 bytes
Retentive memory		200 bytes
Task types		1 cyclic task 8 tasks (time or event-controlled)
Processing time for one bit operation		1.0 µs
No. of counters/timers		Can be freely selected in acc. with IEC 61131-3
Digital inputs		8 (of which 3 have interrupt capability)
Can be extended		Via extension board and distributed terminals
Digital outputs		4 (each 1 A to 40°C, derating 2.5%/K between 40°C and 55°C)
Can be extended		Via extension board and distributed terminals
Analog inputs		3 (± 10 V, 10 bits + sign)
Analog outputs		1 (±10 V or ±20 mA, 10 bits + sign, ±0.5%)
Communication interfaces		System bus (based on CANopen) integrated
		Plug-in communication module (e.g. INTERBUS, PROFIBUS-DP)
Dimensions (H x W x D)/[mm]		120 x 60 x 140
Operational reserve		Acc. to IEC 1131
Programming software		Drive PLC Developer Studio with programming languages IL, LD and FBD, ST, SFC, CFC, debugging and monitoring, visualisation
Voltage supply		+18 ... 30 V DC
Current (at 24 V DC)		200 mA (without output loads)

Designation	Order no.
Drive PLC	EPL-10200

Components required for programming:

Designation	Order no.
Drive PLC Developer Studio BASIC	ESP-DDS1-B
Drive PLC Developer Studio PROFESSIONAL	ESP-DDS1-P
PC system bus adapter (voltage supply via keyboard with DIN connection)	EMF2173IB
PC system bus adapter (voltage supply via keyboard with PS2 connection)	EMF2173IB-V002
RS232 system cable (0.5 m)	EWL0048
RS232 system cable (5.0 m)	EWL0020
RS232 system cable (10.0 m)	EWL0021
USB system bus adapter	EMF2177IB

Note:

The Drive PLC is programmed on the PC via the system bus.

Drive PLC – Mechanical installation

- ▶ Drive PLCs must only be used as built-in units.
- ▶ If the exhaust air contains pollutants (dust, lint, grease, aggressive gases) then appropriate countermeasures must be in place (e.g. installation of filters, regular cleaning etc.).
- ▶ Ensure there is enough mounting space.
 - Several devices can be mounted directly adjacent to one another without clearance.
 - Make sure that there is free access for cooling air and that the outlet for used air is not blocked.
 - Ensure a clearance of 100 mm above and below.
- ▶ In the event of continuous oscillations or vibrations, check the use of vibration dampers.

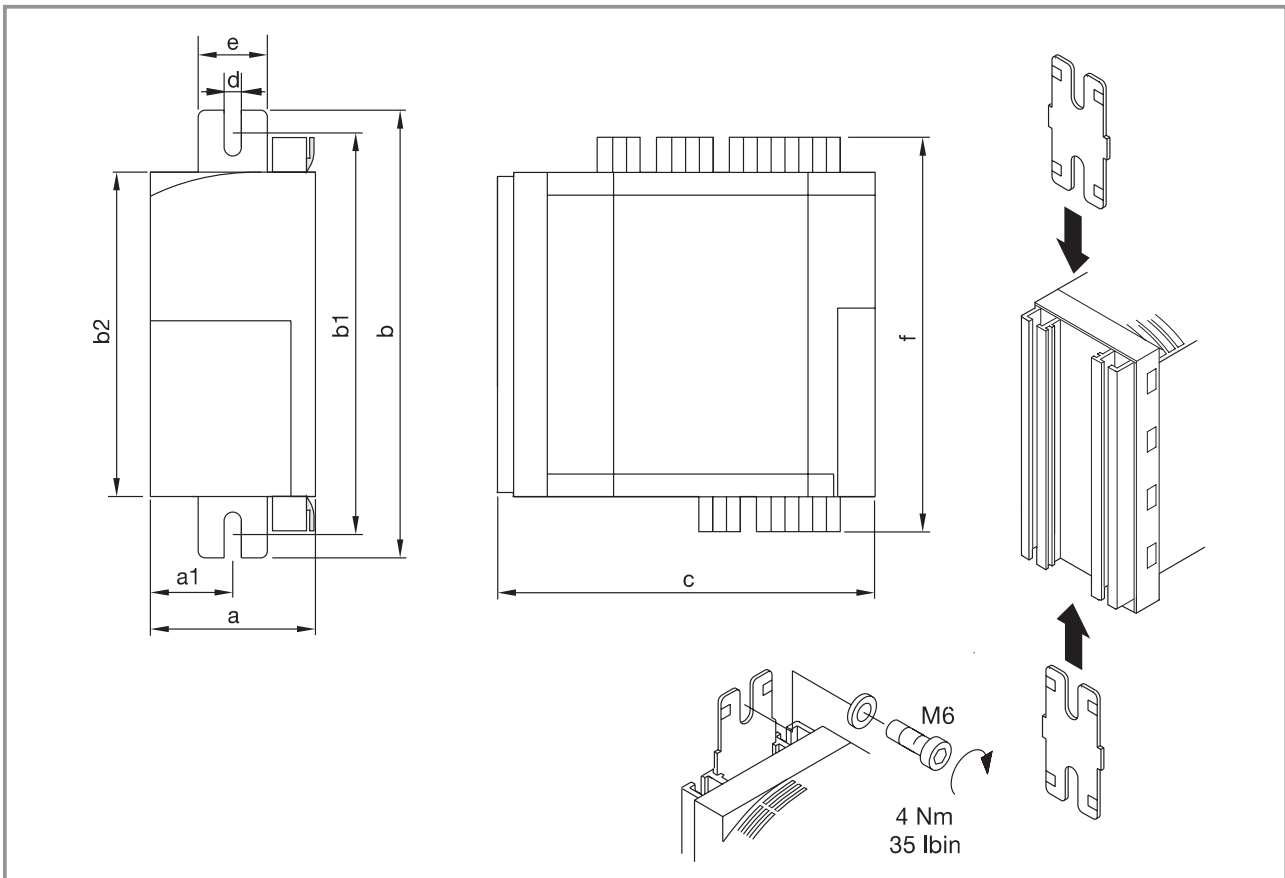
The Drive PLC can be fitted as follows into a control cabinet:

- ▶ With the **standard fixtures included in the scope of supply**
- ▶ With a **swivel bracket** (accessories)
- ▶ With a **DIN rail mounting** (accessories)

Tip:

E82ZWEEK (with bracket) or E82ZWES (with clamp) fixings can be used (accessories) for quick and easy installation.

Standard fixing



Dimensions [mm]

a	a1	b	b1	b2	c	d	e	f
60	30	167	147...157	120	140	6.5	27.5	148

Drive PLC – Mechanical installation

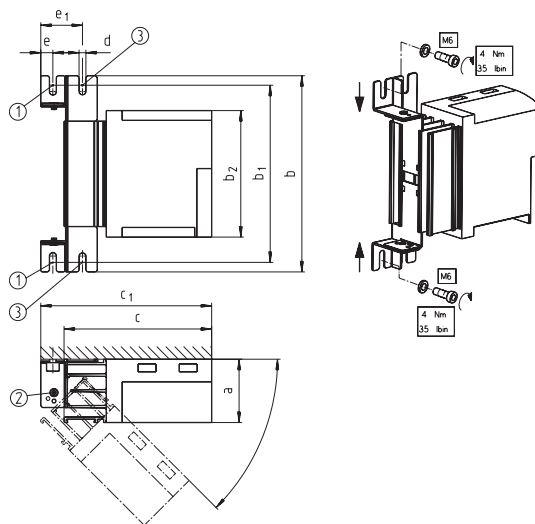
Mounting with a swivel bracket or side mounting

In housings where installation space is limited, the Drive PLC can be installed with a swivel mounting rail.

The Drive PLC can be swivelled out sideways, e.g. through 90°, for installation, adjustment and diagnostic purposes

(locking mechanisms at 45°, 90°, 135°, 180°). The swivel bracket can also be used for fixed sideways mounting.

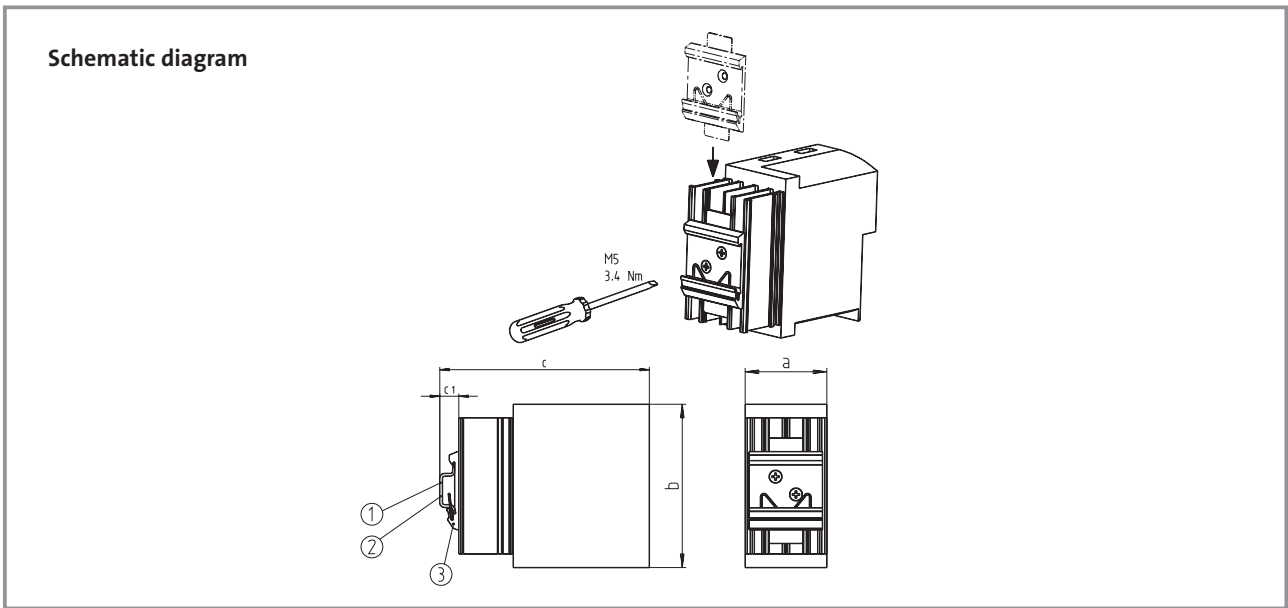
Schematic diagram



① Bolt here ② Pivot point ③ Bolt here to keep the Drive PLC fixed in the 0° position

Order no.	a [mm]	b [mm]	b ₁ [mm]	b ₂ [mm]	c [mm]	c ₁ [mm]	d [mm]	e [mm]	e ₁ [mm]
E82ZJ001	60	203	177...192	120	140	162	6.5	11.5	39

DIN rail mounting



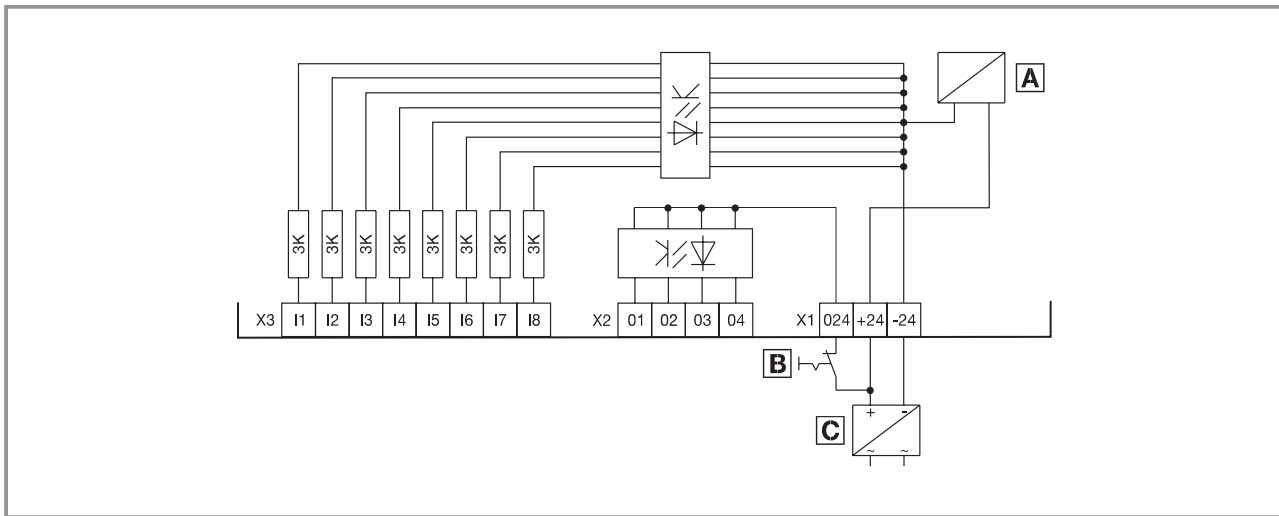
	a [mm]	b [mm]	c [mm]		c ₁ [mm]	
Order no.			①	②	①	②
E82ZJ002	60	120	158	151	18	11

① DIN rail 35 x 15 or ② DIN rail 35 x .7.5 ③ DIN rail mounting

Tip: The DIN rail fixture can be moved flexibly on the rear panel of the Drive PLC.

Drive PLC – Electrical installation

Terminals on the upper side of the device



A Supply, control electronics

B Emergency-off

C External DC voltage source

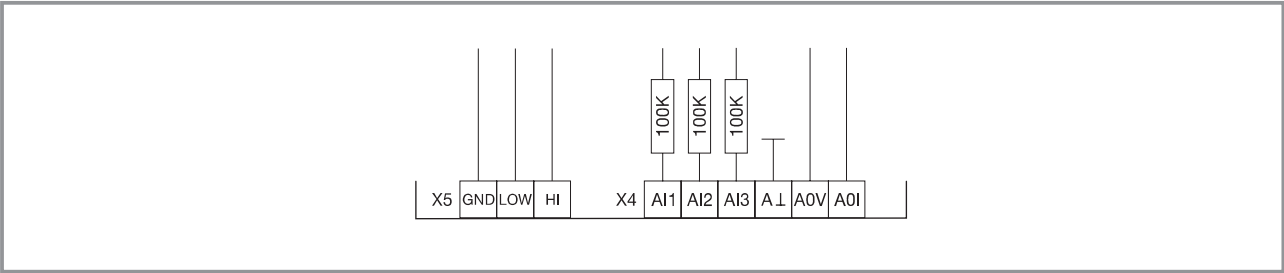
X1	Voltage supply	Level
⊥24	GND supply voltage	Reference potential
+24	Supply voltage	+18 ... +30 V DC
+024	Supply voltage for digital outputs	+18 ... +30 V DC

X2	Digital outputs	Level
01	Output 1	LOW level 0 ... +4 V DC
:	:	HIGH level +13 ... +30 V DC
04	Output 4	HIGH active max. 1 A (up to 40°C, derating 2.5%/K between 40°C and 55°C) Shortest update cycle 1 ms (depending on where the process image is created)

X3	Digital inputs	Level
I1	Input 1	LOW level 0 ... +4 V DC
:	:	HIGH level +13 ... +30 V DC
I8	Input 8	Input current 8 mA at 24 V DC Shortest update cycle 1 ms (depending on where the process image is created)

Drive PLC – Electrical installation

Terminals on the underside of the device



X4	Analog I/O	Level
AI1	Analog input 1	± 10 V (10 bits + sign)
AI2	Analog input 2	
AI3	Analog input 3	
A┴	Analog GND	Reference potential
A0V	Analog output voltage	± 10 V (10 bits + sign); ± 0.5%
A0i	Analog output current	± 20 mA (10 bits + sign); ± 0.5%

X5	System bus (CAN)	Level
GND		Reference potential
LOW	CAN-LOW	System bus LOW (data line)
HI	CAN-HIGH	System bus HIGH (data line)

8200 motec automation

Automation components

Extension board

The extension boards can be plugged into the side of the Drive PLC. This simple solution allows the type and number of input/output terminals to be expanded quickly and easily.

Extension board 1	Connections
For the connection of three-wire sensors and outputs for 24 V brake control	6 digital inputs LOW level: 0 ... +4 V DC HIGH level: +13 ... +30 V DC
	4 digital outputs, LOW level: 0 ... +4 V DC HIGH level: +13 ... +30 V DC max. 1 A (up to 40°C; derating 2.5%/K between 40°C and 55°C)
	2 digital outputs, LOW level: 0 ... +4 V DC HIGH level: +13 ... +30 V DC max. 2 A (up to 40°C; derating 2.5%/K between 40°C and 55°C) 5 terminals each for + 24 V DC and GND (for three-wire sensors)
Extension board 2	Connections
For the cost-effective connection of digital sensors and actuators	14 digital inputs LOW level: 0 ... +4 V DC HIGH level: +13 ... +30 V DC
	8 digital outputs, LOW level: 0 ... +4 V DC HIGH level: +13 ... +30 V DC max. 1 A (up to 40°C; derating 2.5%/K between 40°C and 55°C)
Extension board 3	Connections
For high-speed counting, length measurements and control technology applications	1 encoder input, TTL, HTL, 500 kHz, two-track with inverse signals and zero track
	8 digital inputs, 24 V potential-free LOW level: 0 ... +4 V DC HIGH level: +13 ... +30 V DC
	4 digital outputs, LOW level: 0 ... +4 V DC HIGH level: +13 ... +30 V DC max. 1 A (up to 40°C; derating 2.5%/K between 40°C and 55°C)
	2 analog inputs ± 10 V (10 bits + sign)

Designation	Order no.
Extension board 1	EPZ-10201
Extension board 2	EPZ-10202
Extension board 3	EPZ-10203





8200 motec automation

Visualisation made easy

Visualisation made easy

The task of improving the efficiency and effectiveness of the machines and systems we use today is never-ending. The ability to use complex machines easily and monitor them reliably is becoming an ever-increasing priority. Lenze can offer you a wide range of HMI products, from text displays and graphical displays to touch screen devices, with a single programming software for all devices: HMI Designer.

Choose a host of functions to suit your type of device, e.g.:

- ▶ Display of text, images, bar graphs, bitmap images and animated graphics
- ▶ Recipe handling
- ▶ Display of system and alarm messages
- ▶ Windows fonts
- ▶ Automatic operations
- ▶ Communication via Lenze system bus

Text display

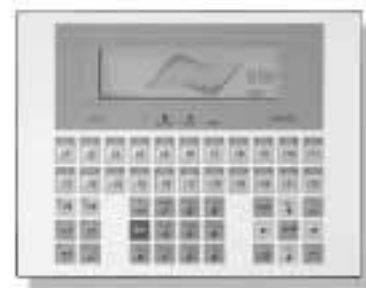
Text displays provide a low-cost, compact solution for simple applications. Their compact mounting depth makes them ideal for installation wherever space is at a premium. The 2 to 4-line displays are backlit, come with a system bus as standard and feature a variety of system and function keys.



Graphical display

Graphical displays combine cost-effectiveness, functionality and user-friendliness in a modern design.

This compact device with its integrated system bus is capable of handling recipes and displaying data in graphics format. Production trends are visible immediately, meaning that machine processes can be optimised.



Touch screen

In the range of touch screens we have to offer, you can choose anything from a low-cost, entry-level graphical display to a 10.4" TFT screen for displaying complex graphics. All the devices come with a system bus, as well as a user interface offering the ultimate in flexibility.



HMI Designer

A single program for all devices: HMI Designer provides a comprehensive development environment for all the human machine interfaces described in this document. The user-friendly programming environment, which features project managers, project editors and font editors, integrates perfectly with the configurations of Lenze's drive controllers, thereby facilitating the devices' set-up and subsequent operation.



8200 motec automation

Automation components

IP20 I/O system

Automation is playing an ever more important part in machines and systems. The increasing number of I/O devices this has given rise to has in turn increased the amount of wiring required. This is where distributed I/O systems bring order to the chaos.

Lenze has developed two new product concepts which are suitable for both basic digital applications and more complex automation applications.

A compact system

The system comprises a range of compact products with a fixed number of digital inputs and outputs. It has a built-in communication interface in the form of the CAN-based Lenze system bus.



The modules have a SUB-D connector for the connection of the system bus, plug-in spring-clamp terminal strips to speed up the wiring process and a switch for the node address. The compact system offers maximum operational reliability, can be mounted quickly and easily on 35 mm DIN rails and is even easy to configure. All in all, this speeds up the start-up process.

The compact system is available in four different versions – one of which is bound to meet your exact application requirements.

8, 16 and 32-channel modules can be supplied in one or three-wire technology with up to 24 inputs and 8 outputs.

Type	Order no.
8x dig. I/O compact	EPM-T830 (3-wire)
16x dig. I/O compact	EPM-T831 (1-wire) EPM-T833 (3-wire)
32x dig. I/O compact	EPM-T832 (1-wire)

A modular system

Lenze can provide a complete range of I/O systems for more complex automation applications. The modular system comprises three components: the gateway, electronic modules and the backplane bus. The modular system is connected to the Lenze system bus



via the gateway. An internal backplane bus is used for the intra-station communication of process and parameter data, as well as diagnostic data.

The electronics modules manage the actual I/O functions. Up to 32 units can be combined as required to form an overall station in which each module is optimised for the individual application in which it is to be used.

The electronics module range comprises the following modules:

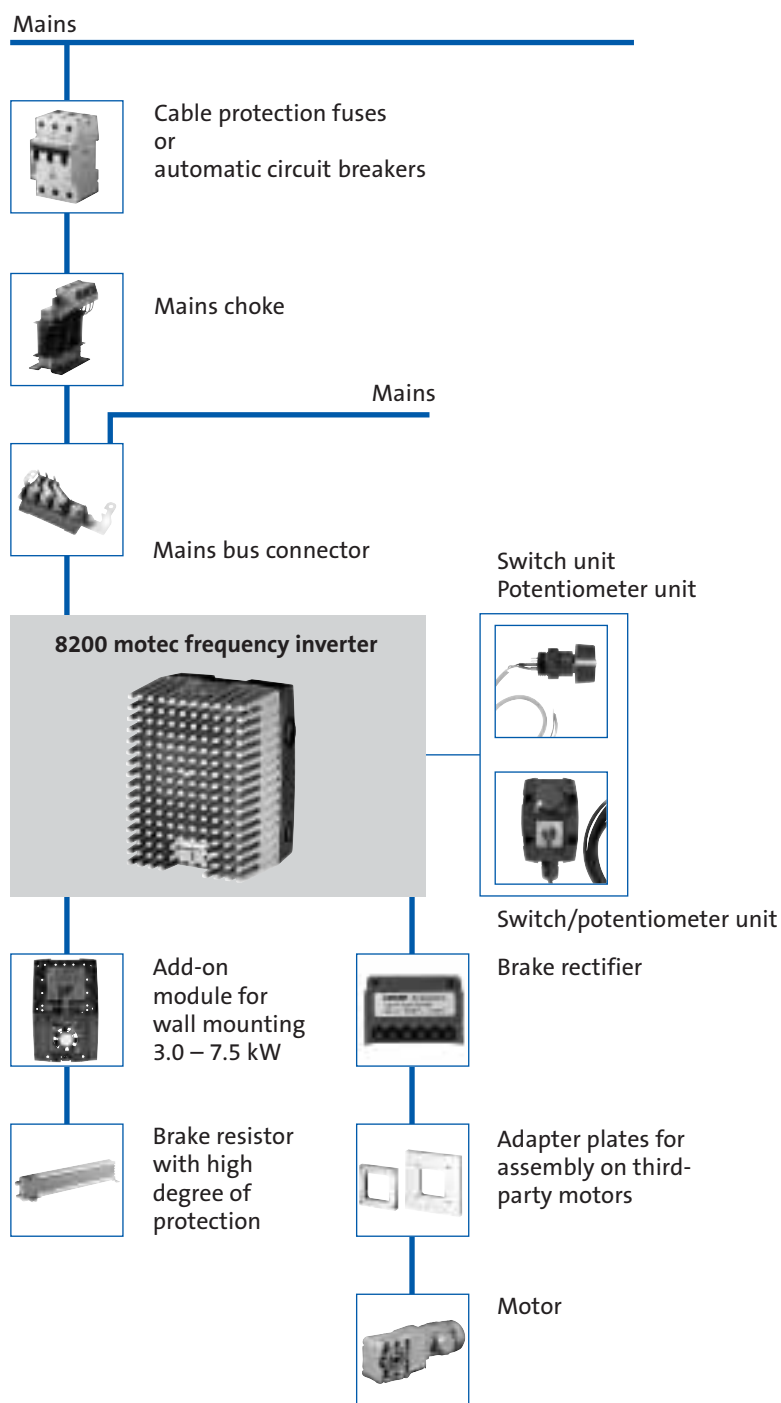
- ▶ Digital input – 8 channels
- ▶ Digital output – 8 channels – 1 A, 2 A
- ▶ Digital output – 4 channels - 5 A relay
- ▶ Digital I/O – 8 channels
- ▶ Analog input – 4 channels
- ▶ Analog output – 4 channels
- ▶ Counter – 1 MHz

Type	Order no.
CAN gateway	EPM-T110
8x digital input	EPM-T210
8x digital output 1 A	EPM-T220
8x digital output 2 A	EPM-T221
4x relay	EPM-T222
8x digital I/O	EPM-T230
4x analog input	EPM-T310
4x analog output	EPM-T320
2/4x counter	EPM-T410

For more information about the I/O system, please refer to the Automation catalog.

Accessories 8200 motec

Overview



The 8200 motec is complemented by wide range of accessory components for setting up distributed drive solutions. Brake resistors (even with high degrees of protection) for converting braking energy into heat are available for braking large loads and for dynamic applications.

Spring-operated brakes can be supplied with power and controlled directly from the 8200 motec.

Fuses and cable cross-sections

Type	Normal operation (150% overload)					Operation with 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 ²	AWG	VDE	UL	VDE	mm ²	AWG
8200 motec										
E82MV251_2B	M 10A	10A	C 10A	1.0	18	M 10A	10A	C 10A	1.0	18
E82MV371_2B	M 10A	10A	C 10A	1.5	16	M 10A	10A	C 10A	1.5	16
E82MV551_4B	M 6A	5A	B 6A	1	18	M 6A	5A	B 6A	1	18
E82MV751_4B	M 6A	5A	B 6A	1	18	M 6A	5A	B 6A	1	18
E82MV152_4B	M 6A	5A	B 6A	1	18	M 10A	10A	B 10A	1.5	16
E82MV222_4B	M 10A	10A	B 10A	1.5	16	M 10A	10A	B 10A	1.5	16
E82MV302_4B	M 16A	15A	B 16A	2.5	14	M 16A	15A	B 16A	2.5	14
E82MV402_4B	M 20A	20A	B 20A	4.0	12	M 20A	20A	B 20A	4.0	12
E82MV552_4B	M 25A	25A	B 25A	4.0	10	M 32A	25A	B 32A	6.0	10
E82MV752_4B	M 32A	35A	B 32A	6.0	8					

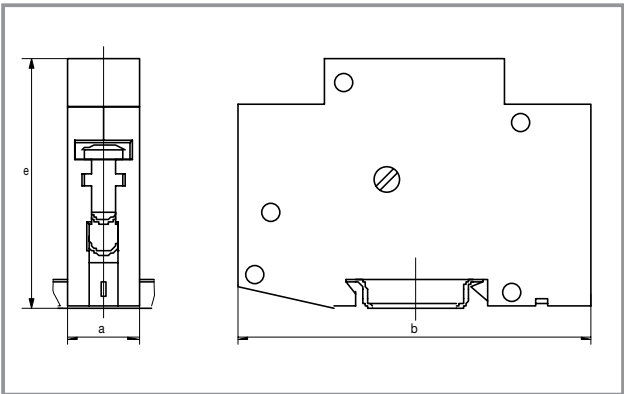
Please observe national and regional regulations.

Only use UL-approved fuses and fuse holders in UL-approved systems.
UL fuse: Voltage 240 V or 500...600 V,
Tripping characteristic "H" or "K5"

Cable protection (circuit breakers)

Type	Circuit breakers			
	Normal operation (150% overload)	Operation at increased rated power (120% overload)	Order number	Quantity required
8200 motec				
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

Dimensions of circuit breakers



EFA1XXXXA



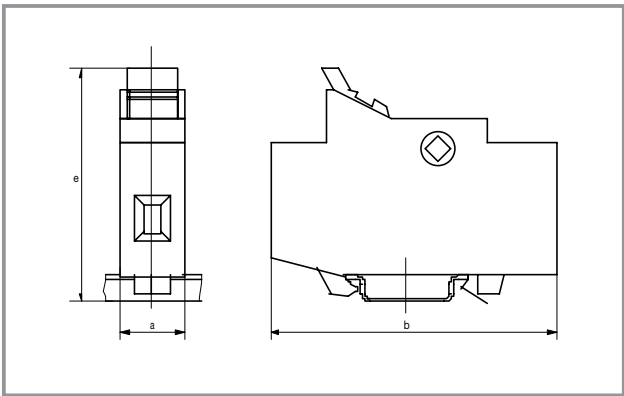
EFA3BXXXXA

Type	a [mm]	b [mm]	e [mm]
EFA1XXXXA	17.5	80	63
EFA3BXXXXA	53	90	63

Cable protection (fuses with assigned holders)

Type	Fuse			Quantity required	Fuse holder	
	Rated current	Size	Order number		Order number	Quantity required
8200 motec						
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	10 x 38	EFSM-0060AWE	3	EFH10001	3
E82MV222_4B	M 10A	10 x 38	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	14 x 51	EFSM-0250AXH	3	EFH10002	3
E82MV752_4B	M 32A	14 x 51	EFSM-0320AWH	3	EFH10002	3

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

Accessories 8200 motec

Mains chokes (EN 61000-3-2)

Mains chokes (EN 61000-3-2)

European Standard EN 61000-3-2 specifies 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 standard is designed to safeguard the quality of **public** supply systems and reduce the load on the mains.

On the 8200 motec frequency inverters listed, the following assigned mains chokes must be used for compliance with limit values to EN 61000-3-2:

Important: The standard is only to be applied on the public supply. Supplies with a dedicated transformer station (generally the case in industrial environments) are not public and therefore do **not** fall within the scope of application of the standard. If more than one component (e.g. 8200 motec) is installed in a single device or piece of machinery, then the standard should only be applied to the **overall machine**. Therefore, the limits must be satisfied by any device which is to be connected to the mains supply.

8200 motec			Mains choke			
Type	Voltage [V]	Power [kW]	Order no.	Inductance [mH]	Ir [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				

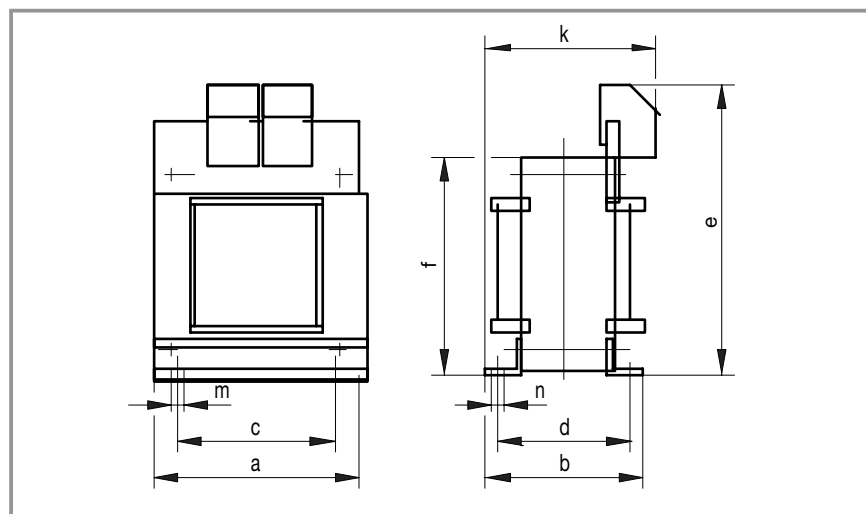
Please note:

- 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%.
- 8200 motec frequency inverters are "professional devices in accordance with EN 61000-3-2" ¹⁾.

¹⁾ 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 mains chokes

Mains choke	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



8200 motec – Braking operation 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 resistor integrated into the 8200 motec frequency inverter activates the external brake resistor if the DC

bus voltage exceeds the switching threshold. This prevents the frequency inverter setting a pulse inhibit due to the "Overvoltage" fault and the drive coasting. 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 (based on 150 % regenerative power). They are suitable for most applications.

For specific applications, e.g. for centrifuges, hoists, etc., the suitable brake resistor must meet the following criteria:

Brake resistor Criteria	Application	
	With active load	With passive load
Continuous braking power [W]	$\geq P_{\max} \cdot \eta_e \cdot \eta_m \cdot \frac{t_1}{t_{\text{cycl}}}$	$\geq \frac{P_{\max} \cdot \eta_e \cdot \eta_m}{2} \cdot \frac{t_1}{t_{\text{cycl}}}$
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 [Ω]	$R_{\min} \leq R \leq \frac{U_{\text{DC}}^2}{P_{\max} \cdot \eta_e \cdot \eta_m}$	

Active load	Can be set in motion independently of the drive (e.g. hoists, unwinders)
Passive load	Will be brought to a standstill independently of the drive (e.g. horizontal motion drives, centrifuges, fans)
U_{DC} [V]	Switching threshold, brake transistor
$P_{\max}$ [W]	Maximum braking power defined by the application
η_e	Electrical efficiency (controller + motor) Guide value: 0.54 (0.25 kW) ... 0.85 (11 kW)
η_m	Mechanical efficiency (gearbox, machine)
t_1 [s]	Braking time
t_{cycl} [s]	Cycle time = Time between two consecutive braking operations (= t_1 + rest time)

Brake resistors for the 8200 motec are supplied with high degrees of protection in order that they can be installed outside the control cabinet. This means that expensive HVAC units do not have to be installed to dissipate resulting power losses from the control cabinet.

Accessories 8200 motec

Braking operation

8200 motec – Braking operation with brake resistor

Rated data of integrated brake transistor

Brake transistor		8200 motec, 230 V	
		E82MV 251_2B	E82MV 371_2B
Switching threshold U _{DC}	[V DC]	375	
Peak current ↑	[A DC]	0.85	
Max. continuous current	[A DC]	0.85	
Peak braking power at U _{DC}	[kW]	0.3	
Continuous braking power	[kW]	0.3	
Minimum permissible brake resistance R _{min}	[Ω]	470	
Power reduction		40°C < T < 60°C: 2%/K 1000 m amsl < h < 4000 m amsl: 5%/1000 m	
Switch-on cycle		Max. 60 s peak braking power, then at least 60 s rest	
Recommended Lenze brake resistor	Order no.	ERBM470R110W	
Brake resistor enclosure		IP55	

Brake transistor		8200 motec, 400 V			
		E82MV551_4B	E82MV751_4B	E82MV152_4B	E82MV222_4B
Switching threshold U _{DC}	[V DC]	780			
Peak current ↑	[A DC]	1.8		4.0	
Max. continuous current	[A DC]	1.0		2.5	
Peak braking power at U _{DC}	[kW]	1.4		3.2	
Continuous braking power	[kW]	0.8		2.0	
Minimum permissible brake resistance	[Ω]	450		200	
Power reduction		40°C < T < 60°C: 2%/K 1000 m amsl < h < 4000 m amsl: 5%/1000 m			
Switch-on cycle		Max. 60 s peak braking power, then at least 60 s rest			
Recommended Lenze brake resistor ¹⁾	Order no.	ERBM470R110W		ERBM240R220W	
Brake resistor enclosure		IP55			

¹⁾ The brake resistors are based on a switch-on cycle of 1:10 (max. 15 s braking, then at least 150 s recovery time)

8200 motec – Braking operation with brake resistor

Rated data of integrated brake transistor

Brake transistor		8200 motec, 400 V			
		E82MV302_4B	E82MV402_4B	E82MV552_4B	E82MV752_4B
Switching threshold U_{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 U_{DC}	[kW]	6.1	6.1	8.9	12.9
Continuous braking power	[kW]	3.0	4.0	5.5	7.5
Minimum permissible brake resistance,	[Ω]	100	100	68	47
Power reduction		40°C < T < 60°C: 2%/K 1000 m amsl < h < 4000 m amsl: 5%/1000 m			
Switch-on cycle		Max. 60 s peak braking power, then at least 60 s rest			
		E82MV302_4B	E82MV402_4B	E82MV552_4B	E82MV752_4B
Recommended Lenze brake resistor ¹⁾	Order no.	ERBS180R350W	ERBS100R625W	ERBS100R625W	ERBS082R780W
Brake resistor enclosure		IP65			

¹⁾ The brake resistors are based on a switch-on cycle of 1:10 (max. 15 s braking, then at least 150 s recovery time)

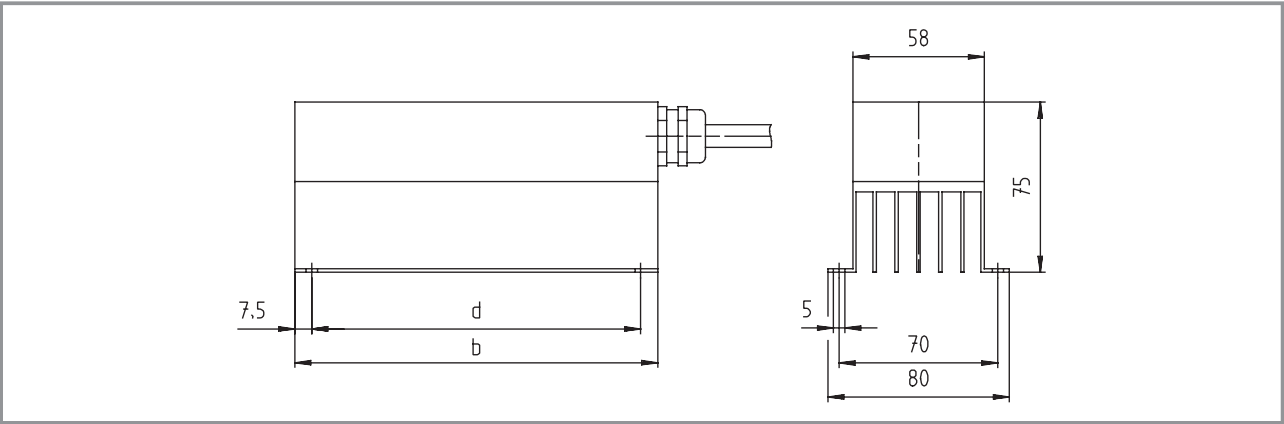
8200 motec – Braking operation with brake resistor

Rated data of brake resistors

Lenze brake resistors							
Order number	R	Braking power		Thermal capacity	Switch-on cycle	Cable cross-section	
	[Ω]	[kW]	Cont. [kW]	[kW _s]		[mm ²]	AWG
ERBM470R110W	470	1.3	0.11	16.5	1:10, max. 15 s braking at peak braking power, followed by at least 150 s recovery time	1.5	16
ERBM240R220W	240	2.5	0.22	33		1.5	16
ERBS180R350W	180	3.5	0.35	52.5		1.5	18
ERBS100R625W	100	6.25	0.625	93.75		1.5	18
ERBS082R780W	82	7.8	0.78	117		2.5	14

Note: The brake resistors are fitted with a thermostat (NC contact) as standard.
Other brake resistors with IP20 enclosures appear in the 8200 vector frequency inverter product catalogue.

Dimensions of ERBM... (IP55) brake resistors



Note: ERBM...(IP55) brake resistors are supplied with a pre-assembled 2.5 m connecting cable.

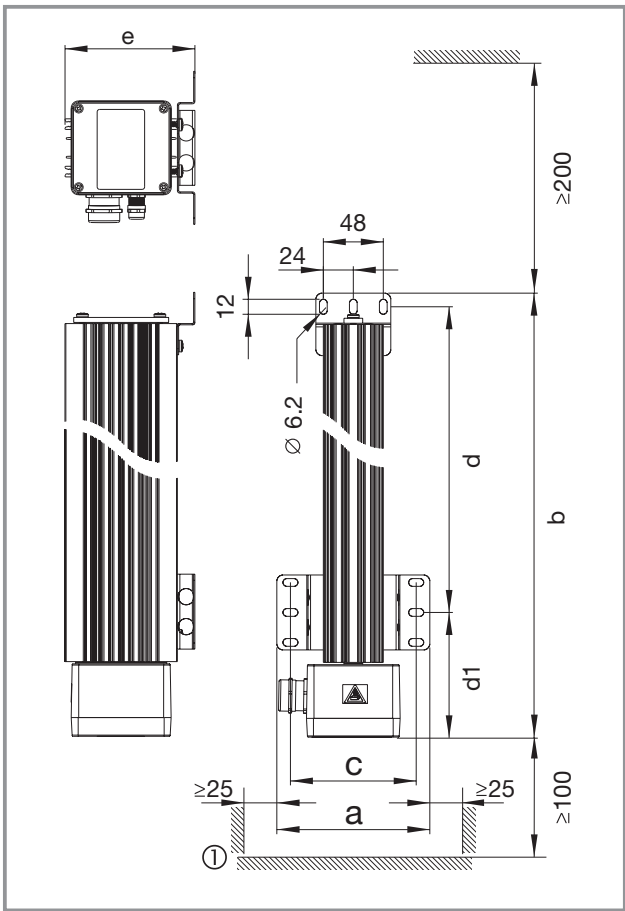
Brake resistor	b [mm]	d [mm]
ERBM470R110W	160	145
ERBM240R220W	340	325



ERBM... brake resistor with pre-assembled connecting cable in IP55

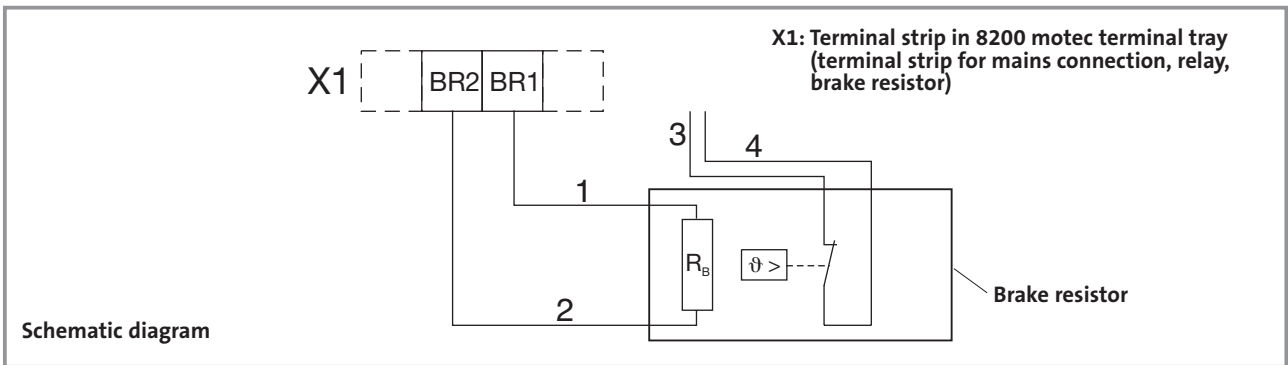
8200 motec – Braking operation with brake resistor

Dimensions of ERBS... (IP65) brake resistors



Brake resistor	a	b	c	d	d1	e	Weight [kg]
ERBS082R780W	123	666	101	554	101	104	3.7
ERBS100R625W		566		454			3.2
ERBS180R350W		381		269			2.1

Connection of a brake resistor



1. 2: Resistor
3. 4: Temperature monitoring (thermostat/NC contact) to be integrated for example into the locking of the relevant supply mains contactor

8200 motec – Braking operation with brake motors

Overview

Lenze three-phase AC motors and G-motion geared motors can be fitted with spring-operated brakes.

A brake rectifier is required for the DC supply to the electro-mechanical motor brakes (180 V DC, 205 V DC). As shown below, this brake rectifier is included in the scope of supply:

	8200 motec	Brake rectifier ...
Example 1	Installed on geared brake motor/three-phase AC brake motor	Installed in 8200 motec terminal tray ¹⁾
Example 2	For wall mounting + geared brake motor/three-phase AC brake motor	Installed in terminal box of geared motor/three-phase AC brake motor ²⁾

Important:

¹⁾ Only 6-pin brake rectifiers can be used in the 8200 motec terminal tray.

²⁾ Lenze brake motors (without 8200 motec) are supplied with 4-pin brake rectifiers as standard.

Depending on the brake voltage (180 V DC, 205 V DC), brake rectifiers may need to be used as bridge or half-wave rectifiers with input/output varistors (overvoltage protection).

Selection of brake rectifier

The brake rectifier is selected on the basis of the input voltage U_{AC} and the brake coil rated voltage (U_{coil}):

Brake rectifier	Order no. ¹⁾	Max. input voltage U_{AC}	Output voltage U_{DC} (V)	Max. output current	Selection example
Bridge rectifier 6-pin	E82ZMBR1 (motec 0.25/0.37 kW, 230 V) ²⁾ E82ZWBR1 (motec 0.55-7.5 kW, 400 V)	265 V + 0%	$U_{DC} = 0.9 \times U_{AC}$	0.75 A	$U_{coil} = 205 \text{ V DC} = U_{DC}$ at $U_{AC} = 230 \text{ V}$
Half-wave rectifier 6-pin	E82ZWBR3 (motec 0.55-7.5 kW, 400 V)	460 V + 0%	$U_{DC} = 0.45 \times U_{AC}$	0.75 A	$U_{coil} = 180 \text{ V DC} = U_{DC}$ at $U_{AC} = 400 \text{ V}$

¹⁾ When 8200 motec frequency inverters are installed on Lenze brake motors, the necessary brake rectifiers are preassembled.

²⁾ E82ZMBR1 corresponds to brake rectifier type E82ZWBR1 installed in additional terminal tray. Please note the change in the overall height (see dimension g1 in the dimensions tables).

E82ZWBR3 = Half-wave rectifier
Type 14.630.33.016

E82ZMBR1/E82ZWBR1 = Bridge rectifier
Type 14.630.35.016



8200 motec – Braking operation with brake motors

Actuation 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 suppressor to protect the switching contact and the coil. The spark suppressor is integrated into 6-pin brake rectifiers.

We recommend that the relay output ¹⁾ of the 8200 motec

frequency inverter is used to switch the brake. Alternatively, the brake can be switched via an external control contact (e.g. PLC).

The following table lists the available options for Lenze brakes. The information relates to a mains rated voltage of 230/400 V +/-10%.

Brake coils 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)
		Associated motor frame size					
		063/071	080/090	090/100	100/112	112/132	132
180 V	Half-wave	- AC-controlled switching via the relay output of the 8200 motec only permissible with additional auxiliary relay - DC-controlled switching or direct switching of a DC voltage via the relay output of the 8200 motec only permissible with additional auxiliary relay					
205 V	Bridge	- AC-controlled switching permissible via the relay output of the 8200 motec - DC-controlled switching or direct switching of a DC voltage permissible via the relay output of the 8200 motec					
24 V ²⁾	No rectifier required	Direct switching of a DC voltage permissible via the relay output of the 8200 motec				Direct switching of a DC voltage via the relay output of the 8200 motec only permissible with additional auxiliary relay	

¹⁾ Technical data relay output 8200 motec:
AC 250 V/3 A, DC 24 V/2 A...240 V/0.22 A. The service life of the relay is determined by the load and the connected power.

²⁾ DC-controlled switching requires a spark suppressor to protect the switching contact and the coil.

Accessories 8200 motec

Braking operation

8200 motec – Braking operation with brake motors

Actuation of the brake

The relay must be programmed in order to actuate the electromechanical motor brake via the relay output of the 8200 motec frequency inverter.

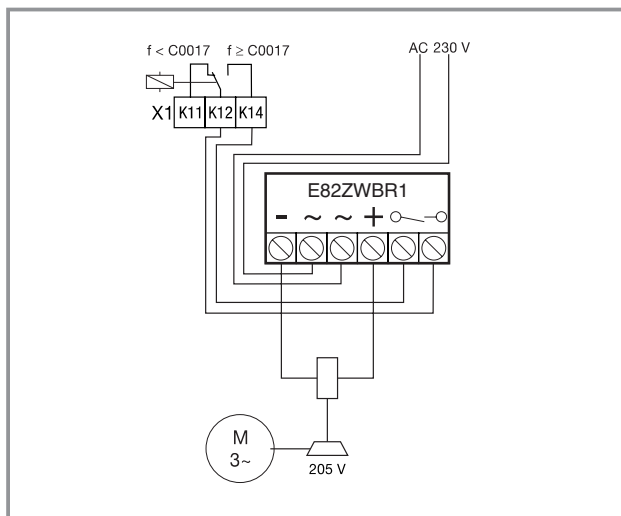
Example: Release/engage brake (205 V) on exceeding/undershooting a configurable frequency threshold.

The braking operation can be induced via a digital signal which forces the drive to quick stop:

(programming: relay C0008 = 7, frequency inverter threshold [Q_{min}] C0017 = 3 Hz; use relay terminals K12, K14 on terminal strip X1 of the 8200 motec)

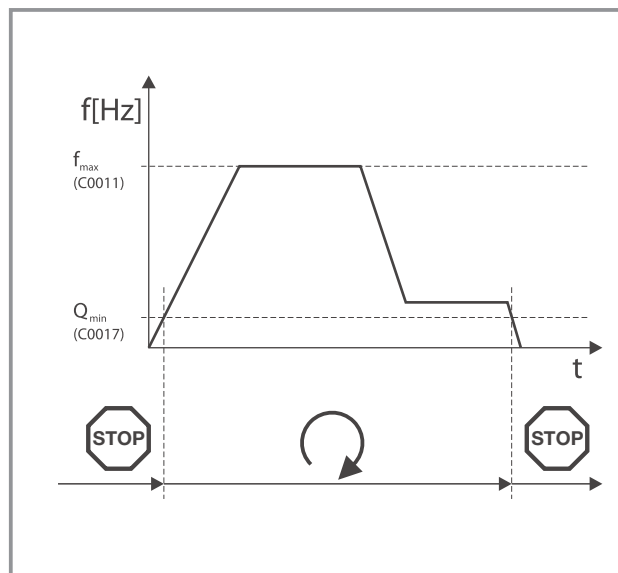
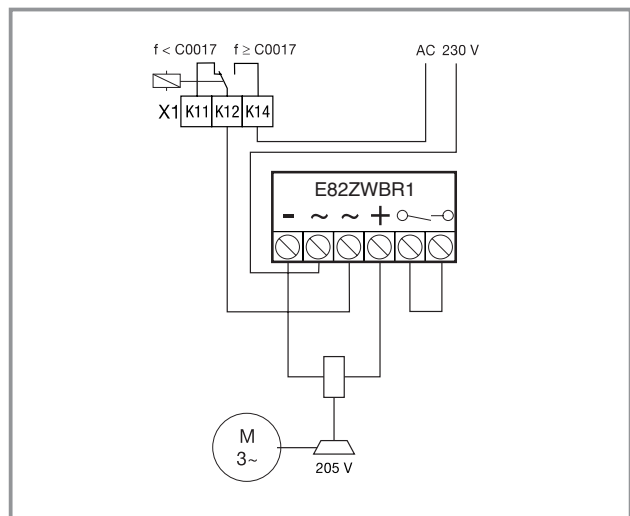
Block diagram

DC-controlled switching of brake



Block diagram

AC-controlled switching of brake



Brake switch

Brake switch enclosure IP65	Order no.	E82ZWBRU

The brake switch has an electronic circuit breaker which it can use to actuate spring-operated brakes. It is installed in a cable gland (M16), e.g. on the 8200 motec. This means that the 8200 motec can actuate a spring-operated brake directly even if, e.g., a bus I/O and a function module are being

used simultaneously. The brake switch draws its power supply from the 8200 motec. It is actuated either via a digital signal or via the mains voltage.

Conformity	CE Low-Voltage Directive (37/23/EEC)	
Vibration resistance	Accelerational stability up to 2 g (Germanischer Lloyd, general conditions)	
Humidity class	Class 3K3 to EN 50178 (without condensation, average relative humidity 85%)	
Degree of pollution	VDE0110 Part 2 Degree of pollution 2	
Temperature ranges	Transport -25°C ... +80°C Storage -25°C ... +80°C Operation -20°C ... +60°C	
Installation	In Lenze 8200 motec frequency inverter	
Noise emission	Limit class A to EN 55022	
Insulation resistance	Overvoltage category III to VDE 0110	
Enclosure	IP65	
Input voltage	1/N/PE AC 230 V, 45 Hz ... 65 Hz 3/PE AC 230 V, 45 Hz ... 65 Hz 3/PE AC 400 V, 45 Hz ... 65 Hz 3/N/PE AC 400 V, 45 Hz ... 65 Hz 3/N/PE AC 500 V, 45 Hz ... 65 Hz	
Output voltage	205 V DC	230 V AC mains
	180 V DC/205 V DC	400 V AC mains
	257 V DC	500 V AC mains
Brake current	0.55 A	
Power loss	3 W max.	
Control input (I)	HIGH (+12 V DC ... +30 V DC) LOW (0 ... +3 V DC) (PLC level, HTL)	

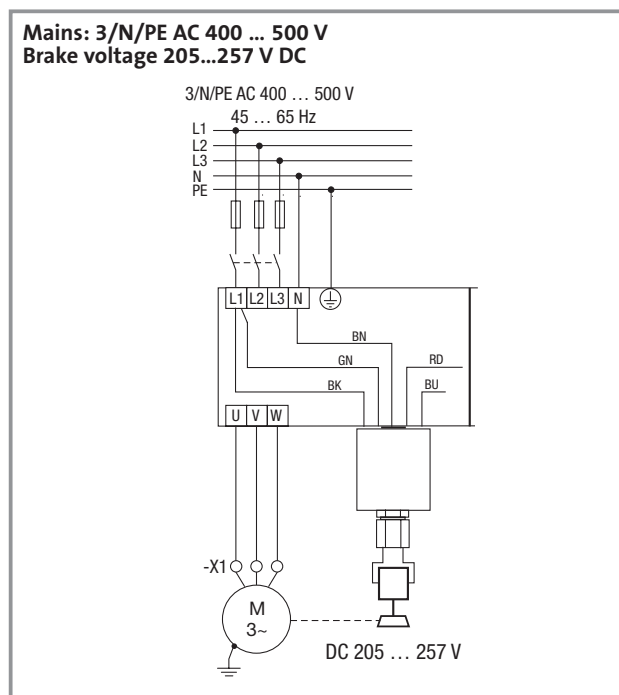
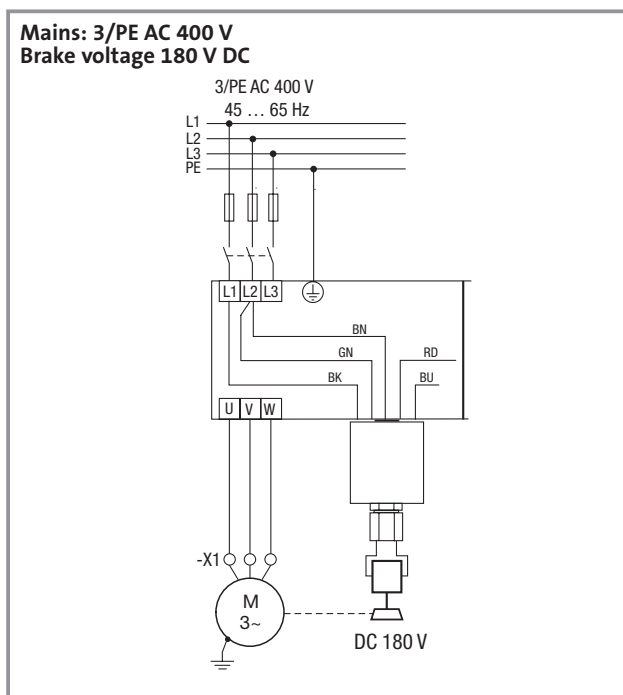
Mains voltage	Brake voltage at B1, B2	
	$U_{B1B2} \approx 0.45 \times U_{L1BN}$	$U_{B1B2} \approx 0.89 \times U_{L2/BNB}$
1/N/PE AC 230 V	Operation not permitted	205 V DC
3/PE AC 230 V	Operation not permitted	205 V DC
3/PE AC 400 V	180 V DC	Operation not permitted
3/N/PE AC 400 V	Operation not permitted	205 V DC
3/N/PE AC 500 V	Operation not permitted	257 V DC

The brake voltage at B1, B2 is determined by the mains voltage.

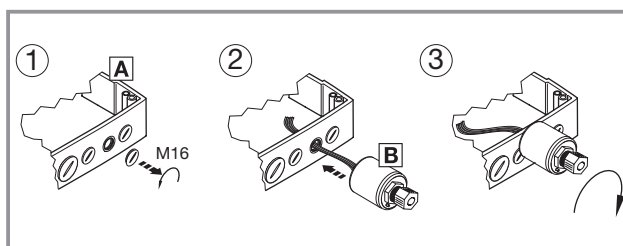
Accessories 8200 motec

Braking operation

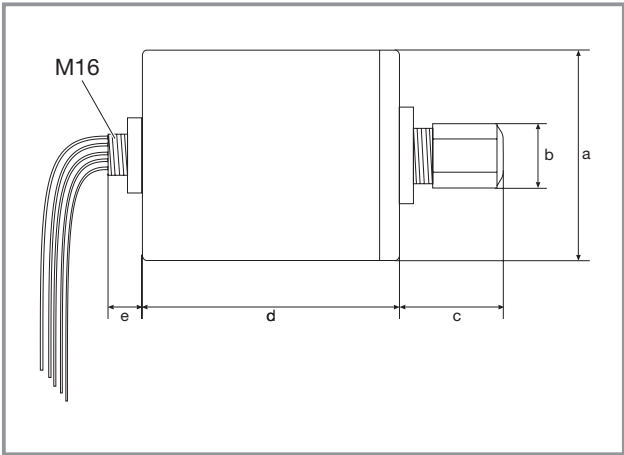
Connection examples for brake switch



Assembly procedure (schematic diagram)



Dimensions of brake switch



Type	Dimensions [mm]				
	a	b	c	d	e
E82ZBU	50	24	35	55	10



Accessories 8200 motec

Wiring terminals

General features

The wiring terminals enable mains and control cables to be looped and connected in the 8200 motec carrier housing.

Wiring terminal	Version	Area of application
Mains bus connector	• 2.5 mm² (0.25 - 0.37 kW, 230 V) • 4 mm² (0.55 - 2.2 kW, 400 V) • 4 mm² (3.0 - 7.5 kW) using twin wire end ferrules by Phoenix Contact AI-TWIN 2x4-12GY • Select a fuse rating for the cable cross-section used, taking into account applicable regulations	Looping and connection of mains cables
Terminal fan	• 2 x 2.5 mm² (0.55 - 2.2 kW, 400 V)	Connection of a separate motor fan with a fan cable
System terminals	• 12 x 1.5 mm² (0.55 - 2.2 kW, 400 V) • 10 x 1.5 mm² (0.25/0.37 kW, 230 V) *	Looping and connection of control cables

* In preparation



Mains bus connector E82ZWKN4 for use in 8200 motec 0.55 to 2.2 kW



Mains bus connector E82ZWKN2 for use in 8200 motec 0.25 to 0.37 kW

Mains bus connectors

In conjunction with the mains bus connectors, a "power bus" can be built, i.e. the supply voltage is "looped" in the 8200 motec frequency inverter terminal tray.

8200 motec 0.25-2.2 kW

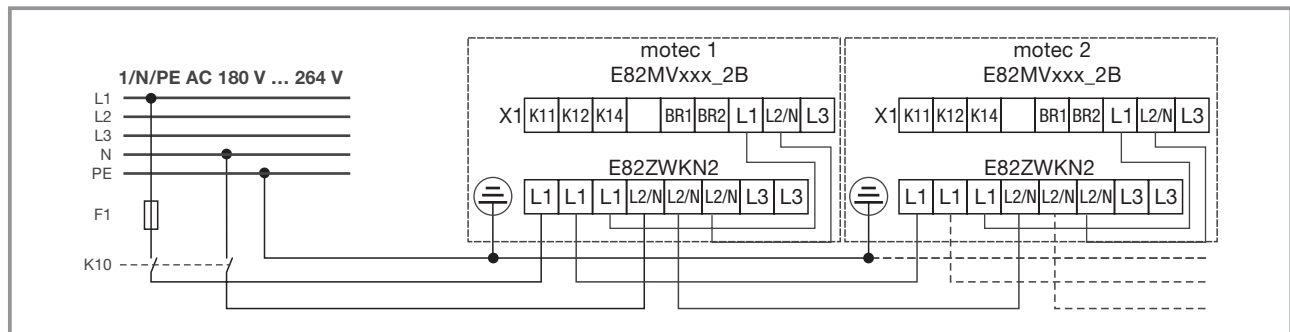
8200 motec		Mains bus connector	
Type	Mains current [A]	Max. mains current [A]	Order no.
0.25 kW, 230 V 0.37 kW, 230 V	3.4 5.0	16	E82ZWKN2
0.55 kW, 400 V 0.75 kW, 400 V 1.5 kW, 400 V 2.2 kW, 400 V	1.8 2.4 3.8 5.5	24	E82ZWKN4

8200 motec 3.0-7.5 kW

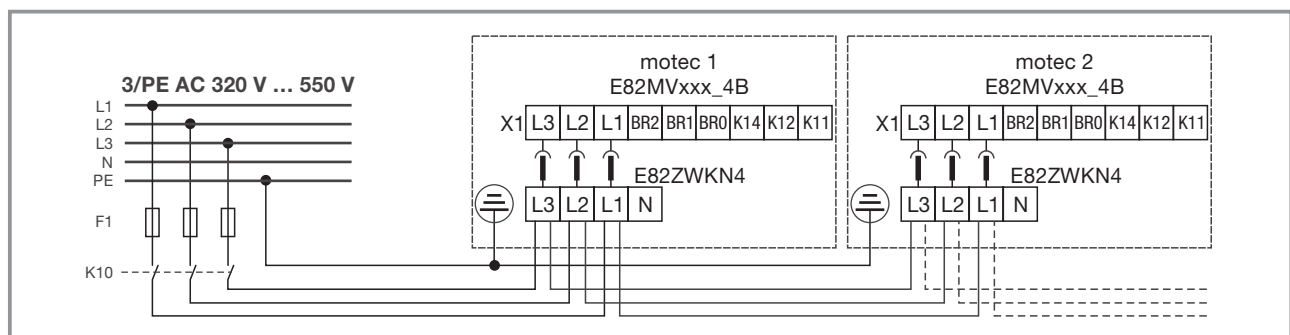
The use of twin wire end ferrules enables mains cables up to 4 mm² to be "looped" directly to the terminal strip in the terminal tray.

Ordering example for twin wire end ferrules from Phoenix Contact AI-TWIN 2x4-12GY.

Block diagram 8200 motec 1 ~ 230 V, 0.25...0.37 kW



Block diagram 8200 motec 3 ~ 400 V, 0.55...2.2 kW



Tip: Using mains contactors enables starting currents to be derated via current limiting modules (see page 9-79).

Accessories 8200 motec

Current limiting modules

A current limiting module reduces the current peak when the 8200 motec(s) is (are) connected to the supply system.

Assignment

	Mains contactor [kW] with current limiting module for connection of...						
8200 motec	1 motec	2 motecs	3 motecs	4 motecs	5 motecs	6 motecs	Current limitation
0.25 kW, 230 V 0.37 kW, 230 V	4 kW						Current limiting module Order no. 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 Order no. EZN3A0150H024 ¹⁾

¹⁾ Alternative E82ZJ004 possible (use one module for each phase)

Technical data

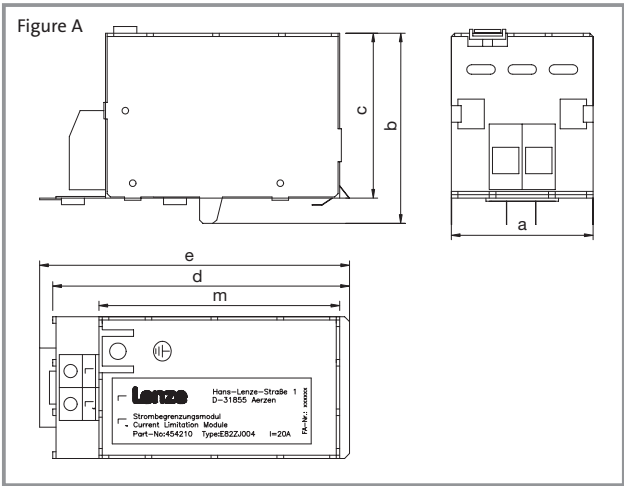
Order no.	I_r [A]	m [kg]
E82ZJ004 ¹⁾ /Current limiting module	20	0.13
EZN3A0150H024 / Mains choke/filter	24	8.2

¹⁾ For DIN rail mounting to EN50022 35 x 7.5 and 35 x 15

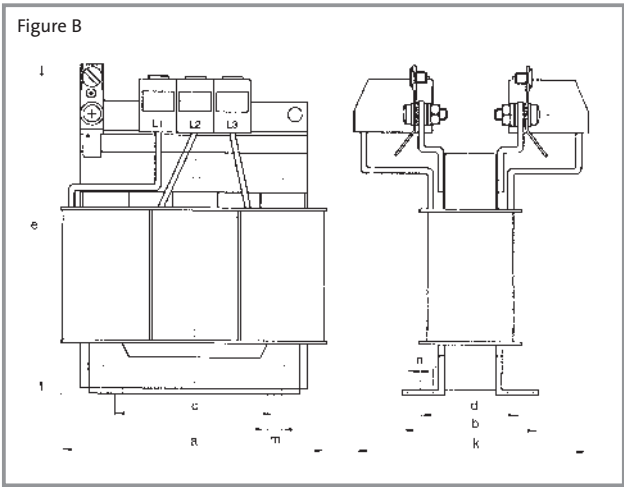
Dimensions

Order no.	Figure	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [mm]	n [mm]
E82ZJ004 ¹⁾ /Current limiting module	A	43	57	50	86	91	70	
EZN3A0150H024 / Mains choke/filter	B	180	120	136	67	192	7	12

¹⁾ For DIN rail mounting to EN 50022 35 x 7.5 and 35 x 15



Current limiting module E82ZJ004



Mains choke/filter EZN3A0150H024

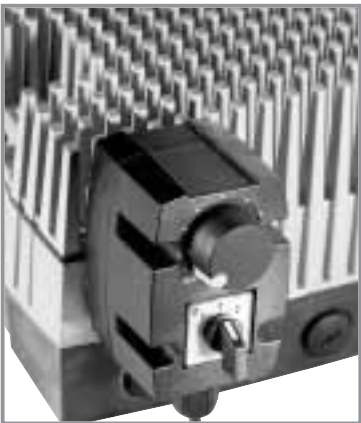
Switch/potentiometer unit

Switch/potentiometer unit	Order no.	E82ZBU

The switch/potentiometer unit (IP65 enclosure) is installed directly on the 8200 motec frequency inverter or, for ease of accessibility, on the system.
The switch/potentiometer unit and an I/O function module (standard I/O, application I/O, bus I/O) can be used to pre-select an analog setpoint on the frequency inverter; the

rotary switch can be used to start/stop the drive or change the direction of rotation.

Note:
An application example with the switch/potentiometer unit appears on page 9-83.



Switch/potentiometer unit

Scope of supply

- 1 switch/potentiometer unit prefabricated with 2.5 m connecting cable
- 1 mounting plate 60 mm x 60 mm
- 4 M4 x 30 screws for fixing the switch/potentiometer unit to the mounting plate
- 2 M4 x 20 screws with spring steel sheet for fixing to the 8200 motec heatsink

General data and operating conditions

Enclosure	IP65	
Dimensions (W x H x D)	Approx. 65 mm x 115 mm x 85 mm	
Assembly options	On the motec heatsink	On a wall

Potentiometer unit

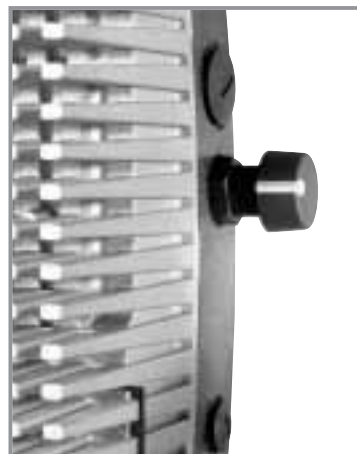
Potentiometer unit/Potentiometer 10 k Ω	Order no.	E82ZBR020

The potentiometer unit is fitted directly in an M20 cable gland (e.g. in the terminal tray on the 8200 motec). In conjunction with an I/O function module (standard I/O, application I/O, BUS I/O), the integrated potentiometer unit can be used to preselect an analog setpoint on the frequency inverter.

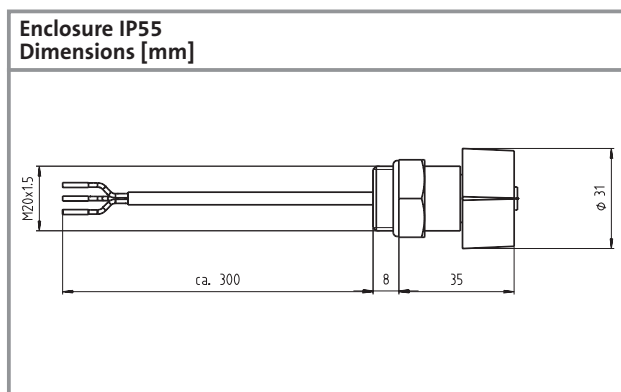
Switch unit

Switch unit	Order no.	E82ZBS020

The switch unit is fitted directly in an M20 cable gland (e.g. in the terminal tray on the 8200 motec). The controller can be actuated easily via the digital inputs (standard I/O, application I/O, BUS I/O on the 8200 motec) using the integrated switch.



General data and operating conditions for potentiometer unit and switch unit



Assembly options

The unit is fitted in an M20 bore.

Accessories 8200 motec

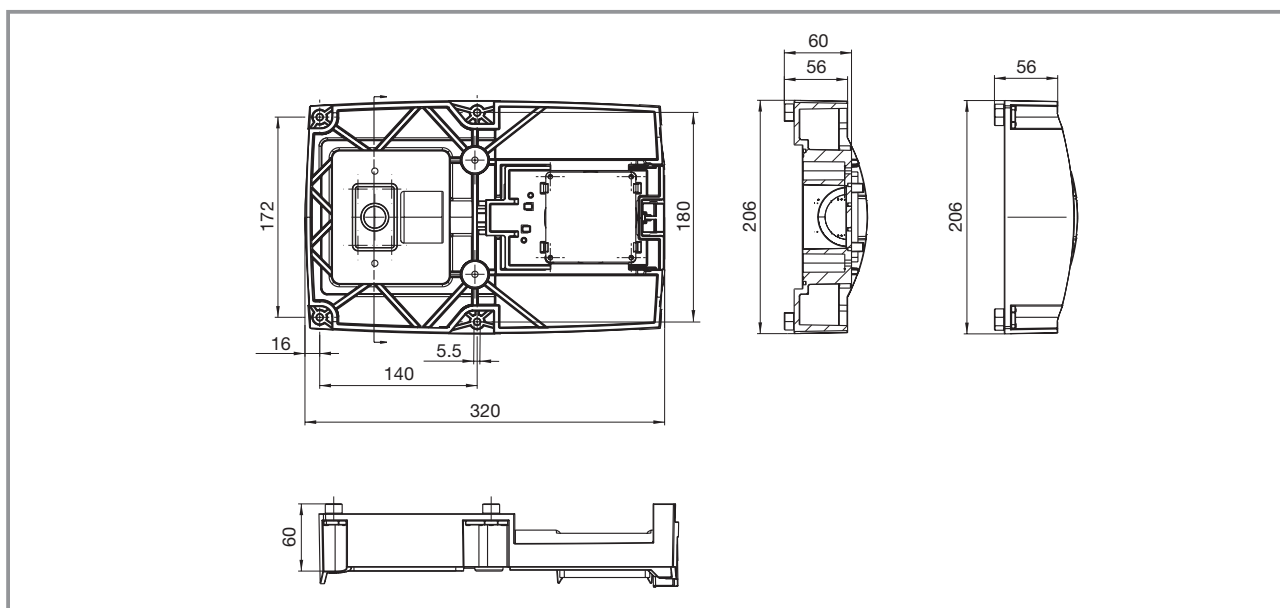
Add-on module

Add-on module for 8200 motec 3.0-7.5 kW

Add-on module IP54 enclosure

Order no.

E82ZMV



The E82ZMV add-on module features an electric fan with IP54 enclosure which draws its power supply directly from the 8200 motec.

The module is required on:

- Geared motors with integral fans which run without derating of the rated output current

Dimensions of geared motor with add-on module page 8-16.

General accessories 8200 motec

Accessories	Designation	Order no.	
Communication modules	Operating module Keypad XT complete with diagnosis terminal	E82ZBBXC	
	Keypad complete with diagnosis terminal	E82ZBB	
	LECOM-A (RS232) with diagnosis terminal	E82ZBL-C	
I/O function modules	Standard I/O	E82ZAFSC001	
	Application I/O	E82ZAFAC001	
	BUS I/O	See type-specific accessories	
Fieldbus function modules	CAN (system bus)	E82ZAFCC001	
	CAN I/O (system bus)	E82ZAFCC201	
	PROFIBUS-DP	E82ZAFPC001	
	INTERBUS	E82ZAFIC001	
	LECOM-B (RS485)	E82ZAFLC001	
	AS-Interface	E82ZAFFC001	
Braking operation	Brake resistors, rectifiers	See type-specific accessories	
	Brake switch (in preparation)	E82ZWBRU	
Wiring terminals		See type-specific accessories	
Current limiting modules		See type-specific accessories	
Assembly guides	Adapter plates	See type-specific accessories	
Controls	Switch/potentiometer unit	E82ZBU	
	Potentiometer unit	E82ZBR020	
	Switch unit	E82ZBS020	
Miscellaneous	Connecting cable	2.5 m	E82ZWL025
	Connecting cable	5.0 m	E82ZWL050
	Connecting cable	10.0 m	E82ZWL100
	PC system cable RS232	0.5 m	EWL0048
	PC system cable RS232	5.0 m	EWL0020
	PC system cable RS232	10.0 m	EWL0021
	Assembly kit for control cabinet		E82ZBHT
	AS-i flat-cable connection		E82ZMFF
Operating Instructions 8200 motec ¹⁾	German	EDB82MV752	
	English		
	French		
Communication Manual LECOM ¹⁾	German	EDSLECOM	
	English		
	French		
Communication Manual CAN ¹⁾	German	EDSCAN	
	English		
	French		
Communication Manual PROFIBUS ¹⁾	German	EDSPBUS	
	English		
	French		
Communication Manual INTERBUS ¹⁾	German	EDSIBUS	
	English		
	French		

¹⁾ Please indicate the language you require when placing your order.

Accessories 8200 motec

Overview tables

Type-specific accessories

8200 motec 0.25/0.37 kW (1~230 V)

Designation	Type	
8200 motec	E82MV251_2B	E82MV371_2B
Circuit breaker	EFA1C10A	EFA1C10A
Fuse	EFSM-0100AWE	EFSM-0100AWE
Fuse holder	EFH10001	EFH10001
Brake resistor IP55	ERBM470R110W	
Mains bus connector	E82ZWKN2	
System terminals	E82ZMK5 (in preparation)	
Brake rectifier	Bridge rectifier E82ZMBR1	
Current limiting module	E82ZJ004	
Mains choke	ELN 1-0900H005	
BUS I/O	E82ZMFB001	
Adapter plates	EJ0048	

8200 motec 0.55 - 2.2 kW (3~400 V)

Designation	Type			
8200 motec	E82MV551_4B	E82MV751_4B	E82MV152_4B	E82MV222_4B
Circuit breaker	EFA3B06A	EFA3B06A	EFA3B06A (EFA3B10A ¹)	EFA3B10A
Fuse	EFSM-0060AWE	EFSM-0060AWE	EFSM-0060AWE EFSM-0100AWE ¹)	EFSM-0100AWE
Fuse holder	EFH10001	EFH10001	EFH10001	EFH10001
Brake resistor IP55	ERBM470R110W		ERBM240R220W	
Mains bus connector	E82ZWKN4			
System terminals	E82ZWKS			
Fan connection terminal	E82ZWKL			
Brake rectifier	Bridge rectifier E82ZWBR1 (type 14.630.32.016) Half-wave rectifier E82ZWBR3 (type 14.630.33.016)			
Current limiting module	EZN3A0150H024 or 3 x E82ZJ004			
Mains choke	EZN3A1500H003			
BUS I/O	E82ZAFB001			
Adapter plates	EJ0047/EJ0048			

¹⁾ Use for operation with increased rated power



8200 motec 3.0 - 7.5 kW (3~400 V)

Designation	Type			
8200 motec	E82MV302_4B	E82MV402_4B	E82MV552_4B	E82MV752_4B
Circuit breaker	EFA3B16A	EFA3B20A	EFA3B25A EFA3B32A ¹⁾	EFA3B32A
Fuse	EFSM-0160AWE	EFSM-0200AWE	EFSM-0250AXH EFSM-0320AWH ¹⁾	EFSM-0320AWH
Fuse holder	EFH10001	EFH10001	EFH10002	EFH10002
Fan module	E82ZMV			
Brake resistor IP65	ERBS180R350W	ERBS100R625W	ERBS100R625W	ERBS082R780W
Brake rectifier	Bridge rectifier E82ZWBR1 (type 14.630.32.016) Half-wave rectifier E82ZWBR3 (type 14.630.33.016)			
BUS I/O	E82ZAFB201			
Adapter plates	EJ0050 (in preparation)			

¹⁾ Use for operation with increased rated power

Accessories 8200 motec

Overview tables

8200 motec 0.25/0.37 kW, 230 V, possible combinations

Options	Can be combined with								
	Switch/pot. unit	Brake resistor (IP55)	Fieldbus function module INTERBUS or PROFIBUS or LECOM-B or system bus (CAN)	Mains bus connector	Brake rectifier ¹⁾ or system terminals ¹⁾	Diagnosis terminal ²⁾ or handheld with PC interface (RS232) ²⁾	Brake switch	Switch unit	Pot. unit
8200 motec with I/O function module standard I/O	•	•		•	•	•	•	•	•
8200 motec with I/O function module application I/O	•	•		•	•	•	•	•	•
8200 motec with I/O function module bus I/O ¹⁾	•	•	•	•		•	•	•	•
8200 motec with fieldbus function module CAN (system bus)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module CANopen	•	•		•	•	•	•	•	
8200 motec with fieldbus function module DeviceNet	•	•		•	•	•	•	•	
8200 motec with fieldbus function module CAN I/O (system bus)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module PROFIBUS-DP	•	•		•	•	•	•	•	
8200 motec with fieldbus function module INTERBUS	•	•		•	•	•	•	•	
8200 motec with fieldbus function module LECOM-B (RS485)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module AS-Interface	•	•		•	•	•	•	•	
8200 motec without function module		•		•	•	•	•		

¹⁾ Please note the change in the overall height. A fieldbus function module MUST be selected.

²⁾ E82ZWxxx connecting cable also required (EWL00xx PC system cable also required for PC interface).

8200 motec 0.55 - 2.2 kW, 400 V, possible combinations

Options	Can be combined with								
	Switch/pot. unit	Brake resistor (IP55)	Fieldbus function module INTERBUS or PROFIBUS or LECOM-B or system bus (CAN)	Mains bus connector	Brake rectifier or system terminals or fan connection terminal	Diagnosis terminal ²⁾ or handheld with PC interface (RS232) ²⁾	Brake switch	Switch unit	Pot. unit
8200 motec with I/O function module standard I/O	•	•		•	•	•	•	•	•
8200 motec with I/O function module application I/O	•	•		•	•	•	•	•	•
8200 motec with I/O function module bus I/O ¹⁾	•	•	•	•		•	•	•	•
8200 motec with fieldbus function module CAN (system bus)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module CANopen	•	•		•	•	•	•	•	
8200 motec with fieldbus function module DeviceNet	•	•		•	•	•	•	•	
8200 motec with fieldbus function module CAN I/O (system bus)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module PROFIBUS-DP	•	•		•	•	•	•	•	
8200 motec with fieldbus function module INTERBUS	•	•		•	•	•	•	•	
8200 motec with fieldbus function module LECOM-B (RS485)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module AS-Interface	•	•		•	•	•	•	•	
8200 motec without function module		•		•	•	•	•		

¹⁾ A fieldbus function module MUST be selected.
²⁾ E82ZWLxxx connecting cable also required (EWL00xx PC system cable also required for PC interface).

8200 motec 3.0 - 7.5 kW, 400 V, possible combinations

Options	Can be combined with								
	Switch/pot. unit	Brake resistor (IP65)	Fieldbus function module INTERBUS or PROFIBUS or LECOM-B or system bus (CAN)	Add-on module e.g. for wall mounting	Brake rectifier	Diagnosis terminal ²⁾ or handheld with PC interface (RS232) ²⁾	Brake switch	Switch unit	Pot. unit
8200 motec with I/O function module standard I/O	•	•		•	•	•	•	•	•
8200 motec with I/O function module application I/O	•	•		•	•	•	•	•	•
8200 motec with I/O function module bus I/O ¹⁾	•	•	•	•	•	•	•	•	•
8200 motec with fieldbus function module CAN (system bus)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module CANopen	•	•		•	•	•	•	•	
8200 motec with fieldbus function module DeviceNet	•	•		•	•	•	•	•	
8200 motec with fieldbus function module CAN I/O (system bus)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module PROFIBUS-DP	•	•		•	•	•	•	•	
8200 motec with fieldbus function module INTERBUS	•	•		•	•	•	•	•	
8200 motec with fieldbus function module LECOM-B (RS485)	•	•		•	•	•	•	•	
8200 motec with fieldbus function module AS-Interface	•	•		•	•	•	•	•	
8200 motec without function module		•		•	•	•	•		

¹⁾ A fieldbus function module MUST be selected.
²⁾ E82ZWLxxx connecting cable also required (EWL00xx PC system cable also required for PC interface).



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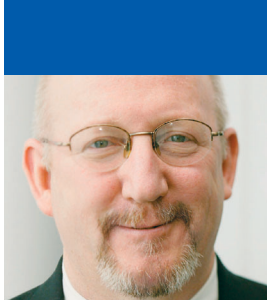
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