

Automation systems Drive solutions

Controls
Inverters

Motors

Gearboxes

Engineering Tools

Motors: MD three-phase AC motors

Gearboxes: GST helical gearboxes

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Lenze makes many things easy for you.

With our motivated and committed approach, we work together with you to create the best possible solution and set your ideas in motion - whether you are looking to optimise an existing machine or develop a new one. We always strive to make things easy and seek perfection therein. This is anchored in our thinking, in our services and in every detail of our products. It's as easy as that!

1

Developing ideas

Are you looking to build the best machine possible and already have some initial ideas? Then get these down on paper together with us, starting with small innovative details and stretching all the way to completely new machines. Working together, we will develop an intelligent and sustainable concept that is perfectly aligned with your specific requirements.

2

Drafting concepts

We see welcome challenges in your machine tasks, supporting you with our comprehensive expertise and providing valuable impetus for your innovations. We take a holistic view of the individual motion and control functions here and draw up consistent, end-to-end drive and automation solutions for you - keeping everything as easy as possible and as extensive as necessary.

3

Implementing solutions

Our easy formula for satisfied customers is to establish an active partnership with fast decision-making processes and an individually tailored offer. We have been using this simple principle to meet the ever more specialised customer requirements in the field of mechanical engineering for many years.

4

Manufacturing machines

Functional diversity in perfect harmony: as one of the few full-range providers in the market, we can provide you with precisely those products that you actually need for any machine task – no more and no less. Our L-force product portfolio, a consistent platform for implementing drive and automation tasks, is invaluable in this regard.

5

Ensuring productivity

Productivity, reliability and new performance peaks on a daily basis – these are our key success factors for your machine. After delivery, we offer you cleverly devised service concepts to ensure continued safe operation. The primary focus here is on technical support, based on the excellent application expertise of our highly-skilled and knowledgeable after-sales team.

A matter of principle: the right products for every application.

Lenze's extensive L-force product portfolio follows a very simple principle. The functions of our finely scaled products are assigned to the three lines Base-Line, State-Line or High-Line.

But what does this mean for you? It allows you to quickly recognise which products represent the best solution for your own specific requirements.

Powerful products with a major impact:

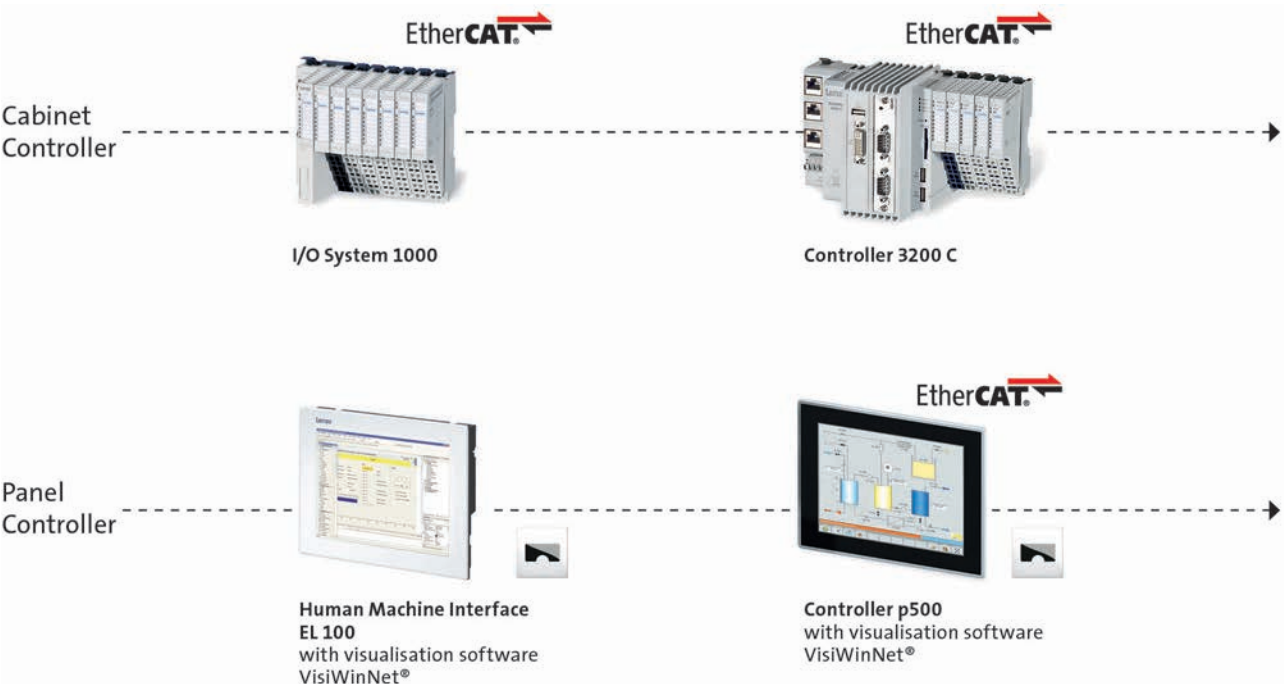
- Easy handling
- High quality and durability
- Reliable technologies in tune with the latest developments

Lenze products undergo the most stringent testing in our own laboratory. This allows us to ensure that you will receive consistently high quality and a long service life. In addition to this, five logistics centres ensure that the Lenze products you select are available for quick delivery anywhere across the globe. It's as easy as that!

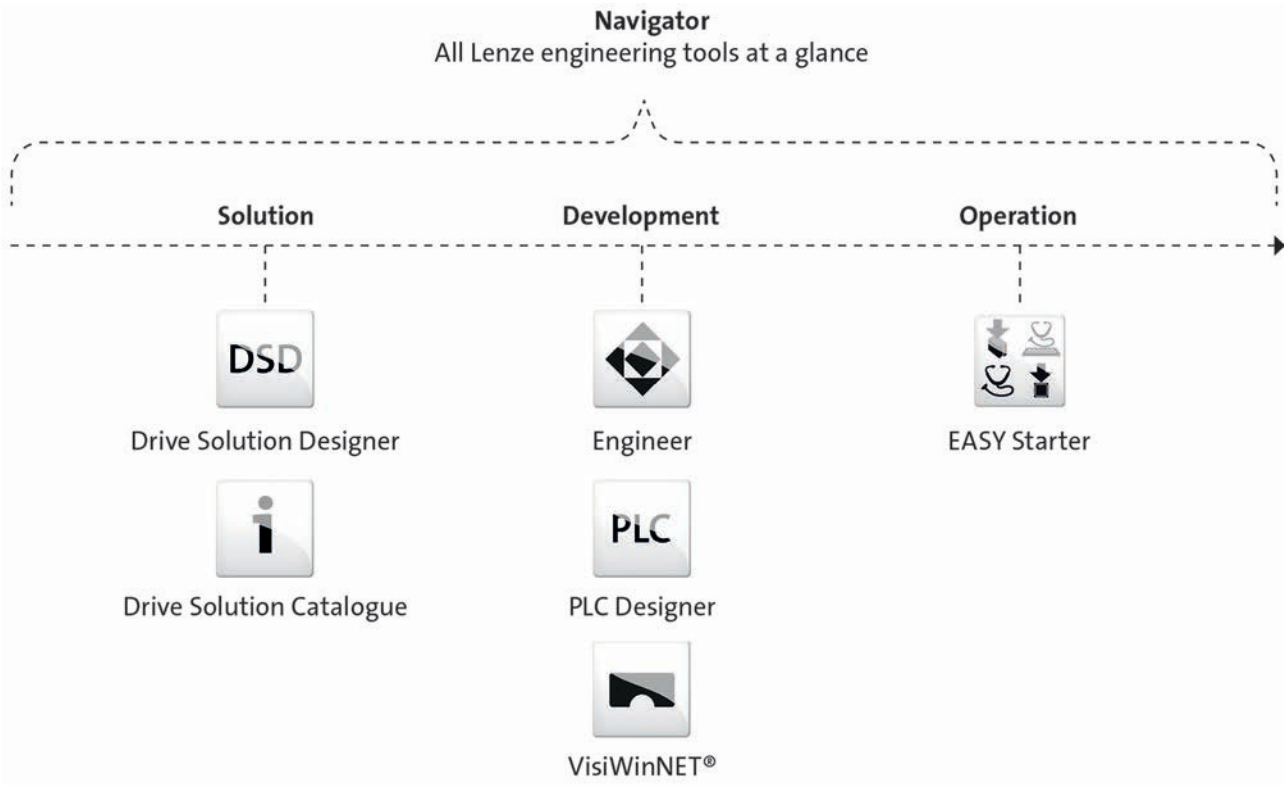


L-force product portfolio

Controls

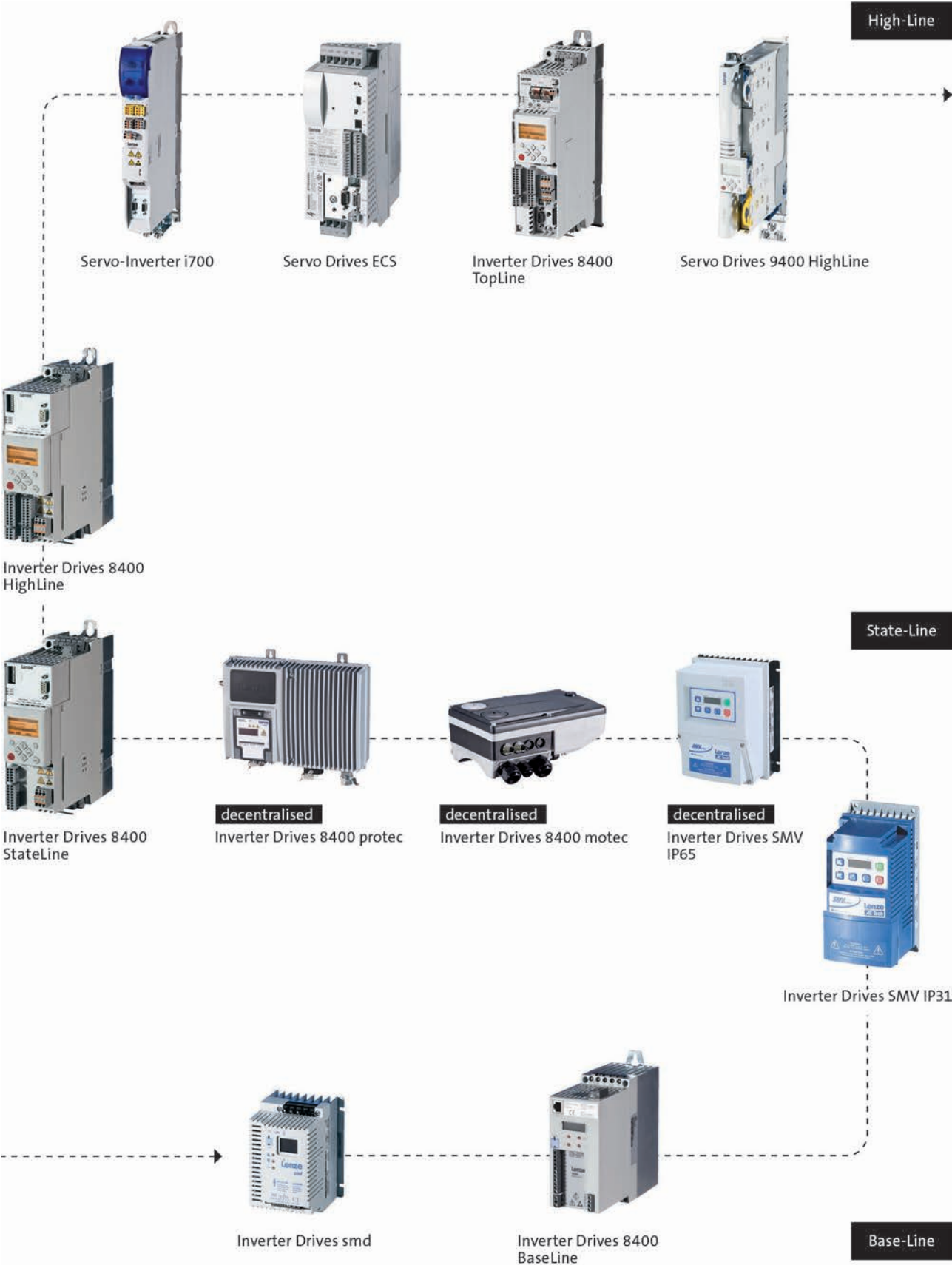


Engineering Tools



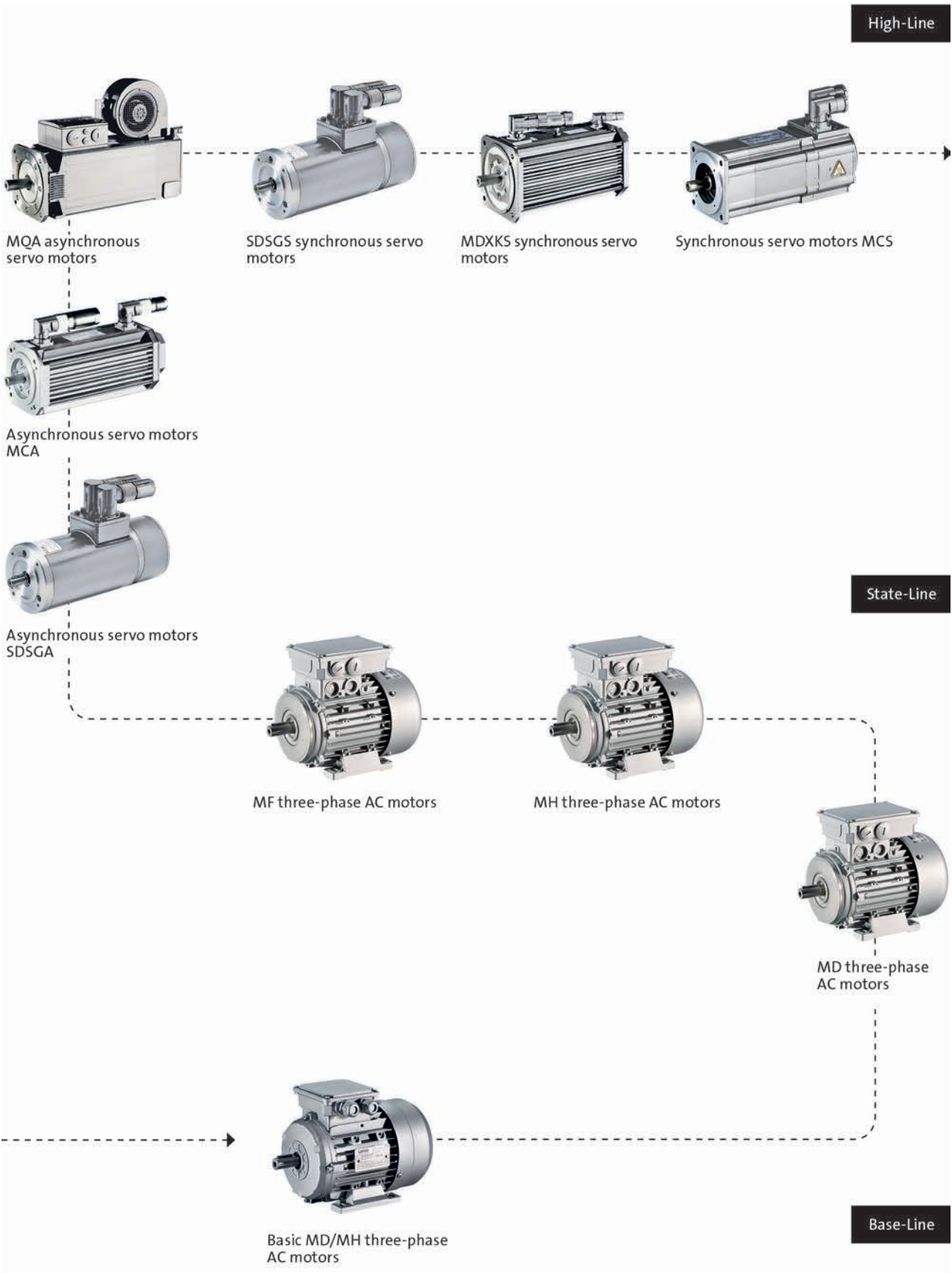
L-force product portfolio

Inverters



L-force product portfolio

Motors



L-force product portfolio

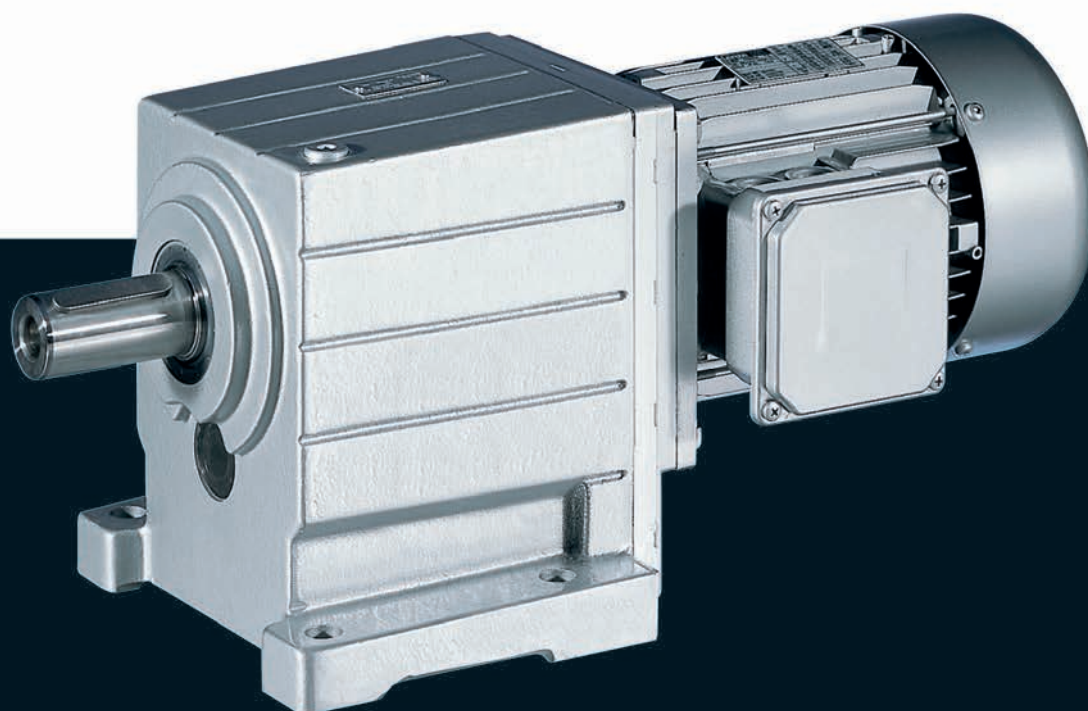
Gearboxes



Gearboxes

GST helical gearboxes

0.06 to 45 kW



GST helical gearboxes

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List of abbreviations

$\eta_{c=1}$		Efficiency
c		Load capacity
f_N	[Hz]	Rated frequency
$F_{ax,max}$	[N]	Max. axial force
$F_{rad,max}$	[N]	Max. radial force
H_{max}	[m]	Site altitude
i		Ratio
J	[kgcm ²]	Moment of inertia
m	[kg]	Mass
M_2	[Nm]	Output torque
n_2	[r/min]	Output speed
n_N	[r/min]	Rated speed
P_N	[kW]	Rated power
$S_{hü}$	[1/h]	Transition operating frequency
$T_{opr,max}$	[°C]	Max. ambient operating temperature
$T_{opr,min}$	[°C]	Min. ambient operating temperature
$U_{N,\Delta}$	[V]	Rated voltage
$U_{N,Y}$	[V]	Rated voltage

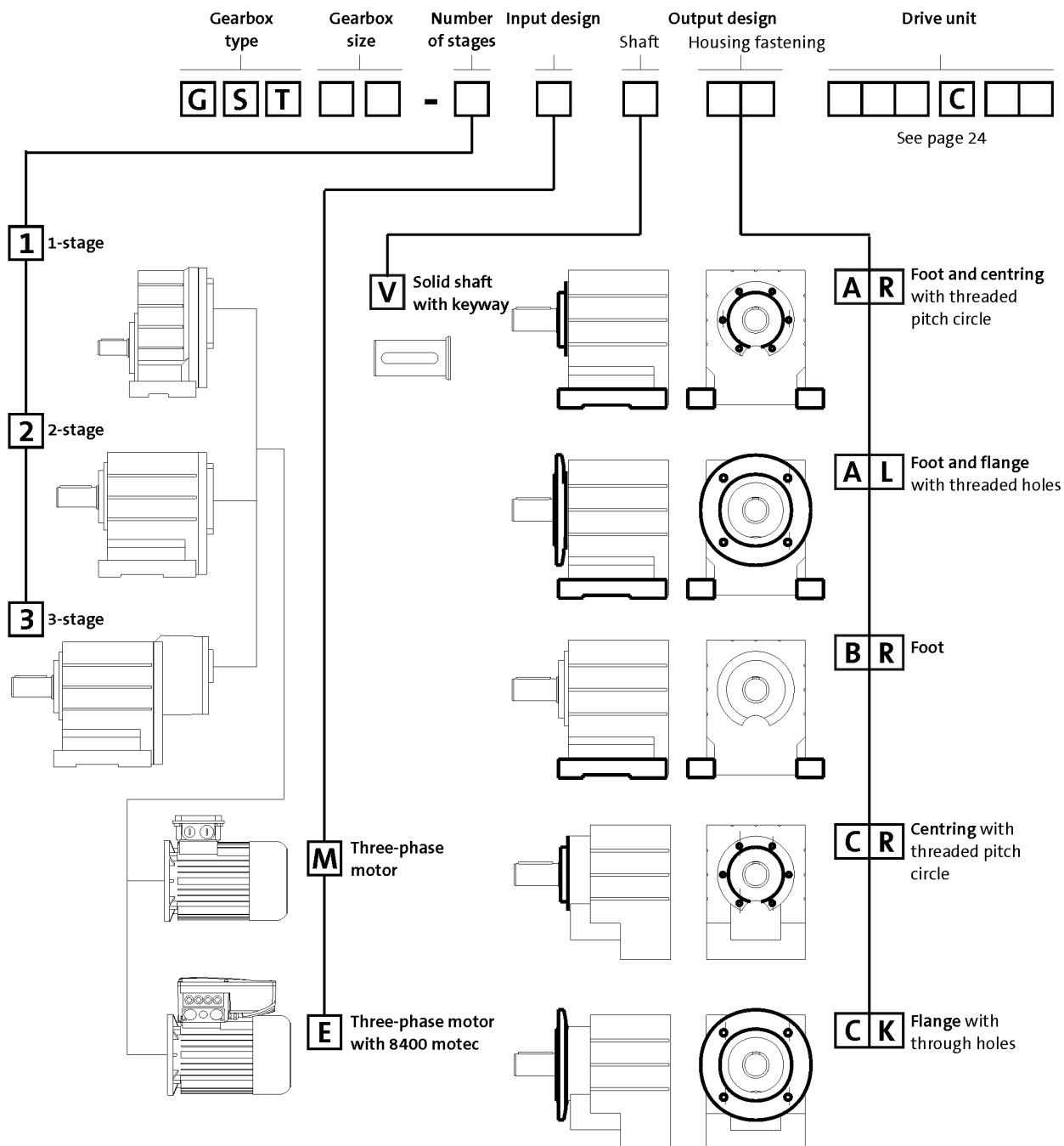
CE	Communauté Européenne
CSA	Canadian Standards Association
DIN	Deutsches Institut für Normung e.V.
EMC	Electromagnetic compatibility
EN	European standard
IEC	International Electrotechnical Commission
IM	International Mounting Code
IP	International Protection Code
NEMA	National Electrical Manufacturers Association
UL	Underwriters Laboratory Listed Product
UR	Underwriters Laboratory Recognized Product
VDE	Verband deutscher Elektrotechniker (Association of German Electrical Engineers)
CCC	China Compulsory Certificate
GOST	Certificate for Russian Federation
cURus	Combined certification marks of UL for the USA and Canada
UkrSEPRO	Certificate for Ukraine

GST helical gearboxes

General information



Product key



6.4

	Output design		
	V	K	L
	d x l [mm]	Øa2 [mm]	Øa2 [mm]
GST03-2	14x28	120/140/160	
	20x40	120/140/160	
GST04-1	16x32	120/140/160	
GST04-2	20x40	120/140/160	120/140
GST05-1	20x40	120/140/160/200	
GST05-2/3	25x50	120/140/160/200	120/140/160
GST06-1	25x50	160/200	

	Output design		
	V	K	L
	d x l [mm]	Øa2 [mm]	Øa2 [mm]
GST06-2/3	30x60	160/200	160/200
GST07-1	30x60	200/250	
GST07-2/3	40x80	200/250	200/250
GST09-1	40x80	250/300	
GST09-2/3	50x100	250/300	250/300
GST11-2/3	60x120	300/350	300/350
GST14-2/3	80x160	350/400	350/400

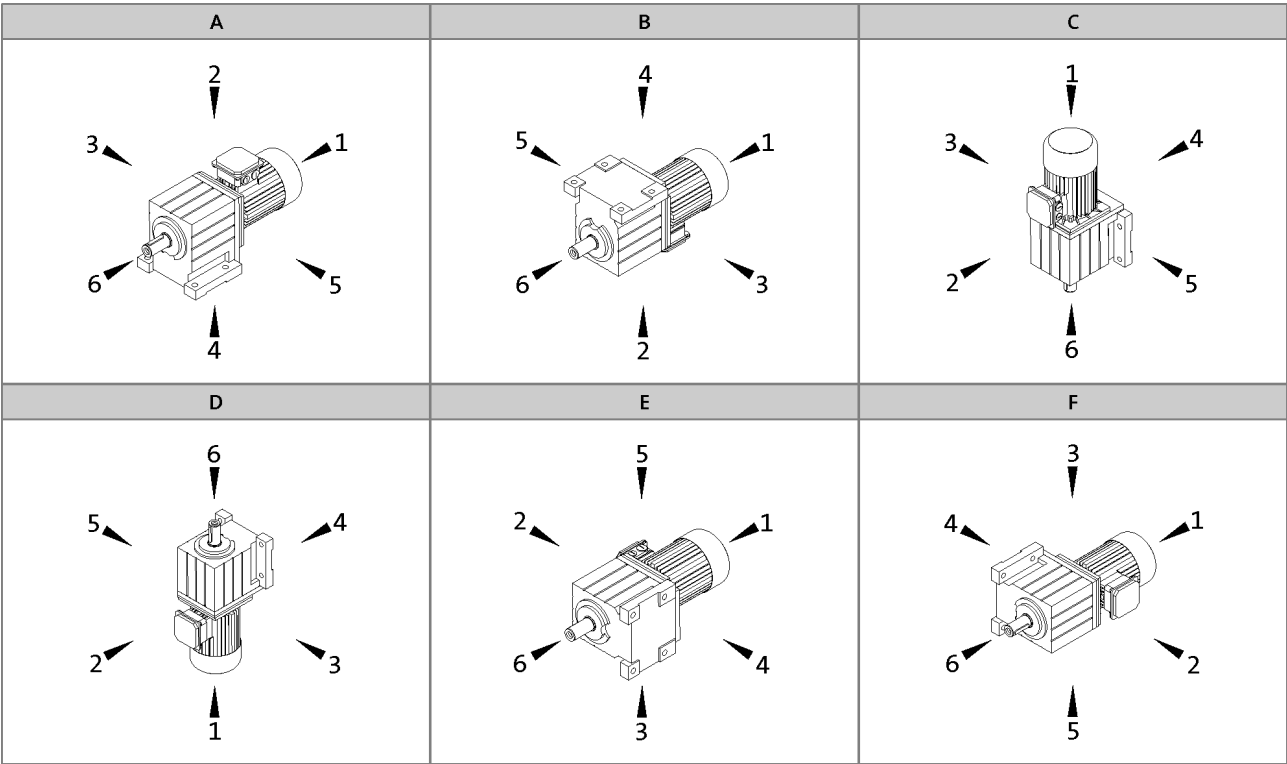
GST helical gearboxes

General information



Product key

Mounting position (A...F) and position of system blocks (1...6)



Terminal box / motec: 2, 3, 4, 5

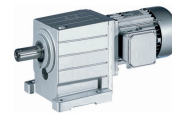
Gearbox designs

Basic versions	
Motor efficiency	Standard efficiency Increased efficiency (IE2)
Surface and corrosion protection	No OKS (unpainted, aluminium housing) for GST03 OKS-G (primer: grey) OKS-S (paint: RAL 7012)
Lubricant	CLP 460 (mineral)
Ventilation	Oil control plugs for GST05 ... 14 Breather elements for GST06 ... 14

Options	
Surface and corrosion protection	OKS-G (primer: grey) for GST03-2 OKS-S (special paint according to RAL) OKS-M (special paint according to RAL) OKS-L (special paint according to RAL)
Lubricant	CLP HC 320 (synthetic) CLP HC 220 USDA H1 (synthetic)
Shaft sealing rings	Driven shaft: Viton
Bearings	Driven shaft: reinforced for GST04 ... 09-2/3
Ventilation	Breather elements for GST05 Compensation reservoir for GST09 ... 14-2 in mounting position C
Nameplate	Metal nameplate (supplied loose) Adhesive nameplate (supplied loose)

GST helical gearboxes

General information



Product information

Lenze provides a geared motor construction kit, which covers a wide range of requirements. Numerous drive-side and output-side options enable precise adaptation of the drive to the specific application. This is the basis for versatile applications and functional scalability of our gearboxes and geared motors.

The modular concept and high power density make extremely compact sizes possible. Optimised teeth profiles and ground gears ensure low-noise operation and low backlash. The gearboxes are of compact and hence space-saving construction.

Designs

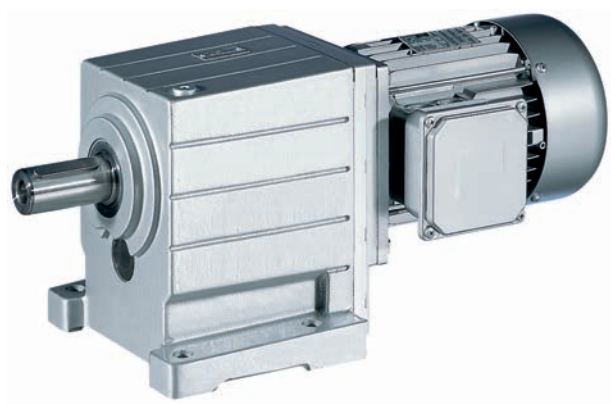
- 1-stage, 2-stage and 3-stage gearboxes
- Solid shaft with keyway
- Foot or flange mounting
- With MD three-phase AC motors (efficiency classes IE1) power range 0.06 ... 45 kW

Robust design with high efficiency

Together with three-phase AC motors, our helical gearboxes form a compact and powerful drive unit. They are rugged in design and feature high permissible radial forces, closely stepped speed reduction ratios and minimum backlash. The gearboxes are available as 1 and 2 and 3-stage versions with a torque of up to 5,920 Nm and a ratio of up to $i = 435$.

Inverters for motor-proximity installation

The Drive Package with decentralised Inverter Drives 8400 motec covers a power range up to 7.5 kW.



Helical geared motor GST07-2M VBR 100-32

GST helical gearboxes

General information



Functions and features

Gearbox type	GST
Housing	
Design	Cuboid
Material	Aluminium / cast iron
Solid shaft	
Design	with keyway to DIN 6885
Tolerance	m6 (d > 50 mm) k6 (d ≤ 50 mm)
Material	Tempered steel C45 or 42CrMo4
Hollow shaft	
Design	
Tolerance	
Material	
Toothed parts	
Design	Optimised tooth flanks and profile geometry Ground tooth flanks
Material	Case-hardened steel
Shaft-hub joint	
	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	
Design	With dust lip
Material	NB / FP
Bearing	
Design	Ball bearing / tapered-roller bearing depending on size and design
Lubricants	
Standard	DIN 51502
Quantities	corresponding to mounting position (see operating instructions)
Mechanical efficiency	
1-stage gearboxes [$\eta_{c=1}$]	0.98
2-stage gearboxes [$\eta_{c=1}$]	0.97
3-stage gearboxes [$\eta_{c=1}$]	0.95
4-stage gearboxes [$\eta_{c=1}$]	
Notes	

GST helical gearboxes

General information



Functions and features

Lubricants

Lenze gearboxes and geared motors are ready for operation on delivery and are filled with lubricants specific to both the drive and the design. The mounting position and design specified in the order are key factors in choosing the volume of lubricant.

The lubricants listed in the lubricant table are approved for use in Lenze drives.

Lubricant table

Mode	CLP 460	CLP HC 320	CLP HC 220 USDA H1
Ambient temperature [°C]	0 ... +40	-25 ... +50	-20 ... +40
Specification	Mineral based oil with additives	Synthetic-based oil (synthetic hydrocarbon / poly-alpha-olefin oil)	
Note			For food processing industry
Changing interval	16000 operating hours not later than after three years (oil temperature 70...80 °C)	25000 operating hours not later than after three years (oil temperature 70...80 °C)	16000 operating hours not later than after three years (oil temperature 70...80 °C)
Fuchs	Fuchs Renolin CLP 460	Fuchs Renolin Unisyn CLP 320	bremer & leguil Cassida Fluid GL 220
Klüber	Klüberoil GEM1-460 N	Klübersynth GEM4-320 N	Klüberoil 4 UH1-220 N
Shell	Shell Omala 460	Shell Omala Oil HD 320	

- Please contact your Lenze office if you are operating at ambient temperatures in areas up to < -20 °C > or up to +40°C.



Functions and features

Surface and corrosion protection

For optimum protection of geared motors against ambient conditions, the surface and corrosion protection system (OKS) offers tailor-made solutions.

Various surface coatings combined with other protective measures ensure that the geared motors operate reliably even at high air humidity, in outdoor installations or in the presence of atmospheric impurities. Any colour from the RAL Classic collection can be chosen for the top coat. The geared motors are also available unpainted (no surface and corrosion protection).

Surface and corrosion protection system	Applications	Measures
	Catalogue text	Catalogue text
OKS-G (primed)	Dependent on subsequent top coat applied	1K priming coat (grey) - Zinc-coated screws - Rust-free breather elements Optional measures - Stainless steel nameplate
OKS-S (small)	- Standard applications - Internal installation in heated buildings - Air humidity up to 90%	- Surface coating as per corrosivity category C1 (in line with EN 12944-2) - Zinc-coated screws - Rust-free breather elements Optional measures - Stainless steel nameplate
OKS-M (medium)	- Internal installation in non-heated buildings - Covered, protected external installation - Air humidity up to 95%	- Surface coating as per corrosivity category C2 (in line with EN 12944-2) - Zinc-coated screws - Rust-free breather elements Optional measures - Stainless steel shaft - Stainless steel nameplate - Rust-free shrink disc (on request)
OKS-L (high)	- External installation - Air humidity above 95% - Chemical industry plants - Food industry	- Surface coating as per corrosivity category C3 (in line with EN 12944-2) - Blower cover and B end shield additionally primed - Cable glands with gaskets - Corrosion-resistant brake with cover ring, stainless friction plate, and chrome-plated armature plate (on request) - All screws/screw plugs zinc-coated - Stainless breather elements - Threaded holes that are not used are closed by means of plastic plugs Optional measures - Sealed recesses on motor (on request) - Stainless steel shaft - Stainless steel nameplate - Rust-free shrink disc (on request) - Additional priming coat on cast iron fan - Oil expansion tank and torque plates painted separately and supplied loose

GST helical gearboxes

General information



Functions and features

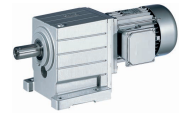
Structure of surface coating

Surface and corrosion protection system	Corrosivity category	Surface coating	Colour
	DIN EN ISO 12944-2	Structure	
Without OKS (uncoated)		Dipping primed gearbox	
OKS-G (primed)		Dipping primed gearbox 1K priming coat	
OKS-S (small)	C1	Dipping primed gearbox 2K-PUR top coat	Standard: RAL 7012 Optional: RAL Classic
OKS-M (medium)	C2	Dipping primed gearbox 1K priming coat 2K-PUR top coat	Standard: RAL 7012 Optional: RAL Classic
OKS-L (high)	C3	Dipping primed gearbox 2K-EP priming coat 2K-PUR top coat	Standard: RAL 7012 Optional: RAL Classic

- The gearboxes GST 03 have an aluminium housing, therefore a dipping primer is dispensed with in the case of these gearboxes.

GST helical gearboxes

General information



Functions and features

Ventilation

Gearboxes without ventilation

No ventilation is required for gearboxes GST03 ... 04.

Gearboxes that may optionally be equipped with ventilation

Special measures are not usually required when using gearbox GST05. In borderline cases, e.g. at input speeds > 2000 r/min, we recommend the use of breather elements which we can supply if required.

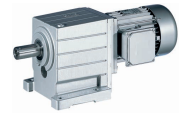
Gearboxes with ventilation

Gearboxes GST06...14 are supplied with breather elements as standard.

Special measures for mounting position C (motor on top)

We recommend that an oil compensation reservoir is always used with gearbox sizes G□□09...14 in this mounting position. This reservoir can be purchased as an option. For illustrations and measures see accessories chapter.

This is not required at higher ratios or low input speeds. Please contact Lenze in this event.



Dimensioning

General information about the data provided in this catalogue

Powers, torques and speeds

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

- Operating time/day = 8 h (100% OT)
- Duty class I for up to 10 switching operations/h
- Mounting positions and designs in this catalogue
- Standard lubricant
- $T_{amb} = 20\text{ °C}$ for gearboxes,
 $T_{amb} = 40\text{ °C}$ for motors (in accordance with EN 60034)
- Site altitude $\leq 1000\text{ m amsl}$
- The selection tables provide the permissible mechanical powers and torques. For notes on the thermal power limit, see chapter drive dimensioning.
- The rated power specified for motors and geared motors applies to operating mode S1 (in accordance with EN 60034).

Under different operating conditions, the values obtained may vary from those listed here.

In the case of extreme operating conditions, please consult your Lenze sales office.



Dimensioning

Thermal power limit

The thermal power limit, defined by the heat balance, limits the permissible gearbox continuous power. It may be less than the mechanical power ratings listed in the selection tables.

The thermal power limit is affected by:

- the churning losses in the lubricant. These are determined by the mounting position and the circumferential speed of the wheels
- the load and the speed
- the ambient conditions: temperature, air circulation, input or dissipation via shafts and the foundation

Please consult your Lenze subsidiary

- if the following input speeds n_1 are exceeded on a continuous basis (continuous is defined as more than 8 h/day):

Motor frame size	Mounting position A, B, E, F	Mounting position C, D
063 ... 100	3000 r/min	3000 r/min
112 ... 132	3000 r/min	1500 r/min
160 ... 225	2000 r/min	1500 r/min

- if the following input speeds n_1 are exceeded:

Motor frame size	Mounting position A, B, E, F	Mounting position C, D
063 ... 100	4000 r/min	3000 r/min
112 ... 132	4000 r/min	2000 r/min
160 ... 225	3000 r/min	1500 r/min

- or if you are using the following gearbox type, size and ratio combinations at an input speed of $n_1 > 1500$ r/min:

Gearbox type	Gearbox size	Ratio i
GST helical gearbox	07, 09, 11, 14	≤ 10

Possible ways of extending the application area

- synthetic lubricant (option)
- shaft sealing rings made from FP material/Viton (option)
- reduction in lubricant quantity
- cooling of the geared motor by means of air convection on the machine/system



Dimensioning

Load capacity and application factor

Load capacity *c* of gearbox

Rated value for the load capacity of Lenze 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 application factor *k* calculated for the application.

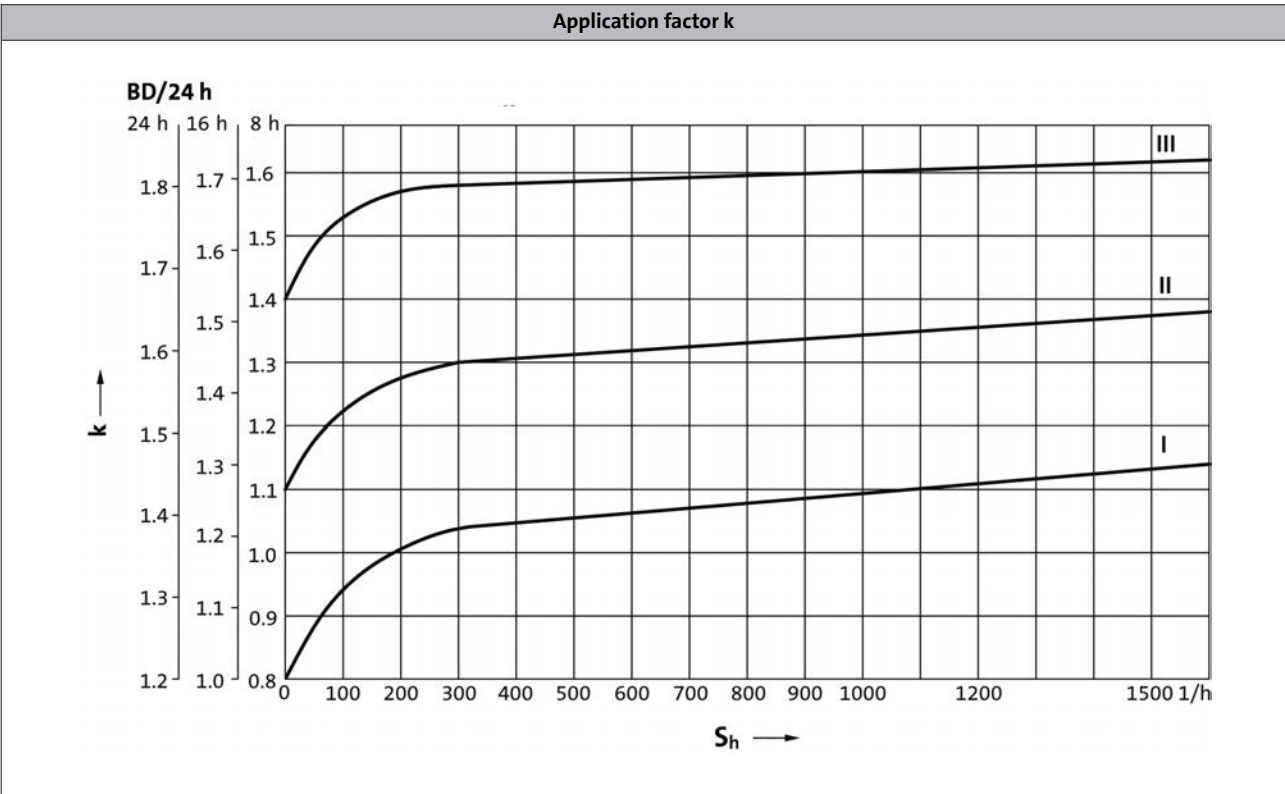
Application factor *k* (according to DIN 3990)

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 influences

Duty class	Load type
I	Smooth operation, small or light jolts
II	Uneven operation, average jolts
III	Uneven operation, severe jolts and/or alternating load

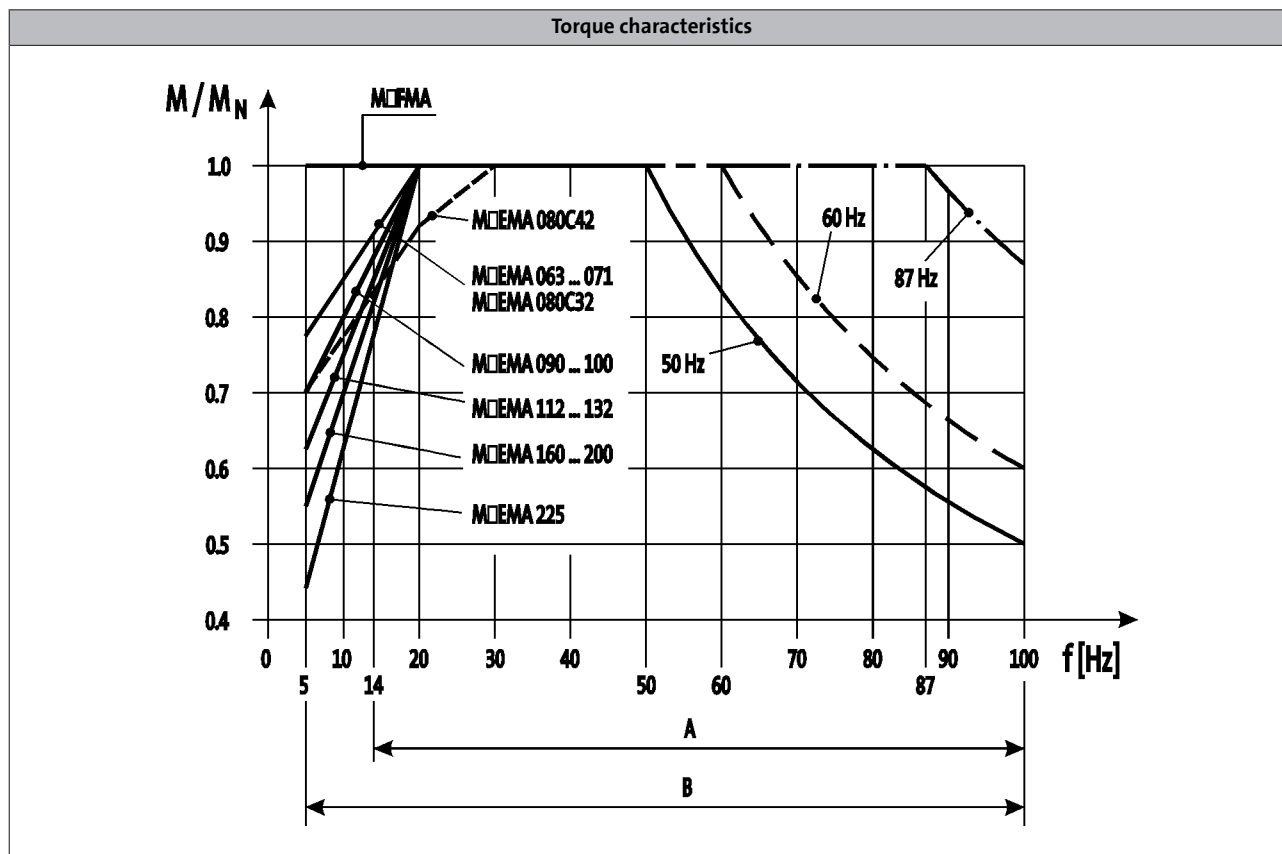




Dimensioning

Torque derating at low motor frequencies

Motor size-dependent torque reduction, taking into account the thermal response during operation on the inverter.



A = Operation with integral fan and brake

B = Operation with integral fan and brake control "Holding current reduction"

You can use the Drive Solution Designer for precise drive dimensioning.

6.4

The Drive Solution Designer helps you to carry out a fast and high-quality drive dimensioning. The software includes well-founded and proven knowledge on drive applications and electro-mechanical drive components.

Please contact your Lenze sales office.



Dimensioning

Notes on the selection tables

The selection tables show the available combinations of gearbox type, number of stages, ratio and motor. The following legend indicates the structure of the selection tables.

Gearbox type

↓

GST helical gearbox

Technical data

Selection tables

Rated speed n_N of the drive motor

Product key of geared motor

Rated power P_N of the drive motor in relation to the rated frequency

► 50 Hz, 60 Hz: $P_N = 0.75$ kW

n_N	1410 r/min			1720 r/min			i	Product key of geared motor				
f_N	50 Hz			60 Hz								
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c						
	881	8.0	2.4	1069	6.6	2.8	1.600	GST04-1M □□□080C32	76			
	689	10	2.2	835	8.4	2.6	2.048	GST04-1M □□□080C32	76			

Output speed n_2

Output torque M_2 (constant for all listed frequencies)

The load capacity c of the gearbox c is the ratio of the gearbox's rated torque to the rated torque of the three-phase motor (calculated in respect of its application to the output shaft). c must always be greater than the application factor k determined for the application

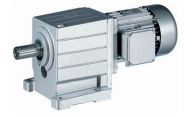
Ratio i

Page number for dimensions

$$c = \frac{M_{2,zul}}{M_{1N} \cdot i \cdot \eta_{Getr}} > k$$

GST helical gearboxes

General information



Dimensioning

Notes on the selection tables

Motor voltages

The power values and torques indicated in the selection tables relate to the following motor voltages:

- 50 Hz : Δ 230 V / Y 400 V
- 60 Hz : Δ 265 V / Y 460 V
- 87 Hz : Δ 400 V

Operation at 87 Hz

In 87 Hz operation, the three-phase AC motor (which is designed for a voltage of Δ 230 V / Y 400 V at 50 Hz) is operated on an inverter with 400 V rated voltage in a delta connection. It is important to note here that the inverter must be configured for 87Hz output.

This offers the following advantages over 50 Hz operation:

- the setting range of the motor is increased by a factor of 1.73.
- the motor can then provide around 1.73 times greater output, which in turn allows a smaller and more affordable motor to be selected for the application.
- the efficiency of the motor is also improved.

GST helical gearboxes

General information



Notes on ordering

We want to be sure that you receive the correct products in good time.

To allow us to achieve this we need:

- your address and your company data
- our product key for the individual products in this catalogue
- your delivery date and delivery address

Ordering procedure

Please use the ordering information checklist to ensure that you provide all the ordering information required for the various products.

The ordering information checklist, the product key, the basic versions, options, mounting position and position of the system blocks will be found in the General – Product key section.

A list of Lenze's worldwide sales offices can be found on the Internet: www.Lenze.com.

GST helical gearboxes

General information



Ordering details checklist

☐ Offer

Page __ of __

☐ Order

Customer No.

--	--	--	--	--	--	--	--

Job No.

--	--	--	--	--	--	--	--	--	--

Fax No.

Sender

Company

Street/P.O. Box

P.O. Box, City

Date

Signature

Made out by (name)

Department

Telephone No.

Delivery address (if different)

Street/P.O. Box

P.O. Box, City

Desired delivery date

Dispatching notes

Invoice recipient (if different)

Street/P.O. Box

Postal code, City

GST helical gearboxes

General information



Ordering details checklist

Customer No.

Job No.

Page __

Quantity

Efficiency class

☐

Standard efficiency

☐

High efficiency (IE2)

Rated frequency

☐

50 Hz

☐

60 Hz

☐

87 Hz

Ratio i

GST - 1 2 3 M E V A R B K C L

Motor frame size C

Solid shaft d = mm (only with GST03)

Flange a₂ = mm

Mounting position

A B C D E F

☐ ☐ ☐ ☐ ☐ ☐

Position of system blocks

Terminal box

2 3 4 5

☐ ☐ ☐ ☐

Surface and corrosion protection

GST03

☐

Without OKS (unpainted)

GST04 ... 14

☐

OKS-S colour: RAL 7012

☐

OKS-G (primed)

Options

Special lubricants

☐

CLP HC 320 (synthetic)

☐

CLP HC 220 USDA H1 (for the food industry)

Surface and corrosion protection

☐

OKS-S (small)

☐

OKS-M (medium)

RAL

☐

OKS-L (high)

☐

OKS-G (primed) only with GST03

Output shaft bearing

☐

Reinforced bearing for GST04 ... 09-2

Shaft sealing rings

☐

Viton

Breathing

☐

Breather elements for GST05

☐

Compensation reservoir in mounting position for GST 09 ... 14-2

GST helical gearboxes

General information



Ordering details checklist

Three-phase AC motors options

Customer No.

Job No.

Page ____

Motor connection

Terminal box

- ☐ with plug-in connector ICN 6-pin.
Adhere to permissible rated motor current 20 A!
- ☐ with plug-in connector ICN 8-pin.
Adhere to permissible rated motor current 20 A!
- ☐ with plug-in connector HAN10E.
Adhere to permissible rated current 16 A!
- ☐ with plug-in connector HAN-Modular.
Adhere to permissible rated current 16 / 40 A!

Cable entry

only with M□□MAXX/LL063 ... 132
or terminal box with plug-in connector
in position

1	2	3	4	5

Blower

☐ 1~ ☐ 3~

☐ Terminal box with plug-in connector ICN

Terminal box position

2	3	4	5

Spring-applied brake

Brake version

☐ Standard ☐ Longlife

Brake size

Characteristic torque

 Nm

Rated voltage

AC	DC	
		V

Rectifier Only in the case of AC supply voltage

☐ Half-wave rectifier	☐ Bridge rectifier
☐ Bridge/half-wave rectifier (overexcitation)	☐ Bridge/half-wave rectifier (holding current reduction)

Brake options

Manual release lever
in position

2	3	4	5

☐ Low-noise version
(Standard in the case of brake with speed/position encoder)

GST helical gearboxes

General information



Ordering details checklist

Three-phase AC motors options

Customer No.

Job No.

Page ____

Speed/position
encoder

Resolver ☐ RS1

Incremental encoder HTL ☐ IG128-24V-H ☐ IG512-24V-H ☐ IG1024-24V-H ☐ IG2048-24V-H

Incremental encoder TTL ☐ IG512-5V-T ☐ IG1024-5V-T ☐ IG2048-5V-T

Feedback with ICN connector ☐ IG128-24V-H not possible with plug-in connector!

Motor protection

☐ PTC

☐ KTY 83-110

☐ KTY 84-130

Approval

☐ UL/CSA
approval: cURus

☐ CCC

☐ China Energy Label

Further options

Indication of supply voltage only for motor frame sizes 112C32 to 225C22

☐ Δ; 400V-50Hz; 460V-60Hz

☐ Y/Δ; 400/230V-50Hz; 460/265V-60Hz
(-/400V-87Hz possible in operation with
frequency inverter)

☐ Protection cover

☐ 2nd shaft end

☐ Handwheel

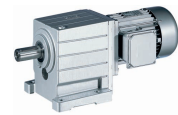
☐ Increased centrifugal mass

☐ 2nd nameplate (adhesive nameplate/metal nameplate)

GST helical gearboxes

General information





Permissible radial and axial forces at output

Permissible radial force

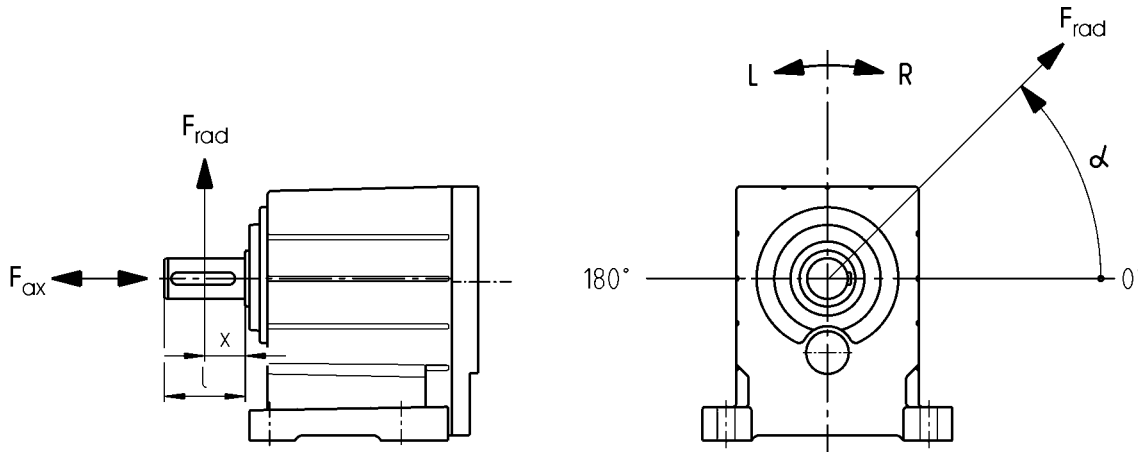
$F_{rad,per} = \min(f_w \times f_{\alpha} \times F_{rad,max} ; f_w \times F_{rad,max} \text{ at } n_2 \leq 50 \text{ r/min})$

Permissible axial force

$F_{ax,per} = F_{ax,max} \text{ if } F_{rad} = 0$

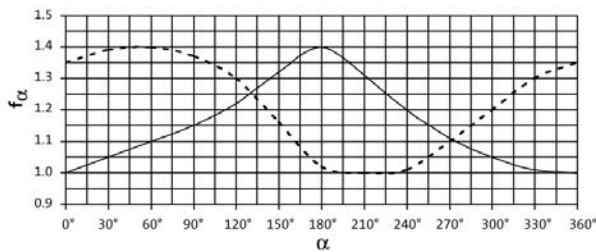
If F_{rad} and $F_{ax} \neq 0$, please contact Lenze.

Application of forces

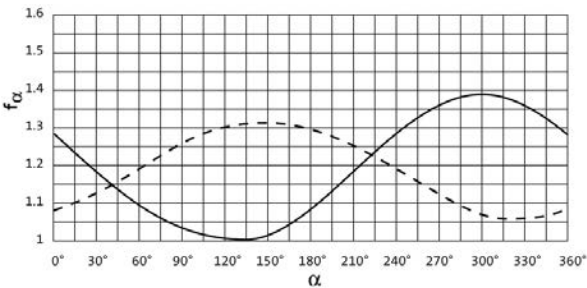


Effective direction factor f_{α} at output shaft

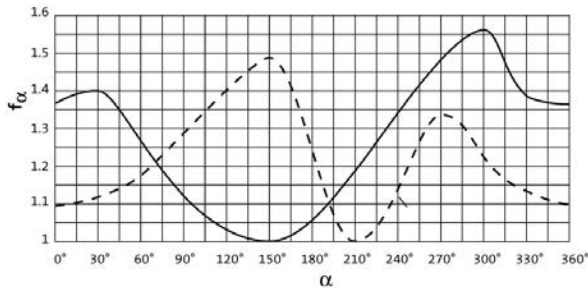
GST03-2



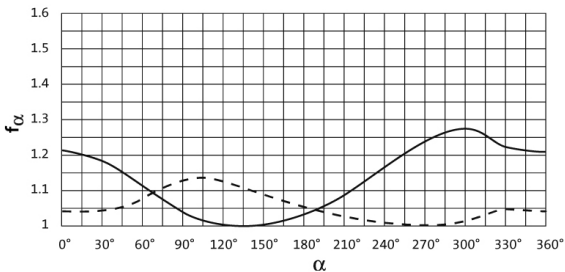
GST04...09-1



GST04...09-2, 3



GST11...14-2, 3

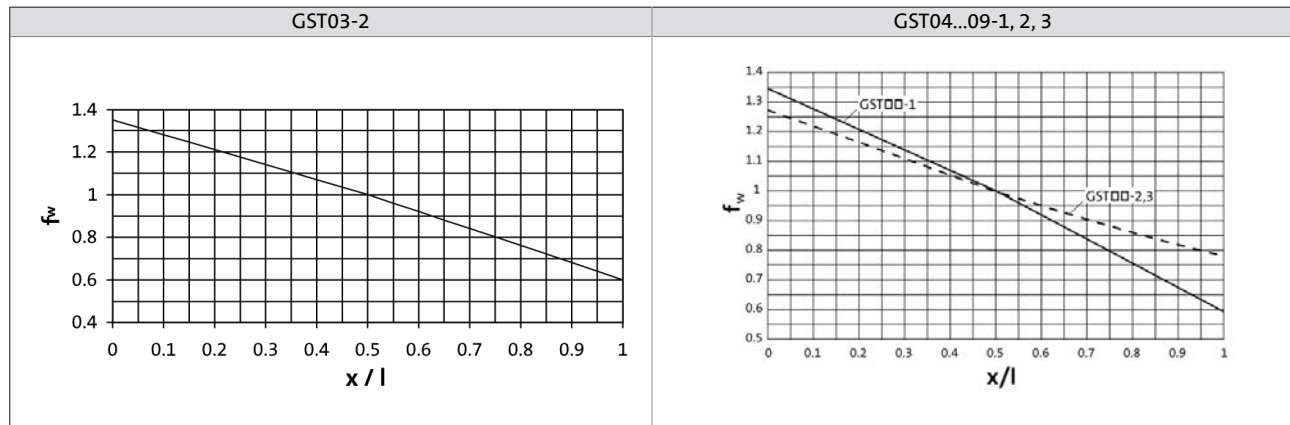


———— Direction of rotation R
- - - - - Direction of rotation L



Permissible radial and axial forces at output

Additional load factor f_w at output shaft



GST04-1

Size	n_2 [r/min]								
Gearbox	2500	1600	1000	600	400	200	125	80	≤50

Max. radial force, Solid shaft									
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
GST04	100	180	440	600	850	1050	1050	1050	1050
GST05	100	250	550	750	1400	2000	2300	2300	2300
GST06	200	600	800	800	1100	2200	2900	3500	3500
GST07	700	1000	1200	1300	1900	3000	3900	4700	5300
GST09	1750	2200	2500	2500	3500	6200	7900	9000	9500

Max. axial force, Solid shaft									
	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
GST04	600	800	1000	1300	1400	1400	1400	1400	1400
GST05	800	1100	1400	2000	2000	2000	2000	2000	2000
GST06	900	1200	1500	2000	2500	2500	2500	2500	2500
GST07	1200	1600	2000	2700	3300	3700	3700	3700	3700
GST09	2500	3400	4300	5700	6800	7000	7000	7000	7000

- Application of force F_{rad} : centre of shaft journal ($x = l/2$)
- $F_{ax,max}$ only valid with $F_{rad} = 0$



Permissible radial and axial forces at output

GST□□-2 / 3 with standard bearings

Size	n_2 [r/min]									
Gearbox	1000	630	400	250	160	100	63	40	25	≤16

Max. radial force, Solid shaft										
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
GST03	100	300	630	710	800	920	1100	1400	1500	1500
GST04	730	950	1250	1450	1700	2100	2500	2650	2650	2650
GST05	1150	1500	1950	2200	2600	3000	3500	3800	3900	3900
GST06	140	750	2350	2600	3100	3600	4300	4350	4350	4350
GST07	140	2050	3400	3800	4500	5400	6400	7600	9100	9500
GST09	1500	1950	6800	7600	9400	11500	11500	11500	11500	11500
GST11	11500	14400	17000	19000	21000	21000	21000	21000	21000	21000
GST14	16600	20700	24000	27000	31000	36000	39000	40000	40000	40000

Max. axial force, Solid shaft										
	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
GST03	300	400	600	700	800	900	1000	1000	1000	1000
GST04	600	800	1100	1300	1650	2000	2000	2000	2000	2000
GST05	1200	1600	2000	2300	2650	3100	3600	3600	3600	3600
GST06	500	600	850	900	1250	1800	2600	3600	4800	4800
GST07	1100	1500	1900	2200	2900	3900	5300	7000	7000	7000
GST09	1300	1800	2300	2800	4000	5600	8100	11000	12000	12000
GST11	5700	7600	9500	10000	11000	14000	16000	16000	16000	16000
GST14	9000	12000	15000	16000	18000	20000	20000	20000	20000	20000

- Application of force F_{rad} : centre of shaft journal ($x = l/2$)
- $F_{ax,max}$ only valid with $F_{rad} = 0$



Permissible radial and axial forces at output

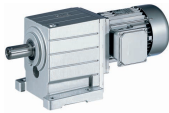
GST□□-2 / 3 with reinforced bearing

Size	n_2 [r/min]									
Gearbox	1000	630	400	250	160	100	63	40	25	≤16

Max. radial force, Solid shaft (reinforced bearings))										
	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$	$F_{rad,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
GST04	1900	2350	2850	3150	3550	3750	3750	3750	3750	3750
GST05	3350	3950	4900	5400	5400	5400	5400	5400	5400	5400
GST06	4250	5100	6300	7000	7700	7700	7700	7700	7700	7700
GST07	5650	6850	8500	9500	10500	12500	13000	13000	13000	13000
GST09	11300	14000	16500	17000	17000	17000	17000	17000	17000	17000

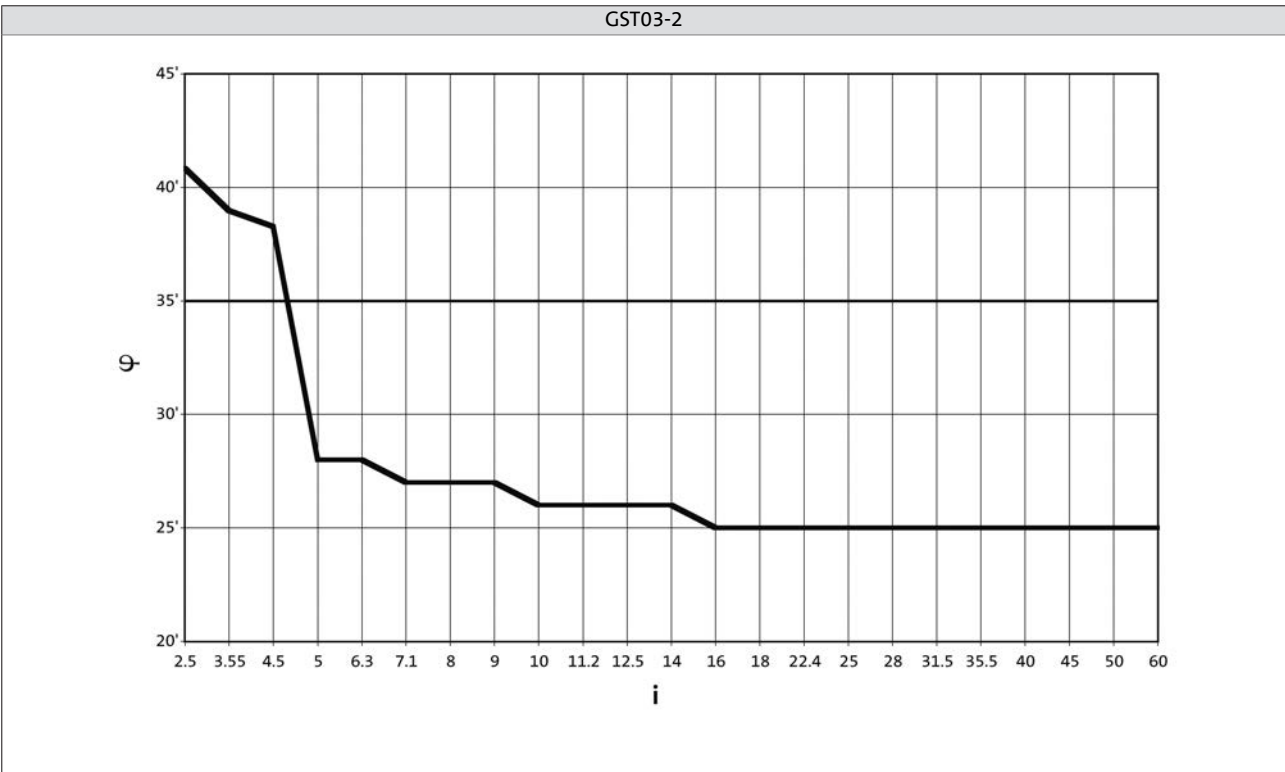
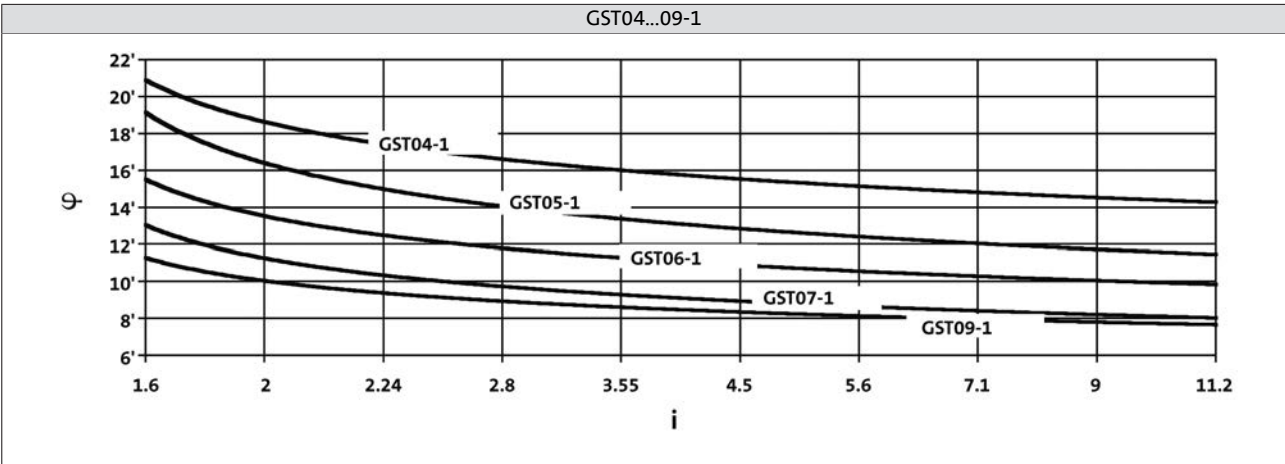
Max. axial force, Solid shaft (reinforced bearings))										
	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$	$F_{ax,max}$
	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]	[N]
GST04	1000	1300	1700	1900	2200	2500	2500	2500	2500	2500
GST05	2100	2800	3600	3900	4300	4500	4500	4500	4500	4500
GST06	2100	2800	3500	3600	4200	4900	5700	5700	5700	5700
GST07	3300	4400	5500	6100	7100	8300	9000	9000	9000	9000
GST09	4800	6400	8000	9000	10500	12500	14000	14000	14000	14000

- Application of force F_{rad} : centre of shaft journal ($x = l/2$)
- $F_{ax,max}$ only valid with $F_{rad} = 0$



Output backlash in angular minutes

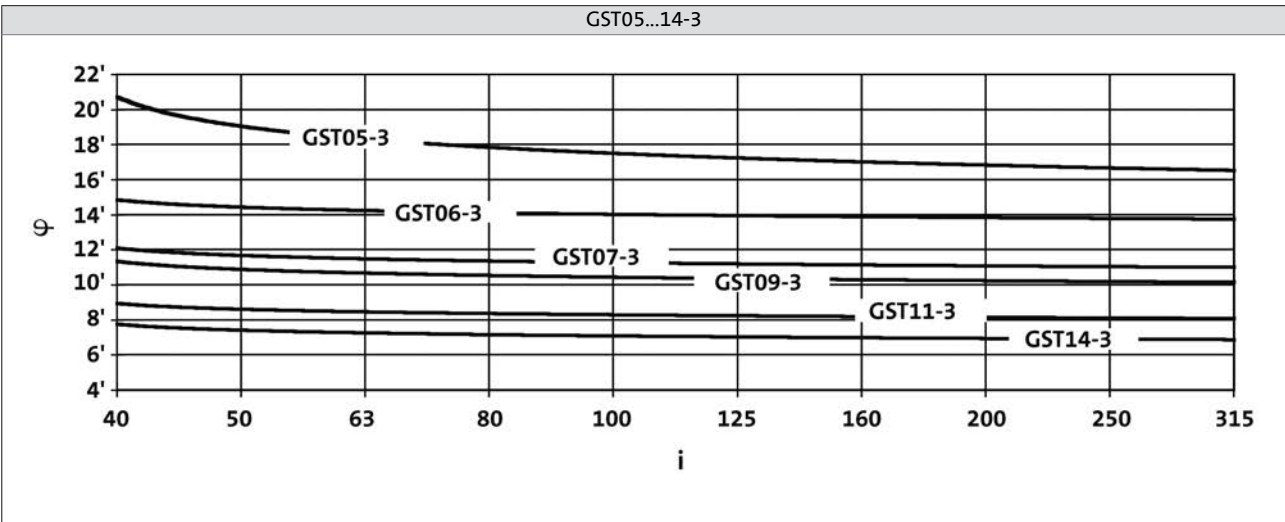
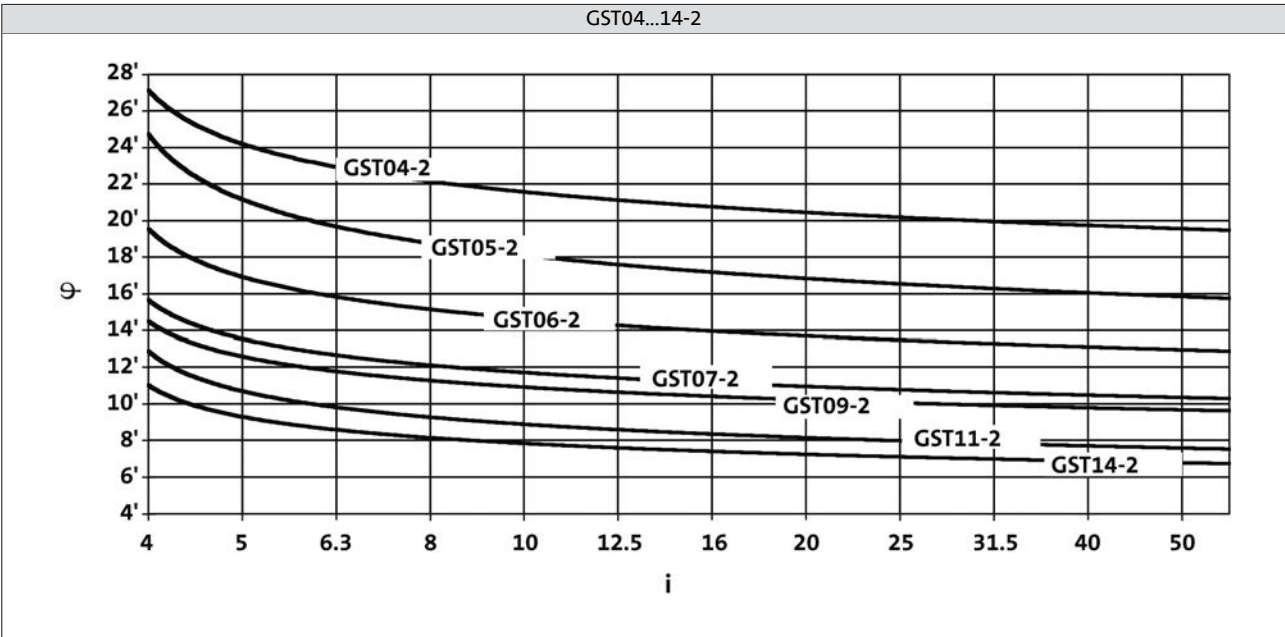
► Backlash ϕ depending on ratio i





Output backlash in angular minutes

► Backlash ϕ depending on ratio i





Moments of inertia

GST□□-1

- Moment of inertia (J) depending on ratio i

Gearbox			GST04
1.600	J	[kgcm ²]	0.267
2.048	J	[kgcm ²]	0.194
2.240	J	[kgcm ²]	0.172
2.857	J	[kgcm ²]	0.126
3.500	J	[kgcm ²]	0.099
4.400	J	[kgcm ²]	0.067
5.667	J	[kgcm ²]	0.047
7.182	J	[kgcm ²]	0.031
9.000	J	[kgcm ²]	0.022
11.857	J	[kgcm ²]	0.013

Gearbox			GST06
1.600	J	[kgcm ²]	2.010
2.048	J	[kgcm ²]	1.460
2.240	J	[kgcm ²]	1.270
2.857	J	[kgcm ²]	0.969
3.500	J	[kgcm ²]	0.736
4.556	J	[kgcm ²]	0.481
5.667	J	[kgcm ²]	0.359
7.333	J	[kgcm ²]	0.226
8.900	J	[kgcm ²]	0.167
11.250	J	[kgcm ²]	0.109

Gearbox			GST09
1.560	J	[kgcm ²]	22.200
2.048	J	[kgcm ²]	15.600
2.333	J	[kgcm ²]	12.200
2.810	J	[kgcm ²]	9.580
3.444	J	[kgcm ²]	7.300
4.667	J	[kgcm ²]	4.600
5.667	J	[kgcm ²]	3.510
7.333	J	[kgcm ²]	2.260
8.900	J	[kgcm ²]	1.660
11.250	J	[kgcm ²]	1.110

Gearbox			GST05
1.600	J	[kgcm ²]	0.760
2.048	J	[kgcm ²]	0.549
2.240	J	[kgcm ²]	0.480
2.857	J	[kgcm ²]	0.354
3.500	J	[kgcm ²]	0.272
4.556	J	[kgcm ²]	0.175
5.667	J	[kgcm ²]	0.129
7.333	J	[kgcm ²]	0.062
8.900	J	[kgcm ²]	0.060
11.375	J	[kgcm ²]	0.039

Gearbox			GST07
1.625	J	[kgcm ²]	6.120
2.000	J	[kgcm ²]	4.780
2.240	J	[kgcm ²]	4.020
2.857	J	[kgcm ²]	2.690
3.500	J	[kgcm ²]	2.150
4.556	J	[kgcm ²]	1.370
5.583	J	[kgcm ²]	1.050
7.333	J	[kgcm ²]	0.664
8.900	J	[kgcm ²]	0.494
11.250	J	[kgcm ²]	0.320

- The moments of inertia relate to the drive shaft of the gearbox.
- The total moment of inertia is calculated by adding the values of the gearbox, motor and accessories.



Moments of inertia

GST□□-2

- Moment of inertia (J) depending on ratio i

Gearbox			GST03
2.597	J	[kgcm ²]	0.260
3.413	J	[kgcm ²]	0.169
4.368	J	[kgcm ²]	0.117
5.312	J	[kgcm ²]	0.179
5.965	J	[kgcm ²]	0.173
6.982	J	[kgcm ²]	0.122
7.840	J	[kgcm ²]	0.119
8.935	J	[kgcm ²]	0.089
10.033	J	[kgcm ²]	0.086
11.429	J	[kgcm ²]	0.059
12.833	J	[kgcm ²]	0.057
14.836	J	[kgcm ²]	0.041
16.660	J	[kgcm ²]	0.040
19.013	J	[kgcm ²]	0.028
21.350	J	[kgcm ²]	0.027
24.595	J	[kgcm ²]	0.019
27.618	J	[kgcm ²]	0.019
32.000	J	[kgcm ²]	0.012
35.933	J	[kgcm ²]	0.012
41.455	J	[kgcm ²]	0.008
46.550	J	[kgcm ²]	0.008
52.909	J	[kgcm ²]	0.005
59.413	J	[kgcm ²]	0.005

Gearbox			GST04
2.956	J	[kgcm ²]	0.337
3.333	J	[kgcm ²]	0.324
4.053	J	[kgcm ²]	0.312
4.571	J	[kgcm ²]	0.300
5.187	J	[kgcm ²]	0.222
5.850	J	[kgcm ²]	0.215
6.400	J	[kgcm ²]	0.189
7.040	J	[kgcm ²]	0.264
8.000	J	[kgcm ²]	0.257
9.010	J	[kgcm ²]	0.193
9.856	J	[kgcm ²]	0.170
11.200	J	[kgcm ²]	0.166
12.571	J	[kgcm ²]	0.126
14.286	J	[kgcm ²]	0.123
15.400	J	[kgcm ²]	0.098
17.500	J	[kgcm ²]	0.097
19.360	J	[kgcm ²]	0.063
22.000	J	[kgcm ²]	0.062
24.933	J	[kgcm ²]	0.044
28.333	J	[kgcm ²]	0.043
31.600	J	[kgcm ²]	0.030
35.909	J	[kgcm ²]	0.030
39.600	J	[kgcm ²]	0.021
45.000	J	[kgcm ²]	0.021
52.171	J	[kgcm ²]	0.013
59.286	J	[kgcm ²]	0.013

- The moments of inertia relate to the drive shaft of the gearbox.
- The total moment of inertia is calculated by adding the values of the gearbox, motor and accessories.



Moments of inertia

GST□□-2

- Moment of inertia (J) depending on ratio i

Gearbox			GST05
2.956	J	[kgcm ²]	0.986
3.333	J	[kgcm ²]	0.944
4.053	J	[kgcm ²]	0.903
4.571	J	[kgcm ²]	0.864
5.187	J	[kgcm ²]	0.637
5.850	J	[kgcm ²]	0.613
6.400	J	[kgcm ²]	0.533
7.238	J	[kgcm ²]	0.400
8.163	J	[kgcm ²]	0.388
9.010	J	[kgcm ²]	0.543
10.000	J	[kgcm ²]	0.300
11.200	J	[kgcm ²]	0.462
13.016	J	[kgcm ²]	0.178
14.356	J	[kgcm ²]	0.131
16.190	J	[kgcm ²]	0.128
17.500	J	[kgcm ²]	0.271
20.044	J	[kgcm ²]	0.164
22.778	J	[kgcm ²]	0.161
24.933	J	[kgcm ²]	0.119
28.333	J	[kgcm ²]	0.117
32.267	J	[kgcm ²]	0.079
36.667	J	[kgcm ²]	0.078
39.160	J	[kgcm ²]	0.058
44.500	J	[kgcm ²]	0.057
50.050	J	[kgcm ²]	0.039
56.875	J	[kgcm ²]	0.038

Gearbox			GST06
3.033	J	[kgcm ²]	2.720
3.333	J	[kgcm ²]	2.610
4.160	J	[kgcm ²]	2.510
4.571	J	[kgcm ²]	2.410
5.324	J	[kgcm ²]	1.760
5.850	J	[kgcm ²]	1.710
6.400	J	[kgcm ²]	1.470
7.040	J	[kgcm ²]	2.070
8.163	J	[kgcm ²]	1.060
9.010	J	[kgcm ²]	1.500
10.000	J	[kgcm ²]	0.820
11.200	J	[kgcm ²]	1.260
12.571	J	[kgcm ²]	0.955
14.286	J	[kgcm ²]	0.932
15.400	J	[kgcm ²]	0.748
17.500	J	[kgcm ²]	0.733
20.044	J	[kgcm ²]	0.457
22.778	J	[kgcm ²]	0.450
24.933	J	[kgcm ²]	0.332
28.333	J	[kgcm ²]	0.326
32.267	J	[kgcm ²]	0.221
36.667	J	[kgcm ²]	0.218
39.160	J	[kgcm ²]	0.162
44.500	J	[kgcm ²]	0.160
49.500	J	[kgcm ²]	0.110
56.250	J	[kgcm ²]	0.108

- The moments of inertia relate to the drive shaft of the gearbox.
- The total moment of inertia is calculated by adding the values of the gearbox, motor and accessories.



Moments of inertia

GST□□-2

- Moment of inertia (J) depending on ratio i

Gearbox			GST07
3.048	J	[kgcm ²]	8.200
3.350	J	[kgcm ²]	7.920
4.225	J	[kgcm ²]	7.650
4.643	J	[kgcm ²]	7.390
5.200	J	[kgcm ²]	5.640
5.714	J	[kgcm ²]	5.460
6.400	J	[kgcm ²]	4.490
7.150	J	[kgcm ²]	6.270
8.125	J	[kgcm ²]	6.040
8.800	J	[kgcm ²]	4.730
9.856	J	[kgcm ²]	3.900
11.200	J	[kgcm ²]	3.780
12.571	J	[kgcm ²]	2.860
14.286	J	[kgcm ²]	2.790
15.400	J	[kgcm ²]	2.260
17.500	J	[kgcm ²]	2.210
20.044	J	[kgcm ²]	1.380
22.778	J	[kgcm ²]	1.350
24.567	J	[kgcm ²]	1.020
27.917	J	[kgcm ²]	1.010
32.267	J	[kgcm ²]	0.664
36.667	J	[kgcm ²]	0.653
39.160	J	[kgcm ²]	0.487
44.500	J	[kgcm ²]	0.479
49.500	J	[kgcm ²]	0.330
56.250	J	[kgcm ²]	0.325

Gearbox			GST09
4.056	J	[kgcm ²]	27.000
4.457	J	[kgcm ²]	25.900
5.324	J	[kgcm ²]	18.100
5.850	J	[kgcm ²]	17.500
6.667	J	[kgcm ²]	14.200
7.305	J	[kgcm ²]	11.300
8.027	J	[kgcm ²]	11.000
9.010	J	[kgcm ²]	15.200
10.267	J	[kgcm ²]	12.400
11.667	J	[kgcm ²]	12.100
12.362	J	[kgcm ²]	9.790
14.048	J	[kgcm ²]	9.530
15.156	J	[kgcm ²]	7.650
17.222	J	[kgcm ²]	7.490
20.533	J	[kgcm ²]	4.500
23.333	J	[kgcm ²]	4.410
24.933	J	[kgcm ²]	3.380
28.333	J	[kgcm ²]	3.320
32.267	J	[kgcm ²]	2.250
36.667	J	[kgcm ²]	2.210
39.160	J	[kgcm ²]	1.640
44.500	J	[kgcm ²]	1.620
49.500	J	[kgcm ²]	1.120
56.250	J	[kgcm ²]	1.100

- The moments of inertia relate to the drive shaft of the gearbox.
- The total moment of inertia is calculated by adding the values of the gearbox, motor and accessories.



Moments of inertia

GST□□-2

- Moment of inertia (J) depending on ratio i

Gearbox			GST11
4.056	J	[kgcm ²]	82.200
4.457	J	[kgcm ²]	79.000
5.324	J	[kgcm ²]	55.400
5.850	J	[kgcm ²]	53.500
6.400	J	[kgcm ²]	45.700
6.864	J	[kgcm ²]	67.500
7.800	J	[kgcm ²]	65.100
9.010	J	[kgcm ²]	46.800
9.856	J	[kgcm ²]	40.200
11.200	J	[kgcm ²]	39.000
12.571	J	[kgcm ²]	29.400
14.286	J	[kgcm ²]	28.700
15.400	J	[kgcm ²]	23.000
17.500	J	[kgcm ²]	22.500
20.289	J	[kgcm ²]	14.300
23.056	J	[kgcm ²]	14.100
24.933	J	[kgcm ²]	10.600
28.333	J	[kgcm ²]	10.400
32.267	J	[kgcm ²]	7.040
36.667	J	[kgcm ²]	6.930
39.160	J	[kgcm ²]	5.150
44.500	J	[kgcm ²]	5.080
49.500	J	[kgcm ²]	3.520
56.250	J	[kgcm ²]	3.440

Gearbox			GST14
4.225	J	[kgcm ²]	226.000
4.643	J	[kgcm ²]	216.000
5.200	J	[kgcm ²]	168.000
5.714	J	[kgcm ²]	161.000
6.286	J	[kgcm ²]	141.000
7.150	J	[kgcm ²]	183.000
8.027	J	[kgcm ²]	100.000
8.800	J	[kgcm ²]	139.000
9.841	J	[kgcm ²]	75.100
11.000	J	[kgcm ²]	119.000
12.362	J	[kgcm ²]	89.000
14.048	J	[kgcm ²]	86.600
15.156	J	[kgcm ²]	67.600
17.222	J	[kgcm ²]	66.000
20.044	J	[kgcm ²]	45.800
22.778	J	[kgcm ²]	44.900
24.567	J	[kgcm ²]	33.200
27.917	J	[kgcm ²]	32.600
32.267	J	[kgcm ²]	21.500
36.667	J	[kgcm ²]	21.200
39.160	J	[kgcm ²]	15.700
44.500	J	[kgcm ²]	15.500
49.500	J	[kgcm ²]	10.600
56.250	J	[kgcm ²]	10.500

- The moments of inertia relate to the drive shaft of the gearbox.
- The total moment of inertia is calculated by adding the values of the gearbox, motor and accessories.



Moments of inertia

GST□□-3

- Moment of inertia (J) depending on ratio i

Gearbox			GST05
36.267	J	[kgcm ²]	0.195
46.259	J	[kgcm ²]	0.141
56.667	J	[kgcm ²]	0.108
63.467	J	[kgcm ²]	0.192
71.238	J	[kgcm ²]	0.073
80.952	J	[kgcm ²]	0.139
91.746	J	[kgcm ²]	0.050
99.167	J	[kgcm ²]	0.107
116.277	J	[kgcm ²]	0.033
124.667	J	[kgcm ²]	0.072
145.714	J	[kgcm ²]	0.023
160.556	J	[kgcm ²]	0.050
179.067	J	[kgcm ²]	0.033
191.973	J	[kgcm ²]	0.014
224.400	J	[kgcm ²]	0.023
255.000	J	[kgcm ²]	0.023
295.638	J	[kgcm ²]	0.014
335.952	J	[kgcm ²]	0.014

Gearbox			GST06
39.200	J	[kgcm ²]	0.362
44.000	J	[kgcm ²]	0.195
51.022	J	[kgcm ²]	0.320
53.900	J	[kgcm ²]	0.178
67.760	J	[kgcm ²]	0.114
70.156	J	[kgcm ²]	0.160
80.952	J	[kgcm ²]	0.203
87.267	J	[kgcm ²]	0.150
99.167	J	[kgcm ²]	0.150
109.707	J	[kgcm ²]	0.096
124.667	J	[kgcm ²]	0.096
141.289	J	[kgcm ²]	0.063
160.556	J	[kgcm ²]	0.063
179.067	J	[kgcm ²]	0.043
203.485	J	[kgcm ²]	0.042
231.733	J	[kgcm ²]	0.040
255.000	J	[kgcm ²]	0.029
290.400	J	[kgcm ²]	0.027
330.000	J	[kgcm ²]	0.027
382.590	J	[kgcm ²]	0.026
434.762	J	[kgcm ²]	0.025

Gearbox			GST07
39.200	J	[kgcm ²]	0.974
44.000	J	[kgcm ²]	0.534
51.022	J	[kgcm ²]	0.843
53.900	J	[kgcm ²]	0.484
65.079	J	[kgcm ²]	0.313
70.156	J	[kgcm ²]	0.431
79.762	J	[kgcm ²]	0.536
85.983	J	[kgcm ²]	0.400
97.708	J	[kgcm ²]	0.399
111.915	J	[kgcm ²]	0.238
127.176	J	[kgcm ²]	0.237
139.211	J	[kgcm ²]	0.166
158.194	J	[kgcm ²]	0.166
180.156	J	[kgcm ²]	0.108
204.722	J	[kgcm ²]	0.107
236.622	J	[kgcm ²]	0.101
248.458	J	[kgcm ²]	0.077
268.889	J	[kgcm ²]	0.101
326.333	J	[kgcm ²]	0.073
367.033	J	[kgcm ²]	0.094
417.083	J	[kgcm ²]	0.067

Gearbox			GST09
40.136	J	[kgcm ²]	2.140
43.267	J	[kgcm ²]	1.550
49.167	J	[kgcm ²]	1.530
53.044	J	[kgcm ²]	1.380
60.278	J	[kgcm ²]	1.370
71.867	J	[kgcm ²]	1.170
81.667	J	[kgcm ²]	1.160
93.541	J	[kgcm ²]	0.706
99.167	J	[kgcm ²]	1.070
113.585	J	[kgcm ²]	0.652
129.074	J	[kgcm ²]	0.649
141.289	J	[kgcm ²]	0.458
160.556	J	[kgcm ²]	0.456
182.844	J	[kgcm ²]	0.297
207.778	J	[kgcm ²]	0.295
236.622	J	[kgcm ²]	0.275
252.167	J	[kgcm ²]	0.212
268.889	J	[kgcm ²]	0.275
326.333	J	[kgcm ²]	0.198
363.000	J	[kgcm ²]	0.255
412.500	J	[kgcm ²]	0.183

- The moments of inertia relate to the drive shaft of the gearbox.
- The total moment of inertia is calculated by adding the values of the gearbox, motor and accessories.



Moments of inertia

GST□□-3

- Moment of inertia (J) depending on ratio i

Gearbox			GST11
40.816	J	[kgcm ²]	6.360
44.000	J	[kgcm ²]	5.660
50.000	J	[kgcm ²]	5.600
57.968	J	[kgcm ²]	4.770
61.250	J	[kgcm ²]	4.080
71.011	J	[kgcm ²]	3.520
80.694	J	[kgcm ²]	3.500
87.267	J	[kgcm ²]	3.220
99.167	J	[kgcm ²]	3.200
112.933	J	[kgcm ²]	2.930
129.074	J	[kgcm ²]	1.940
146.993	J	[kgcm ²]	1.770
158.194	J	[kgcm ²]	1.400
180.156	J	[kgcm ²]	1.290
207.778	J	[kgcm ²]	0.880
236.622	J	[kgcm ²]	0.818
252.167	J	[kgcm ²]	0.633
268.889	J	[kgcm ²]	0.816
326.333	J	[kgcm ²]	0.589
363.000	J	[kgcm ²]	0.756
412.500	J	[kgcm ²]	0.545

Gearbox			GST14
40.185	J	[kgcm ²]	24.400
42.580	J	[kgcm ²]	18.300
48.386	J	[kgcm ²]	18.100
53.148	J	[kgcm ²]	20.500
59.321	J	[kgcm ²]	13.200
69.042	J	[kgcm ²]	11.500
78.457	J	[kgcm ²]	11.400
93.541	J	[kgcm ²]	6.570
96.157	J	[kgcm ²]	10.400
106.296	J	[kgcm ²]	6.520
130.278	J	[kgcm ²]	6.000
139.211	J	[kgcm ²]	4.420
158.194	J	[kgcm ²]	4.400
171.111	J	[kgcm ²]	5.490
204.722	J	[kgcm ²]	2.860
236.622	J	[kgcm ²]	2.650
248.458	J	[kgcm ²]	2.060
268.889	J	[kgcm ²]	2.650
326.333	J	[kgcm ²]	1.920
363.000	J	[kgcm ²]	2.450
412.500	J	[kgcm ²]	1.780

- The moments of inertia relate to the drive shaft of the gearbox.
- The total moment of inertia is calculated by adding the values of the gearbox, motor and accessories.

GST helical gearboxes

Technical data



Weights

GST□□-1M VBR

			063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42	080C11	080C13	080C31
GST04	m	[kg]	8		10	11	10	11	10	15	16	15
GST05	m	[kg]		12			14			18	19	18
GST06	m	[kg]		16		19	18	19	18	22	23	22
GST07	m	[kg]								32	33	32

			080C32 080C33 080C42	090C11 090C31	090C32	100C12	100C31	100C32	100C41	112C22	112C31	112C32
GST04	m	[kg]	16	22	20							
GST05	m	[kg]	19	26	24	33	30	33	30			
GST06	m	[kg]	23	30	28	37	34	37	34	46	43	53
GST07	m	[kg]	33	40	38	47	44	47	44	55	52	62
GST09	m	[kg]		54	52	61	58	61	58	69	66	76

			112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32	180C42
GST06	m	[kg]	50							
GST07	m	[kg]	59	94	92	136				
GST09	m	[kg]	73	109	107	151	171	206	216	241

GST□□-1M VCR

			063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31	071C32	071C33 071C42	080C11	080C13	080C31
GST04	m	[kg]	7	8	9	10	9	10	14	15	14
GST05	m	[kg]		11			13		17	18	17
GST06	m	[kg]		15		17	16	17	20	21	20
GST07	m	[kg]							28	29	28

			080C32 080C33 080C42	090C11 090C31	090C32	100C12	100C31	100C32	100C41	112C22	112C31
GST04	m	[kg]	15	21	19						
GST05	m	[kg]	18	25	23	32	29	32	29		
GST06	m	[kg]	21	29	27	36	33	36	33	44	41
GST07	m	[kg]	29	37	35	44	41	44	41	52	49
GST09	m	[kg]		50	48	57	54	57	54	65	62

			112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32	180C42
GST06	m	[kg]	51	48							
GST07	m	[kg]	59	56	91	89	133				
GST09	m	[kg]	72	69	104	102	146	166	201	211	236

- Weights with oil filling for mounting position A; all values are approximate.
The weights relate to the basic version. Bear in mind that additional weights may be needed, e.g. for motor options.

GST helical gearboxes

Technical data



Weights

GST□□-1M VCK

			063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31	071C32	071C33 071C42	080C11	080C13	080C31
GST04	m	[kg]	8	9	10	11	10	11	15	16	15
GST05	m	[kg]		13	14	15	14	15	18	19	18
GST06	m	[kg]		18		20	19	20	23	24	23
GST07	m	[kg]							32	33	32

			080C32 080C33 080C42	090C11 090C31	090C32	100C12	100C31	100C32	100C41	112C22	112C31
GST04	m	[kg]	16	22	20						
GST05	m	[kg]	19	26	24	33	30	33	30		
GST06	m	[kg]	24	32	30	39	36	39	36	47	44
GST07	m	[kg]	33	41	39	48	45	48	45	56	53
GST09	m	[kg]		57	55	64	61	64	61	72	69

			112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32	180C42
GST06	m	[kg]	54	51							
GST07	m	[kg]	63	60	95	93	137				
GST09	m	[kg]	79	76	111	109	153	173	208	218	243

- Weights with oil filling for mounting position A; all values are approximate.
The weights relate to the basic version. Bear in mind that additional weights may be needed, e.g. for motor options.

GST helical gearboxes

Technical data



Weights

GST□□-2M VAR / VBR

		063C02	063C11	063C12	063C22	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42
GST03	m [kg]	6		6			6				7		8
GST04	m [kg]		10				10		12	13	12	13	12
GST05	m [kg]							16	17	18	17		18
GST06	m [kg]							23		25	24		25

		080C11	080C13	080C31	080C32 080C33 080C42	090C11	090C31	090C32	100C12	100C31	100C32	100C41	112C22
GST04	m [kg]	17	18	17	18		24	22					
GST05	m [kg]	21	22	21	22		29	27	36	33	36	33	
GST06	m [kg]	28	29	28	29		37	35	44	41	44	41	52
GST07	m [kg]		45	44	45		52	50	59	56	59	56	67
GST09	m [kg]						79	77	86	83	86	83	94
GST11	m [kg]								132		132	129	139
GST14	m [kg]												231

		112C31	112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32	180C42	225C12	225C22
GST06	m [kg]	49	59	56									
GST07	m [kg]	64	74	71	106	104	148	168					
GST09	m [kg]	91	101	98	133	131	175	195	230	240	265		
GST11	m [kg]	136	146	143	178	176	220	240	275	285	310	434	529
GST14	m [kg]	228	238	235	267	265	309	329	364	374	399	522	547

GST□□-2M VCR

		063C02	063C11	063C12	063C22	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42
GST03	m [kg]	5		6	5		6				7		8
GST04	m [kg]		9			9		10	11	12	11		12
GST05	m [kg]							14			16		
GST06	m [kg]							20			22		

		080C11	080C13	080C31	080C32 080C33 080C42	090C11	090C31	090C32	100C12	100C31	100C32	100C41	112C22
GST04	m [kg]	16	17	16	17		23	21					
GST05	m [kg]	20	21	20	21		28	26	35	32	35	32	
GST06	m [kg]	26	27	26	27		34	32	41	38	41	38	50
GST07	m [kg]		40	39	40		47	45	54	51	54	51	63
GST09	m [kg]						70	68	77	74	77	74	85
GST11	m [kg]								117		117	114	124
GST14	m [kg]												203

		112C31	112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32	180C42	225C12	225C22
GST06	m [kg]	47	57	54									
GST07	m [kg]	60	70	67	102	100	144	164					
GST09	m [kg]	82	92	89	125	123	167	187	222	232	257		
GST11	m [kg]	121	131	128	163	161	205	225	260	270	295	419	514
GST14	m [kg]	200	210	207	239	237	281	301	336	346	371	494	519

- Weights with oil filling for mounting position A; all values are approximate.
The weights relate to the basic version. Bear in mind that additional weights may be needed, e.g. for motor options.

GST helical gearboxes

Technical data



Weights

GST□□-2M VCK

		063C02	063C11	063C12	063C22	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42
GST03	m [kg]	6		6		6	7				8		9
GST04	m [kg]		10			10	11	12	13	12		13	
GST05	m [kg]						16	17	18	17		18	
GST06	m [kg]						23				25		

		080C11	080C13	080C31	080C32 080C33 080C42	090C11	090C31	090C32	100C12	100C31	100C32	100C41	112C22
GST04	m [kg]	17	18	17	18	24		22					
GST05	m [kg]	21	22	21	22	29	27	36	33	36	33		
GST06	m [kg]	29	30	29	30	37	35	44	41	44	41	53	
GST07	m [kg]		44	43	44	51	49	58	55	58	55	67	
GST09	m [kg]					77	75	84	81	84	81	92	
GST11	m [kg]							128		128	125	135	
GST14	m [kg]											219	

		112C31	112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32	180C42	225C12	225C22
GST06	m [kg]	50	60	57									
GST07	m [kg]	64	74	71	106	104	148	168					
GST09	m [kg]	89	99	96	132	130	174	194	229	239	264		
GST11	m [kg]	132	142	139	173	171	215	235	270	280	305	430	525
GST14	m [kg]	216	226	223	255	253	297	317	352	362	387	509	534

GST□□-2M VAL

		063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42	080C11	080C13	080C31	080C32 080C33 080C42
GST04	m [kg]	11		13	14	13	14	13	18	19	18	19
GST05	m [kg]		17			19			23	24	23	24
GST06	m [kg]		26		28	27	28		31	32	31	32
GST07	m [kg]									49	48	49

		090C11	090C31	090C32	100C12	100C31	100C32	100C41	112C22	112C31	112C32	112C41
GST04	m [kg]	25		23								
GST05	m [kg]	31		29	38	35	38	35				
GST06	m [kg]	40		38	47	44	47	44	55	52	62	59
GST07	m [kg]	56		54	63	60	63	60	71	68	78	75
GST09	m [kg]		86	84	93	90	93	90	101	98	108	105
GST11	m [kg]				142		142	139	150	147	157	154
GST14	m [kg]								247	244	254	251

		132C21	132C22 132C32	160C22	160C32	180C12	180C32	180C42	225C12	225C22
GST07	m [kg]	110	108	152	166					
GST09	m [kg]	140	138	181	196	247		272		
GST11	m [kg]	188	186	229	250	285	295	320	445	540
GST14	m [kg]	283	281	324	339	390	395	415	537	562

- Weights with oil filling for mounting position A; all values are approximate.
The weights relate to the basic version. Bear in mind that additional weights may be needed, e.g. for motor options.

GST helical gearboxes

Technical data



Weights

GST□□-3M VAR / VBR

			063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31	071C32	071C33 071C42	080C11	080C13	080C31
GST05	m	[kg]	16		18	19	18	19	23	24	23
GST06	m	[kg]	26		28	29	28	29	33	34	33
GST07	m	[kg]		46	48		47	48	52	53	52
GST09	m	[kg]		78	80		79	80	84	85	84
GST11	m	[kg]							138	139	138

			080C32 080C33 080C42	090C11 090C31	090C32	100C12	100C31	100C32	100C41	112C22	112C31
GST06	m	[kg]	34	40	38						
GST07	m	[kg]	53	60	58	67	64	67	64		
GST09	m	[kg]	85	92	90	99	96	99	96	107	104
GST11	m	[kg]	139	146	144	153	150	153	150	162	159
GST14	m	[kg]		252	250	259	256	259	256	267	264

			112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32
GST09	m	[kg]	114	111						
GST11	m	[kg]	169	166	200	198				
GST14	m	[kg]	274	271	307	305	349	369	404	414

GST□□-3M VCR

			063C11	063C12	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42
GST05	m	[kg]	14	15	14	15		17		16	17	
GST06	m	[kg]	23				24	25	26	25	26	
GST07	m	[kg]					41	43	44	43	44	
GST09	m	[kg]					69	71	72	71	72	71

			080C11	080C13	080C31	080C32 080C33 080C42	090C11 090C31	090C32	100C12	100C31	100C32	100C41
GST05	m	[kg]	21	22	21							
GST06	m	[kg]	30	31	30	31	37	35				
GST07	m	[kg]	47	48	47	48	55	53	62	59	62	59
GST09	m	[kg]	75	76	75	76	83	81	90	87	90	87
GST11	m	[kg]	123	124	123	124	131	129	138	135	138	135
GST14	m	[kg]					224	222	231	228	231	228

			112C22	112C31	112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32
GST09	m	[kg]	99	96	106	103						
GST11	m	[kg]	147	144	154	151	185	183				
GST14	m	[kg]	239	236	246	243	279	277	321	341	376	386

- Weights with oil filling for mounting position A; all values are approximate.
The weights relate to the basic version. Bear in mind that additional weights may be needed, e.g. for motor options.

GST helical gearboxes

Technical data



Weights

GST□□-3M VCK

			063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42	080C11	080C13
GST05	m	[kg]	16		18	19	18	19		23	24
GST06	m	[kg]	26	27	28	29	28	29		33	34
GST07	m	[kg]		45	47	48	47	48		51	52
GST09	m	[kg]		76	78	79	78	79	78	82	83
GST11	m	[kg]								134	135

			080C31	080C32 080C33 080C42	090C11 090C31	090C32	100C12	100C31	100C32	100C41	112C22
GST05	m	[kg]	23								
GST06	m	[kg]	33	34	40	38					
GST07	m	[kg]	51	52	59	57	66	63	66	63	
GST09	m	[kg]	82	83	90	88	97	94	97	94	106
GST11	m	[kg]	134	135	142	140	149	146	149	146	157
GST14	m	[kg]			240	238	247	244	247	244	255

			112C31	112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32
GST09	m	[kg]	103	113	110						
GST11	m	[kg]	154	164	161	196	194				
GST14	m	[kg]	252	262	259	294	292	336	356	391	401

GST□□-3M VAL

			063C11	063C12	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33 071C42	080C11
GST05	m	[kg]	17	18	17	18		20		19	20	24
GST06	m	[kg]	29					31	32	31	32	36
GST07	m	[kg]					50	52		51	52	56
GST09	m	[kg]					85	87		86	87	91
GST11	m	[kg]										149

			080C13	080C31	080C32 080C33 080C42	090C11 090C31	090C32	100C12	100C31	100C32	100C41	112C22
GST05	m	[kg]	25	24								
GST06	m	[kg]	37	36	37	43	41					
GST07	m	[kg]	57	56	57	64	62	71	68	71	68	
GST09	m	[kg]	92	91	92	99	97	106	103	106	103	114
GST11	m	[kg]	150	149	150	157	155	164	161	164	161	172
GST14	m	[kg]				268	266	275	272	275	272	283

			112C31	112C32	112C41	132C21	132C22 132C32	160C22	160C32	180C12	180C32
GST09	m	[kg]	111	121	118						
GST11	m	[kg]	169	179	176	211	209				
GST14	m	[kg]	280	290	287	322	320	364	384	419	429

- Weights with oil filling for mounting position A; all values are approximate.
The weights relate to the basic version. Bear in mind that additional weights may be needed, e.g. for motor options.

GST helical gearboxes

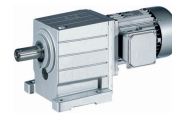
Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.06$ kW

n_N	1425 r/min			1735 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	75	7.4	5.6				19.013	GST03-2M□□□063C02	146
	67	8.3	5.3				21.350	GST03-2M□□□063C02	146
	58	9.6	4.7	70	7.9	5.7	24.595	GST03-2M□□□063C02	146
	52	11	4.2	63	8.8	5.1	27.618	GST03-2M□□□063C02	146
	45	12	3.6	54	10	4.4	32.000	GST03-2M□□□063C02	146
	40	14	3.2	48	12	3.9	35.933	GST03-2M□□□063C02	146
	34	16	2.8	42	13	3.4	41.455	GST03-2M□□□063C02	146
	31	18	2.5	37	15	3.0	46.550	GST03-2M□□□063C02	146
	27	21	2.2	33	17	2.7	52.909	GST03-2M□□□063C02	146
	24	23	1.9	29	19	2.4	59.413	GST03-2M□□□063C02	146



Selection tables

50 Hz, 60 Hz: $P_N = 0.09$ kW

n _N	1375 r/min			1695 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	137	6.1	5.7				10.033	GST03-2M□□□063C22	146
	120	6.9	5.1				11.429	GST03-2M□□□063C22	146
	107	7.8	4.8	131	6.3	5.7	12.833	GST03-2M□□□063C22	146
	93	9.0	4.3	113	7.3	5.1	14.836	GST03-2M□□□063C22	146
	83	10	4.1	101	8.2	5.0	16.660	GST03-2M□□□063C22	146
	72	12	3.6	88	9.4	4.5	19.013	GST03-2M□□□063C22	146
	64	13	3.4	79	11	4.2	21.350	GST03-2M□□□063C22	146
	56	15	3.0	68	12	3.7	24.595	GST03-2M□□□063C22	146
	50	17	2.7	61	14	3.3	27.618	GST03-2M□□□063C22	146
	43	19	2.3	52	16	2.9	32.000	GST03-2M□□□063C22	146
	38	22	2.1	47	18	2.5	35.933	GST03-2M□□□063C22	146
	33	25	1.8	40	20	2.2	41.455	GST03-2M□□□063C22	146
	30	28	1.6	36	23	2.0	46.550	GST03-2M□□□063C22	146
	26	32	1.4	32	26	1.7	52.909	GST03-2M□□□063C22	146
	23	36	1.2	28	29	1.5	59.413	GST03-2M□□□063C22	146



Selection tables

50 Hz, 60 Hz: $P_N = 0.12 \text{ kW}$

n _N f _N	1425 r/min			1735 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	636	1.8	5.4	770	1.5	6.2	2.240	GST04-1M □□□063C12	140
	499	2.3	5.0	604	1.9	5.8	2.857	GST04-1M □□□063C12	140
	324	3.5	5.5	392	2.9	6.4	4.400	GST04-1M □□□063C12	140
	252	4.5	4.6	304	3.7	5.3	5.667	GST04-1M □□□063C12	140
	223	5.0	5.4	270	4.1	6.2	6.400	GST04-2M □□□063C12	146
	204	5.4	5.4	247	4.5	6.3	6.982	GST03-2M □□□063C12	146
	198	5.7	4.0	240	4.7	4.7	7.182	GST04-1M □□□063C12	140
	182	6.1	5.2	220	5.0	6.0	7.840	GST03-2M □□□063C12	146
	160	7.0	4.7	193	5.7	5.4	8.935	GST03-2M □□□063C12	146
	158	7.1	3.3	192	5.9	3.8	9.000	GST04-1M □□□063C12	140
	145	7.7	5.4	175	6.3	6.2	9.856	GST04-2M □□□063C12	146
	142	7.8	4.4	172	6.4	5.1	10.033	GST03-2M □□□063C12	146
	125	8.9	4.0	151	7.3	4.6	11.429	GST03-2M □□□063C12	146
	120	9.4	1.7	146	7.7	2.0	11.857	GST04-1M □□□063C12	140
	113	9.8	5.0	137	8.1	5.8	12.571	GST04-2M □□□063C12	146
	111	10	3.8	134	8.2	4.4	12.833	GST03-2M □□□063C12	146
	100	11	5.0	121	9.2	5.8	14.286	GST04-2M □□□063C12	146
	96	12	3.4	116	9.5	3.9	14.836	GST03-2M □□□063C12	146
	86	13	3.2	104	11	3.8	16.660	GST03-2M □□□063C12	146
	75	15	2.8	91	12	3.4	19.013	GST03-2M □□□063C12	146
	74	15	4.7	89	12	5.7	19.360	GST04-2M □□□063C12	146
	67	17	2.7	81	14	3.2	21.350	GST03-2M □□□063C12	146
	65	17	3.6	78	14	4.4	22.000	GST04-2M □□□063C12	146
	58	19	2.3	70	16	2.9	24.595	GST03-2M □□□063C12	146
	57	19	3.7	69	16	4.5	24.933	GST04-2M □□□063C12	146
	52	22	2.1	63	18	2.5	27.618	GST03-2M □□□063C12	146
	50	22	2.9	61	18	3.5	28.333	GST04-2M □□□063C12	146
	45	25	2.9	55	20	3.6	31.600	GST04-2M □□□063C12	146
	45	25	1.8	54	21	2.2	32.000	GST03-2M □□□063C12	146
	40	28	2.3	48	23	2.8	35.909	GST04-2M □□□063C12	146
	40	28	1.6	48	23	2.0	35.933	GST03-2M □□□063C12	146
	36	31	2.4	44	25	2.9	39.600	GST04-2M □□□063C12	146
	34	32	1.4	42	27	1.7	41.455	GST03-2M □□□063C12	146
	32	35	1.9	38	29	2.3	45.000	GST04-2M □□□063C12	146
	31	36	1.2	37	30	1.5	46.550	GST03-2M □□□063C12	146
	27	41	1.7	33	33	2.1	52.171	GST04-2M □□□063C12	146
	27	41	1.1	33	34	1.3	52.909	GST03-2M □□□063C12	146
	24	46	1.4	29	38	1.7	59.286	GST04-2M □□□063C12	146
	24	46	1.0	29	38	1.2	59.413	GST03-2M □□□063C12	146
	23	49	3.0	27	40	3.6	63.467	GST05-3M □□□063C12	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.12$ kW

n _N	1425 r/min			1735 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	20	55	3.1	24	45	3.7	71.238	GST05-3M □□□063C12	152
	18	62	2.4	21	51	2.9	80.952	GST05-3M □□□063C12	152
	16	71	2.4	19	58	2.9	91.746	GST05-3M □□□063C12	152
	12	89	1.9	15	73	2.3	116.277	GST05-3M □□□063C12	152
	11	96	1.6	14	79	1.9	124.667	GST05-3M □□□063C12	152
	9.8	112	1.5	12	92	1.9	145.714	GST05-3M □□□063C12	152
	8.9	123	1.2	11	101	1.5	160.556	GST05-3M □□□063C12	152
	8.9	123	2.8	11	101	3.4	160.556	GST06-3M □□□063C12	152
	8.0	138	1.2	9.6	113	1.5	179.067	GST05-3M □□□063C12	152
	8.0	138	2.7	9.6	113	3.3	179.067	GST06-3M □□□063C12	152
	7.4	148	1.2	9.0	121	1.4	191.973	GST05-3M □□□063C12	152
	7.0	156	2.2	8.5	128	2.7	203.485	GST06-3M □□□063C12	152
	6.4	172	1.0	7.7	142	1.2	224.400	GST05-3M □□□063C12	152
	6.2	178	2.1	7.4	146	2.6	231.733	GST06-3M □□□063C12	152
	5.6	196	1.8	6.8	161	2.2	255.000	GST06-3M □□□063C12	152
				6.8	161	0.9	255.000	GST05-3M □□□063C12	152
	4.9	223	1.7	5.9	183	2.0	290.400	GST06-3M □□□063C12	152
				5.9	187	0.9	295.638	GST05-3M □□□063C12	152
	4.3	254	1.4	5.2	208	1.7	330.000	GST06-3M □□□063C12	152
	3.7	294	1.3	4.5	241	1.6	382.590	GST06-3M □□□063C12	152
	3.3	334	1.1	4.0	274	1.3	434.762	GST06-3M □□□063C12	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.18 \text{ kW}$

n _N	2740 r/min			3370 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1223	1.4	5.6	1491	1.1	6.5	2.240	GST04-1M □□□063C11	140
	959	1.8	5.2	1169	1.4	6.0	2.857	GST04-1M □□□063C11	140
	623	2.7	5.8	759	2.2	6.6	4.400	GST04-1M □□□063C11	140
	484	3.5	4.8	589	2.8	5.5	5.667	GST04-1M □□□063C11	140
	428	3.9	5.6	522	3.2	6.5	6.400	GST04-2M □□□063C11	146
	382	4.4	4.2	465	3.6	4.8	7.182	GST04-1M □□□063C11	140
	304	5.6	3.4	371	4.5	3.9	9.000	GST04-1M □□□063C11	140
	278	6.0	5.6	339	4.9	6.5	9.856	GST04-2M □□□063C11	146
	231	7.3	1.8	282	6.0	2.1	11.857	GST04-1M □□□063C11	140
	218	7.7	5.2	266	6.2	6.0	12.571	GST04-2M □□□063C11	146
	192	8.7	5.2	234	7.1	6.0	14.286	GST04-2M □□□063C11	146
	142	12	5.5	173	9.6	6.4	19.360	GST04-2M □□□063C11	146
	125	13	4.3	152	11	5.0	22.000	GST04-2M □□□063C11	146
	110	15	4.4	134	12	5.0	24.933	GST04-2M □□□063C11	146
	97	17	3.4	118	14	3.9	28.333	GST04-2M □□□063C11	146
	87	19	3.5	106	16	4.0	31.600	GST04-2M □□□063C11	146
	76	22	2.7	93	18	3.1	35.909	GST04-2M □□□063C11	146
	69	24	2.8	84	20	3.2	39.600	GST04-2M □□□063C11	146
	61	27	2.4	74	22	2.8	45.000	GST04-2M □□□063C11	146
	53	32	2.2	64	26	2.6	52.171	GST04-2M □□□063C11	146
	46	36	1.8	56	29	2.2	59.286	GST04-2M □□□063C11	146
	43	38	3.8	53	31	4.5	63.467	GST05-3M □□□063C11	152
	39	43	3.9	47	35	4.6	71.238	GST05-3M □□□063C11	152
	34	49	3.0	41	39	3.6	80.952	GST05-3M □□□063C11	152
	30	55	3.1	36	45	3.7	91.746	GST05-3M □□□063C11	152
	24	70	2.4	29	57	2.9	116.277	GST05-3M □□□063C11	152
	22	75	2.0	27	61	2.4	124.667	GST05-3M □□□063C11	152
	19	87	2.0	23	71	2.3	145.714	GST05-3M □□□063C11	152
	17	96	1.6	21	78	1.8	160.556	GST05-3M □□□063C11	152
	15	107	1.6	19	87	1.8	179.067	GST05-3M □□□063C11	152
	14	115	1.5	17	94	1.8	191.973	GST05-3M □□□063C11	152
	14	122	2.8	16	99	3.4	203.485	GST06-3M □□□063C11	152
	12	135	1.3	15	109	1.5	224.400	GST05-3M □□□063C11	152
	12	139	2.7	14	113	3.2	231.733	GST06-3M □□□063C11	152
	11	153	1.0	13	124	1.2	255.000	GST05-3M □□□063C11	152
	11	153	2.3	13	124	2.7	255.000	GST06-3M □□□063C11	152
	9.4	174	2.2	12	142	2.5	290.400	GST06-3M □□□063C11	152
	9.3	177	1.0	11	144	1.1	295.638	GST05-3M □□□063C11	152
	8.3	198	1.8	10	161	2.1	330.000	GST06-3M □□□063C11	152
	7.2	229	1.6	8.7	186	1.9	382.590	GST06-3M □□□063C11	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.18 \text{ kW}$

n _N	2740 r/min			3370 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	6.3	261	1.4	7.7	212	1.6	434.762	GST06-3M □□□063C11	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.18 \text{ kW}$

n _N f _N	1365 r/min			1695 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	609	2.8	3.4	743	2.2	4.1	2.240	GST04-1M □□□063C32	140
	526	3.2	5.7	641	2.6	6.8	2.597	GST03-2M □□□063C32	146
	478	3.5	3.2	583	2.9	3.8	2.857	GST04-1M □□□063C32	140
	400	4.2	4.6	488	3.4	5.5	3.413	GST03-2M □□□063C32	146
	313	5.3	3.9	381	4.3	4.7	4.368	GST03-2M □□□063C32	146
	310	5.5	3.5	378	4.4	4.2	4.400	GST04-1M □□□063C32	140
	257	6.5	4.1	313	5.2	4.9	5.312	GST03-2M □□□063C32	146
	241	7.0	2.9	294	5.7	3.5	5.667	GST04-1M □□□063C32	140
	229	7.3	3.9	279	5.9	4.7	5.965	GST03-2M □□□063C32	146
	213	7.8	3.4	260	6.3	4.1	6.400	GST04-2M □□□063C32	146
	196	8.5	3.5	239	6.9	4.1	6.982	GST03-2M □□□063C32	146
	190	8.9	2.6	232	7.2	3.1	7.182	GST04-1M □□□063C32	140
	174	9.6	3.3	212	7.7	3.9	7.840	GST03-2M □□□063C32	146
	153	11	3.0	186	8.8	3.6	8.935	GST03-2M □□□063C32	146
	152	11	2.1	185	9.0	2.5	9.000	GST04-1M □□□063C32	140
	139	12	3.4	169	9.7	4.1	9.856	GST04-2M □□□063C32	146
	136	12	2.8	166	9.9	3.4	10.033	GST03-2M □□□063C32	146
	119	14	2.5	146	11	3.0	11.429	GST03-2M □□□063C32	146
	115	15	1.1	140	12	1.3	11.857	GST04-1M □□□063C32	140
	109	15	3.2	132	12	3.8	12.571	GST04-2M □□□063C32	146
	106	16	2.4	130	13	2.9	12.833	GST03-2M □□□063C32	146
	96	17	3.2	117	14	3.8	14.286	GST04-2M □□□063C32	146
	92	18	2.2	112	15	2.6	14.836	GST03-2M □□□063C32	146
	82	20	2.0	100	16	2.5	16.660	GST03-2M □□□063C32	146
	72	23	1.8	88	19	2.2	19.013	GST03-2M □□□063C32	146
	71	24	3.0	86	19	3.7	19.360	GST04-2M □□□063C32	146
	64	26	1.7	78	21	2.1	21.350	GST03-2M □□□063C32	146
	62	27	2.3	76	22	2.9	22.000	GST04-2M □□□063C32	146
	56	30	1.5	68	24	1.9	24.595	GST03-2M □□□063C32	146
	55	30	2.3	67	25	2.9	24.933	GST04-2M □□□063C32	146
	49	34	1.3	60	27	1.7	27.618	GST03-2M □□□063C32	146
	48	35	1.8	59	28	2.3	28.333	GST04-2M □□□063C32	146
	43	39	1.9	53	31	2.3	31.600	GST04-2M □□□063C32	146
	43	39	1.2	52	31	1.4	32.000	GST03-2M □□□063C32	146
	38	44	1.5	46	35	1.8	35.909	GST04-2M □□□063C32	146
	38	44	1.0	46	35	1.3	35.933	GST03-2M □□□063C32	146
	38	44	3.1	46	35	3.8	36.267	GST05-3M □□□063C32	152
	35	48	1.5	42	39	1.9	39.600	GST04-2M □□□063C32	146
	33	51	0.9	40	41	1.1	41.455	GST03-2M □□□063C32	146
	30	55	1.2	37	44	1.5	45.000	GST04-2M □□□063C32	146



Selection tables

50 Hz, 60 Hz: $P_N = 0.18 \text{ kW}$

n_N	1365 r/min			1695 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	30	56	2.6	36	45	3.2	46.259	GST05-3M □□□063C32	152
				36	46	1.0	46.550	GST03-2M □□□063C32	146
	26	64	1.1	32	51	1.4	52.171	GST04-2M □□□063C32	146
				32	52	0.9	52.909	GST03-2M □□□063C32	146
	23	72	0.9	28	58	1.1	59.286	GST04-2M □□□063C32	146
	22	76	1.9	26	62	2.4	63.467	GST05-3M □□□063C32	152
	19	86	2.0	23	69	2.4	71.238	GST05-3M □□□063C32	152
	17	97	1.5	21	78	1.9	80.952	GST05-3M □□□063C32	152
	17	97	3.2	21	78	4.0	80.952	GST06-3M □□□063C32	152
	15	110	1.5	18	89	1.9	91.746	GST05-3M □□□063C32	152
	12	132	2.8	15	106	3.5	109.707	GST06-3M □□□063C32	152
	12	140	1.2	14	113	1.5	116.277	GST05-3M □□□063C32	152
	11	150	1.0	13	121	1.2	124.667	GST05-3M □□□063C32	152
	11	150	2.3	13	121	2.8	124.667	GST06-3M □□□063C32	152
	9.7	170	2.2	12	137	2.7	141.289	GST06-3M □□□063C32	152
	9.4	175	1.0	11	141	1.2	145.714	GST05-3M □□□063C32	152
	8.5	193	1.8	10	156	2.2	160.556	GST06-3M □□□063C32	152
				11	156	1.0	160.556	GST05-3M □□□063C32	152
	7.6	215	1.7	9.3	174	2.2	179.067	GST06-3M □□□063C32	152
				9.5	174	1.0	179.067	GST05-3M □□□063C32	152
				8.8	186	0.9	191.973	GST05-3M □□□063C32	152
	6.7	245	1.4	8.2	197	1.8	203.485	GST06-3M □□□063C32	152
	5.9	279	1.3	7.2	225	1.7	231.733	GST06-3M □□□063C32	152
	5.4	307	1.1	6.5	247	1.4	255.000	GST06-3M □□□063C32	152
	4.7	349	1.1	5.7	281	1.3	290.400	GST06-3M □□□063C32	152
	4.1	397	0.9	5.1	320	1.1	330.000	GST06-3M □□□063C32	152
	3.6	460	0.8	4.4	371	1.0	382.590	GST06-3M □□□063C32	152
				3.9	421	0.9	434.762	GST06-3M □□□063C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.18 \text{ kW}$

n _N f _N	930 r/min			1140 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	581	2.9	5.4	706	2.4	6.6	1.600	GST04-1M □□□071C13	140
	415	4.1	5.4	505	3.3	6.6	2.240	GST05-1M □□□071C13	140
	326	5.2	4.8	396	4.2	5.9	2.857	GST04-1M □□□071C13	140
	315	5.3	5.4	382	4.3	6.6	2.956	GST04-2M □□□071C13	146
	266	6.4	3.9	323	5.2	4.8	3.500	GST04-1M □□□071C13	140
	229	7.3	5.4	279	5.9	6.6	4.053	GST04-2M □□□071C13	146
	211	8.0	3.1	257	6.5	3.8	4.400	GST04-1M □□□071C13	140
	179	9.3	5.4	218	7.6	6.6	5.187	GST04-2M □□□071C13	146
	164	10	2.4	199	8.4	3.0	5.667	GST04-1M □□□071C13	140
	145	11	4.8	177	9.4	5.9	6.400	GST04-2M □□□071C13	146
	130	13	1.9	157	11	2.3	7.182	GST04-1M □□□071C13	140
	116	14	4.1	141	12	5.0	8.000	GST04-2M □□□071C13	146
	105	16	2.6	127	13	3.2	8.900	GST05-1M □□□071C13	140
	103	16	1.4	126	13	1.7	9.000	GST04-1M □□□071C13	140
	94	18	3.7	115	14	4.5	9.856	GST04-2M □□□071C13	146
	83	20	3.0	101	16	3.7	11.200	GST04-2M □□□071C13	146
	83	20	3.0	100	17	3.7	11.250	GST06-1M □□□071C13	140
	82	21	1.5	99	17	1.8	11.375	GST05-1M □□□071C13	140
	74	23	3.1	90	18	3.8	12.571	GST04-2M □□□071C13	146
	65	26	2.4	79	21	2.9	14.286	GST04-2M □□□071C13	146
	60	28	2.5	73	23	3.1	15.400	GST04-2M □□□071C13	146
	53	31	2.0	65	26	2.4	17.500	GST04-2M □□□071C13	146
	48	35	2.0	58	28	2.5	19.360	GST04-2M □□□071C13	146
	42	39	1.6	51	32	1.9	22.000	GST04-2M □□□071C13	146
	37	45	1.6	45	36	2.0	24.933	GST04-2M □□□071C13	146
	33	51	1.2	40	41	1.5	28.333	GST04-2M □□□071C13	146
	33	51	2.9	40	41	3.5	28.333	GST05-2M □□□071C13	146
	29	57	1.3	36	46	1.6	31.600	GST04-2M □□□071C13	146
	29	58	2.8	35	47	3.5	32.267	GST05-2M □□□071C13	146
	26	64	1.0	32	53	1.2	35.909	GST04-2M □□□071C13	146
	26	64	2.1	31	52	2.6	36.267	GST05-3M □□□071C13	152
	25	66	2.3	31	54	2.8	36.667	GST05-2M □□□071C13	146
	24	70	2.3	29	57	2.9	39.160	GST05-2M □□□071C13	146
	24	71	1.0	29	58	1.3	39.600	GST04-2M □□□071C13	146
	21	80	1.9	25	65	2.3	44.500	GST05-2M □□□071C13	146
	21	81	0.8	25	66	1.0	45.000	GST04-2M □□□071C13	146
	20	82	1.8	24	67	2.2	46.259	GST05-3M □□□071C13	152
	19	89	3.0	23	72	3.7	49.500	GST06-2M □□□071C13	146
	19	90	1.5	23	73	1.9	50.050	GST05-2M □□□071C13	146
	17	101	3.0	20	82	3.7	56.250	GST06-2M □□□071C13	146



Selection tables

50 Hz, 60 Hz: $P_N = 0.18 \text{ kW}$

n _N f _N	930 r/min			1140 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	16	100	1.6	20	82	1.9	56.667	GST05-3M □□□071C13	152
	16	102	1.5	20	83	1.8	56.875	GST05-2M □□□071C13	146
	15	112	1.3	18	91	1.6	63.467	GST05-3M □□□071C13	152
	14	120	3.0	17	98	3.7	67.760	GST06-3M □□□071C13	152
	13	124	2.9	16	101	3.5	70.156	GST06-3M □□□071C13	152
	13	126	1.3	16	103	1.6	71.238	GST05-3M □□□071C13	152
	12	143	1.0	14	117	1.3	80.952	GST05-3M □□□071C13	152
	12	143	2.3	14	117	2.8	80.952	GST06-3M □□□071C13	152
	11	154	2.4	13	126	2.9	87.267	GST06-3M □□□071C13	152
	10	162	1.1	12	132	1.3	91.746	GST05-3M □□□071C13	152
	9.4	175	0.8	11	143	1.0	99.167	GST05-3M □□□071C13	152
	9.4	175	1.9	11	143	2.3	99.167	GST06-3M □□□071C13	152
	8.5	194	1.9	10	158	2.4	109.707	GST06-3M □□□071C13	152
	8.0	205	0.8	9.7	168	1.0	116.277	GST05-3M □□□071C13	152
	7.5	220	1.5	9.1	180	1.9	124.667	GST06-3M □□□071C13	152
	7.3	225	3.2	8.9	183	3.9	127.176	GST07-3M □□□071C13	152
	6.7	246	2.9	8.1	201	3.5	139.211	GST07-3M □□□071C13	152
	6.6	250	1.5	8.0	204	1.8	141.289	GST06-3M □□□071C13	152
	5.9	279	2.5	7.1	228	3.1	158.194	GST07-3M □□□071C13	152
	5.8	284	1.2	7.0	231	1.5	160.556	GST06-3M □□□071C13	152
	5.2	316	1.2	6.3	258	1.5	179.067	GST06-3M □□□071C13	152
	5.2	318	2.2	6.3	260	2.7	180.156	GST07-3M □□□071C13	152
	4.6	359	1.0	5.6	293	1.2	203.485	GST06-3M □□□071C13	152
	4.5	362	2.0	5.5	295	2.4	204.722	GST07-3M □□□071C13	152
	4.0	409	0.9	4.9	334	1.1	231.733	GST06-3M □□□071C13	152
	3.9	418	1.7	4.8	341	2.1	236.622	GST07-3M □□□071C13	152
	3.7	439	1.6	4.6	358	2.0	248.458	GST07-3M □□□071C13	152
	3.5	475	1.5	4.2	387	1.8	268.889	GST07-3M □□□071C13	152
	2.9	576	1.2	3.5	470	1.5	326.333	GST07-3M □□□071C13	152
	2.9	576	2.8	3.5	470	3.5	326.333	GST09-3M □□□071C13	152
	2.6	641	2.5	3.1	523	3.1	363.000	GST09-3M □□□071C13	152
	2.5	648	1.1	3.1	529	1.3	367.033	GST07-3M □□□071C13	152
	2.3	729	2.2	2.7	594	2.7	412.500	GST09-3M □□□071C13	152
	2.2	737	1.0	2.7	601	1.2	417.083	GST07-3M □□□071C13	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.25 \text{ kW}$

n _N	2710 r/min			3390 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1210	1.9	4.0	1478	1.6	4.7	2.240	GST04-1M □□□063C31	140
	949	2.5	3.8	1159	2.0	4.4	2.857	GST04-1M □□□063C31	140
	616	3.8	4.1	752	3.1	4.8	4.400	GST04-1M □□□063C31	140
	478	4.9	3.4	584	3.9	4.0	5.667	GST04-1M □□□063C31	140
	423	5.5	4.0	517	4.4	4.7	6.400	GST04-2M □□□063C31	146
	377	6.2	3.0	461	5.0	3.5	7.182	GST04-1M □□□063C31	140
	301	7.8	2.4	368	6.2	2.8	9.000	GST04-1M □□□063C31	140
	275	8.4	4.0	336	6.7	4.7	9.856	GST04-2M □□□063C31	146
	229	10	1.3	279	8.2	1.5	11.857	GST04-1M □□□063C31	140
	216	11	3.8	263	8.6	4.4	12.571	GST04-2M □□□063C31	146
	190	12	3.8	232	9.8	4.4	14.286	GST04-2M □□□063C31	146
	140	17	4.0	171	13	4.6	19.360	GST04-2M □□□063C31	146
	123	19	3.1	151	15	3.6	22.000	GST04-2M □□□063C31	146
	109	21	3.1	133	17	3.6	24.933	GST04-2M □□□063C31	146
	96	24	2.4	117	19	2.8	28.333	GST04-2M □□□063C31	146
	86	27	2.5	105	22	2.9	31.600	GST04-2M □□□063C31	146
	76	31	1.9	92	25	2.3	35.909	GST04-2M □□□063C31	146
	68	34	2.0	84	27	2.3	39.600	GST04-2M □□□063C31	146
	60	38	1.7	74	31	2.0	45.000	GST04-2M □□□063C31	146
	52	45	1.6	63	36	1.9	52.171	GST04-2M □□□063C31	146
	46	51	1.3	56	41	1.6	59.286	GST04-2M □□□063C31	146
	43	53	2.7	52	43	3.3	63.467	GST05-3M □□□063C31	152
	38	60	2.8	47	48	3.3	71.238	GST05-3M □□□063C31	152
	34	68	2.2	41	54	2.6	80.952	GST05-3M □□□063C31	152
	30	77	2.2	36	62	2.7	91.746	GST05-3M □□□063C31	152
	23	98	1.7	29	78	2.1	116.277	GST05-3M □□□063C31	152
	22	105	1.4	27	84	1.7	124.667	GST05-3M □□□063C31	152
	22	105	3.2	27	84	3.9	124.667	GST06-3M □□□063C31	152
	19	119	3.2	23	95	3.8	141.289	GST06-3M □□□063C31	152
	19	123	1.4	23	98	1.7	145.714	GST05-3M □□□063C31	152
	17	135	1.1	21	108	1.3	160.556	GST05-3M □□□063C31	152
	17	135	2.5	21	108	3.0	160.556	GST06-3M □□□063C31	152
	15	151	1.1	19	121	1.3	179.067	GST05-3M □□□063C31	152
	15	151	2.5	19	121	3.0	179.067	GST06-3M □□□063C31	152
	14	162	1.1	17	129	1.3	191.973	GST05-3M □□□063C31	152
	13	171	2.0	16	137	2.4	203.485	GST06-3M □□□063C31	152
	12	189	0.9	15	151	1.1	224.400	GST05-3M □□□063C31	152
	12	195	1.9	14	156	2.3	231.733	GST06-3M □□□063C31	152
	11	215	1.6	13	172	2.0	255.000	GST06-3M □□□063C31	152
	9.3	244	1.5	11	195	1.8	290.400	GST06-3M □□□063C31	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.25 \text{ kW}$

n _N	2710 r/min			3390 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	8.2	278	1.3	10	222	1.5	330.000	GST06-3M □□□063C31	152
	7.1	322	1.2	8.7	257	1.4	382.590	GST06-3M □□□063C31	152
	6.2	366	1.0	7.6	293	1.2	434.762	GST06-3M □□□063C31	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.25 \text{ kW}$

n _N f _N	1370 r/min			1680 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	856	2.7	4.5	1044	2.2	5.4	1.600	GST04-1M □□□063C42	140
	669	3.5	5.2	816	2.9	6.2	2.048	GST04-1M □□□063C42	140
	612	3.8	4.5	746	3.1	5.4	2.240	GST05-1M □□□063C42	140
	528	4.4	4.1	643	3.6	4.8	2.597	GST03-2M □□□063C42	146
	480	4.9	4.8	585	4.0	5.7	2.857	GST04-1M □□□063C42	140
	464	5.0	4.5	565	4.1	5.4	2.956	GST04-2M □□□063C42	146
	401	5.8	3.3	489	4.7	3.9	3.413	GST03-2M □□□063C42	146
	391	6.0	4.2	477	4.9	4.9	3.500	GST04-1M □□□063C42	140
	338	6.9	4.5	412	5.6	5.4	4.053	GST04-2M □□□063C42	146
	314	7.4	2.8	382	6.0	3.3	4.368	GST03-2M □□□063C42	146
	311	7.6	3.3	380	6.2	3.9	4.400	GST04-1M □□□063C42	140
	264	8.8	5.2	322	7.2	6.2	5.187	GST04-2M □□□063C42	146
	258	9.0	3.0	314	7.3	3.5	5.312	GST03-2M □□□063C42	146
	242	9.7	2.6	295	7.9	3.0	5.667	GST04-1M □□□063C42	140
	230	10	2.8	280	8.2	3.4	5.965	GST03-2M □□□063C42	146
	214	11	4.5	261	8.8	5.4	6.400	GST05-2M □□□063C42	146
	196	12	2.5	239	9.6	3.0	6.982	GST03-2M □□□063C42	146
	191	12	2.0	233	10	2.4	7.182	GST04-1M □□□063C42	140
	175	13	2.4	213	11	2.8	7.840	GST03-2M □□□063C42	146
	171	14	4.3	209	11	5.1	8.000	GST04-2M □□□063C42	146
	154	15	2.8	188	12	3.3	8.900	GST05-1M □□□063C42	140
	154	15	3.2	188	12	3.8	8.900	GST06-1M □□□063C42	140
	153	15	2.2	187	12	2.5	8.935	GST03-2M □□□063C42	146
	152	15	1.2	186	13	1.4	9.000	GST04-1M □□□063C42	140
	139	17	3.9	169	14	4.6	9.856	GST04-2M □□□063C42	146
	137	17	2.0	166	14	2.4	10.033	GST03-2M □□□063C42	146
	122	19	3.2	149	15	3.7	11.200	GST04-2M □□□063C42	146
	122	19	2.6	148	16	3.0	11.250	GST06-1M □□□063C42	140
	120	20	1.4	147	16	1.6	11.375	GST05-1M □□□063C42	140
	120	19	1.8	146	16	2.2	11.429	GST03-2M □□□063C42	146
	109	21	3.3	133	17	3.8	12.571	GST04-2M □□□063C42	146
	107	22	1.7	130	18	2.0	12.833	GST03-2M □□□063C42	146
	96	24	2.5	117	20	3.0	14.286	GST04-2M □□□063C42	146
	92	25	1.6	113	20	1.8	14.836	GST03-2M □□□063C42	146
	89	26	2.7	108	21	3.3	15.400	GST04-2M □□□063C42	146
	82	28	1.5	100	23	1.8	16.660	GST03-2M □□□063C42	146
	78	30	2.1	95	24	2.6	17.500	GST04-2M □□□063C42	146
	72	32	1.3	88	26	1.6	19.013	GST03-2M □□□063C42	146
	71	33	2.1	86	27	2.6	19.360	GST04-2M □□□063C42	146
	64	36	1.2	78	29	1.5	21.350	GST03-2M □□□063C42	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.25 \text{ kW}$

n_N	1370 r/min			1680 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	62	37	1.7	76	30	2.1	22.000	GST04-2M □□□063C42	146
	56	42	1.1	68	34	1.3	24.595	GST03-2M □□□063C42	146
	55	42	1.7	67	34	2.1	24.933	GST04-2M □□□063C42	146
	50	47	1.0	61	38	1.2	27.618	GST03-2M □□□063C42	146
	48	48	1.3	59	39	1.6	28.333	GST04-2M □□□063C42	146
	48	48	3.1	59	39	3.8	28.333	GST05-2M □□□063C42	146
	43	53	1.4	53	44	1.7	31.600	GST04-2M □□□063C42	146
	43	54	0.8	52	44	1.0	32.000	GST03-2M □□□063C42	146
	42	55	3.0	52	44	3.7	32.267	GST05-2M □□□063C42	146
	38	61	1.1	47	50	1.3	35.909	GST04-2M □□□063C42	146
				47	50	0.9	35.933	GST03-2M □□□063C42	146
	38	60	2.2	46	49	2.7	36.267	GST05-3M □□□063C42	152
	37	62	2.4	46	51	2.9	36.667	GST05-2M □□□063C42	146
	35	66	2.5	43	54	3.1	39.160	GST05-2M □□□063C42	146
	35	66	3.2	43	54	3.9	39.160	GST06-2M □□□063C42	146
	35	67	1.1	42	55	1.3	39.600	GST04-2M □□□063C42	146
	31	75	2.0	38	61	2.4	44.500	GST05-2M □□□063C42	146
	31	75	3.2	38	61	3.9	44.500	GST06-2M □□□063C42	146
	30	76	0.9	37	62	1.1	45.000	GST04-2M □□□063C42	146
	30	77	1.9	36	63	2.3	46.259	GST05-3M □□□063C42	152
	28	84	2.6	34	68	3.2	49.500	GST06-2M □□□063C42	146
	27	85	1.4	33	69	1.7	50.050	GST05-2M □□□063C42	146
	24	95	2.6	30	78	3.2	56.250	GST06-2M □□□063C42	146
	24	94	1.6	30	77	2.0	56.667	GST05-3M □□□063C42	152
	24	96	1.4	29	78	1.7	56.875	GST05-2M □□□063C42	146
	22	106	1.4	26	86	1.7	63.467	GST05-3M □□□063C42	152
	20	113	3.2	25	92	4.0	67.760	GST06-3M □□□063C42	152
	20	117	3.1	24	95	3.8	70.156	GST06-3M □□□063C42	152
	19	119	1.4	23	97	1.7	71.238	GST05-3M □□□063C42	152
	17	135	1.1	21	110	1.3	80.952	GST05-3M □□□063C42	152
	17	135	2.5	21	110	3.0	80.952	GST06-3M □□□063C42	152
	16	145	2.5	19	119	3.1	87.267	GST06-3M □□□063C42	152
	15	153	1.1	18	125	1.4	91.746	GST05-3M □□□063C42	152
	14	165	0.9	17	135	1.1	99.167	GST05-3M □□□063C42	152
	14	165	2.0	17	135	2.5	99.167	GST06-3M □□□063C42	152
	13	183	2.1	15	149	2.5	109.707	GST06-3M □□□063C42	152
	12	194	0.9	14	158	1.1	116.277	GST05-3M □□□063C42	152
	11	208	1.6	13	169	2.0	124.667	GST06-3M □□□063C42	152
				13	169	0.9	124.667	GST05-3M □□□063C42	152
	9.8	232	3.0	12	189	3.7	139.211	GST07-3M □□□063C42	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.25$ kW

n _N	1370 r/min			1680 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	9.7	235	1.6	12	192	2.0	141.289	GST06-3M □□□063C42	152
				12	198	0.9	145.714	GST05-3M □□□063C42	152
	8.7	263	2.7	11	215	3.3	158.194	GST07-3M □□□063C42	152
	8.5	267	1.3	10	218	1.6	160.556	GST06-3M □□□063C42	152
	7.7	298	1.3	9.3	243	1.5	179.067	GST06-3M □□□063C42	152
	7.6	300	2.4	9.3	245	2.9	180.156	GST07-3M □□□063C42	152
	6.7	339	1.0	8.2	276	1.3	203.485	GST06-3M □□□063C42	152
	6.7	341	2.1	8.2	278	2.6	204.722	GST07-3M □□□063C42	152
	5.9	386	1.0	7.2	315	1.2	231.733	GST06-3M □□□063C42	152
	5.8	394	1.8	7.1	321	2.2	236.622	GST07-3M □□□063C42	152
	5.5	414	1.7	6.7	337	2.1	248.458	GST07-3M □□□063C42	152
	5.4	420	3.2	6.6	342	3.9	252.167	GST09-3M □□□063C42	152
	5.4	425	0.8	6.6	346	1.0	255.000	GST06-3M □□□063C42	152
	5.1	448	1.6	6.2	365	1.9	268.889	GST07-3M □□□063C42	152
				5.8	394	1.0	290.400	GST06-3M □□□063C42	152
	4.2	543	1.3	5.1	443	1.6	326.333	GST07-3M □□□063C42	152
	4.2	543	3.0	5.1	443	3.7	326.333	GST09-3M □□□063C42	152
	3.8	605	2.6	4.6	493	3.2	363.000	GST09-3M □□□063C42	152
	3.7	611	1.2	4.6	498	1.4	367.033	GST07-3M □□□063C42	152
	3.3	687	2.4	4.1	560	2.9	412.500	GST09-3M □□□063C42	152
	3.3	695	1.0	4.0	566	1.3	417.083	GST07-3M □□□063C42	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.25 \text{ kW}$

n _N	930 r/min			1140 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	581	4.0	3.9	706	3.3	4.7	1.600	GST04-1M □□□071C33	140
	454	5.2	4.4	552	4.2	5.4	2.048	GST04-1M □□□071C33	140
	415	5.7	3.9				2.240	GST05-1M □□□071C33	140
				509	4.6	5.3	2.240	GST04-1M □□□071C33	140
	326	7.2	3.5	396	5.9	4.2	2.857	GST04-1M □□□071C33	140
	315	7.4	3.9	382	6.0	4.7	2.956	GST04-2M □□□071C33	146
	266	8.8	2.8	323	7.2	3.5	3.500	GST04-1M □□□071C33	140
	229	10	3.9	279	8.2	4.7	4.053	GST04-2M □□□071C33	146
	211	11	2.2	257	9.1	2.8	4.400	GST04-1M □□□071C33	140
	179	13	3.9	218	11	4.7	5.187	GST04-2M □□□071C33	146
	164	14	1.7	199	12	2.1	5.667	GST04-1M □□□071C33	140
	164	14	3.1	199	12	3.8	5.667	GST05-1M □□□071C33	140
	145	16	3.5	177	13	4.2	6.400	GST04-2M □□□071C33	146
	132	18	3.2	161	14	4.0	7.040	GST04-2M □□□071C33	146
	130	18	1.4	157	15	1.7	7.182	GST04-1M □□□071C33	140
	127	19	2.5	154	15	3.1	7.333	GST05-1M □□□071C33	140
	127	19	3.1	154	15	3.8	7.333	GST06-1M □□□071C33	140
	116	20	3.0	141	16	3.6	8.000	GST04-2M □□□071C33	146
	105	23	1.9	127	18	2.3	8.900	GST05-1M □□□071C33	140
	105	23	2.7	127	18	3.3	8.900	GST06-1M □□□071C33	140
	103	23	1.0	126	19	1.3	9.000	GST04-1M □□□071C33	140
	103	22	2.8	125	18	3.4	9.010	GST04-2M □□□071C33	146
	94	25	2.6	115	20	3.2	9.856	GST04-2M □□□071C33	146
	83	28	2.2	101	23	2.6	11.200	GST04-2M □□□071C33	146
	83	28	2.2	100	23	2.7	11.250	GST06-1M □□□071C33	140
	82	29	1.1	99	23	1.3	11.375	GST05-1M □□□071C33	140
	74	31	2.2	90	26	2.7	12.571	GST04-2M □□□071C33	146
	65	36	1.7	79	29	2.1	14.286	GST04-2M □□□071C33	146
	65	36	3.1	79	29	3.8	14.356	GST05-2M □□□071C33	146
	60	38	1.8	73	31	2.2	15.400	GST04-2M □□□071C33	146
	57	40	3.1	70	33	3.8	16.190	GST05-2M □□□071C33	146
	53	44	1.4	65	36	1.7	17.500	GST04-2M □□□071C33	146
	48	48	1.5	58	39	1.8	19.360	GST04-2M □□□071C33	146
	46	50	3.2	56	41	3.9	20.044	GST05-2M □□□071C33	146
	42	55	1.1	51	45	1.4	22.000	GST04-2M □□□071C33	146
	41	57	2.5	50	46	3.1	22.778	GST05-2M □□□071C33	146
	37	62	1.1	45	51	1.4	24.933	GST04-2M □□□071C33	146
	37	62	2.6	45	51	3.2	24.933	GST05-2M □□□071C33	146
	33	71	0.9	40	58	1.1	28.333	GST04-2M □□□071C33	146
	33	71	2.1	40	58	2.6	28.333	GST05-2M □□□071C33	146



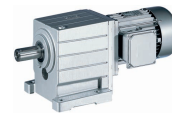
Selection tables

50 Hz, 60 Hz: $P_N = 0.25 \text{ kW}$

n _N f _N	930 r/min			1140 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	29	79	0.9	36	64	1.1	31.600	GST04-2M □□□071C33	146
	29	80	2.0	35	66	2.5	32.267	GST05-2M □□□071C33	146
	29	80	3.1	35	66	3.8	32.267	GST06-2M □□□071C33	146
	26	89	1.5	31	73	1.8	36.267	GST05-3M □□□071C33	152
	25	91	1.6	31	74	2.0	36.667	GST05-2M □□□071C33	146
	25	91	3.1	31	74	3.8	36.667	GST06-2M □□□071C33	146
	24	98	1.7	29	80	2.1	39.160	GST05-2M □□□071C33	146
	24	98	2.7	29	80	3.3	39.160	GST06-2M □□□071C33	146
	21	108	3.1	26	88	3.8	44.000	GST06-3M □□□071C33	152
	21	111	1.3	25	90	1.6	44.500	GST05-2M □□□071C33	146
	21	111	2.7	25	90	3.3	44.500	GST06-2M □□□071C33	146
	20	113	1.3	24	93	1.6	46.259	GST05-3M □□□071C33	152
	19	123	2.2	23	101	2.7	49.500	GST06-2M □□□071C33	146
	19	125	1.1	23	102	1.3	50.050	GST05-2M □□□071C33	146
	18	125	2.6	22	102	3.2	51.022	GST06-3M □□□071C33	152
	17	132	2.6	21	108	3.2	53.900	GST06-3M □□□071C33	152
	17	140	2.2	20	114	2.7	56.250	GST06-2M □□□071C33	146
	16	139	1.1	20	113	1.4	56.667	GST05-3M □□□071C33	152
	16	142	1.1	20	116	1.3	56.875	GST05-2M □□□071C33	146
	15	156	0.9	18	127	1.1	63.467	GST05-3M □□□071C33	152
	14	166	2.2	17	136	2.7	67.760	GST06-3M □□□071C33	152
	13	172	2.1	16	140	2.6	70.156	GST06-3M □□□071C33	152
	13	175	1.0	16	143	1.2	71.238	GST05-3M □□□071C33	152
	12	199	1.7	14	162	2.1	80.952	GST06-3M □□□071C33	152
	11	214	1.7	13	175	2.1	87.267	GST06-3M □□□071C33	152
	9.4	243	1.4	11	198	1.7	99.167	GST06-3M □□□071C33	152
	8.5	269	1.4	10	220	1.7	109.707	GST06-3M □□□071C33	152
	8.3	275	2.6	10	224	3.2	111.915	GST07-3M □□□071C33	152
	7.5	306	1.1	9.1	249	1.4	124.667	GST06-3M □□□071C33	152
	7.3	312	2.3	8.9	255	2.8	127.176	GST07-3M □□□071C33	152
	6.7	342	2.1	8.1	279	2.5	139.211	GST07-3M □□□071C33	152
	6.6	347	1.1	8.0	283	1.3	141.289	GST06-3M □□□071C33	152
	5.9	388	1.8	7.1	317	2.2	158.194	GST07-3M □□□071C33	152
	5.8	394	0.9	7.0	321	1.1	160.556	GST06-3M □□□071C33	152
	5.2	439	0.9	6.3	358	1.0	179.067	GST06-3M □□□071C33	152
	5.2	442	1.6	6.3	361	2.0	180.156	GST07-3M □□□071C33	152
	5.1	449	3.1	6.2	366	3.8	182.844	GST09-3M □□□071C33	152
	4.5	502	1.4	5.5	410	1.7	204.722	GST07-3M □□□071C33	152
	4.5	510	3.1	5.4	416	3.8	207.778	GST09-3M □□□071C33	152
	3.9	580	1.2	4.8	474	1.5	236.622	GST07-3M □□□071C33	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.25$ kW

n _N	930 r/min			1140 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	3.9	580	2.8	4.8	474	3.4	236.622	GST09-3M □□□071C33	152
	3.7	610	1.2	4.6	497	1.4	248.458	GST07-3M □□□071C33	152
	3.7	619	2.6	4.5	505	3.2	252.167	GST09-3M □□□071C33	152
	3.5	660	1.1	4.2	538	1.3	268.889	GST07-3M □□□071C33	152
	3.5	660	2.5	4.2	538	3.0	268.889	GST09-3M □□□071C33	152
	2.9	801	0.9	3.5	653	1.1	326.333	GST07-3M □□□071C33	152
	2.9	801	2.0	3.5	653	2.5	326.333	GST09-3M □□□071C33	152
	2.6	891	1.8	3.1	726	2.2	363.000	GST09-3M □□□071C33	152
	2.3	1012	1.6	2.7	826	2.0	412.500	GST09-3M □□□071C33	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.37 \text{ kW}$

n _N f _N	2720 r/min			3360 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	952	3.7	5.6	1162	3.0	6.5	2.857	GST04-1M □□□071C11	140
	777	4.5	4.6	949	3.6	5.3	3.500	GST04-1M □□□071C11	140
	618	5.6	3.6	755	4.6	4.2	4.400	GST04-1M □□□071C11	140
	480	7.3	2.8	586	5.9	3.3	5.667	GST04-1M □□□071C11	140
	425	8.1	5.6	519	6.5	6.4	6.400	GST04-2M □□□071C11	146
	379	9.2	2.2	462	7.4	2.6	7.182	GST04-1M □□□071C11	140
	340	10	4.8	415	8.2	5.5	8.000	GST04-2M □□□071C11	146
	306	11	3.0	373	9.2	3.5	8.900	GST05-1M □□□071C11	140
	302	12	1.7	369	9.3	1.9	9.000	GST04-1M □□□071C11	140
	276	12	4.3	337	10	4.9	9.856	GST04-2M □□□071C11	146
	239	15	1.7	292	12	2.0	11.375	GST05-1M □□□071C11	140
	216	16	3.6	264	13	4.1	12.571	GST04-2M □□□071C11	146
	190	18	2.8	232	15	3.2	14.286	GST04-2M □□□071C11	146
	177	19	3.3	216	16	3.8	15.400	GST04-2M □□□071C11	146
	155	22	2.6	190	18	3.0	17.500	GST04-2M □□□071C11	146
	141	24	2.7	172	20	3.1	19.360	GST04-2M □□□071C11	146
	124	28	2.1	151	22	2.4	22.000	GST04-2M □□□071C11	146
	109	31	2.1	133	25	2.4	24.933	GST04-2M □□□071C11	146
	96	36	1.7	117	29	1.9	28.333	GST04-2M □□□071C11	146
	86	40	1.7	105	32	1.9	31.600	GST04-2M □□□071C11	146
	76	45	1.3	93	37	1.5	35.909	GST04-2M □□□071C11	146
	75	45	2.8	92	36	3.2	36.267	GST05-3M □□□071C11	152
	74	46	3.0	91	37	3.4	36.667	GST05-2M □□□071C11	146
	70	49	3.1	85	40	3.6	39.160	GST05-2M □□□071C11	146
	69	50	1.4	84	40	1.6	39.600	GST04-2M □□□071C11	146
	61	56	2.7	75	45	3.2	44.500	GST05-2M □□□071C11	146
	60	57	1.2	74	46	1.4	45.000	GST04-2M □□□071C11	146
	59	57	2.5	72	46	3.0	46.259	GST05-3M □□□071C11	152
	54	63	2.1	66	51	2.6	50.050	GST05-2M □□□071C11	146
	48	70	2.2	59	57	2.6	56.667	GST05-3M □□□071C11	152
	48	72	2.1	58	58	2.5	56.875	GST05-2M □□□071C11	146
	43	79	1.9	52	64	2.2	63.467	GST05-3M □□□071C11	152
	38	88	1.9	47	72	2.2	71.238	GST05-3M □□□071C11	152
	34	100	1.5	41	81	1.7	80.952	GST05-3M □□□071C11	152
	30	114	1.5	36	92	1.8	91.746	GST05-3M □□□071C11	152
	27	123	1.2	34	100	1.4	99.167	GST05-3M □□□071C11	152
	27	123	2.7	34	100	3.2	99.167	GST06-3M □□□071C11	152
	25	136	2.8	30	110	3.3	109.707	GST06-3M □□□071C11	152
	23	144	1.2	29	117	1.4	116.277	GST05-3M □□□071C11	152
	22	155	1.0	27	125	1.1	124.667	GST05-3M □□□071C11	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.37$ kW

n _N	2720 r/min				3360 r/min			i		
f _N	50 Hz				60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c		n ₂ [r/min]	M ₂ [Nm]	c			
	22	155	2.2		27	125	2.6	124.667	GST06-3M □□□071C11	152
	19	175	2.1		24	142	2.5	141.289	GST06-3M □□□071C11	152
	19	181	0.9		23	146	1.1	145.714	GST05-3M □□□071C11	152
	17	199	1.7		21	161	2.0	160.556	GST06-3M □□□071C11	152
	15	222	1.7		19	180	2.0	179.067	GST06-3M □□□071C11	152
	15	224	3.2		18	181	3.8	180.156	GST07-3M □□□071C11	152
	13	253	1.4		16	204	1.6	203.485	GST06-3M □□□071C11	152
	13	254	2.8		16	206	3.3	204.722	GST07-3M □□□071C11	152
	12	288	1.3		14	233	1.6	231.733	GST06-3M □□□071C11	152
	12	294	2.4		14	238	2.9	236.622	GST07-3M □□□071C11	152
	11	308	2.3		13	250	2.7	248.458	GST07-3M □□□071C11	152
	11	317	1.1		13	256	1.3	255.000	GST06-3M □□□071C11	152
	10	334	2.1		12	270	2.5	268.889	GST07-3M □□□071C11	152
	9.4	361	1.0		11	292	1.2	290.400	GST06-3M □□□071C11	152
	8.3	405	1.8		10	328	2.1	326.333	GST07-3M □□□071C11	152
	8.2	410	0.9		10	332	1.0	330.000	GST06-3M □□□071C11	152
	7.4	456	1.5		9.1	369	1.8	367.033	GST07-3M □□□071C11	152
	6.6	512	3.2		8.1	415	3.8	412.500	GST09-3M □□□071C11	152
	6.5	518	1.4		8.0	419	1.6	417.083	GST07-3M □□□071C11	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.37 \text{ kW}$

n _N	1410 r/min			1720 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	881	3.9	4.0	1069	3.2	4.6	1.600	GST04-1M □□□071C32	140
	689	5.1	4.5	835	4.1	5.3	2.048	GST04-1M □□□071C32	140
	629	5.5	4.0	763	4.5	4.6	2.240	GST05-1M □□□071C32	140
				768	4.5	5.2	2.240	GST04-1M □□□071C32	140
	543	6.3	2.8	658	5.2	3.3	2.597	GST03-2M □□□071C32	146
	494	7.1	3.5	599	5.8	4.1	2.857	GST04-1M □□□071C32	140
	477	7.2	4.0	579	5.9	4.6	2.956	GST04-2M □□□071C32	146
	413	8.3	2.3	501	6.8	2.7	3.413	GST03-2M □□□071C32	146
	403	8.6	2.9	489	7.1	3.4	3.500	GST04-1M □□□071C32	140
	348	9.9	4.0	422	8.1	4.6	4.053	GST04-2M □□□071C32	146
	323	11	2.0	392	8.7	2.3	4.368	GST03-2M □□□071C32	146
	321	11	2.3	389	8.9	2.7	4.400	GST04-1M □□□071C32	140
	272	13	4.0	330	10	4.6	5.187	GST04-2M □□□071C32	146
	265	13	2.1	322	11	2.4	5.312	GST03-2M □□□071C32	146
	249	14	1.8	302	11	2.1	5.667	GST04-1M □□□071C32	140
	249	14	3.2	302	11	3.7	5.667	GST05-1M □□□071C32	140
	236	15	2.0	287	12	2.3	5.965	GST03-2M □□□071C32	146
	220	16	3.5	267	13	4.1	6.400	GST04-2M □□□071C32	146
	202	17	1.7	245	14	2.0	6.982	GST03-2M □□□071C32	146
	196	18	1.4	238	15	1.6	7.182	GST04-1M □□□071C32	140
	192	18	2.6	233	15	3.0	7.333	GST05-1M □□□071C32	140
	192	18	3.2	233	15	3.7	7.333	GST06-1M □□□071C32	140
	180	19	1.7	218	16	1.9	7.840	GST03-2M □□□071C32	146
	176	19	3.0	214	16	3.5	8.000	GST04-2M □□□071C32	146
	158	22	1.9	192	18	2.2	8.900	GST05-1M □□□071C32	140
	158	22	2.8	192	18	3.2	8.900	GST06-1M □□□071C32	140
	158	22	1.5	191	18	1.7	8.935	GST03-2M □□□071C32	146
	157	22	1.0	190	18	1.2	9.000	GST04-1M □□□071C32	140
	157	22	2.9	190	18	3.3	9.010	GST04-2M □□□071C32	146
	143	24	2.7	174	20	3.1	9.856	GST04-2M □□□071C32	146
	141	24	1.4	170	20	1.7	10.033	GST03-2M □□□071C32	146
	126	27	2.2	153	22	2.6	11.200	GST04-2M □□□071C32	146
	125	28	2.2	152	23	2.6	11.250	GST06-1M □□□071C32	140
	124	28	1.1	150	23	1.3	11.375	GST05-1M □□□071C32	140
	123	28	1.3	150	23	1.5	11.429	GST03-2M □□□071C32	146
	112	31	2.3	136	25	2.6	12.571	GST04-2M □□□071C32	146
	110	31	1.2	133	26	1.4	12.833	GST03-2M □□□071C32	146
	99	35	1.8	120	28	2.0	14.286	GST04-2M □□□071C32	146
	98	35	3.2	119	29	3.7	14.356	GST05-2M □□□071C32	146
	95	36	1.1	115	30	1.3	14.836	GST03-2M □□□071C32	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.37 \text{ kW}$

n _N f _N	1410 r/min			1720 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	92	37	1.9	111	31	2.3	15.400	GST04-2M □□□071C32	146
	87	39	3.2	106	32	3.9	16.190	GST05-2M □□□071C32	146
	85	41	1.0	103	33	1.2	16.660	GST03-2M □□□071C32	146
	81	43	1.5	98	35	1.8	17.500	GST04-2M □□□071C32	146
	74	46	0.9	90	38	1.1	19.013	GST03-2M □□□071C32	146
	73	47	1.5	88	39	1.8	19.360	GST04-2M □□□071C32	146
	66	52	0.9	80	43	1.0	21.350	GST03-2M □□□071C32	146
	64	53	1.2	78	44	1.4	22.000	GST04-2M □□□071C32	146
	62	55	2.6	75	45	3.2	22.778	GST05-2M □□□071C32	146
				70	49	0.9	24.595	GST03-2M □□□071C32	146
	57	61	1.2	69	50	1.4	24.933	GST04-2M □□□071C32	146
	57	61	2.7	69	50	3.3	24.933	GST05-2M □□□071C32	146
				62	55	0.8	27.618	GST03-2M □□□071C32	146
	50	69	0.9	60	56	1.1	28.333	GST04-2M □□□071C32	146
	50	69	2.1	60	56	2.6	28.333	GST05-2M □□□071C32	146
	45	77	0.9	54	63	1.1	31.600	GST04-2M □□□071C32	146
	44	78	2.1	53	64	2.6	32.267	GST05-2M □□□071C32	146
	44	78	3.2	53	64	3.9	32.267	GST06-2M □□□071C32	146
	39	87	1.5	47	71	1.9	36.267	GST05-3M □□□071C32	152
	39	89	1.7	47	73	2.0	36.667	GST05-2M □□□071C32	146
	39	89	3.2	47	73	3.9	36.667	GST06-2M □□□071C32	146
	36	95	1.7	44	78	2.1	39.160	GST05-2M □□□071C32	146
	36	95	2.8	44	78	3.4	39.160	GST06-2M □□□071C32	146
	32	105	3.2	39	86	3.9	44.000	GST06-3M □□□071C32	152
	32	108	1.4	38	89	1.7	44.500	GST05-2M □□□071C32	146
	32	108	2.8	38	89	3.4	44.500	GST06-2M □□□071C32	146
	31	111	1.3	37	91	1.6	46.259	GST05-3M □□□071C32	152
	29	120	2.2	35	99	2.7	49.500	GST06-2M □□□071C32	146
	28	122	1.1	34	100	1.4	50.050	GST05-2M □□□071C32	146
	28	122	2.7	34	100	3.2	51.022	GST06-3M □□□071C32	152
	26	129	2.7	32	106	3.3	53.900	GST06-3M □□□071C32	152
	25	137	2.2	30	112	2.7	56.250	GST06-2M □□□071C32	146
	25	136	1.1	30	111	1.4	56.667	GST05-3M □□□071C32	152
	25	138	1.1	30	113	1.3	56.875	GST05-2M □□□071C32	146
	22	152	1.0	27	125	1.2	63.467	GST05-3M □□□071C32	152
	21	162	2.2	25	133	2.7	67.760	GST06-3M □□□071C32	152
	20	168	2.1	24	138	2.6	70.156	GST06-3M □□□071C32	152
	20	171	1.0	24	140	1.2	71.238	GST05-3M □□□071C32	152
	17	194	1.7	21	159	2.1	80.952	GST06-3M □□□071C32	152
	16	209	1.8	20	171	2.2	87.267	GST06-3M □□□071C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.37$ kW

n_N	1410 r/min			1720 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	14	237	1.4	17	195	1.7	99.167	GST06-3M □□□071C32	152
	13	263	1.4	16	215	1.7	109.707	GST06-3M □□□071C32	152
	13	268	2.6	15	220	3.2	111.915	GST07-3M □□□071C32	152
	11	299	1.1	14	245	1.4	124.667	GST06-3M □□□071C32	152
	11	305	2.3	13	250	2.8	127.176	GST07-3M □□□071C32	152
	10	333	2.1	12	273	2.6	139.211	GST07-3M □□□071C32	152
	10	338	1.1	12	277	1.4	141.289	GST06-3M □□□071C32	152
	8.9	379	1.9	11	311	2.3	158.194	GST07-3M □□□071C32	152
	8.8	384	0.9	11	315	1.1	160.556	GST06-3M □□□071C32	152
	7.9	429	0.9	9.6	352	1.1	179.067	GST06-3M □□□071C32	152
	7.8	431	1.6	9.5	354	2.0	180.156	GST07-3M □□□071C32	152
	7.7	438	3.2	9.4	359	3.9	182.844	GST09-3M □□□071C32	152
	6.9	490	1.4	8.4	402	1.8	204.722	GST07-3M □□□071C32	152
	6.8	498	3.2	8.2	408	3.9	207.778	GST09-3M □□□071C32	152
	6.0	567	1.2	7.2	465	1.5	236.622	GST07-3M □□□071C32	152
	6.0	567	2.8	7.2	465	3.5	236.622	GST09-3M □□□071C32	152
	5.7	595	1.2	6.9	488	1.5	248.458	GST07-3M □□□071C32	152
	5.6	604	2.7	6.8	495	3.3	252.167	GST09-3M □□□071C32	152
	5.2	644	1.1	6.4	528	1.3	268.889	GST07-3M □□□071C32	152
	5.2	644	2.5	6.4	528	3.1	268.889	GST09-3M □□□071C32	152
	4.3	781	0.9	5.2	641	1.1	326.333	GST07-3M □□□071C32	152
	4.3	781	2.1	5.2	641	2.5	326.333	GST09-3M □□□071C32	152
	3.9	869	1.9	4.7	713	2.3	363.000	GST09-3M □□□071C32	152
	3.8	879	0.8	4.7	721	1.0	367.033	GST07-3M □□□071C32	152
	3.4	988	1.6	4.2	810	2.0	412.500	GST09-3M □□□071C32	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.37 \text{ kW}$

n _N f _N	950 r/min			1160 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	594	5.9	3.3	719	4.8	4.0	1.600	GST04-1M □□□080C13	140
	464	7.5	3.0	562	6.1	3.7	2.048	GST04-1M □□□080C13	140
	424	8.2	3.0	513	6.7	3.7	2.240	GST04-1M □□□080C13	140
	333	10	2.4	403	8.6	2.9	2.857	GST04-1M □□□080C13	140
	321	11	3.7	389	8.7	4.5	2.956	GST04-2M □□□080C13	146
	271	13	1.9	329	11	2.4	3.500	GST04-1M □□□080C13	140
	234	15	3.1	284	12	3.8	4.053	GST04-2M □□□080C13	146
	216	16	1.6	261	13	1.9	4.400	GST04-1M □□□080C13	140
	209	17	3.2	252	14	4.0	4.556	GST05-1M □□□080C13	140
	208	16	2.9	252	14	3.6	4.571	GST04-2M □□□080C13	146
	183	19	2.7	222	15	3.3	5.187	GST04-2M □□□080C13	146
	168	21	1.2	203	17	1.5	5.667	GST04-1M □□□080C13	140
	168	21	2.6	203	17	3.2	5.667	GST05-1M □□□080C13	140
	162	21	2.5	197	17	3.1	5.850	GST04-2M □□□080C13	146
	148	23	2.4	180	19	2.9	6.400	GST04-2M □□□080C13	146
	135	25	2.2	163	21	2.7	7.040	GST04-2M □□□080C13	146
	130	27	1.7	157	22	2.1	7.333	GST05-1M □□□080C13	140
	119	29	2.0	144	24	2.5	8.000	GST04-2M □□□080C13	146
	107	33	1.3	129	27	1.6	8.900	GST05-1M □□□080C13	140
	107	33	2.6	129	27	3.2	8.900	GST06-1M □□□080C13	140
	105	33	1.9	128	27	2.4	9.010	GST04-2M □□□080C13	146
	96	36	1.8	117	29	2.2	9.856	GST04-2M □□□080C13	146
	85	40	1.5	103	33	1.8	11.200	GST04-2M □□□080C13	146
	85	40	3.2	103	33	3.9	11.200	GST05-2M □□□080C13	146
	84	41	1.5	102	34	1.9	11.250	GST06-1M □□□080C13	140
	84	41	2.8	102	34	3.4	11.250	GST07-1M □□□080C13	140
	76	45	1.5	92	37	1.9	12.571	GST04-2M □□□080C13	146
	73	47	2.9	88	38	3.6	13.016	GST05-2M □□□080C13	146
	67	52	1.2	81	42	1.4	14.286	GST04-2M □□□080C13	146
	66	52	2.7	80	42	3.3	14.356	GST05-2M □□□080C13	146
	62	56	1.3	75	46	1.5	15.400	GST04-2M □□□080C13	146
	59	58	2.5	71	48	3.1	16.190	GST05-2M □□□080C13	146
	54	63	1.0	66	52	1.2	17.500	GST04-2M □□□080C13	146
	54	63	2.2	66	52	2.7	17.500	GST05-2M □□□080C13	146
	49	70	1.0	59	57	1.2	19.360	GST04-2M □□□080C13	146
	47	72	2.2	57	59	2.7	20.044	GST05-2M □□□080C13	146
	42	82	1.8	51	67	2.1	22.778	GST05-2M □□□080C13	146
	38	90	1.8	46	74	2.2	24.933	GST05-2M □□□080C13	146
	34	102	1.4	41	84	1.8	28.333	GST05-2M □□□080C13	146
	34	102	3.1	41	84	3.8	28.333	GST06-2M □□□080C13	146



Selection tables

50 Hz, 60 Hz: $P_N = 0.37 \text{ kW}$

n_N	950 r/min			1160 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	29	116	1.4	36	95	1.7	32.267	GST05-2M □□□080C13	146
	29	116	3.1	36	95	3.8	32.267	GST06-2M □□□080C13	146
	26	129	1.0	32	106	1.3	36.267	GST05-3M □□□080C13	152
	26	132	1.1	31	108	1.4	36.667	GST05-2M □□□080C13	146
	26	132	2.4	31	108	3.0	36.667	GST06-2M □□□080C13	146
	24	141	1.2	29	116	1.4	39.160	GST05-2M □□□080C13	146
	24	141	2.6	29	116	3.2	39.160	GST06-2M □□□080C13	146
	24	139	2.3	29	114	2.8	39.200	GST06-3M □□□080C13	152
	22	156	2.1	26	128	2.6	44.000	GST06-3M □□□080C13	152
	21	161	0.9	26	132	1.1	44.500	GST05-2M □□□080C13	146
	21	161	2.0	26	132	2.5	44.500	GST06-2M □□□080C13	146
	21	164	0.9	25	135	1.1	46.259	GST05-3M □□□080C13	152
	19	179	1.6	23	146	1.9	49.500	GST06-2M □□□080C13	146
	19	179	2.8	23	146	3.4	49.500	GST07-2M □□□080C13	146
	19	181	1.8	23	149	2.2	51.022	GST06-3M □□□080C13	152
	18	192	1.8	21	157	2.2	53.900	GST06-3M □□□080C13	152
	17	203	1.6	20	166	1.9	56.250	GST06-2M □□□080C13	146
	17	203	2.8	20	166	3.4	56.250	GST07-2M □□□080C13	146
	15	231	3.1	18	189	3.7	65.079	GST07-3M □□□080C13	152
	14	241	1.5	17	197	1.9	67.760	GST06-3M □□□080C13	152
	14	249	1.4	16	204	1.8	70.156	GST06-3M □□□080C13	152
	14	249	2.8	16	204	3.5	70.156	GST07-3M □□□080C13	152
	12	284	2.5	14	232	3.1	79.762	GST07-3M □□□080C13	152
	12	288	1.2	14	236	1.4	80.952	GST06-3M □□□080C13	152
	11	306	2.3	13	250	2.8	85.983	GST07-3M □□□080C13	152
	11	310	1.2	13	254	1.5	87.267	GST06-3M □□□080C13	152
	9.7	347	2.0	12	284	2.5	97.708	GST07-3M □□□080C13	152
	9.6	352	1.0	12	289	1.2	99.167	GST06-3M □□□080C13	152
	8.7	390	1.0	11	319	1.2	109.707	GST06-3M □□□080C13	152
	8.5	398	1.8	10	326	2.2	111.915	GST07-3M □□□080C13	152
	7.5	452	1.6	9.0	370	1.9	127.176	GST07-3M □□□080C13	152
	6.8	495	1.4	8.3	405	1.7	139.211	GST07-3M □□□080C13	152
	6.7	502	3.2	8.1	411	3.9	141.289	GST09-3M □□□080C13	152
	6.0	562	1.3	7.3	460	1.5	158.194	GST07-3M □□□080C13	152
	5.9	571	2.8	7.2	467	3.5	160.556	GST09-3M □□□080C13	152
	5.3	640	1.1	6.4	524	1.3	180.156	GST07-3M □□□080C13	152
	5.2	650	2.5	6.3	532	3.0	182.844	GST09-3M □□□080C13	152
	4.6	728	1.0	5.6	596	1.2	204.722	GST07-3M □□□080C13	152
	4.6	739	2.2	5.5	605	2.7	207.778	GST09-3M □□□080C13	152
	4.0	841	0.8	4.9	689	1.0	236.622	GST07-3M □□□080C13	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.37$ kW

n_N	950 r/min				1160 r/min			i		
f_N	50 Hz				60 Hz					
	n_2 [r/min]	M_2 [Nm]	c		n_2 [r/min]	M_2 [Nm]	c			
	4.0	841	1.9		4.9	689	2.3	236.622	GST09-3M □□□080C13	152
	4.0	841	3.2		4.9	689	3.9	236.622	GST11-3M □□□080C13	152
	3.8	883	0.8		4.6	723	1.0	248.458	GST07-3M □□□080C13	152
	3.8	896	1.8		4.6	734	2.2	252.167	GST09-3M □□□080C13	152
	3.8	896	3.1		4.6	734	3.8	252.167	GST11-3M □□□080C13	152
	3.5	956	1.7		4.3	783	2.1	268.889	GST09-3M □□□080C13	152
	3.5	956	3.0		4.3	783	3.6	268.889	GST11-3M □□□080C13	152
	2.9	1160	1.4		3.5	950	1.7	326.333	GST09-3M □□□080C13	152
	2.9	1160	2.5		3.5	950	3.0	326.333	GST11-3M □□□080C13	152
	2.6	1290	1.3		3.2	1057	1.5	363.000	GST09-3M □□□080C13	152
	2.6	1290	2.1		3.2	1057	2.6	363.000	GST11-3M □□□080C13	152
	2.3	1466	1.1		2.8	1201	1.4	412.500	GST09-3M □□□080C13	152
	2.3	1466	1.9		2.8	1201	2.4	412.500	GST11-3M □□□080C13	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n _N f _N	2630 r/min			3240 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1644	3.1	4.1	2019	2.6	4.7	1.600	GST04-1M □□□071C31	140
	1284	4.0	4.7	1577	3.3	5.4	2.048	GST04-1M □□□071C31	140
	1174	4.4	4.1				2.240	GST05-1M □□□071C31	140
				1446	3.6	5.3	2.240	GST04-1M □□□071C31	140
	921	5.6	3.7	1131	4.6	4.2	2.857	GST04-1M □□□071C31	140
	890	5.7	4.1	1093	4.6	4.7	2.956	GST04-2M □□□071C31	146
	751	6.9	3.0	923	5.6	3.5	3.500	GST04-1M □□□071C31	140
	649	7.9	4.1	797	6.4	4.7	4.053	GST04-2M □□□071C31	146
	598	8.7	2.4	734	7.0	2.8	4.400	GST04-1M □□□071C31	140
	507	10	4.1	623	8.2	4.7	5.187	GST04-2M □□□071C31	146
	464	11	1.9	570	9.0	2.1	5.667	GST04-1M □□□071C31	140
	411	12	3.7	505	10	4.2	6.400	GST04-2M □□□071C31	146
	366	14	1.5	450	11	1.7	7.182	GST04-1M □□□071C31	140
	359	14	2.7	441	12	3.1	7.333	GST05-1M □□□071C31	140
	329	16	3.1	404	13	3.6	8.000	GST04-2M □□□071C31	146
	296	18	2.0	363	14	2.3	8.900	GST05-1M □□□071C31	140
	296	18	2.9	363	14	3.3	8.900	GST06-1M □□□071C31	140
	292	18	1.1	359	14	1.3	9.000	GST04-1M □□□071C31	140
	292	17	3.0	359	14	3.4	9.010	GST04-2M □□□071C31	146
	267	19	2.8	328	16	3.2	9.856	GST04-2M □□□071C31	146
	235	22	2.3	288	18	2.6	11.200	GST04-2M □□□071C31	146
	234	22	2.3	287	18	2.7	11.250	GST06-1M □□□071C31	140
	231	22	1.1	284	18	1.3	11.375	GST05-1M □□□071C31	140
	209	24	2.4	257	20	2.7	12.571	GST04-2M □□□071C31	146
	184	28	1.8	226	22	2.1	14.286	GST04-2M □□□071C31	146
	171	30	2.2	210	24	2.5	15.400	GST04-2M □□□071C31	146
	150	34	1.7	185	28	2.0	17.500	GST04-2M □□□071C31	146
	136	38	1.8	167	30	2.0	19.360	GST04-2M □□□071C31	146
	120	43	1.4	147	35	1.6	22.000	GST04-2M □□□071C31	146
	116	44	3.1	142	36	3.5	22.778	GST05-2M □□□071C31	146
	106	48	1.4	130	39	1.6	24.933	GST04-2M □□□071C31	146
	106	48	3.2	130	39	3.6	24.933	GST05-2M □□□071C31	146
	93	55	1.1	114	45	1.3	28.333	GST04-2M □□□071C31	146
	93	55	2.5	114	45	2.9	28.333	GST05-2M □□□071C31	146
	83	61	1.1	102	50	1.3	31.600	GST04-2M □□□071C31	146
	82	63	2.5	100	51	2.8	32.267	GST05-2M □□□071C31	146
	73	70	0.9	90	56	1.0	35.909	GST04-2M □□□071C31	146
	73	69	1.8	89	56	2.1	36.267	GST05-3M □□□071C31	152
	72	71	2.0	88	58	2.3	36.667	GST05-2M □□□071C31	146
	67	76	2.0	83	62	2.4	39.160	GST05-2M □□□071C31	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n _N	2630 r/min			3240 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	66	77	0.9	82	62	1.0	39.600	GST04-2M □□□071C31	146
	59	86	1.7	73	70	2.1	44.500	GST05-2M □□□071C31	146
	57	88	1.6	70	72	2.0	46.259	GST05-3M □□□071C31	152
	53	96	2.8	65	78	3.4	49.500	GST06-2M □□□071C31	146
	53	97	1.4	65	79	1.7	50.050	GST05-2M □□□071C31	146
	47	109	2.8	57	88	3.4	56.250	GST06-2M □□□071C31	146
	46	108	1.4	57	88	1.7	56.667	GST05-3M □□□071C31	152
	46	110	1.4	57	89	1.6	56.875	GST05-2M □□□071C31	146
	41	121	1.2	51	98	1.4	63.467	GST05-3M □□□071C31	152
	39	129	2.8	48	105	3.4	67.760	GST06-3M □□□071C31	152
	38	134	2.7	46	109	3.2	70.156	GST06-3M □□□071C31	152
	37	136	1.2	45	110	1.5	71.238	GST05-3M □□□071C31	152
	33	154	1.0	40	125	1.1	80.952	GST05-3M □□□071C31	152
	33	154	2.2	40	125	2.6	80.952	GST06-3M □□□071C31	152
	30	167	2.2	37	135	2.7	87.267	GST06-3M □□□071C31	152
	29	175	1.0	35	142	1.2	91.746	GST05-3M □□□071C31	152
	27	189	1.8	33	154	2.1	99.167	GST06-3M □□□071C31	152
	24	209	1.8	29	170	2.2	109.707	GST06-3M □□□071C31	152
	21	238	1.4	26	193	1.7	124.667	GST06-3M □□□071C31	152
	21	243	2.9	25	197	3.5	127.176	GST07-3M □□□071C31	152
	19	266	2.7	23	216	3.2	139.211	GST07-3M □□□071C31	152
	19	270	1.4	23	219	1.7	141.289	GST06-3M □□□071C31	152
	17	302	2.4	20	245	2.8	158.194	GST07-3M □□□071C31	152
	16	306	1.1	20	249	1.3	160.556	GST06-3M □□□071C31	152
	15	342	1.1	18	277	1.3	179.067	GST06-3M □□□071C31	152
	15	344	2.1	18	279	2.5	180.156	GST07-3M □□□071C31	152
	13	388	0.9	16	315	1.1	203.485	GST06-3M □□□071C31	152
	13	391	1.8	16	317	2.2	204.722	GST07-3M □□□071C31	152
	11	442	0.8	14	359	1.0	231.733	GST06-3M □□□071C31	152
	11	452	1.6	14	367	1.9	236.622	GST07-3M □□□071C31	152
	11	474	1.5	13	385	1.8	248.458	GST07-3M □□□071C31	152
	9.8	513	1.4	12	417	1.7	268.889	GST07-3M □□□071C31	152
	9.8	513	3.2	12	417	3.8	268.889	GST09-3M □□□071C31	152
	8.1	623	1.1	9.9	506	1.4	326.333	GST07-3M □□□071C31	152
	8.1	623	2.6	9.9	506	3.1	326.333	GST09-3M □□□071C31	152
	7.3	693	2.3	8.9	562	2.8	363.000	GST09-3M □□□071C31	152
	7.2	700	1.0	8.8	569	1.2	367.033	GST07-3M □□□071C31	152
	6.4	787	2.1	7.8	639	2.5	412.500	GST09-3M □□□071C31	152
	6.3	796	0.9	7.7	646	1.1	417.083	GST07-3M □□□071C31	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n _N f _N	1405 r/min			1720 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	878	5.9	3.3	1066	4.8	3.8	1.600	GST04-1M □□□071C42	140
	686	7.5	3.0	833	6.2	3.5	2.048	GST04-1M □□□071C42	140
	627	8.2	3.0	761	6.7	3.5	2.240	GST04-1M □□□071C42	140
	541	9.4	1.9	657	7.7	2.2	2.597	GST03-2M □□□071C42	146
	492	11	2.4	597	8.6	2.8	2.857	GST04-1M □□□071C42	140
	475	11	3.6	577	8.8	4.3	2.956	GST04-2M □□□071C42	146
	412	12	1.6	500	10	1.8	3.413	GST03-2M □□□071C42	146
	401	13	1.9	487	11	2.3	3.500	GST04-1M □□□071C42	140
	347	15	3.1	421	12	3.6	4.053	GST04-2M □□□071C42	146
	322	16	1.3	390	13	1.5	4.368	GST03-2M □□□071C42	146
	319	16	1.5	388	13	1.8	4.400	GST04-1M □□□071C42	140
	308	17	3.2	374	14	3.8	4.556	GST05-1M □□□071C42	140
	307	17	2.9	373	14	3.4	4.571	GST04-2M □□□071C42	146
	271	19	2.7	329	15	3.1	5.187	GST04-2M □□□071C42	146
	265	19	1.4	321	16	1.6	5.312	GST03-2M □□□071C42	146
	248	21	1.2	301	17	1.4	5.667	GST04-1M □□□071C42	140
	248	21	2.6	301	17	3.0	5.667	GST05-1M □□□071C42	140
	248	21	3.2	301	17	3.7	5.667	GST06-1M □□□071C42	140
	240	21	2.5	291	17	2.9	5.850	GST04-2M □□□071C42	146
	236	22	1.3	286	18	1.5	5.965	GST03-2M □□□071C42	146
	220	23	2.4	266	19	2.8	6.400	GST04-2M □□□071C42	146
	201	25	1.2	244	21	1.4	6.982	GST03-2M □□□071C42	146
	200	26	2.2	242	21	2.6	7.040	GST04-2M □□□071C42	146
	192	27	1.7	233	22	2.0	7.333	GST05-1M □□□071C42	140
	192	27	2.9	233	22	3.4	7.333	GST06-1M □□□071C42	140
	179	28	1.1	218	23	1.3	7.840	GST03-2M □□□071C42	146
	176	29	2.0	213	24	2.4	8.000	GST04-2M □□□071C42	146
	158	33	1.3	192	27	1.5	8.900	GST05-1M □□□071C42	140
	158	33	2.4	192	27	2.8	8.900	GST06-1M □□□071C42	140
	157	32	1.0	191	26	1.2	8.935	GST03-2M □□□071C42	146
	156	33	1.9	189	27	2.2	9.010	GST04-2M □□□071C42	146
	143	36	1.8	173	29	2.1	9.856	GST04-2M □□□071C42	146
	140	36	0.9	170	30	1.1	10.033	GST03-2M □□□071C42	146
	125	41	1.5	152	33	1.7	11.200	GST04-2M □□□071C42	146
	125	41	3.1	152	33	3.7	11.200	GST05-2M □□□071C42	146
	125	41	1.4	152	34	1.6	11.250	GST06-1M □□□071C42	140
	123	41	0.9	149	34	1.0	11.429	GST03-2M □□□071C42	146
	112	46	1.5	136	37	1.8	12.571	GST04-2M □□□071C42	146
	110	47	0.8	134	38	0.9	12.833	GST03-2M □□□071C42	146
	108	47	2.9	131	39	3.4	13.016	GST05-2M □□□071C42	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n_N	1405 r/min			1720 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	98	52	1.2	119	42	1.4	14.286	GST04-2M □□□071C42	146
	98	52	2.7	119	43	3.1	14.356	GST05-2M □□□071C42	146
				116	44	0.8	14.836	GST03-2M □□□071C42	146
	91	56	1.2	111	46	1.5	15.400	GST04-2M □□□071C42	146
	87	59	2.5	105	48	3.1	16.190	GST05-2M □□□071C42	146
				103	49	0.8	16.660	GST03-2M □□□071C42	146
	80	63	1.0	97	52	1.2	17.500	GST04-2M □□□071C42	146
	80	63	2.2	97	52	2.7	17.500	GST05-2M □□□071C42	146
	73	70	1.0	88	57	1.2	19.360	GST04-2M □□□071C42	146
	70	73	2.2	85	59	2.7	20.044	GST05-2M □□□071C42	146
	62	83	1.7	75	67	2.1	22.778	GST05-2M □□□071C42	146
	56	90	1.8	68	74	2.2	24.933	GST05-2M □□□071C42	146
	56	90	3.2	68	74	3.9	24.933	GST06-2M □□□071C42	146
	50	103	1.4	60	84	1.8	28.333	GST05-2M □□□071C42	146
	50	103	3.1	60	84	3.8	28.333	GST06-2M □□□071C42	146
	44	117	1.4	53	96	1.7	32.267	GST05-2M □□□071C42	146
	44	117	2.9	53	96	3.5	32.267	GST06-2M □□□071C42	146
	39	130	1.0	47	106	1.3	36.267	GST05-3M □□□071C42	152
	38	133	1.1	47	109	1.4	36.667	GST05-2M □□□071C42	146
	38	133	2.4	47	109	3.0	36.667	GST06-2M □□□071C42	146
	36	142	1.2	44	116	1.4	39.160	GST05-2M □□□071C42	146
	36	142	2.4	44	116	2.9	39.160	GST06-2M □□□071C42	146
	36	140	2.3	44	114	2.8	39.200	GST06-3M □□□071C42	152
	32	157	2.1	39	128	2.6	44.000	GST06-3M □□□071C42	152
	32	161	0.9	38	132	1.1	44.500	GST05-2M □□□071C42	146
	32	161	2.0	38	132	2.5	44.500	GST06-2M □□□071C42	146
	30	165	0.9	37	135	1.1	46.259	GST05-3M □□□071C42	152
	28	180	1.4	34	147	1.7	49.500	GST06-2M □□□071C42	146
	28	182	1.8	33	149	2.2	51.022	GST06-3M □□□071C42	152
	26	193	1.8	32	157	2.2	53.900	GST06-3M □□□071C42	152
	25	204	1.4	30	167	1.7	56.250	GST06-2M □□□071C42	146
	22	232	3.0	26	190	3.7	65.079	GST07-3M □□□071C42	152
	21	242	1.5	25	198	1.8	67.760	GST06-3M □□□071C42	152
	20	251	1.4	24	205	1.8	70.156	GST06-3M □□□071C42	152
	20	251	2.8	24	205	3.4	70.156	GST07-3M □□□071C42	152
	18	285	2.5	21	233	3.1	79.762	GST07-3M □□□071C42	152
	17	289	1.1	21	236	1.4	80.952	GST06-3M □□□071C42	152
	16	307	2.3	20	251	2.8	85.983	GST07-3M □□□071C42	152
	16	312	1.2	20	255	1.5	87.267	GST06-3M □□□071C42	152
	14	349	2.0	17	285	2.5	97.708	GST07-3M □□□071C42	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n_N	1405 r/min			1720 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	14	354	0.9	17	289	1.2	99.167	GST06-3M □□□071C42	152
	13	392	1.0	16	320	1.2	109.707	GST06-3M □□□071C42	152
	13	400	1.8	15	327	2.2	111.915	GST07-3M □□□071C42	152
	11	454	1.6	13	371	1.9	127.176	GST07-3M □□□071C42	152
	10	497	1.4	12	406	1.7	139.211	GST07-3M □□□071C42	152
	9.9	505	3.2	12	412	3.9	141.289	GST09-3M □□□071C42	152
	8.9	565	1.3	11	462	1.5	158.194	GST07-3M □□□071C42	152
	8.8	574	2.8	11	469	3.5	160.556	GST09-3M □□□071C42	152
	7.8	644	1.1	9.5	526	1.3	180.156	GST07-3M □□□071C42	152
	7.7	653	2.5	9.3	534	3.0	182.844	GST09-3M □□□071C42	152
	6.9	731	1.0	8.3	597	1.2	204.722	GST07-3M □□□071C42	152
	6.8	742	2.2	8.2	606	2.7	207.778	GST09-3M □□□071C42	152
	5.9	845	0.8	7.2	691	1.0	236.622	GST07-3M □□□071C42	152
	5.9	845	1.9	7.2	691	2.3	236.622	GST09-3M □□□071C42	152
	5.6	901	1.8	6.8	736	2.2	252.167	GST09-3M □□□071C42	152
	5.2	961	1.7	6.3	785	2.1	268.889	GST09-3M □□□071C42	152
	4.3	1166	1.4	5.2	952	1.7	326.333	GST09-3M □□□071C42	152
	3.9	1297	1.2	4.7	1059	1.5	363.000	GST09-3M □□□071C42	152
	3.4	1474	1.1	4.1	1204	1.3	412.500	GST09-3M □□□071C42	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n_N	930 r/min			1140 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	581	8.9	2.2	706	7.3	2.6	1.600	GST04-1M □□□080C33	140
	454	11	2.0	552	9.3	2.5	2.048	GST04-1M □□□080C33	140
	415	12	2.0	505	10	2.4	2.240	GST04-1M □□□080C33	140
	326	16	1.6	396	13	1.9	2.857	GST04-1M □□□080C33	140
	315	16	2.4	382	13	3.0	2.956	GST04-2M □□□080C33	146
	279	18	2.3	339	15	2.8	3.333	GST04-2M □□□080C33	146
	266	19	1.3	323	16	1.6	3.500	GST04-1M □□□080C33	140
	266	19	2.8	323	16	3.4	3.500	GST05-1M □□□080C33	140
	229	22	2.0	279	18	2.5	4.053	GST04-2M □□□080C33	146
	211	24	1.0	257	20	1.3	4.400	GST04-1M □□□080C33	140
	204	25	2.1	248	21	2.6	4.556	GST05-1M □□□080C33	140
	204	25	3.1	248	21	3.8	4.556	GST06-1M □□□080C33	140
	203	25	1.9	247	20	2.3	4.571	GST04-2M □□□080C33	146
	179	28	1.8	218	23	2.2	5.187	GST04-2M □□□080C33	146
	179	28	3.2	218	23	3.9	5.187	GST05-2M □□□080C33	146
	164	32	1.7	199	26	2.1	5.667	GST05-1M □□□080C33	140
	164	32	2.6	199	26	3.2	5.667	GST06-1M □□□080C33	140
	159	32	1.7	193	26	2.0	5.850	GST04-2M □□□080C33	146
	159	32	3.2	193	26	3.9	5.850	GST05-2M □□□080C33	146
	145	35	1.6	177	29	1.9	6.400	GST04-2M □□□080C33	146
	145	35	3.0	177	29	3.7	6.400	GST05-2M □□□080C33	146
	132	39	1.5	161	31	1.8	7.040	GST04-2M □□□080C33	146
	129	40	2.7	156	32	3.3	7.238	GST05-2M □□□080C33	146
	127	41	1.1	154	33	1.4	7.333	GST05-1M □□□080C33	140
	127	41	2.4	154	33	2.9	7.333	GST06-1M □□□080C33	140
	127	41	2.6	154	33	3.2	7.333	GST07-1M □□□080C33	140
	116	44	1.3	141	36	1.6	8.000	GST04-2M □□□080C33	146
	114	45	2.6	138	36	3.2	8.163	GST05-2M □□□080C33	146
	105	50	0.9	127	40	1.0	8.900	GST05-1M □□□080C33	140
	105	50	1.7	127	40	2.1	8.900	GST06-1M □□□080C33	140
	105	50	2.3	127	40	2.8	8.900	GST07-1M □□□080C33	140
	103	49	1.3	125	40	1.6	9.010	GST04-2M □□□080C33	146
	103	49	2.4	125	40	2.9	9.010	GST05-2M □□□080C33	146
	94	54	1.2	115	44	1.5	9.856	GST04-2M □□□080C33	146
	93	55	2.3	113	45	2.8	10.000	GST05-2M □□□080C33	146
	83	61	1.0	101	50	1.2	11.200	GST04-2M □□□080C33	146
	83	61	2.1	101	50	2.5	11.200	GST05-2M □□□080C33	146
	83	63	1.0	100	51	1.2	11.250	GST06-1M □□□080C33	140
	83	63	1.8	100	51	2.2	11.250	GST07-1M □□□080C33	140
	74	69	1.0	90	56	1.2	12.571	GST04-2M □□□080C33	146



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n_N	930 r/min			1140 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	72	71	1.9	87	58	2.4	13.016	GST05-2M □□□080C33	146
	65	79	1.8	79	64	2.2	14.356	GST05-2M □□□080C33	146
	60	84	0.8	73	69	1.0	15.400	GST04-2M □□□080C33	146
	57	89	1.7	70	72	2.1	16.190	GST05-2M □□□080C33	146
	53	96	1.5	65	78	1.8	17.500	GST05-2M □□□080C33	146
	46	110	1.5	56	90	1.8	20.044	GST05-2M □□□080C33	146
	46	110	3.1	56	90	3.8	20.044	GST06-2M □□□080C33	146
	41	125	1.2	50	102	1.4	22.778	GST05-2M □□□080C33	146
	41	125	2.5	50	102	3.1	22.778	GST06-2M □□□080C33	146
	37	137	1.2	45	111	1.5	24.933	GST05-2M □□□080C33	146
	37	137	2.6	45	111	3.2	24.933	GST06-2M □□□080C33	146
	33	155	0.9	40	127	1.2	28.333	GST05-2M □□□080C33	146
	33	155	2.0	40	127	2.5	28.333	GST06-2M □□□080C33	146
	29	177	0.9	35	144	1.1	32.267	GST05-2M □□□080C33	146
	29	177	2.1	35	144	2.5	32.267	GST06-2M □□□080C33	146
	29	177	2.6	35	144	3.2	32.267	GST07-2M □□□080C33	146
	25	201	1.6	31	164	2.0	36.667	GST06-2M □□□080C33	146
	25	201	2.6	31	164	3.2	36.667	GST07-2M □□□080C33	146
	24	215	1.7	29	175	2.1	39.160	GST06-2M □□□080C33	146
	24	215	2.3	29	175	2.8	39.160	GST07-2M □□□080C33	146
	24	212	1.5	29	173	1.9	39.200	GST06-3M □□□080C33	152
	21	237	1.4	26	194	1.7	44.000	GST06-3M □□□080C33	152
	21	237	3.0	26	194	3.6	44.000	GST07-3M □□□080C33	152
	21	244	1.3	25	199	1.6	44.500	GST06-2M □□□080C33	146
	21	244	2.3	25	199	2.8	44.500	GST07-2M □□□080C33	146
	19	271	1.0	23	221	1.3	49.500	GST06-2M □□□080C33	146
	19	271	1.8	23	221	2.2	49.500	GST07-2M □□□080C33	146
	18	275	1.2	22	225	1.4	51.022	GST06-3M □□□080C33	152
	18	275	2.5	22	225	3.1	51.022	GST07-3M □□□080C33	152
	17	291	1.2	21	237	1.5	53.900	GST06-3M □□□080C33	152
	17	291	2.4	21	237	3.0	53.900	GST07-3M □□□080C33	152
	17	308	1.0	20	251	1.3	56.250	GST06-2M □□□080C33	146
	17	308	1.8	20	251	2.2	56.250	GST07-2M □□□080C33	146
	14	351	2.0	17	287	2.5	65.079	GST07-3M □□□080C33	152
	14	366	1.0	17	298	1.2	67.760	GST06-3M □□□080C33	152
	13	379	0.9	16	309	1.2	70.156	GST06-3M □□□080C33	152
	13	379	1.9	16	309	2.3	70.156	GST07-3M □□□080C33	152
	12	430	1.6	14	351	2.0	79.762	GST07-3M □□□080C33	152
	11	464	1.5	13	379	1.9	85.983	GST07-3M □□□080C33	152
	9.9	505	3.1	12	412	3.8	93.541	GST09-3M □□□080C33	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.55 \text{ kW}$

n _N	930 r/min			1140 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	9.5	527	1.3	12	430	1.7	97.708	GST07-3M □□□080C33	152
	8.3	604	1.2	10	493	1.4	111.915	GST07-3M □□□080C33	152
	8.2	613	2.6	10	500	3.2	113.585	GST09-3M □□□080C33	152
	7.3	686	1.0	8.9	560	1.3	127.176	GST07-3M □□□080C33	152
	7.2	697	2.3	8.8	568	2.8	129.074	GST09-3M □□□080C33	152
	6.7	751	0.9	8.1	613	1.2	139.211	GST07-3M □□□080C33	152
	6.6	763	2.1	8.0	622	2.6	141.289	GST09-3M □□□080C33	152
	5.9	854	0.8	7.1	697	1.0	158.194	GST07-3M □□□080C33	152
	5.8	867	1.9	7.0	707	2.3	160.556	GST09-3M □□□080C33	152
	5.1	987	1.6	6.2	805	2.0	182.844	GST09-3M □□□080C33	152
	4.5	1121	1.4	5.4	915	1.8	207.778	GST09-3M □□□080C33	152
	4.5	1121	2.5	5.4	915	3.1	207.778	GST11-3M □□□080C33	152
	3.9	1277	1.3	4.8	1042	1.5	236.622	GST09-3M □□□080C33	152
	3.9	1277	2.1	4.8	1042	2.6	236.622	GST11-3M □□□080C33	152
	3.7	1361	1.2	4.5	1110	1.5	252.167	GST09-3M □□□080C33	152
	3.7	1361	2.1	4.5	1110	2.5	252.167	GST11-3M □□□080C33	152
	3.5	1451	1.1	4.2	1184	1.4	268.889	GST09-3M □□□080C33	152
	3.5	1451	2.0	4.2	1184	2.4	268.889	GST11-3M □□□080C33	152
	2.9	1761	0.9	3.5	1437	1.1	326.333	GST09-3M □□□080C33	152
	2.9	1761	1.6	3.5	1437	2.0	326.333	GST11-3M □□□080C33	152
	2.6	1959	0.8	3.1	1598	1.0	363.000	GST09-3M □□□080C33	152
	2.6	1959	1.4	3.1	1598	1.7	363.000	GST11-3M □□□080C33	152
	2.3	2226	1.3	2.7	1816	1.6	412.500	GST11-3M □□□080C33	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.75 \text{ kW}$

n _N f _N	2720 r/min			3380 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1700	4.1	3.8	2075	3.3	4.4	1.600	GST04-1M □□□080C11	140
	1328	5.3	3.5	1621	4.3	4.1	2.048	GST04-1M □□□080C11	140
	1214	5.8	3.5	1482	4.7	4.0	2.240	GST04-1M □□□080C11	140
	952	7.4	2.8	1162	6.0	3.2	2.857	GST04-1M □□□080C11	140
	920	7.6	4.2	1123	6.1	4.9	2.956	GST04-2M □□□080C11	146
	777	9.1	2.3	949	7.3	2.6	3.500	GST04-1M □□□080C11	140
	671	10	3.6	819	8.3	4.1	4.053	GST04-2M □□□080C11	146
	618	11	1.8	755	9.2	2.1	4.400	GST04-1M □□□080C11	140
	524	13	3.1	640	11	3.6	5.187	GST04-2M □□□080C11	146
	480	15	1.4	586	12	1.6	5.667	GST04-1M □□□080C11	140
	480	15	3.0	586	12	3.5	5.667	GST05-1M □□□080C11	140
	465	15	2.9	568	12	3.4	5.850	GST04-2M □□□080C11	146
	425	16	2.8	519	13	3.2	6.400	GST04-2M □□□080C11	146
	386	18	2.6	472	14	3.0	7.040	GST04-2M □□□080C11	146
	371	19	2.0	453	15	2.3	7.333	GST05-1M □□□080C11	140
	340	20	2.4	415	16	2.7	8.000	GST04-2M □□□080C11	146
	306	23	1.5	373	19	1.7	8.900	GST05-1M □□□080C11	140
	306	23	3.0	373	19	3.5	8.900	GST06-1M □□□080C11	140
	302	23	2.2	369	19	2.6	9.010	GST04-2M □□□080C11	146
	276	25	2.1	337	20	2.4	9.856	GST04-2M □□□080C11	146
	243	29	1.7	296	23	2.0	11.200	GST04-2M □□□080C11	146
	242	29	1.8	295	23	2.0	11.250	GST06-1M □□□080C11	140
	242	29	3.2	295	23	3.7	11.250	GST07-1M □□□080C11	140
	216	32	1.8	264	26	2.0	12.571	GST04-2M □□□080C11	146
	190	36	1.4	232	29	1.6	14.286	GST04-2M □□□080C11	146
	190	37	3.1	231	30	3.6	14.356	GST05-2M □□□080C11	146
	177	39	1.6	216	32	1.9	15.400	GST04-2M □□□080C11	146
	155	45	1.3	190	36	1.5	17.500	GST04-2M □□□080C11	146
	155	45	3.0	190	36	3.4	17.500	GST05-2M □□□080C11	146
	141	49	1.3	172	40	1.5	19.360	GST04-2M □□□080C11	146
	136	51	2.9	166	41	3.4	20.044	GST05-2M □□□080C11	146
	124	56	1.0	151	45	1.2	22.000	GST04-2M □□□080C11	146
	119	58	2.3	146	47	2.7	22.778	GST05-2M □□□080C11	146
	109	64	1.0	133	51	1.2	24.933	GST04-2M □□□080C11	146
	109	64	2.4	133	51	2.7	24.933	GST05-2M □□□080C11	146
	96	72	0.8	119	58	0.9	28.333	GST04-2M □□□080C11	146
	96	72	1.9	117	58	2.2	28.333	GST05-2M □□□080C11	146
	84	82	1.9	103	66	2.1	32.267	GST05-2M □□□080C11	146
	75	91	1.4	92	73	1.6	36.267	GST05-3M □□□080C11	152
	74	94	1.5	91	75	1.7	36.667	GST05-2M □□□080C11	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.75 \text{ kW}$

n _N f _N	2720 r/min			3380 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	74	94	3.2	91	75	3.7	36.667	GST06-2M □□□080C11	146
	70	100	1.5	85	81	1.8	39.160	GST05-2M □□□080C11	146
	69	99	3.0	85	79	3.5	39.200	GST06-3M □□□080C11	152
	62	111	3.0	76	89	3.6	44.000	GST06-3M □□□080C11	152
	61	114	1.3	75	91	1.6	44.500	GST05-2M □□□080C11	146
	61	114	2.9	75	91	3.4	44.500	GST06-2M □□□080C11	146
	59	116	1.2	72	94	1.5	46.259	GST05-3M □□□080C11	152
	55	126	2.2	67	102	2.6	49.500	GST06-2M □□□080C11	146
	53	128	2.5	65	103	3.0	51.022	GST06-3M □□□080C11	152
	51	136	2.6	62	109	3.1	53.900	GST06-3M □□□080C11	152
	48	144	2.2	59	116	2.6	56.250	GST06-2M □□□080C11	146
	48	143	1.1	59	115	1.3	56.667	GST05-3M □□□080C11	152
	43	160	0.9	52	129	1.1	63.467	GST05-3M □□□080C11	152
	40	171	2.1	49	137	2.6	67.760	GST06-3M □□□080C11	152
	39	177	2.0	47	142	2.4	70.156	GST06-3M □□□080C11	152
	38	179	0.9	47	144	1.1	71.238	GST05-3M □□□080C11	152
	34	204	1.6	41	164	1.9	80.952	GST06-3M □□□080C11	152
	31	220	1.7	38	177	2.0	87.267	GST06-3M □□□080C11	152
	28	246	2.9	34	198	3.4	97.708	GST07-3M □□□080C11	152
	27	250	1.3	34	201	1.6	99.167	GST06-3M □□□080C11	152
	25	276	1.4	30	222	1.6	109.707	GST06-3M □□□080C11	152
	24	282	2.5	30	227	3.0	111.915	GST07-3M □□□080C11	152
	22	314	1.1	27	252	1.3	124.667	GST06-3M □□□080C11	152
	21	320	2.2	26	258	2.6	127.176	GST07-3M □□□080C11	152
	20	350	2.0	24	282	2.4	139.211	GST07-3M □□□080C11	152
	19	356	1.1	24	286	1.3	141.289	GST06-3M □□□080C11	152
	17	398	1.8	21	320	2.1	158.194	GST07-3M □□□080C11	152
	17	404	0.8	21	325	1.0	160.556	GST06-3M □□□080C11	152
	15	453	1.6	18	365	1.9	180.156	GST07-3M □□□080C11	152
	13	515	1.4	16	415	1.6	204.722	GST07-3M □□□080C11	152
	13	523	3.1	16	421	3.7	207.778	GST09-3M □□□080C11	152
	12	595	1.2	14	479	1.4	236.622	GST07-3M □□□080C11	152
	12	595	2.7	14	479	3.2	236.622	GST09-3M □□□080C11	152
	11	625	1.1	13	503	1.4	248.458	GST07-3M □□□080C11	152
	11	635	2.6	13	511	3.1	252.167	GST09-3M □□□080C11	152
	10	677	1.0	12	544	1.3	268.889	GST07-3M □□□080C11	152
	10	677	2.4	12	544	2.9	268.889	GST09-3M □□□080C11	152
	8.3	821	0.9	10	661	1.0	326.333	GST07-3M □□□080C11	152
	8.3	821	2.0	10	661	2.4	326.333	GST09-3M □□□080C11	152
	7.5	913	1.8	9.2	735	2.1	363.000	GST09-3M □□□080C11	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.75\text{ kW}$

n _N	2720 r/min			3380 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	7.5	913	3.0	9.2	735	3.5	363.000	GST11-3M □□□080C11	152
	6.6	1038	1.6	8.1	835	1.9	412.500	GST09-3M □□□080C11	152
	6.6	1038	2.7	8.1	835	3.3	412.500	GST11-3M □□□080C11	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 0.75 \text{ kW}$

n _N	1410 r/min			1720 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	881	8.0	2.4	1069	6.6	2.8	1.600	GST04-1M □□□080C32	140
	689	10	2.2	835	8.4	2.6	2.048	GST04-1M □□□080C32	140
	630	11	2.2	763	9.2	2.6	2.240	GST04-1M □□□080C32	140
	494	14	1.7	599	12	2.0	2.857	GST04-1M □□□080C32	140
	477	15	2.7	579	12	3.1	2.956	GST04-2M □□□080C32	146
	423	16	2.5	513	13	3.0	3.333	GST04-2M □□□080C32	146
	403	18	1.4	489	14	1.7	3.500	GST04-1M □□□080C32	140
	403	18	3.1	489	14	3.6	3.500	GST05-1M □□□080C32	140
	348	20	2.3	422	16	2.6	4.053	GST04-2M □□□080C32	146
	321	22	1.1	389	18	1.3	4.400	GST04-1M □□□080C32	140
	310	23	2.4	375	19	2.8	4.556	GST05-1M □□□080C32	140
	308	23	2.1	374	18	2.5	4.571	GST04-2M □□□080C32	146
	272	26	2.0	330	21	2.3	5.187	GST04-2M □□□080C32	146
	249	28	0.9	302	23	1.0	5.667	GST04-1M □□□080C32	140
	249	28	1.9	302	23	2.2	5.667	GST05-1M □□□080C32	140
	249	28	2.9	302	23	3.4	5.667	GST06-1M □□□080C32	140
	241	29	1.8	292	24	2.2	5.850	GST04-2M □□□080C32	146
	220	32	1.7	267	26	2.0	6.400	GST04-2M □□□080C32	146
	200	35	1.6	243	28	1.9	7.040	GST04-2M □□□080C32	146
	195	36	3.0	236	29	3.5	7.238	GST05-2M □□□080C32	146
	192	37	1.3	233	30	1.5	7.333	GST05-1M □□□080C32	140
	192	37	2.6	233	30	3.1	7.333	GST06-1M □□□080C32	140
	192	37	2.9	233	30	3.4	7.333	GST07-1M □□□080C32	140
	176	39	1.5	214	32	1.7	8.000	GST04-2M □□□080C32	146
	173	40	2.9	210	33	3.3	8.163	GST05-2M □□□080C32	146
	158	45	0.9	192	37	1.1	8.900	GST05-1M □□□080C32	140
	158	45	1.9	192	37	2.2	8.900	GST06-1M □□□080C32	140
	158	45	2.5	192	37	3.0	8.900	GST07-1M □□□080C32	140
	157	44	1.4	190	36	1.6	9.010	GST04-2M □□□080C32	146
	157	44	2.7	190	36	3.1	9.010	GST05-2M □□□080C32	146
	143	49	1.3	174	40	1.6	9.856	GST04-2M □□□080C32	146
	141	49	2.5	171	40	2.9	10.000	GST05-2M □□□080C32	146
	126	55	1.1	153	45	1.3	11.200	GST04-2M □□□080C32	146
	126	55	2.3	153	45	2.7	11.200	GST05-2M □□□080C32	146
	125	56	1.1	152	46	1.3	11.250	GST06-1M □□□080C32	140
	125	56	2.0	152	46	2.4	11.250	GST07-1M □□□080C32	140
	112	62	1.1	136	51	1.3	12.571	GST04-2M □□□080C32	146
	108	64	2.1	131	53	2.5	13.016	GST05-2M □□□080C32	146
	99	70	0.9	120	58	1.0	14.286	GST04-2M □□□080C32	146
	98	71	2.0	119	58	2.3	14.356	GST05-2M □□□080C32	146



Selection tables

50 Hz, 60 Hz: $P_N = 0.75 \text{ kW}$

n_N f_N	1410 r/min			1720 r/min			i		
	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	92	76	0.9	111	62	1.1	15.400	GST04-2M □□□080C32	146
	87	80	1.9	106	65	2.3	16.190	GST05-2M □□□080C32	146
	81	86	1.6	98	71	2.0	17.500	GST05-2M □□□080C32	146
	70	99	1.6	85	81	2.0	20.044	GST05-2M □□□080C32	146
	62	112	1.3	75	92	1.6	22.778	GST05-2M □□□080C32	146
	62	112	2.8	75	92	3.4	22.778	GST06-2M □□□080C32	146
	57	123	1.3	69	101	1.6	24.933	GST05-2M □□□080C32	146
	57	123	2.9	69	101	3.5	24.933	GST06-2M □□□080C32	146
	50	140	1.1	60	114	1.3	28.333	GST05-2M □□□080C32	146
	50	140	2.3	60	114	2.8	28.333	GST06-2M □□□080C32	146
	44	159	1.0	53	130	1.3	32.267	GST05-2M □□□080C32	146
	44	159	2.3	53	130	2.8	32.267	GST06-2M □□□080C32	146
	44	159	2.9	53	130	3.5	32.267	GST07-2M □□□080C32	146
	39	181	0.8	47	148	1.0	36.667	GST05-2M □□□080C32	146
	39	181	1.8	47	148	2.2	36.667	GST06-2M □□□080C32	146
	39	181	2.9	47	148	3.5	36.667	GST07-2M □□□080C32	146
	36	193	0.9	44	158	1.0	39.160	GST05-2M □□□080C32	146
	36	193	1.9	44	158	2.3	39.160	GST06-2M □□□080C32	146
	36	193	2.5	44	158	3.1	39.160	GST07-2M □□□080C32	146
	36	190	1.7	44	156	2.1	39.200	GST06-3M □□□080C32	152
	32	214	1.6	39	175	1.9	44.000	GST06-3M □□□080C32	152
	32	219	1.5	38	180	1.8	44.500	GST06-2M □□□080C32	146
	32	219	2.5	38	180	3.1	44.500	GST07-2M □□□080C32	146
	29	244	1.1	35	200	1.4	49.500	GST06-2M □□□080C32	146
	29	244	2.0	35	200	2.5	49.500	GST07-2M □□□080C32	146
	28	248	1.3	34	203	1.6	51.022	GST06-3M □□□080C32	152
	28	248	2.8	34	203	3.4	51.022	GST07-3M □□□080C32	152
	26	262	1.3	32	214	1.6	53.900	GST06-3M □□□080C32	152
	26	262	2.7	32	214	3.3	53.900	GST07-3M □□□080C32	152
	25	277	1.1	30	227	1.4	56.250	GST06-2M □□□080C32	146
	25	277	2.0	30	227	2.5	56.250	GST07-2M □□□080C32	146
	22	316	2.2	26	259	2.7	65.079	GST07-3M □□□080C32	152
	21	329	1.1	25	270	1.4	67.760	GST06-3M □□□080C32	152
	20	341	1.1	24	279	1.3	70.156	GST06-3M □□□080C32	152
	20	341	2.1	24	279	2.5	70.156	GST07-3M □□□080C32	152
	18	387	1.8	21	317	2.2	79.762	GST07-3M □□□080C32	152
	17	393	0.8	21	322	1.0	80.952	GST06-3M □□□080C32	152
	16	417	1.7	20	342	2.1	85.983	GST07-3M □□□080C32	152
	16	424	0.9	20	347	1.1	87.267	GST06-3M □□□080C32	152
	14	474	1.5	18	389	1.8	97.708	GST07-3M □□□080C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 0.75$ kW

n _N	1410 r/min			1720 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	13	543	1.3	15	445	1.6	111.915	GST07-3M □□□080C32	152
	12	551	2.9	15	452	3.6	113.585	GST09-3M □□□080C32	152
	11	617	1.2	13	506	1.4	127.176	GST07-3M □□□080C32	152
	11	627	2.6	13	514	3.1	129.074	GST09-3M □□□080C32	152
	10	676	1.0	12	554	1.3	139.211	GST07-3M □□□080C32	152
	10	686	2.4	12	562	2.9	141.289	GST09-3M □□□080C32	152
	8.9	768	0.9	11	630	1.1	158.194	GST07-3M □□□080C32	152
	8.8	779	2.1	11	639	2.5	160.556	GST09-3M □□□080C32	152
	7.8	875	0.8	9.5	717	1.0	180.156	GST07-3M □□□080C32	152
	7.7	888	1.8	9.4	728	2.2	182.844	GST09-3M □□□080C32	152
	6.8	1009	1.6	8.2	827	2.0	207.778	GST09-3M □□□080C32	152
	6.8	1009	2.8	8.2	827	3.4	207.778	GST11-3M □□□080C32	152
	6.0	1149	1.4	7.2	942	1.7	236.622	GST09-3M □□□080C32	152
	6.0	1149	2.3	7.2	942	2.9	236.622	GST11-3M □□□080C32	152
	5.6	1224	1.3	6.8	1003	1.6	252.167	GST09-3M □□□080C32	152
	5.6	1224	2.3	6.8	1003	2.8	252.167	GST11-3M □□□080C32	152
	5.2	1305	1.2	6.4	1070	1.5	268.889	GST09-3M □□□080C32	152
	5.2	1305	2.2	6.4	1070	2.7	268.889	GST11-3M □□□080C32	152
	4.3	1584	1.0	5.2	1299	1.2	326.333	GST09-3M □□□080C32	152
	4.3	1584	1.8	5.2	1299	2.2	326.333	GST11-3M □□□080C32	152
	3.9	1762	0.9	4.7	1445	1.1	363.000	GST09-3M □□□080C32	152
	3.9	1762	1.5	4.7	1445	1.9	363.000	GST11-3M □□□080C32	152
	3.4	2002	0.8	4.2	1641	1.0	412.500	GST09-3M □□□080C32	152
	3.4	2002	1.4	4.2	1641	1.7	412.500	GST11-3M □□□080C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 1.1 \text{ kW}$

n _N f _N	2720 r/min			3370 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1700	6.1	2.6	2075	4.9	3.0	1.600	GST04-1M □□□080C31	140
	1328	7.8	2.4	1621	6.3	2.8	2.048	GST04-1M □□□080C31	140
	1214	8.5	2.4	1482	6.9	2.7	2.240	GST04-1M □□□080C31	140
	952	11	1.9	1162	8.8	2.2	2.857	GST04-1M □□□080C31	140
	920	11	2.9	1123	8.9	3.3	2.956	GST04-2M □□□080C31	146
	816	12	2.7	996	10	3.2	3.333	GST04-2M □□□080C31	146
	777	13	1.5	949	11	1.8	3.500	GST04-1M □□□080C31	140
	671	15	2.4	819	12	2.8	4.053	GST04-2M □□□080C31	146
	618	17	1.2	755	14	1.4	4.400	GST04-1M □□□080C31	140
	597	17	2.6	729	14	2.9	4.556	GST05-1M □□□080C31	140
	595	17	2.3	726	14	2.6	4.571	GST04-2M □□□080C31	146
	524	19	2.1	640	16	2.4	5.187	GST04-2M □□□080C31	146
	480	22	1.0	586	17	1.1	5.667	GST04-1M □□□080C31	140
	480	22	2.1	586	17	2.4	5.667	GST05-1M □□□080C31	140
	480	22	3.1	586	17	3.6	5.667	GST06-1M □□□080C31	140
	465	22	2.0	568	18	2.3	5.850	GST04-2M □□□080C31	146
	425	24	1.9	519	19	2.2	6.400	GST04-2M □□□080C31	146
	386	26	1.8	472	21	2.0	7.040	GST04-2M □□□080C31	146
	371	28	1.4	453	23	1.6	7.333	GST05-1M □□□080C31	140
	371	28	2.8	453	23	3.3	7.333	GST06-1M □□□080C31	140
	371	28	3.1	453	23	3.6	7.333	GST07-1M □□□080C31	140
	340	30	1.6	415	24	1.9	8.000	GST04-2M □□□080C31	146
	333	31	3.1	407	25	3.6	8.163	GST05-2M □□□080C31	146
	306	34	1.0	373	27	1.2	8.900	GST05-1M □□□080C31	140
	306	34	2.1	373	27	2.4	8.900	GST06-1M □□□080C31	140
	306	34	2.7	373	27	3.2	8.900	GST07-1M □□□080C31	140
	302	34	1.5	369	27	1.8	9.010	GST04-2M □□□080C31	146
	302	34	2.9	369	27	3.3	9.010	GST05-2M □□□080C31	146
	276	37	1.4	337	30	1.7	9.856	GST04-2M □□□080C31	146
	272	37	2.7	332	30	3.1	10.000	GST05-2M □□□080C31	146
	243	42	1.2	296	34	1.4	11.200	GST04-2M □□□080C31	146
	243	42	2.5	296	34	2.9	11.200	GST05-2M □□□080C31	146
	242	43	1.2	295	35	1.4	11.250	GST06-1M □□□080C31	140
	242	43	2.2	295	35	2.5	11.250	GST07-1M □□□080C31	140
	216	47	1.2	264	38	1.4	12.571	GST04-2M □□□080C31	146
	209	49	2.3	255	39	2.7	13.016	GST05-2M □□□080C31	146
	190	54	0.9	232	43	1.1	14.286	GST04-2M □□□080C31	146
	190	54	2.1	231	43	2.5	14.356	GST05-2M □□□080C31	146
	177	58	1.1	216	47	1.3	15.400	GST04-2M □□□080C31	146
	168	61	2.3	205	49	2.6	16.190	GST05-2M □□□080C31	146



Selection tables

50 Hz, 60 Hz: $P_N = 1.1 \text{ kW}$

n _N	2720 r/min			3370 r/min			i		
	f _N	50 Hz			60 Hz				
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	155	66	0.9	190	53	1.0	17.500	GST04-2M □□□080C31	146
	155	66	2.0	190	53	2.3	17.500	GST05-2M □□□080C31	146
	141	73	0.9	172	59	1.0	19.360	GST04-2M □□□080C31	146
	136	75	2.0	166	61	2.3	20.044	GST05-2M □□□080C31	146
	119	85	1.6	146	69	1.8	22.778	GST05-2M □□□080C31	146
	109	93	1.6	133	75	1.9	24.933	GST05-2M □□□080C31	146
	96	106	1.3	117	86	1.5	28.333	GST05-2M □□□080C31	146
	96	106	2.8	117	86	3.2	28.333	GST06-2M □□□080C31	146
	84	121	1.3	103	98	1.5	32.267	GST05-2M □□□080C31	146
	84	121	2.8	103	98	3.2	32.267	GST06-2M □□□080C31	146
	75	134	0.9	92	108	1.1	36.267	GST05-3M □□□080C31	152
	74	137	1.0	91	111	1.2	36.667	GST05-2M □□□080C31	146
	74	137	2.2	91	111	2.5	36.667	GST06-2M □□□080C31	146
	70	147	1.0	85	118	1.2	39.160	GST05-2M □□□080C31	146
	70	147	2.3	85	118	2.7	39.160	GST06-2M □□□080C31	146
	70	147	3.1	85	118	3.6	39.160	GST07-2M □□□080C31	146
	69	145	2.1	85	117	2.4	39.200	GST06-3M □□□080C31	152
	62	162	2.1	76	131	2.5	44.000	GST06-3M □□□080C31	152
	61	167	0.9	75	135	1.1	44.500	GST05-2M □□□080C31	146
	61	167	1.9	75	135	2.3	44.500	GST06-2M □□□080C31	146
	59	171	0.9	72	138	1.0	46.259	GST05-3M □□□080C31	152
	55	185	1.5	67	150	1.8	49.500	GST06-2M □□□080C31	146
	55	185	2.7	67	150	3.2	49.500	GST07-2M □□□080C31	146
	53	188	1.7	65	152	2.1	51.022	GST06-3M □□□080C31	152
	51	199	1.8	62	161	2.1	53.900	GST06-3M □□□080C31	152
	48	211	1.5	59	170	1.8	56.250	GST06-2M □□□080C31	146
	48	211	2.7	59	170	3.2	56.250	GST07-2M □□□080C31	146
	42	240	2.9	51	194	3.5	65.079	GST07-3M □□□080C31	152
	40	250	1.5	49	202	1.7	67.760	GST06-3M □□□080C31	152
	39	259	1.4	47	209	1.7	70.156	GST06-3M □□□080C31	152
	39	259	2.7	47	209	3.2	70.156	GST07-3M □□□080C31	152
	34	294	2.4	42	238	2.9	79.762	GST07-3M □□□080C31	152
	34	299	1.1	41	241	1.3	80.952	GST06-3M □□□080C31	152
	32	317	2.2	39	256	2.7	85.983	GST07-3M □□□080C31	152
	31	322	1.1	38	260	1.4	87.267	GST06-3M □□□080C31	152
	28	361	2.0	34	291	2.3	97.708	GST07-3M □□□080C31	152
	27	366	0.9	34	295	1.1	99.167	GST06-3M □□□080C31	152
	25	405	0.9	30	327	1.1	109.707	GST06-3M □□□080C31	152
	24	413	1.7	30	333	2.0	111.915	GST07-3M □□□080C31	152
	21	469	1.5	26	379	1.8	127.176	GST07-3M □□□080C31	152



Selection tables

50 Hz, 60 Hz: $P_N = 1.1 \text{ kW}$

n_N	2720 r/min			3370 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	20	514	1.4	24	415	1.6	139.211	GST07-3M □□□080C31	152
	19	521	3.1	24	421	3.7	141.289	GST09-3M □□□080C31	152
	17	584	1.2	21	471	1.4	158.194	GST07-3M □□□080C31	152
	17	593	2.7	21	478	3.3	160.556	GST09-3M □□□080C31	152
	15	665	1.1	18	537	1.3	180.156	GST07-3M □□□080C31	152
	15	675	2.4	18	545	2.8	182.844	GST09-3M □□□080C31	152
	13	756	0.9	16	610	1.1	204.722	GST07-3M □□□080C31	152
	13	767	2.1	16	619	2.5	207.778	GST09-3M □□□080C31	152
	11	873	0.8	14	705	1.0	236.622	GST07-3M □□□080C31	152
	12	873	1.8	14	705	2.2	236.622	GST09-3M □□□080C31	152
	12	873	3.1	14	705	3.7	236.622	GST11-3M □□□080C31	152
	11	931	1.7	13	751	2.1	252.167	GST09-3M □□□080C31	152
	11	931	3.0	13	751	3.6	252.167	GST11-3M □□□080C31	152
	10	992	1.6	12	801	1.9	268.889	GST09-3M □□□080C31	152
	10	992	2.9	12	801	3.4	268.889	GST11-3M □□□080C31	152
	8.3	1204	1.3	10	972	1.6	326.333	GST09-3M □□□080C31	152
	8.3	1204	2.4	10	972	2.8	326.333	GST11-3M □□□080C31	152
	7.5	1340	1.2	9.2	1081	1.4	363.000	GST09-3M □□□080C31	152
	7.5	1340	2.0	9.2	1081	2.4	363.000	GST11-3M □□□080C31	152
	6.6	1522	1.1	8.1	1229	1.3	412.500	GST09-3M □□□080C31	152
	6.6	1522	1.9	8.1	1229	2.2	412.500	GST11-3M □□□080C31	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 1.1 \text{ kW}$

n _N f _N	1390 r/min			1705 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	869	12	1.6	1056	9.7	1.9	1.600	GST04-1M □□□080C42	140
	679	15	1.5	825	12	1.8	2.048	GST04-1M □□□080C42	140
	621	17	1.5	755	14	1.7	2.240	GST04-1M □□□080C42	140
	621	17	3.2	755	14	3.7	2.240	GST05-1M □□□080C42	140
	487	21	1.2	592	17	1.4	2.857	GST04-1M □□□080C42	140
	487	21	2.5	592	17	2.9	2.857	GST05-1M □□□080C42	140
	470	22	1.8	572	18	2.1	2.956	GST04-2M □□□080C42	146
	470	22	2.9	572	18	3.4	2.956	GST05-2M □□□080C42	146
	417	24	1.7	507	20	2.0	3.333	GST04-2M □□□080C42	146
	417	24	3.2	507	20	3.8	3.333	GST05-2M □□□080C42	146
	397	26	1.0	483	21	1.1	3.500	GST04-1M □□□080C42	140
	397	26	2.1	483	21	2.4	3.500	GST05-1M □□□080C42	140
	343	30	1.5	417	24	1.8	4.053	GST04-2M □□□080C42	146
	343	30	2.7	417	24	3.2	4.053	GST05-2M □□□080C42	146
	305	34	1.6	371	28	1.9	4.556	GST05-1M □□□080C42	140
	305	34	3.1	371	28	3.6	4.556	GST06-1M □□□080C42	140
	304	34	1.4	370	27	1.7	4.571	GST04-2M □□□080C42	146
	304	34	2.7	370	27	3.2	4.571	GST05-2M □□□080C42	146
	268	38	1.3	326	31	1.5	5.187	GST04-2M □□□080C42	146
	268	38	2.4	326	31	2.8	5.187	GST05-2M □□□080C42	146
	249	42	3.1	303	34	3.6	5.583	GST07-1M □□□080C42	140
	245	42	1.3	298	34	1.5	5.667	GST05-1M □□□080C42	140
	245	42	2.5	298	34	2.9	5.667	GST06-1M □□□080C42	140
	238	43	1.2	289	35	1.5	5.850	GST04-2M □□□080C42	146
	238	43	2.4	289	35	2.8	5.850	GST05-2M □□□080C42	146
	217	47	1.2	264	38	1.4	6.400	GST04-2M □□□080C42	146
	217	47	2.2	264	38	2.6	6.400	GST05-2M □□□080C42	146
	197	52	1.1	240	42	1.3	7.040	GST04-2M □□□080C42	146
	192	53	2.0	234	43	2.4	7.238	GST05-2M □□□080C42	146
	190	55	1.8	231	45	2.2	7.333	GST06-1M □□□080C42	140
	190	55	2.9	231	45	3.4	7.333	GST07-1M □□□080C42	140
	174	59	1.0	211	48	1.2	8.000	GST04-2M □□□080C42	146
	170	60	1.9	207	49	2.3	8.163	GST05-2M □□□080C42	146
	156	66	1.3	190	54	1.5	8.900	GST06-1M □□□080C42	140
	156	66	2.3	190	54	2.7	8.900	GST07-1M □□□080C42	140
	154	66	0.9	188	54	1.1	9.010	GST04-2M □□□080C42	146
	154	66	1.8	188	54	2.1	9.010	GST05-2M □□□080C42	146
	141	72	0.9	172	59	1.1	9.856	GST04-2M □□□080C42	146
	139	73	1.7	169	60	2.0	10.000	GST05-2M □□□080C42	146
	124	82	1.6	151	67	1.8	11.200	GST05-2M □□□080C42	146



Selection tables

50 Hz, 60 Hz: $P_N = 1.1 \text{ kW}$

n_N	1390 r/min			1705 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	124	84	1.4	150	68	1.6	11.250	GST07-1M □□□080C42	140
	111	92	3.2	134	75	3.8	12.571	GST06-2M □□□080C42	146
	107	95	1.4	130	78	1.7	13.016	GST05-2M □□□080C42	146
	97	105	2.9	118	85	3.4	14.286	GST06-2M □□□080C42	146
	97	105	1.3	118	86	1.6	14.356	GST05-2M □□□080C42	146
	90	113	2.8	110	92	3.5	15.400	GST06-2M □□□080C42	146
	86	119	1.3	104	97	1.5	16.190	GST05-2M □□□080C42	146
	79	128	1.1	97	105	1.4	17.500	GST05-2M □□□080C42	146
	79	128	2.4	97	105	3.0	17.500	GST06-2M □□□080C42	146
	69	147	1.1	84	120	1.3	20.044	GST05-2M □□□080C42	146
	69	147	2.4	84	120	2.9	20.044	GST06-2M □□□080C42	146
	61	167	0.9	74	136	1.1	22.778	GST05-2M □□□080C42	146
	61	167	1.9	74	136	2.3	22.778	GST06-2M □□□080C42	146
	57	180	3.1	69	147	3.8	24.567	GST07-2M □□□080C42	146
	56	183	0.9	68	149	1.1	24.933	GST05-2M □□□080C42	146
	56	183	2.0	68	149	2.4	24.933	GST06-2M □□□080C42	146
	50	205	3.1	61	167	3.8	27.917	GST07-2M □□□080C42	146
	49	208	1.5	60	169	1.9	28.333	GST06-2M □□□080C42	146
	43	237	1.5	52	193	1.9	32.267	GST06-2M □□□080C42	146
	43	237	2.9	52	193	3.5	32.267	GST07-2M □□□080C42	146
	38	269	1.2	46	219	1.5	36.667	GST06-2M □□□080C42	146
	38	269	2.6	46	219	3.2	36.667	GST07-2M □□□080C42	146
	36	287	1.3	43	234	1.6	39.160	GST06-2M □□□080C42	146
	36	287	2.3	43	234	2.8	39.160	GST07-2M □□□080C42	146
	36	283	1.1	43	231	1.4	39.200	GST06-3M □□□080C42	152
	36	283	2.4	43	231	3.0	39.200	GST07-3M □□□080C42	152
	32	318	1.1	38	259	1.3	44.000	GST06-3M □□□080C42	152
	32	318	2.2	38	259	2.7	44.000	GST07-3M □□□080C42	152
	31	326	1.0	38	266	1.2	44.500	GST06-2M □□□080C42	146
	31	326	2.2	38	266	2.7	44.500	GST07-2M □□□080C42	146
	28	363	1.4	34	296	1.7	49.500	GST07-2M □□□080C42	146
	27	368	0.9	33	300	1.1	51.022	GST06-3M □□□080C42	152
	27	368	1.9	33	300	2.3	51.022	GST07-3M □□□080C42	152
	26	389	0.9	31	317	1.1	53.900	GST06-3M □□□080C42	152
	26	389	1.8	31	317	2.2	53.900	GST07-3M □□□080C42	152
	25	412	1.4	30	336	1.7	56.250	GST07-2M □□□080C42	146
	21	470	1.5	26	383	1.8	65.079	GST07-3M □□□080C42	152
	20	507	1.4	24	413	1.7	70.156	GST07-3M □□□080C42	152
	19	519	2.8	24	423	3.5	71.867	GST09-3M □□□080C42	152
	17	576	1.2	21	470	1.5	79.762	GST07-3M □□□080C42	152



Selection tables

50 Hz, 60 Hz: $P_N = 1.1 \text{ kW}$

n_N	1390 r/min			1705 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	17	590	2.7	21	481	3.3	81.667	GST09-3M □□□080C42	152
	16	621	1.1	20	506	1.4	85.983	GST07-3M □□□080C42	152
	15	676	2.4	18	551	2.9	93.541	GST09-3M □□□080C42	152
	14	706	1.0	17	575	1.2	97.708	GST07-3M □□□080C42	152
	14	716	2.2	17	584	2.7	99.167	GST09-3M □□□080C42	152
	12	808	0.9	15	659	1.1	111.915	GST07-3M □□□080C42	152
	12	820	2.0	15	669	2.4	113.585	GST09-3M □□□080C42	152
	11	932	1.7	13	760	2.1	129.074	GST09-3M □□□080C42	152
	11	932	3.0	13	760	3.7	129.074	GST11-3M □□□080C42	152
	9.8	1020	1.6	12	832	1.9	141.289	GST09-3M □□□080C42	152
	9.5	1062	2.5	12	865	3.1	146.993	GST11-3M □□□080C42	152
	8.8	1142	2.5	11	931	3.0	158.194	GST11-3M □□□080C42	152
	8.7	1160	1.4	11	945	1.7	160.556	GST09-3M □□□080C42	152
	7.7	1301	2.1	9.4	1061	2.5	180.156	GST11-3M □□□080C42	152
	7.6	1321	1.2	9.2	1077	1.5	182.844	GST09-3M □□□080C42	152
	6.7	1501	1.1	8.1	1223	1.3	207.778	GST09-3M □□□080C42	152
	6.7	1501	1.9	8.1	1223	2.3	207.778	GST11-3M □□□080C42	152
	5.9	1709	0.9	7.1	1393	1.2	236.622	GST09-3M □□□080C42	152
	5.9	1709	1.6	7.1	1393	1.9	236.622	GST11-3M □□□080C42	152
	5.5	1821	0.9	6.7	1485	1.1	252.167	GST09-3M □□□080C42	152
	5.5	1821	1.5	6.7	1485	1.9	252.167	GST11-3M □□□080C42	152
	5.2	1942	0.8	6.3	1583	1.0	268.889	GST09-3M □□□080C42	152
	5.2	1942	1.5	6.3	1583	1.8	268.889	GST11-3M □□□080C42	152
	4.3	2357	1.2	5.2	1921	1.5	326.333	GST11-3M □□□080C42	152
	3.8	2622	1.0	4.7	2137	1.3	363.000	GST11-3M □□□080C42	152
	3.4	2979	1.0	4.1	2429	1.2	412.500	GST11-3M □□□080C42	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 1.5 \text{ kW}$

n _N f _N	2710 r/min			3310 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1694	8.3	1.9	2069	6.8	2.2	1.600	GST04-1M □□□090C11	140
	1324	11	1.8	1617	8.7	2.0	2.048	GST04-1M □□□090C11	140
	1210	12	1.7	1478	9.5	2.0	2.240	GST04-1M □□□090C11	140
	949	15	1.4	1159	12	1.6	2.857	GST04-1M □□□090C11	140
	949	15	2.9	1159	12	3.3	2.857	GST05-1M □□□090C11	140
	917	15	2.1	1120	12	2.4	2.956	GST04-2M □□□090C11	146
	813	17	2.0	993	14	2.3	3.333	GST04-2M □□□090C11	146
	774	18	1.1	946	15	1.3	3.500	GST04-1M □□□090C11	140
	774	18	2.4	946	15	2.8	3.500	GST05-1M □□□090C11	140
	669	21	1.8	817	17	2.0	4.053	GST04-2M □□□090C11	146
	669	21	3.2	817	17	3.7	4.053	GST05-2M □□□090C11	146
	595	24	1.9	727	19	2.1	4.556	GST05-1M □□□090C11	140
	593	23	1.7	724	19	1.9	4.571	GST04-2M □□□090C11	146
	593	23	3.2	724	19	3.7	4.571	GST05-2M □□□090C11	146
	522	27	1.5	638	22	1.8	5.187	GST04-2M □□□090C11	146
	522	27	2.8	638	22	3.2	5.187	GST05-2M □□□090C11	146
	478	30	1.5	584	24	1.7	5.667	GST05-1M □□□090C11	140
	478	30	2.9	584	24	3.3	5.667	GST06-1M □□□090C11	140
	463	30	1.5	566	25	1.7	5.850	GST04-2M □□□090C11	146
	463	30	2.8	566	25	3.2	5.850	GST05-2M □□□090C11	146
	423	33	1.4	517	27	1.6	6.400	GST04-2M □□□090C11	146
	423	33	2.6	517	27	3.0	6.400	GST05-2M □□□090C11	146
	385	36	1.3	470	30	1.5	7.040	GST04-2M □□□090C11	146
	374	37	2.4	457	30	2.7	7.238	GST05-2M □□□090C11	146
	370	38	2.2	451	31	2.5	7.333	GST06-1M □□□090C11	140
	339	41	1.2	414	34	1.3	8.000	GST04-2M □□□090C11	146
	332	42	2.3	406	34	2.6	8.163	GST05-2M □□□090C11	146
	305	46	1.5	372	38	1.7	8.900	GST06-1M □□□090C11	140
	305	46	3.2	372	38	3.6	8.900	GST07-1M □□□090C11	140
	301	46	1.1	367	38	1.3	9.010	GST04-2M □□□090C11	146
	301	46	2.1	367	38	2.4	9.010	GST05-2M □□□090C11	146
	275	51	1.1	336	41	1.2	9.856	GST04-2M □□□090C11	146
	271	51	2.0	331	42	2.3	10.000	GST05-2M □□□090C11	146
	242	57	0.9	296	47	1.0	11.200	GST04-2M □□□090C11	146
	242	57	1.8	296	47	2.1	11.200	GST05-2M □□□090C11	146
	241	59	1.9	294	48	2.2	11.250	GST07-1M □□□090C11	140
	241	59	3.1	294	48	3.5	11.250	GST09-1M □□□090C11	140
	216	64	0.9	263	53	1.0	12.571	GST04-2M □□□090C11	146
	208	67	1.7	254	55	1.9	13.016	GST05-2M □□□090C11	146
	189	74	1.6	231	60	1.8	14.356	GST05-2M □□□090C11	146



Selection tables

50 Hz, 60 Hz: $P_N = 1.5 \text{ kW}$

n_N	2710 r/min			3310 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	176	79	0.8	215	65	0.9	15.400	GST04-2M □□□090C11	146
	167	83	1.7	204	68	1.9	16.190	GST05-2M □□□090C11	146
	155	90	1.5	189	73	1.7	17.500	GST05-2M □□□090C11	146
	135	103	1.4	165	84	1.7	20.044	GST05-2M □□□090C11	146
	135	103	3.2	165	84	3.6	20.044	GST06-2M □□□090C11	146
	119	117	1.2	145	96	1.3	22.778	GST05-2M □□□090C11	146
	119	117	2.5	145	96	2.9	22.778	GST06-2M □□□090C11	146
	109	128	1.2	133	105	1.4	24.933	GST05-2M □□□090C11	146
	109	128	2.6	133	105	3.0	24.933	GST06-2M □□□090C11	146
	96	145	0.9	117	119	1.1	28.333	GST05-2M □□□090C11	146
	96	145	2.0	117	119	2.3	28.333	GST06-2M □□□090C11	146
	84	165	2.0	103	135	2.3	32.267	GST06-2M □□□090C11	146
	74	188	1.6	90	154	1.8	36.667	GST06-2M □□□090C11	146
	69	201	1.7	85	164	2.0	39.160	GST06-2M □□□090C11	146
	69	198	1.5	84	162	1.7	39.200	GST06-3M □□□090C11	152
	62	222	1.5	75	182	1.8	44.000	GST06-3M □□□090C11	152
	62	222	3.2	75	182	3.8	44.000	GST07-3M □□□090C11	152
	61	228	1.4	74	187	1.7	44.500	GST06-2M □□□090C11	146
	61	228	3.1	74	187	3.7	44.500	GST07-2M □□□090C11	146
	55	254	2.4	67	208	2.8	49.500	GST07-2M □□□090C11	146
	53	258	1.3	65	211	1.5	51.022	GST06-3M □□□090C11	152
	53	258	2.7	65	211	3.2	51.022	GST07-3M □□□090C11	152
	50	272	1.3	61	223	1.5	53.900	GST06-3M □□□090C11	152
	50	272	2.6	61	223	3.1	53.900	GST07-3M □□□090C11	152
	48	288	2.4	59	236	2.8	56.250	GST07-2M □□□090C11	146
	42	329	2.2	51	269	2.5	65.079	GST07-3M □□□090C11	152
	39	354	1.0	47	290	1.2	70.156	GST06-3M □□□090C11	152
	39	354	2.0	47	290	2.4	70.156	GST07-3M □□□090C11	152
	34	403	1.8	42	330	2.1	79.762	GST07-3M □□□090C11	152
	33	409	0.8	41	335	1.0	80.952	GST06-3M □□□090C11	152
	32	434	1.6	39	356	1.9	85.983	GST07-3M □□□090C11	152
	31	441	0.8	38	361	1.0	87.267	GST06-3M □□□090C11	152
	28	494	1.4	34	404	1.7	97.708	GST07-3M □□□090C11	152
	27	501	3.2	33	410	3.8	99.167	GST09-3M □□□090C11	152
	24	565	1.2	30	463	1.5	111.915	GST07-3M □□□090C11	152
	24	574	2.8	29	470	3.3	113.585	GST09-3M □□□090C11	152
	21	642	1.1	26	526	1.3	127.176	GST07-3M □□□090C11	152
	21	652	2.5	26	534	2.9	129.074	GST09-3M □□□090C11	152
	20	703	1.0	24	576	1.2	139.211	GST07-3M □□□090C11	152
	19	714	2.3	23	584	2.7	141.289	GST09-3M □□□090C11	152



Selection tables

50 Hz, 60 Hz: $P_N = 1.5 \text{ kW}$

n_N	2710 r/min			3310 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	17	799	0.9	21	654	1.1	158.194	GST07-3M □□□090C11	152
	17	811	2.0	21	664	2.4	160.556	GST09-3M □□□090C11	152
	15	910	3.0	18	745	3.5	180.156	GST11-3M □□□090C11	152
	15	924	1.7	18	756	2.1	182.844	GST09-3M □□□090C11	152
	13	1050	1.5	16	859	1.8	207.778	GST09-3M □□□090C11	152
	13	1050	2.7	16	859	3.2	207.778	GST11-3M □□□090C11	152
	12	1195	1.3	14	979	1.6	236.622	GST09-3M □□□090C11	152
	12	1195	2.3	14	979	2.7	236.622	GST11-3M □□□090C11	152
	11	1274	1.3	13	1043	1.5	252.167	GST09-3M □□□090C11	152
	11	1274	2.2	13	1043	2.6	252.167	GST11-3M □□□090C11	152
	10	1358	1.2	12	1112	1.4	268.889	GST09-3M □□□090C11	152
	10	1358	2.1	12	1112	2.5	268.889	GST11-3M □□□090C11	152
	8.3	1648	1.0	10	1350	1.2	326.333	GST09-3M □□□090C11	152
	8.3	1648	1.7	10	1350	2.0	326.333	GST11-3M □□□090C11	152
	7.5	1834	1.5	9.1	1501	1.7	363.000	GST11-3M □□□090C11	152
	7.5	1834	3.2	9.1	1501	3.7	363.000	GST14-3M □□□090C11	152
	6.6	2084	1.4	8.0	1706	1.6	412.500	GST11-3M □□□090C11	152
	6.6	2084	2.8	8.0	1706	3.4	412.500	GST14-3M □□□090C11	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 1.5 \text{ kW}$

n _N	1410 r/min			1720 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	872	16	1.2	1059	13	1.4	1.600	GST04-1M □□□090C32	140
	872	16	2.8	1059	13	3.3	1.600	GST05-1M □□□090C32	140
	681	20	1.1	828	17	1.3	2.048	GST04-1M □□□090C32	140
	681	20	2.6	828	17	3.0	2.048	GST05-1M □□□090C32	140
	623	22	1.1	757	18	1.3	2.240	GST04-1M □□□090C32	140
	623	22	2.4	757	18	2.8	2.240	GST05-1M □□□090C32	140
	488	29	0.9	593	23	1.0	2.857	GST04-1M □□□090C32	140
	488	29	1.9	593	23	2.2	2.857	GST05-1M □□□090C32	140
	488	29	3.2	593	23	3.8	2.857	GST06-1M □□□090C32	140
	472	29	1.3	574	24	1.6	2.956	GST04-2M □□□090C32	146
	472	29	2.2	574	24	2.5	2.956	GST05-2M □□□090C32	146
	419	33	1.3	509	27	1.5	3.333	GST04-2M □□□090C32	146
	419	33	2.4	509	27	2.8	3.333	GST05-2M □□□090C32	146
	399	35	1.5	484	29	1.8	3.500	GST05-1M □□□090C32	140
	399	35	3.0	484	29	3.5	3.500	GST06-1M □□□090C32	140
	344	40	1.1	418	33	1.3	4.053	GST04-2M □□□090C32	146
	344	40	2.0	418	33	2.4	4.053	GST05-2M □□□090C32	146
	306	46	1.2	372	37	1.4	4.556	GST05-1M □□□090C32	140
	306	46	2.3	372	37	2.7	4.556	GST06-1M □□□090C32	140
	305	45	1.1	371	37	1.2	4.571	GST04-2M □□□090C32	146
	305	45	2.0	371	37	2.4	4.571	GST05-2M □□□090C32	146
	269	51	1.0	327	42	1.1	5.187	GST04-2M □□□090C32	146
	269	51	1.8	327	42	2.0	5.187	GST05-2M □□□090C32	146
	250	56	2.9	304	46	3.3	5.583	GST07-1M □□□090C32	140
	246	57	1.0	299	46	1.1	5.667	GST05-1M □□□090C32	140
	246	57	1.9	299	46	2.2	5.667	GST06-1M □□□090C32	140
	238	58	0.9	290	47	1.1	5.850	GST04-2M □□□090C32	146
	238	58	1.8	290	47	2.0	5.850	GST05-2M □□□090C32	146
	218	63	0.9	265	52	1.0	6.400	GST04-2M □□□090C32	146
	218	63	1.7	265	52	1.9	6.400	GST05-2M □□□090C32	146
	198	69	0.8	244	57	1.0	7.040	GST04-2M □□□090C32	146
	193	71	1.5	234	58	1.8	7.238	GST05-2M □□□090C32	146
	190	73	1.4	231	60	1.6	7.333	GST06-1M □□□090C32	140
	190	73	2.4	231	60	2.8	7.333	GST07-1M □□□090C32	140
	190	73	2.9	231	60	3.3	7.333	GST09-1M □□□090C32	140
	171	80	1.4	208	66	1.7	8.163	GST05-2M □□□090C32	146
	171	80	3.1	208	66	3.6	8.163	GST06-2M □□□090C32	146
	157	89	1.0	190	73	1.1	8.900	GST06-1M □□□090C32	140
	157	89	2.0	190	73	2.3	8.900	GST07-1M □□□090C32	140
	157	89	2.5	190	73	2.9	8.900	GST09-1M □□□090C32	140

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 1.5 \text{ kW}$

n _N f _N	1410 r/min			1720 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	155	89	1.3	188	73	1.6	9.010	GST05-2M □□□090C32	146
	155	89	2.9	188	73	3.4	9.010	GST06-2M □□□090C32	146
	140	99	1.3	170	81	1.5	10.000	GST05-2M □□□090C32	146
	140	99	2.7	170	81	3.2	10.000	GST06-2M □□□090C32	146
	125	110	1.2	151	90	1.3	11.200	GST05-2M □□□090C32	146
	125	110	2.5	151	90	3.0	11.200	GST06-2M □□□090C32	146
	124	113	1.2	151	92	1.4	11.250	GST07-1M □□□090C32	140
	124	113	1.9	151	92	2.3	11.250	GST09-1M □□□090C32	140
	111	124	2.4	135	102	2.8	12.571	GST06-2M □□□090C32	146
	107	128	1.1	130	105	1.2	13.016	GST05-2M □□□090C32	146
	98	141	2.2	119	115	2.5	14.286	GST06-2M □□□090C32	146
	97	141	1.0	118	116	1.2	14.356	GST05-2M □□□090C32	146
	91	152	2.1	110	124	2.6	15.400	GST06-2M □□□090C32	146
	86	160	0.9	105	131	1.1	16.190	GST05-2M □□□090C32	146
	80	172	0.8	97	141	1.0	17.500	GST05-2M □□□090C32	146
	80	172	1.8	97	141	2.2	17.500	GST06-2M □□□090C32	146
	70	198	0.8	86	162	1.0	20.044	GST05-2M □□□090C32	146
	70	198	1.8	85	162	2.2	20.044	GST06-2M □□□090C32	146
	61	225	1.4	74	184	1.7	22.778	GST06-2M □□□090C32	146
	61	225	3.0	74	184	3.7	22.778	GST07-2M □□□090C32	146
	57	242	2.9	69	198	3.5	24.567	GST07-2M □□□090C32	146
	56	246	1.5	68	201	1.8	24.933	GST06-2M □□□090C32	146
	50	275	2.5	61	226	3.1	27.917	GST07-2M □□□090C32	146
	49	279	1.1	60	229	1.4	28.333	GST06-2M □□□090C32	146
	43	318	1.1	53	261	1.4	32.267	GST06-2M □□□090C32	146
	43	318	2.2	53	261	2.7	32.267	GST07-2M □□□090C32	146
	43	318	2.9	53	261	3.5	32.267	GST09-2M □□□090C32	146
	38	361	0.9	46	296	1.1	36.667	GST06-2M □□□090C32	146
	38	361	1.9	46	296	2.4	36.667	GST07-2M □□□090C32	146
	38	361	2.9	46	296	3.5	36.667	GST09-2M □□□090C32	146
	36	386	1.0	43	316	1.2	39.160	GST06-2M □□□090C32	146
	36	386	1.8	43	316	2.2	39.160	GST07-2M □□□090C32	146
	36	386	2.5	43	316	3.1	39.160	GST09-2M □□□090C32	146
	36	381	0.8	43	312	1.0	39.200	GST06-3M □□□090C32	152
	36	381	1.8	43	312	2.2	39.200	GST07-3M □□□090C32	152
	32	420	3.1	39	344	3.7	43.267	GST09-3M □□□090C32	152
	32	427	1.7	39	350	2.0	44.000	GST07-3M □□□090C32	152
	31	439	1.6	38	360	2.0	44.500	GST07-2M □□□090C32	146
	31	439	2.5	38	360	3.1	44.500	GST09-2M □□□090C32	146
	28	477	3.1	35	391	3.7	49.167	GST09-3M □□□090C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 1.5 \text{ kW}$

n_N	1410 r/min			1720 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	28	488	1.2	34	400	1.5	49.500	GST07-2M □□□090C32	146
	28	488	1.9	34	400	2.4	49.500	GST09-2M □□□090C32	146
	27	495	1.4	33	406	1.7	51.022	GST07-3M □□□090C32	152
	26	515	2.7	32	422	3.3	53.044	GST09-3M □□□090C32	152
	26	523	1.3	31	429	1.6	53.900	GST07-3M □□□090C32	152
	25	554	1.2	30	454	1.5	56.250	GST07-2M □□□090C32	146
	25	554	1.9	30	454	2.4	56.250	GST09-2M □□□090C32	146
	23	585	2.7	28	480	3.3	60.278	GST09-3M □□□090C32	152
	21	632	1.1	26	518	1.4	65.079	GST07-3M □□□090C32	152
	20	681	1.0	24	558	1.3	70.156	GST07-3M □□□090C32	152
	19	698	2.1	24	572	2.6	71.867	GST09-3M □□□090C32	152
	18	774	0.9	21	635	1.1	79.762	GST07-3M □□□090C32	152
	17	793	2.0	21	650	2.4	81.667	GST09-3M □□□090C32	152
	16	835	0.8	20	684	1.0	85.983	GST07-3M □□□090C32	152
	15	908	1.8	18	744	2.2	93.541	GST09-3M □□□090C32	152
	14	963	1.7	17	789	2.0	99.167	GST09-3M □□□090C32	152
	12	1103	1.5	15	904	1.8	113.585	GST09-3M □□□090C32	152
	11	1253	1.3	13	1027	1.6	129.074	GST09-3M □□□090C32	152
	11	1253	2.2	13	1027	2.7	129.074	GST11-3M □□□090C32	152
	9.9	1372	1.2	12	1124	1.4	141.289	GST09-3M □□□090C32	152
	9.5	1427	1.9	12	1170	2.3	146.993	GST11-3M □□□090C32	152
	8.8	1536	1.8	11	1259	2.2	158.194	GST11-3M □□□090C32	152
	8.7	1559	1.0	11	1278	1.3	160.556	GST09-3M □□□090C32	152
	7.7	1749	1.5	9.4	1434	1.9	180.156	GST11-3M □□□090C32	152
	7.6	1775	0.9	9.3	1455	1.1	182.844	GST09-3M □□□090C32	152
	6.8	1988	2.9	8.3	1629	3.5	204.722	GST14-3M □□□090C32	152
	6.8	2017	0.8	8.3	1654	1.0	207.778	GST09-3M □□□090C32	152
	6.7	2017	1.4	8.2	1654	1.7	207.778	GST11-3M □□□090C32	152
	5.9	2297	1.2	7.2	1883	1.4	236.622	GST11-3M □□□090C32	152
	5.9	2297	2.5	7.2	1883	3.1	236.622	GST14-3M □□□090C32	152
	5.6	2412	2.5	6.8	1977	3.0	248.458	GST14-3M □□□090C32	152
	5.5	2448	1.1	6.7	2007	1.4	252.167	GST11-3M □□□090C32	152
	5.2	2611	1.1	6.3	2140	1.3	268.889	GST11-3M □□□090C32	152
	5.2	2611	2.3	6.3	2140	2.8	268.889	GST14-3M □□□090C32	152
	4.3	3168	0.9	5.2	2597	1.1	326.333	GST11-3M □□□090C32	152
	4.3	3168	1.9	5.2	2597	2.3	326.333	GST14-3M □□□090C32	152
	3.8	3524	1.6	4.7	2889	2.0	363.000	GST14-3M □□□090C32	152
	3.4	4005	1.5	4.1	3283	1.8	412.500	GST14-3M □□□090C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 2.2 \text{ kW}$

n _N f _N	2730 r/min			3320 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1706	12	1.3	2081	10.0	1.5	1.600	GST04-1M □□□090C31	140
	1706	12	3.0	2081	10.0	3.4	1.600	GST05-1M □□□090C31	140
	1333	16	1.2	1626	13	1.4	2.048	GST04-1M □□□090C31	140
	1333	16	2.8	1626	13	3.2	2.048	GST05-1M □□□090C31	140
	1219	17	1.2	1487	14	1.4	2.240	GST04-1M □□□090C31	140
	1219	17	2.6	1487	14	2.9	2.240	GST05-1M □□□090C31	140
	956	22	0.9	1166	18	1.1	2.857	GST04-1M □□□090C31	140
	956	22	2.0	1166	18	2.3	2.857	GST05-1M □□□090C31	140
	924	22	1.5	1127	18	1.7	2.956	GST04-2M □□□090C31	146
	924	22	2.3	1127	18	2.7	2.956	GST05-2M □□□090C31	146
	819	25	1.4	999	20	1.6	3.333	GST04-2M □□□090C31	146
	819	25	2.6	999	20	2.9	3.333	GST05-2M □□□090C31	146
	780	27	1.7	951	22	1.9	3.500	GST05-1M □□□090C31	140
	780	27	3.2	951	22	3.7	3.500	GST06-1M □□□090C31	140
	674	30	1.2	822	25	1.4	4.053	GST04-2M □□□090C31	146
	674	30	2.2	822	25	2.5	4.053	GST05-2M □□□090C31	146
	599	35	1.3	731	28	1.5	4.556	GST05-1M □□□090C31	140
	599	35	2.5	731	28	2.8	4.556	GST06-1M □□□090C31	140
	597	34	1.2	728	28	1.3	4.571	GST04-2M □□□090C31	146
	597	34	2.2	728	28	2.5	4.571	GST05-2M □□□090C31	146
	526	39	1.1	642	32	1.2	5.187	GST04-2M □□□090C31	146
	526	39	1.9	642	32	2.2	5.187	GST05-2M □□□090C31	146
	489	42	3.1	596	35	3.5	5.583	GST07-1M □□□090C31	140
	482	43	1.0	588	35	1.2	5.667	GST05-1M □□□090C31	140
	482	43	2.0	588	35	2.3	5.667	GST06-1M □□□090C31	140
	467	44	1.0	569	36	1.1	5.850	GST04-2M □□□090C31	146
	467	44	1.9	569	36	2.2	5.850	GST05-2M □□□090C31	146
	427	48	0.9	520	39	1.1	6.400	GST04-2M □□□090C31	146
	427	48	1.8	520	39	2.0	6.400	GST05-2M □□□090C31	146
	388	53	0.9	473	43	1.0	7.040	GST04-2M □□□090C31	146
	377	54	1.6	460	44	1.9	7.238	GST05-2M □□□090C31	146
	372	56	1.5	454	46	1.7	7.333	GST06-1M □□□090C31	140
	372	56	2.6	454	46	2.9	7.333	GST07-1M □□□090C31	140
	372	56	3.1	454	46	3.5	7.333	GST09-1M □□□090C31	140
	341	60	0.8	415	49	0.9	8.000	GST04-2M □□□090C31	146
	334	61	1.5	408	50	1.8	8.163	GST05-2M □□□090C31	146
	307	67	1.0	374	55	1.2	8.900	GST06-1M □□□090C31	140
	307	67	2.2	374	55	2.5	8.900	GST07-1M □□□090C31	140
	307	67	2.7	374	55	3.1	8.900	GST09-1M □□□090C31	140
	303	67	1.4	370	55	1.6	9.010	GST05-2M □□□090C31	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 2.2 \text{ kW}$

n _N f _N	2730 r/min			3320 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	303	67	3.2	370	55	3.6	9.010	GST06-2M □□□090C31	146
	273	75	1.4	332	61	1.6	10.000	GST05-2M □□□090C31	146
	273	75	3.0	332	61	3.4	10.000	GST06-2M □□□090C31	146
	244	84	1.2	297	69	1.4	11.200	GST05-2M □□□090C31	146
	244	84	2.7	297	69	3.1	11.200	GST06-2M □□□090C31	146
	243	85	1.3	296	70	1.5	11.250	GST07-1M □□□090C31	140
	243	85	2.1	296	70	2.4	11.250	GST09-1M □□□090C31	140
	217	94	2.6	265	77	2.9	12.571	GST06-2M □□□090C31	146
	210	97	1.2	256	80	1.3	13.016	GST05-2M □□□090C31	146
	191	107	2.4	233	88	2.7	14.286	GST06-2M □□□090C31	146
	190	107	1.1	232	88	1.2	14.356	GST05-2M □□□090C31	146
	177	115	2.6	216	95	2.9	15.400	GST06-2M □□□090C31	146
	169	121	1.1	206	99	1.3	16.190	GST05-2M □□□090C31	146
	156	131	1.0	190	107	1.2	17.500	GST05-2M □□□090C31	146
	156	131	2.2	190	107	2.5	17.500	GST06-2M □□□090C31	146
	136	150	1.0	166	123	1.1	20.044	GST05-2M □□□090C31	146
	136	150	2.2	166	123	2.5	20.044	GST06-2M □□□090C31	146
	120	170	1.7	146	140	2.0	22.778	GST06-2M □□□090C31	146
	109	186	0.8	133	153	0.9	24.933	GST05-2M □□□090C31	146
	110	186	1.8	134	153	2.1	24.933	GST06-2M □□□090C31	146
	98	208	3.1	119	171	3.5	27.917	GST07-2M □□□090C31	146
	96	212	1.4	118	174	1.6	28.333	GST06-2M □□□090C31	146
	85	241	1.4	103	198	1.6	32.267	GST06-2M □□□090C31	146
	85	241	2.7	103	198	3.1	32.267	GST07-2M □□□090C31	146
	75	274	1.1	91	225	1.2	36.667	GST06-2M □□□090C31	146
	75	274	2.4	91	225	2.7	36.667	GST07-2M □□□090C31	146
	70	292	1.2	85	240	1.3	39.160	GST06-2M □□□090C31	146
	70	292	2.2	85	240	2.6	39.160	GST07-2M □□□090C31	146
	70	292	3.1	85	240	3.5	39.160	GST09-2M □□□090C31	146
	70	288	1.0	85	237	1.2	39.200	GST06-3M □□□090C31	152
	70	288	2.2	85	237	2.5	39.200	GST07-3M □□□090C31	152
	62	324	1.0	76	266	1.2	44.000	GST06-3M □□□090C31	152
	62	324	2.2	76	266	2.6	44.000	GST07-3M □□□090C31	152
	61	332	1.0	75	273	1.2	44.500	GST06-2M □□□090C31	146
	61	332	2.1	75	273	2.5	44.500	GST07-2M □□□090C31	146
	55	370	1.6	67	304	1.9	49.500	GST07-2M □□□090C31	146
	55	370	2.6	67	304	3.0	49.500	GST09-2M □□□090C31	146
	54	375	0.9	65	309	1.0	51.022	GST06-3M □□□090C31	152
	54	375	1.9	65	309	2.2	51.022	GST07-3M □□□090C31	152
	51	396	0.9	62	326	1.0	53.900	GST06-3M □□□090C31	152



Selection tables

50 Hz, 60 Hz: $P_N = 2.2 \text{ kW}$

n _N	2730 r/min			3320 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	51	396	1.8	62	326	2.1	53.900	GST07-3M □□□090C31	152
	49	420	1.6	59	345	1.9	56.250	GST07-2M □□□090C31	146
	49	420	2.6	59	345	3.0	56.250	GST09-2M □□□090C31	146
	42	479	1.5	51	394	1.7	65.079	GST07-3M □□□090C31	152
	39	516	1.4	48	424	1.6	70.156	GST07-3M □□□090C31	152
	38	529	2.8	46	435	3.3	71.867	GST09-3M □□□090C31	152
	34	587	1.2	42	482	1.4	79.762	GST07-3M □□□090C31	152
	33	601	2.6	41	494	3.1	81.667	GST09-3M □□□090C31	152
	32	632	1.1	39	520	1.3	85.983	GST07-3M □□□090C31	152
	29	688	2.3	36	566	2.8	93.541	GST09-3M □□□090C31	152
	28	719	1.0	34	591	1.2	97.708	GST07-3M □□□090C31	152
	28	729	2.2	34	600	2.6	99.167	GST09-3M □□□090C31	152
	24	823	0.9	30	677	1.0	111.915	GST07-3M □□□090C31	152
	24	835	1.9	29	687	2.3	113.585	GST09-3M □□□090C31	152
	21	949	1.7	26	781	2.0	129.074	GST09-3M □□□090C31	152
	21	949	3.0	26	781	3.5	129.074	GST11-3M □□□090C31	152
	19	1039	1.6	24	854	1.8	141.289	GST09-3M □□□090C31	152
	19	1081	2.5	23	889	2.9	146.993	GST11-3M □□□090C31	152
	17	1163	2.4	21	957	2.8	158.194	GST11-3M □□□090C31	152
	17	1181	1.4	21	971	1.6	160.556	GST09-3M □□□090C31	152
	15	1325	2.0	19	1089	2.4	180.156	GST11-3M □□□090C31	152
	15	1345	1.2	18	1106	1.4	182.844	GST09-3M □□□090C31	152
	13	1528	1.1	16	1257	1.2	207.778	GST09-3M □□□090C31	152
	13	1528	1.8	16	1257	2.2	207.778	GST11-3M □□□090C31	152
	12	1740	0.9	14	1431	1.1	236.622	GST09-3M □□□090C31	152
	12	1740	1.5	14	1431	1.8	236.622	GST11-3M □□□090C31	152
	11	1827	3.2	13	1503	3.8	248.458	GST14-3M □□□090C31	152
	11	1855	0.9	13	1525	1.0	252.167	GST09-3M □□□090C31	152
	11	1855	1.5	13	1525	1.8	252.167	GST11-3M □□□090C31	152
	10	1977	0.8	12	1626	1.0	268.889	GST09-3M □□□090C31	152
	10	1977	1.4	12	1626	1.7	268.889	GST11-3M □□□090C31	152
	10	1977	3.0	12	1626	3.5	268.889	GST14-3M □□□090C31	152
	8.4	2400	1.2	10	1973	1.4	326.333	GST11-3M □□□090C31	152
	8.4	2400	2.5	10	1973	2.9	326.333	GST14-3M □□□090C31	152
	7.5	2670	1.0	9.2	2195	1.2	363.000	GST11-3M □□□090C31	152
	7.5	2670	2.2	9.2	2195	2.5	363.000	GST14-3M □□□090C31	152
	6.6	3034	0.9	8.1	2495	1.1	412.500	GST11-3M □□□090C31	152
	6.6	3034	2.0	8.1	2495	2.3	412.500	GST14-3M □□□090C31	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 2.2 \text{ kW}$

n _N	1440 r/min			1745 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	900	23	1.9	1088	19	2.2	1.600	GST05-1M □□□100C12	140
	900	23	2.7	1088	19	3.1	1.600	GST06-1M □□□100C12	140
	703	29	1.8	850	24	2.1	2.048	GST05-1M □□□100C12	140
	703	29	2.5	850	24	2.8	2.048	GST06-1M □□□100C12	140
	643	32	1.6	777	27	1.9	2.240	GST05-1M □□□100C12	140
	643	32	2.4	777	27	2.8	2.240	GST06-1M □□□100C12	140
	504	41	1.3	609	34	1.5	2.857	GST05-1M □□□100C12	140
	504	41	2.3	609	34	2.6	2.857	GST06-1M □□□100C12	140
	487	42	1.5	589	35	1.7	2.956	GST05-2M □□□100C12	146
	432	47	1.7	522	39	1.9	3.333	GST05-2M □□□100C12	146
	411	50	1.1	497	42	1.2	3.500	GST05-1M □□□100C12	140
	411	50	2.1	497	42	2.4	3.500	GST06-1M □□□100C12	140
	355	57	1.4	429	47	1.6	4.053	GST05-2M □□□100C12	146
	346	59	3.2	418	49	3.7	4.160	GST06-2M □□□100C12	146
	316	65	1.6	382	54	1.8	4.556	GST06-1M □□□100C12	140
	316	65	2.8	382	54	3.3	4.556	GST07-1M □□□100C12	140
	315	65	1.4	381	53	1.6	4.571	GST05-2M □□□100C12	146
	315	65	3.1	381	53	3.6	4.571	GST06-2M □□□100C12	146
	278	73	1.2	335	61	1.4	5.187	GST05-2M □□□100C12	146
	271	75	2.8	327	62	3.2	5.324	GST06-2M □□□100C12	146
	258	80	2.4	312	66	2.8	5.583	GST07-1M □□□100C12	140
	254	81	1.3	307	67	1.5	5.667	GST06-1M □□□100C12	140
	246	83	1.2	297	68	1.4	5.850	GST05-2M □□□100C12	146
	246	83	2.7	297	68	3.1	5.850	GST06-2M □□□100C12	146
	225	91	1.2	272	75	1.3	6.400	GST05-2M □□□100C12	146
	225	91	2.5	272	75	2.9	6.400	GST06-2M □□□100C12	146
	205	100	2.4	247	82	2.7	7.040	GST06-2M □□□100C12	146
	199	102	1.1	240	85	1.2	7.238	GST05-2M □□□100C12	146
	196	105	1.9	237	87	2.1	7.333	GST07-1M □□□100C12	140
	196	105	2.8	237	87	3.2	7.333	GST09-1M □□□100C12	140
	176	116	1.0	213	95	1.1	8.163	GST05-2M □□□100C12	146
	176	116	2.2	213	95	2.5	8.163	GST06-2M □□□100C12	146
	162	128	1.4	196	106	1.6	8.900	GST07-1M □□□100C12	140
	162	128	2.3	196	106	2.7	8.900	GST09-1M □□□100C12	140
	160	128	0.9	193	105	1.1	9.010	GST05-2M □□□100C12	146
	160	128	2.0	193	105	2.4	9.010	GST06-2M □□□100C12	146
	144	142	0.9	174	117	1.0	10.000	GST05-2M □□□100C12	146
	144	142	1.9	174	117	2.2	10.000	GST06-2M □□□100C12	146
	129	159	0.8	156	131	0.9	11.200	GST05-2M □□□100C12	146
	129	159	1.8	155	131	2.0	11.200	GST06-2M □□□100C12	146



Selection tables

50 Hz, 60 Hz: $P_N = 2.2 \text{ kW}$

n_N	1440 r/min			1745 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	128	162	1.8	155	133	2.1	11.250	GST09-1M □□□100C12	140
	115	178	1.7	138	147	1.9	12.571	GST06-2M □□□100C12	146
	101	202	1.5	122	167	1.7	14.286	GST06-2M □□□100C12	146
	101	202	3.2	122	167	3.7	14.286	GST07-2M □□□100C12	146
	94	218	1.5	113	180	1.8	15.400	GST06-2M □□□100C12	146
	94	218	3.0	113	180	3.6	15.400	GST07-2M □□□100C12	146
	82	248	1.3	99	204	1.5	17.500	GST06-2M □□□100C12	146
	82	248	2.7	99	204	3.3	17.500	GST07-2M □□□100C12	146
	72	284	1.2	87	234	1.5	20.044	GST06-2M □□□100C12	146
	72	284	2.4	87	234	3.0	20.044	GST07-2M □□□100C12	146
	63	322	1.0	76	266	1.2	22.778	GST06-2M □□□100C12	146
	63	322	2.1	76	266	2.6	22.778	GST07-2M □□□100C12	146
	59	348	2.0	71	287	2.5	24.567	GST07-2M □□□100C12	146
	58	353	1.0	70	291	1.2	24.933	GST06-2M □□□100C12	146
	52	395	1.7	62	326	2.1	27.917	GST07-2M □□□100C12	146
	45	457	1.5	54	377	1.9	32.267	GST07-2M □□□100C12	146
	45	457	2.8	54	377	3.4	32.267	GST09-2M □□□100C12	146
	39	519	1.4	48	428	1.6	36.667	GST07-2M □□□100C12	146
	39	519	2.8	48	428	3.4	36.667	GST09-2M □□□100C12	146
	37	554	1.3	44	457	1.5	39.160	GST07-2M □□□100C12	146
	37	554	2.3	44	457	2.8	39.160	GST09-2M □□□100C12	146
	37	554	2.9	44	457	3.5	39.160	GST11-2M □□□100C12	146
	37	547	1.3	44	451	1.5	39.200	GST07-3M □□□100C12	152
	36	560	2.4	43	462	2.9	40.136	GST09-3M □□□100C12	152
	33	603	2.1	40	498	2.6	43.267	GST09-3M □□□100C12	152
	33	613	1.2	40	506	1.4	44.000	GST07-3M □□□100C12	152
	32	630	1.1	39	520	1.4	44.500	GST07-2M □□□100C12	146
	32	630	2.3	39	520	2.8	44.500	GST09-2M □□□100C12	146
	32	630	2.9	39	520	3.5	44.500	GST11-2M □□□100C12	146
	29	686	2.1	35	566	2.6	49.167	GST09-3M □□□100C12	152
	29	701	1.8	35	578	2.2	49.500	GST09-2M □□□100C12	146
	29	701	2.3	35	578	2.8	49.500	GST11-2M □□□100C12	146
	28	711	1.0	34	587	1.2	51.022	GST07-3M □□□100C12	152
	27	740	1.9	33	610	2.3	53.044	GST09-3M □□□100C12	152
	27	752	0.9	32	620	1.1	53.900	GST07-3M □□□100C12	152
	26	796	1.8	31	657	2.2	56.250	GST09-2M □□□100C12	146
	26	796	2.3	31	657	2.8	56.250	GST11-2M □□□100C12	146
	25	808	3.2	30	667	3.9	57.968	GST11-3M □□□100C12	152
	24	840	1.9	29	694	2.3	60.278	GST09-3M □□□100C12	152
	24	854	3.2	28	705	3.9	61.250	GST11-3M □□□100C12	152



Selection tables

50 Hz, 60 Hz: $P_N = 2.2 \text{ kW}$

n_N	1440 r/min			1745 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	20	990	2.7	25	817	3.2	71.011	GST11-3M □□□100C12	152
	20	1002	1.5	24	827	1.8	71.867	GST09-3M □□□100C12	152
	18	1125	2.5	22	928	3.0	80.694	GST11-3M □□□100C12	152
	18	1139	1.4	21	940	1.7	81.667	GST09-3M □□□100C12	152
	17	1217	2.2	20	1004	2.6	87.267	GST11-3M □□□100C12	152
	15	1304	1.2	19	1076	1.5	93.541	GST09-3M □□□100C12	152
	15	1383	1.2	18	1141	1.4	99.167	GST09-3M □□□100C12	152
	15	1383	2.0	18	1141	2.5	99.167	GST11-3M □□□100C12	152
	13	1575	1.7	15	1299	2.1	112.933	GST11-3M □□□100C12	152
	13	1584	1.0	15	1307	1.2	113.585	GST09-3M □□□100C12	152
	11	1800	0.9	14	1485	1.1	129.074	GST09-3M □□□100C12	152
	11	1800	1.6	14	1485	1.9	129.074	GST11-3M □□□100C12	152
	10	1941	3.0	13	1602	3.6	139.211	GST14-3M □□□100C12	152
	10	1970	0.8	12	1626	1.0	141.289	GST09-3M □□□100C12	152
	9.8	2049	1.3	12	1691	1.6	146.993	GST11-3M □□□100C12	152
	9.1	2206	1.3	11	1820	1.5	158.194	GST11-3M □□□100C12	152
	9.1	2206	2.7	11	1820	3.3	158.194	GST14-3M □□□100C12	152
	8.4	2386	2.5	10	1969	3.0	171.111	GST14-3M □□□100C12	152
	8.0	2512	1.1	9.7	2073	1.3	180.156	GST11-3M □□□100C12	152
	7.0	2854	2.1	8.5	2355	2.5	204.722	GST14-3M □□□100C12	152
	6.9	2897	1.0	8.4	2391	1.2	207.778	GST11-3M □□□100C12	152
	6.1	3299	0.8	7.4	2722	1.0	236.622	GST11-3M □□□100C12	152
	6.1	3299	1.8	7.4	2722	2.1	236.622	GST14-3M □□□100C12	152
	5.8	3464	1.7	7.0	2859	2.1	248.458	GST14-3M □□□100C12	152
	5.4	3749	1.6	6.5	3094	1.9	268.889	GST14-3M □□□100C12	152
	4.4	4550	1.3	5.3	3755	1.6	326.333	GST14-3M □□□100C12	152
	4.0	5061	1.1	4.8	4177	1.4	363.000	GST14-3M □□□100C12	152
	3.5	5751	1.0	4.2	4746	1.2	412.500	GST14-3M □□□100C12	152



Selection tables

50 Hz, 60 Hz: $P_N = 3.0 \text{ kW}$

n _N	2890 r/min			3510 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1806	16	2.3	2181	13	2.6	1.600	GST05-1M □□□100C31	140
	1806	16	3.2	2181	13	3.6	1.600	GST06-1M □□□100C31	140
	1411	20	2.1	1704	16	2.4	2.048	GST05-1M □□□100C31	140
	1411	20	2.9	1704	16	3.3	2.048	GST06-1M □□□100C31	140
	1290	22	1.9	1558	18	2.2	2.240	GST05-1M □□□100C31	140
	1290	22	2.9	1558	18	3.3	2.240	GST06-1M □□□100C31	140
	1012	28	1.5	1222	23	1.7	2.857	GST05-1M □□□100C31	140
	1012	28	2.7	1222	23	3.0	2.857	GST06-1M □□□100C31	140
	978	28	1.8	1181	23	2.0	2.956	GST05-2M □□□100C31	146
	867	32	2.0	1047	26	2.2	3.333	GST05-2M □□□100C31	146
	826	34	1.3	997	28	1.4	3.500	GST05-1M □□□100C31	140
	826	34	2.5	997	28	2.8	3.500	GST06-1M □□□100C31	140
	713	39	1.7	861	32	1.9	4.053	GST05-2M □□□100C31	146
	634	44	1.9	766	37	2.2	4.556	GST06-1M □□□100C31	140
	632	44	1.7	763	36	1.9	4.571	GST05-2M □□□100C31	146
	557	50	1.4	673	41	1.6	5.187	GST05-2M □□□100C31	146
	518	55	2.9	625	45	3.3	5.583	GST07-1M □□□100C31	140
	510	55	1.5	616	46	1.7	5.667	GST06-1M □□□100C31	140
	494	56	1.4	597	46	1.6	5.850	GST05-2M □□□100C31	146
	494	56	3.2	597	46	3.6	5.850	GST06-2M □□□100C31	146
	452	62	1.4	545	51	1.6	6.400	GST05-2M □□□100C31	146
	452	62	3.0	545	51	3.4	6.400	GST06-2M □□□100C31	146
	411	68	2.8	496	56	3.2	7.040	GST06-2M □□□100C31	146
	399	70	1.2	482	57	1.4	7.238	GST05-2M □□□100C31	146
	394	72	2.2	476	59	2.5	7.333	GST07-1M □□□100C31	140
	354	79	1.2	428	65	1.3	8.163	GST05-2M □□□100C31	146
	354	79	2.6	428	65	2.9	8.163	GST06-2M □□□100C31	146
	325	87	1.7	392	72	1.9	8.900	GST07-1M □□□100C31	140
	325	87	2.7	392	72	3.1	8.900	GST09-1M □□□100C31	140
	321	87	1.1	387	71	1.3	9.010	GST05-2M □□□100C31	146
	321	87	2.4	387	71	2.8	9.010	GST06-2M □□□100C31	146
	289	96	1.0	349	79	1.2	10.000	GST05-2M □□□100C31	146
	289	96	2.2	349	79	2.6	10.000	GST06-2M □□□100C31	146
	258	108	1.0	312	89	1.1	11.200	GST05-2M □□□100C31	146
	258	108	2.1	312	89	2.4	11.200	GST06-2M □□□100C31	146
	257	110	2.2	310	90	2.5	11.250	GST09-1M □□□100C31	140
	230	121	2.0	278	100	2.2	12.571	GST06-2M □□□100C31	146
	202	137	1.8	244	113	2.0	14.286	GST06-2M □□□100C31	146
	188	148	2.0	227	122	2.2	15.400	GST06-2M □□□100C31	146
	165	168	1.7	199	139	1.9	17.500	GST06-2M □□□100C31	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 3.0 \text{ kW}$

n _N f _N	2890 r/min			3510 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	144	193	1.7	174	159	1.9	20.044	GST06-2M □□□100C31	146
	127	219	1.3	153	180	1.5	22.778	GST06-2M □□□100C31	146
	127	219	2.8	153	180	3.2	22.778	GST07-2M □□□100C31	146
	118	236	2.7	142	195	3.1	24.567	GST07-2M □□□100C31	146
	116	240	1.4	140	197	1.6	24.933	GST06-2M □□□100C31	146
	104	268	2.3	125	221	2.7	27.917	GST07-2M □□□100C31	146
	102	272	1.1	123	224	1.2	28.333	GST06-2M □□□100C31	146
	90	310	2.1	108	256	2.4	32.267	GST07-2M □□□100C31	146
	79	353	1.8	95	290	2.1	36.667	GST07-2M □□□100C31	146
	74	377	1.7	89	310	1.9	39.160	GST07-2M □□□100C31	146
	74	377	3.1	89	310	3.5	39.160	GST09-2M □□□100C31	146
	74	371	1.7	89	306	1.9	39.200	GST07-3M □□□100C31	152
	72	380	3.2	87	313	3.7	40.136	GST09-3M □□□100C31	152
	67	410	3.1	81	337	3.6	43.267	GST09-3M □□□100C31	152
	66	417	1.7	79	343	2.0	44.000	GST07-3M □□□100C31	152
	65	428	1.7	78	352	1.9	44.500	GST07-2M □□□100C31	146
	59	466	3.1	71	383	3.6	49.167	GST09-3M □□□100C31	152
	58	476	2.7	71	392	3.1	49.500	GST09-2M □□□100C31	146
	57	483	1.4	68	398	1.7	51.022	GST07-3M □□□100C31	152
	55	503	2.7	66	414	3.2	53.044	GST09-3M □□□100C31	152
	54	511	1.4	65	420	1.6	53.900	GST07-3M □□□100C31	152
	51	541	2.7	62	445	3.1	56.250	GST09-2M □□□100C31	146
	48	571	2.7	58	470	3.2	60.278	GST09-3M □□□100C31	152
	41	665	1.1	50	547	1.2	70.156	GST07-3M □□□100C31	152
	40	681	2.2	49	561	2.5	71.867	GST09-3M □□□100C31	152
	36	756	0.9	44	622	1.1	79.762	GST07-3M □□□100C31	152
	35	774	2.0	43	637	2.4	81.667	GST09-3M □□□100C31	152
	34	815	0.9	41	671	1.0	85.983	GST07-3M □□□100C31	152
	33	827	3.2	40	681	3.7	87.267	GST11-3M □□□100C31	152
	31	886	1.8	37	730	2.1	93.541	GST09-3M □□□100C31	152
	29	939	1.7	35	773	2.0	99.167	GST09-3M □□□100C31	152
	29	939	3.0	35	773	3.4	99.167	GST11-3M □□□100C31	152
	26	1070	2.5	31	881	2.9	112.933	GST11-3M □□□100C31	152
	25	1076	1.5	31	886	1.7	113.585	GST09-3M □□□100C31	152
	22	1223	1.3	27	1007	1.5	129.074	GST09-3M □□□100C31	152
	22	1223	2.3	27	1007	2.6	129.074	GST11-3M □□□100C31	152
	21	1338	1.2	25	1102	1.4	141.289	GST09-3M □□□100C31	152
	20	1393	1.9	24	1147	2.2	146.993	GST11-3M □□□100C31	152
	18	1499	1.9	22	1234	2.2	158.194	GST11-3M □□□100C31	152
	18	1521	1.1	22	1252	1.2	160.556	GST09-3M □□□100C31	152



Selection tables

50 Hz, 60 Hz: $P_N = 3.0$ kW

n_N	2890 r/min				3510 r/min			i		
f_N	50 Hz				60 Hz					
	n_2 [r/min]	M_2 [Nm]	c		n_2 [r/min]	M_2 [Nm]	c			
	16	1707	1.6		19	1405	1.8	180.156	GST11-3M □□□100C31	152
	14	1939	3.1		17	1597	3.5	204.722	GST14-3M □□□100C31	152
	14	1968	1.4		17	1621	1.6	207.778	GST11-3M □□□100C31	152
	12	2242	1.2		15	1846	1.4	236.622	GST11-3M □□□100C31	152
	12	2242	2.6		15	1846	3.0	236.622	GST14-3M □□□100C31	152
	12	2354	2.5		14	1938	2.9	248.458	GST14-3M □□□100C31	152
	12	2389	1.2		14	1967	1.4	252.167	GST11-3M □□□100C31	152
	11	2547	1.1		13	2097	1.3	268.889	GST11-3M □□□100C31	152
	11	2547	2.3		13	2097	2.7	268.889	GST14-3M □□□100C31	152
	8.9	3091	0.9		11	2545	1.1	326.333	GST11-3M □□□100C31	152
	8.9	3091	1.9		11	2545	2.2	326.333	GST14-3M □□□100C31	152
	8.0	3439	1.7		9.6	2831	1.9	363.000	GST14-3M □□□100C31	152
	7.0	3908	1.5		8.5	3217	1.7	412.500	GST14-3M □□□100C31	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 3.0 \text{ kW}$

n _N f _N	1430 r/min			1740 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	894	32	1.4	1081	26	1.6	1.600	GST05-1M □□□100C32	140
	894	32	1.9	1081	26	2.3	1.600	GST06-1M □□□100C32	140
	715	39	3.1	865	32	3.6	2.000	GST07-1M □□□100C32	140
	698	40	1.3	845	33	1.5	2.048	GST05-1M □□□100C32	140
	698	40	1.8	845	33	2.1	2.048	GST06-1M □□□100C32	140
	638	44	1.2	772	36	1.4	2.240	GST05-1M □□□100C32	140
	638	44	1.8	772	36	2.1	2.240	GST06-1M □□□100C32	140
	638	44	3.0	772	36	3.5	2.240	GST07-1M □□□100C32	140
	501	56	0.9	606	46	1.1	2.857	GST05-1M □□□100C32	140
	501	56	1.6	606	46	1.9	2.857	GST06-1M □□□100C32	140
	501	56	2.8	606	46	3.3	2.857	GST07-1M □□□100C32	140
	484	57	1.1	585	47	1.3	2.956	GST05-2M □□□100C32	146
	471	59	2.8	570	48	3.3	3.033	GST06-2M □□□100C32	146
	429	65	1.2	519	53	1.4	3.333	GST05-2M □□□100C32	146
	429	65	2.7	519	53	3.1	3.333	GST06-2M □□□100C32	146
	409	69	1.5	494	57	1.8	3.500	GST06-1M □□□100C32	140
	409	69	2.5	494	57	2.9	3.500	GST07-1M □□□100C32	140
	353	79	1.0	427	65	1.2	4.053	GST05-2M □□□100C32	146
	344	81	2.4	416	66	2.7	4.160	GST06-2M □□□100C32	146
	314	90	1.2	380	74	1.4	4.556	GST06-1M □□□100C32	140
	314	90	2.1	380	74	2.4	4.556	GST07-1M □□□100C32	140
	313	89	1.0	378	73	1.2	4.571	GST05-2M □□□100C32	146
	313	89	2.2	378	73	2.6	4.571	GST06-2M □□□100C32	146
	306	92	2.9	371	76	3.4	4.667	GST09-1M □□□100C32	140
	276	101	0.9	334	83	1.0	5.187	GST05-2M □□□100C32	146
	269	103	2.0	325	85	2.3	5.324	GST06-2M □□□100C32	146
	256	110	1.8	310	91	2.1	5.583	GST07-1M □□□100C32	140
	252	112	0.9	305	92	1.1	5.667	GST06-1M □□□100C32	140
	252	112	2.5	305	92	2.9	5.667	GST09-1M □□□100C32	140
	244	114	0.9	296	93	1.0	5.850	GST05-2M □□□100C32	146
	244	114	2.0	296	93	2.3	5.850	GST06-2M □□□100C32	146
	223	124	0.8	270	102	1.0	6.400	GST05-2M □□□100C32	146
	223	124	1.8	270	102	2.1	6.400	GST06-2M □□□100C32	146
	203	137	1.7	246	112	2.0	7.040	GST06-2M □□□100C32	146
	195	145	1.4	236	119	1.6	7.333	GST07-1M □□□100C32	140
	195	145	2.0	236	119	2.3	7.333	GST09-1M □□□100C32	140
	175	159	1.6	212	130	1.8	8.163	GST06-2M □□□100C32	146
	163	171	3.1	197	141	3.6	8.800	GST07-2M □□□100C32	146
	161	176	1.0	194	144	1.2	8.900	GST07-1M □□□100C32	140
	161	176	1.7	194	144	2.0	8.900	GST09-1M □□□100C32	140



Selection tables

50 Hz, 60 Hz: $P_N = 3.0 \text{ kW}$

n _N f _N	1430 r/min			1740 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	159	175	1.5	192	144	1.7	9.010	GST06-2M □□□100C32	146
	145	192	2.9	176	157	3.3	9.856	GST07-2M □□□100C32	146
	143	194	1.4	173	160	1.6	10.000	GST06-2M □□□100C32	146
	128	218	1.3	155	179	1.5	11.200	GST06-2M □□□100C32	146
	128	218	2.7	155	179	3.2	11.200	GST07-2M □□□100C32	146
	127	222	1.3	154	182	1.5	11.250	GST09-1M □□□100C32	140
	114	244	1.2	138	201	1.4	12.571	GST06-2M □□□100C32	146
	114	244	2.5	138	201	2.8	12.571	GST07-2M □□□100C32	146
	100	278	1.1	121	228	1.3	14.286	GST06-2M □□□100C32	146
	100	278	2.3	121	228	2.7	14.286	GST07-2M □□□100C32	146
	93	299	1.1	112	246	1.3	15.400	GST06-2M □□□100C32	146
	93	299	2.2	112	246	2.6	15.400	GST07-2M □□□100C32	146
	82	340	0.9	99	280	1.1	17.500	GST06-2M □□□100C32	146
	82	340	2.0	99	280	2.4	17.500	GST07-2M □□□100C32	146
	71	390	0.9	86	320	1.1	20.044	GST06-2M □□□100C32	146
	71	390	1.8	86	320	2.2	20.044	GST07-2M □□□100C32	146
	70	399	2.9	84	328	3.6	20.533	GST09-2M □□□100C32	146
	63	443	1.5	76	364	1.9	22.778	GST07-2M □□□100C32	146
	61	454	2.9	74	373	3.6	23.333	GST09-2M □□□100C32	146
	58	478	1.5	70	392	1.8	24.567	GST07-2M □□□100C32	146
	57	485	2.5	69	398	3.1	24.933	GST09-2M □□□100C32	146
	51	543	1.3	62	446	1.5	27.917	GST07-2M □□□100C32	146
	51	551	2.5	61	453	3.1	28.333	GST09-2M □□□100C32	146
	44	627	1.1	54	515	1.4	32.267	GST07-2M □□□100C32	146
	44	627	2.0	54	515	2.5	32.267	GST09-2M □□□100C32	146
	44	627	2.5	54	515	3.1	32.267	GST11-2M □□□100C32	146
	39	713	1.0	47	586	1.2	36.667	GST07-2M □□□100C32	146
	39	713	2.0	47	586	2.5	36.667	GST09-2M □□□100C32	146
	39	713	2.5	47	586	3.1	36.667	GST11-2M □□□100C32	146
	37	761	0.9	44	626	1.1	39.160	GST07-2M □□□100C32	146
	37	761	1.7	44	626	2.1	39.160	GST09-2M □□□100C32	146
	37	761	2.1	44	626	2.6	39.160	GST11-2M □□□100C32	146
	37	751	0.9	44	617	1.1	39.200	GST07-3M □□□100C32	152
	36	768	1.7	43	632	2.1	40.136	GST09-3M □□□100C32	152
	33	828	1.6	40	681	1.9	43.267	GST09-3M □□□100C32	152
	33	842	0.8	39	692	1.0	44.000	GST07-3M □□□100C32	152
	33	842	2.9	39	692	3.5	44.000	GST11-3M □□□100C32	152
	32	865	0.8	39	711	1.0	44.500	GST07-2M □□□100C32	146
	32	865	1.7	39	711	2.1	44.500	GST09-2M □□□100C32	146
	32	865	2.1	39	711	2.6	44.500	GST11-2M □□□100C32	146



Selection tables

50 Hz, 60 Hz: $P_N = 3.0 \text{ kW}$

n _N	1430 r/min			1740 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	29	941	1.6	35	774	1.9	49.167	GST09-3M □□□100C32	152
	29	962	1.3	35	791	1.6	49.500	GST09-2M □□□100C32	146
	29	962	1.7	35	791	2.1	49.500	GST11-2M □□□100C32	146
	29	957	2.8	35	787	3.5	50.000	GST11-3M □□□100C32	152
	27	1016	1.4	33	835	1.7	53.044	GST09-3M □□□100C32	152
	25	1093	1.3	31	899	1.6	56.250	GST09-2M □□□100C32	146
	25	1093	1.7	31	899	2.1	56.250	GST11-2M □□□100C32	146
	25	1110	2.3	30	912	2.8	57.968	GST11-3M □□□100C32	152
	24	1154	1.4	29	948	1.6	60.278	GST09-3M □□□100C32	152
	23	1173	2.3	28	964	2.8	61.250	GST11-3M □□□100C32	152
	20	1360	1.9	24	1117	2.4	71.011	GST11-3M □□□100C32	152
	20	1376	1.1	24	1131	1.3	71.867	GST09-3M □□□100C32	152
	18	1545	1.8	21	1270	2.2	80.694	GST11-3M □□□100C32	152
	18	1564	1.0	21	1285	1.2	81.667	GST09-3M □□□100C32	152
	16	1671	1.6	20	1373	1.9	87.267	GST11-3M □□□100C32	152
	15	1791	0.9	19	1472	1.1	93.541	GST09-3M □□□100C32	152
	15	1791	2.9	19	1472	3.6	93.541	GST14-3M □□□100C32	152
	14	1899	0.8	17	1560	1.0	99.167	GST09-3M □□□100C32	152
	14	1899	1.5	17	1560	1.8	99.167	GST11-3M □□□100C32	152
	14	2035	2.9	16	1673	3.5	106.296	GST14-3M □□□100C32	152
	13	2162	1.2	15	1777	1.5	112.933	GST11-3M □□□100C32	152
	11	2471	1.1	13	2031	1.4	129.074	GST11-3M □□□100C32	152
	11	2494	2.4	13	2050	2.9	130.278	GST14-3M □□□100C32	152
	10	2665	2.2	12	2190	2.6	139.211	GST14-3M □□□100C32	152
	9.7	2814	1.0	12	2313	1.2	146.993	GST11-3M □□□100C32	152
	9.0	3029	0.9	11	2489	1.1	158.194	GST11-3M □□□100C32	152
	9.0	3029	2.0	11	2489	2.4	158.194	GST14-3M □□□100C32	152
	8.4	3276	1.8	10	2692	2.2	171.111	GST14-3M □□□100C32	152
	7.0	3919	1.5	8.5	3221	1.8	204.722	GST14-3M □□□100C32	152
	6.0	4530	1.3	7.3	3723	1.6	236.622	GST14-3M □□□100C32	152
	5.8	4757	1.2	7.0	3909	1.5	248.458	GST14-3M □□□100C32	152
	5.3	5148	1.1	6.4	4231	1.4	268.889	GST14-3M □□□100C32	152
	4.4	6248	0.9	5.3	5135	1.2	326.333	GST14-3M □□□100C32	152
	3.9	6950	0.8	4.8	5712	1.0	363.000	GST14-3M □□□100C32	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 4.0 \text{ kW}$

n _N f _N	2840 r/min			3440 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1775	21	1.7	2150	17	1.9	1.600	GST05-1M □□□100C41	140
	1775	21	2.3	2150	17	2.7	1.600	GST06-1M □□□100C41	140
	1387	27	1.6	1680	22	1.8	2.048	GST05-1M □□□100C41	140
	1387	27	2.2	1680	22	2.5	2.048	GST06-1M □□□100C41	140
	1268	30	1.4	1536	24	1.6	2.240	GST05-1M □□□100C41	140
	1268	30	2.1	1536	24	2.4	2.240	GST06-1M □□□100C41	140
	994	38	1.1	1204	31	1.3	2.857	GST05-1M □□□100C41	140
	994	38	2.0	1204	31	2.2	2.857	GST06-1M □□□100C41	140
	961	39	1.3	1164	32	1.5	2.956	GST05-2M □□□100C41	146
	852	43	1.4	1032	36	1.6	3.333	GST05-2M □□□100C41	146
	852	43	3.2	1032	36	3.7	3.333	GST06-2M □□□100C41	146
	811	46	0.9	983	38	1.1	3.500	GST05-1M □□□100C41	140
	811	46	1.8	983	38	2.1	3.500	GST06-1M □□□100C41	140
	811	46	3.0	983	38	3.4	3.500	GST07-1M □□□100C41	140
	701	53	1.2	849	44	1.4	4.053	GST05-2M □□□100C41	146
	683	54	2.8	827	45	3.2	4.160	GST06-2M □□□100C41	146
	623	60	1.4	755	50	1.6	4.556	GST06-1M □□□100C41	140
	623	60	2.5	755	50	2.8	4.556	GST07-1M □□□100C41	140
	621	60	1.2	753	49	1.4	4.571	GST05-2M □□□100C41	146
	621	60	2.7	753	49	3.1	4.571	GST06-2M □□□100C41	146
	548	68	1.1	663	56	1.2	5.187	GST05-2M □□□100C41	146
	534	69	2.4	646	57	2.7	5.324	GST06-2M □□□100C41	146
	509	74	2.1	616	61	2.4	5.583	GST07-1M □□□100C41	140
	501	75	1.1	607	62	1.3	5.667	GST06-1M □□□100C41	140
	501	75	3.0	607	62	3.4	5.667	GST09-1M □□□100C41	140
	485	76	1.1	588	63	1.2	5.850	GST05-2M □□□100C41	146
	485	76	2.3	588	63	2.7	5.850	GST06-2M □□□100C41	146
	444	84	1.0	538	69	1.2	6.400	GST05-2M □□□100C41	146
	444	84	2.2	538	69	2.5	6.400	GST06-2M □□□100C41	146
	403	92	2.1	489	76	2.4	7.040	GST06-2M □□□100C41	146
	392	94	0.9	475	78	1.1	7.238	GST05-2M □□□100C41	146
	387	97	1.6	469	80	1.9	7.333	GST07-1M □□□100C41	140
	387	97	2.4	469	80	2.8	7.333	GST09-1M □□□100C41	140
	348	107	0.9	421	88	1.0	8.163	GST05-2M □□□100C41	146
	348	107	1.9	421	88	2.2	8.163	GST06-2M □□□100C41	146
	319	118	1.3	387	97	1.4	8.900	GST07-1M □□□100C41	140
	319	118	2.0	387	97	2.3	8.900	GST09-1M □□□100C41	140
	315	118	0.8	382	97	0.9	9.010	GST05-2M □□□100C41	146
	315	118	1.8	382	97	2.0	9.010	GST06-2M □□□100C41	146
	284	130	1.7	344	108	1.9	10.000	GST06-2M □□□100C41	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 4.0 \text{ kW}$

n _N f _N	2840 r/min			3440 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	254	146	1.5	307	121	1.8	11.200	GST06-2M □□□100C41	146
	252	149	1.6	306	123	1.8	11.250	GST09-1M □□□100C41	140
	226	164	1.5	274	135	1.7	12.571	GST06-2M □□□100C41	146
	226	164	3.0	274	135	3.4	12.571	GST07-2M □□□100C41	146
	199	186	1.3	241	154	1.5	14.286	GST06-2M □□□100C41	146
	199	186	2.8	241	154	3.2	14.286	GST07-2M □□□100C41	146
	184	201	1.5	223	166	1.7	15.400	GST06-2M □□□100C41	146
	184	201	2.9	223	166	3.3	15.400	GST07-2M □□□100C41	146
	162	228	1.3	197	189	1.4	17.500	GST06-2M □□□100C41	146
	162	228	2.7	197	189	3.1	17.500	GST07-2M □□□100C41	146
	142	262	1.2	172	216	1.4	20.044	GST06-2M □□□100C41	146
	142	262	2.4	172	216	2.8	20.044	GST07-2M □□□100C41	146
	125	297	1.0	151	245	1.1	22.778	GST06-2M □□□100C41	146
	125	297	2.1	151	245	2.4	22.778	GST07-2M □□□100C41	146
	116	321	2.0	140	265	2.3	24.567	GST07-2M □□□100C41	146
	114	325	1.0	138	269	1.2	24.933	GST06-2M □□□100C41	146
	102	364	1.7	123	301	2.0	27.917	GST07-2M □□□100C41	146
	88	421	1.5	107	348	1.7	32.267	GST07-2M □□□100C41	146
	88	421	2.8	107	348	3.1	32.267	GST09-2M □□□100C41	146
	78	478	1.3	94	395	1.5	36.667	GST07-2M □□□100C41	146
	78	478	2.8	94	395	3.1	36.667	GST09-2M □□□100C41	146
	73	511	1.3	88	422	1.4	39.160	GST07-2M □□□100C41	146
	73	511	2.3	88	422	2.6	39.160	GST09-2M □□□100C41	146
	73	511	2.9	88	422	3.3	39.160	GST11-2M □□□100C41	146
	72	504	1.3	88	416	1.4	39.200	GST07-3M □□□100C41	152
	71	516	2.4	86	426	2.7	40.136	GST09-3M □□□100C41	152
	66	556	2.3	80	459	2.7	43.267	GST09-3M □□□100C41	152
	65	566	1.2	78	467	1.4	44.000	GST07-3M □□□100C41	152
	64	581	1.2	77	479	1.4	44.500	GST07-2M □□□100C41	146
	64	581	2.5	77	479	2.9	44.500	GST09-2M □□□100C41	146
	64	581	3.1	77	479	3.6	44.500	GST11-2M □□□100C41	146
	58	632	2.3	70	522	2.7	49.167	GST09-3M □□□100C41	152
	57	646	2.0	70	533	2.3	49.500	GST09-2M □□□100C41	146
	57	646	2.5	70	533	2.9	49.500	GST11-2M □□□100C41	146
	56	656	1.1	67	541	1.2	51.022	GST07-3M □□□100C41	152
	54	682	2.0	65	563	2.3	53.044	GST09-3M □□□100C41	152
	53	693	1.0	64	572	1.2	53.900	GST07-3M □□□100C41	152
	51	734	2.0	61	606	2.3	56.250	GST09-2M □□□100C41	146
	51	734	2.5	61	606	2.9	56.250	GST11-2M □□□100C41	146
	47	775	2.0	57	640	2.3	60.278	GST09-3M □□□100C41	152



Selection tables

50 Hz, 60 Hz: $P_N = 4.0 \text{ kW}$

n _N	2840 r/min			3440 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	40	913	2.9	48	754	3.3	71.011	GST11-3M □□□100C41	152
	40	924	1.6	48	763	1.9	71.867	GST09-3M □□□100C41	152
	35	1037	2.7	43	856	3.1	80.694	GST11-3M □□□100C41	152
	35	1050	1.5	42	867	1.7	81.667	GST09-3M □□□100C41	152
	33	1122	2.4	39	926	2.7	87.267	GST11-3M □□□100C41	152
	30	1202	1.3	37	993	1.6	93.541	GST09-3M □□□100C41	152
	29	1275	1.3	35	1052	1.4	99.167	GST09-3M □□□100C41	152
	29	1275	2.2	35	1052	2.6	99.167	GST11-3M □□□100C41	152
	25	1452	1.9	31	1198	2.1	112.933	GST11-3M □□□100C41	152
	25	1460	1.1	30	1205	1.3	113.585	GST09-3M □□□100C41	152
	22	1659	1.0	27	1370	1.1	129.074	GST09-3M □□□100C41	152
	22	1659	1.7	27	1370	2.0	129.074	GST11-3M □□□100C41	152
	20	1789	3.2	25	1477	3.7	139.211	GST14-3M □□□100C41	152
	20	1816	0.9	24	1499	1.0	141.289	GST09-3M □□□100C41	152
	19	1889	1.4	23	1560	1.7	146.993	GST11-3M □□□100C41	152
	18	2033	1.4	22	1679	1.6	158.194	GST11-3M □□□100C41	152
	18	2033	2.9	22	1679	3.4	158.194	GST14-3M □□□100C41	152
	17	2199	2.7	20	1816	3.1	171.111	GST14-3M □□□100C41	152
	16	2316	1.2	19	1912	1.3	180.156	GST11-3M □□□100C41	152
	14	2631	2.2	17	2172	2.6	204.722	GST14-3M □□□100C41	152
	14	2671	1.1	17	2205	1.2	207.778	GST11-3M □□□100C41	152
	12	3041	0.9	15	2511	1.0	236.622	GST11-3M □□□100C41	152
	12	3041	1.9	15	2511	2.2	236.622	GST14-3M □□□100C41	152
	11	3194	1.9	14	2637	2.1	248.458	GST14-3M □□□100C41	152
	11	3241	0.9	14	2676	1.0	252.167	GST11-3M □□□100C41	152
	11	3456	0.8	13	2853	1.0	268.889	GST11-3M □□□100C41	152
	11	3456	1.7	13	2853	2.0	268.889	GST14-3M □□□100C41	152
	8.7	4195	1.4	11	3463	1.6	326.333	GST14-3M □□□100C41	152
	7.8	4666	1.2	9.5	3852	1.4	363.000	GST14-3M □□□100C41	152
	6.9	5302	1.1	8.3	4377	1.3	412.500	GST14-3M □□□100C41	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 4.0 \text{ kW}$

n _N	1450 r/min			1755 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	906	42	1.5	1094	34	1.7	1.600	GST06-1M □□□112C22	140
	892	42	2.5	1077	35	2.9	1.625	GST07-1M □□□112C22	140
	725	52	2.4	875	43	2.7	2.000	GST07-1M □□□112C22	140
	708	53	1.4	855	44	1.6	2.048	GST06-1M □□□112C22	140
	647	58	1.4	781	48	1.6	2.240	GST06-1M □□□112C22	140
	647	58	2.3	781	48	2.7	2.240	GST07-1M □□□112C22	140
	508	74	1.2	613	61	1.4	2.857	GST06-1M □□□112C22	140
	508	74	2.1	613	61	2.5	2.857	GST07-1M □□□112C22	140
	478	78	2.1	577	64	2.5	3.033	GST06-2M □□□112C22	146
	435	85	2.0	525	70	2.3	3.333	GST06-2M □□□112C22	146
	414	91	1.2	500	75	1.3	3.500	GST06-1M □□□112C22	140
	414	91	1.9	500	75	2.2	3.500	GST07-1M □□□112C22	140
	349	106	1.8	421	88	2.1	4.160	GST06-2M □□□112C22	146
	318	118	1.6	384	98	1.8	4.556	GST07-1M □□□112C22	140
	317	117	1.7	383	97	2.0	4.571	GST06-2M □□□112C22	146
	311	121	2.6	375	100	2.9	4.667	GST09-1M □□□112C22	140
	279	133	3.2	337	110	3.7	5.200	GST07-2M □□□112C22	146
	272	136	1.5	329	112	1.7	5.324	GST06-2M □□□112C22	146
	260	145	1.4	313	120	1.6	5.583	GST07-1M □□□112C22	140
	256	147	2.2	309	121	2.5	5.667	GST09-1M □□□112C22	140
	254	146	3.1	306	121	3.5	5.714	GST07-2M □□□112C22	146
	248	150	1.5	299	124	1.7	5.850	GST06-2M □□□112C22	146
	227	164	1.4	273	135	1.6	6.400	GST06-2M □□□112C22	146
	227	164	2.8	273	135	3.3	6.400	GST07-2M □□□112C22	146
	206	180	1.3	249	149	1.5	7.040	GST06-2M □□□112C22	146
	203	183	2.7	245	151	3.1	7.150	GST07-2M □□□112C22	146
	198	190	1.7	239	157	2.0	7.333	GST09-1M □□□112C22	140
	179	208	2.6	215	172	3.0	8.125	GST07-2M □□□112C22	146
	178	209	1.2	214	172	1.4	8.163	GST06-2M □□□112C22	146
	165	225	2.3	199	186	2.7	8.800	GST07-2M □□□112C22	146
	163	231	1.5	197	191	1.7	8.900	GST09-1M □□□112C22	140
	161	230	1.1	194	190	1.3	9.010	GST06-2M □□□112C22	146
	147	252	2.2	178	208	2.5	9.856	GST07-2M □□□112C22	146
	145	256	1.1	175	211	1.2	10.000	GST06-2M □□□112C22	146
	130	286	1.0	156	237	1.1	11.200	GST06-2M □□□112C22	146
	130	286	2.1	156	237	2.4	11.200	GST07-2M □□□112C22	146
	115	321	0.9	139	265	1.1	12.571	GST06-2M □□□112C22	146
	115	321	1.9	139	265	2.1	12.571	GST07-2M □□□112C22	146
	102	365	0.8	123	302	1.0	14.286	GST06-2M □□□112C22	146
	102	365	1.8	123	302	2.0	14.286	GST07-2M □□□112C22	146



Selection tables

50 Hz, 60 Hz: $P_N = 4.0 \text{ kW}$

n_N	1450 r/min			1755 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	94	394	0.8	114	325	1.0	15.400	GST06-2M □□□112C22	146
	94	394	1.6	114	325	2.0	15.400	GST07-2M □□□112C22	146
	84	440	3.1	102	364	3.8	17.222	GST09-2M □□□112C22	146
	83	447	1.5	100	370	1.8	17.500	GST07-2M □□□112C22	146
	72	512	1.4	87	423	1.6	20.044	GST07-2M □□□112C22	146
	72	519	3.2	86	428	3.9	20.289	GST11-2M □□□112C22	146
	71	525	2.6	85	434	3.1	20.533	GST09-2M □□□112C22	146
	64	582	1.2	77	481	1.4	22.778	GST07-2M □□□112C22	146
	63	589	3.2	76	487	3.9	23.056	GST11-2M □□□112C22	146
	62	596	2.5	75	493	3.1	23.333	GST09-2M □□□112C22	146
	59	628	1.1	71	519	1.4	24.567	GST07-2M □□□112C22	146
	58	637	2.2	70	527	2.6	24.933	GST09-2M □□□112C22	146
	58	637	2.7	70	527	3.3	24.933	GST11-2M □□□112C22	146
	52	714	1.0	63	590	1.2	27.917	GST07-2M □□□112C22	146
	51	724	2.1	62	598	2.5	28.333	GST09-2M □□□112C22	146
	51	724	2.7	62	598	3.3	28.333	GST11-2M □□□112C22	146
	45	825	1.7	54	681	2.1	32.267	GST09-2M □□□112C22	146
	45	825	2.2	54	681	2.6	32.267	GST11-2M □□□112C22	146
	45	825	2.7	54	681	3.3	32.267	GST14-2M □□□112C22	146
	40	937	1.6	48	774	2.0	36.667	GST09-2M □□□112C22	146
	40	937	2.2	48	774	2.6	36.667	GST11-2M □□□112C22	146
	40	937	2.7	48	774	3.3	36.667	GST14-2M □□□112C22	146
	37	1001	1.4	45	827	1.8	39.160	GST09-2M □□□112C22	146
	37	1001	1.8	45	827	2.2	39.160	GST11-2M □□□112C22	146
	37	1001	2.3	45	827	2.7	39.160	GST14-2M □□□112C22	146
	36	1010	1.3	44	835	1.6	40.136	GST09-3M □□□112C22	152
	36	1028	2.5	43	849	3.0	40.816	GST11-3M □□□112C22	152
	34	1089	1.2	40	900	1.4	43.267	GST09-3M □□□112C22	152
	33	1108	2.2	40	915	2.6	44.000	GST11-3M □□□112C22	152
	33	1137	1.4	39	940	1.6	44.500	GST09-2M □□□112C22	146
	33	1137	1.8	39	940	2.2	44.500	GST11-2M □□□112C22	146
	33	1137	2.3	39	940	2.7	44.500	GST14-2M □□□112C22	146
	30	1238	1.2	36	1023	1.4	49.167	GST09-3M □□□112C22	152
	29	1265	1.4	35	1045	1.8	49.500	GST11-2M □□□112C22	146
	29	1265	1.8	35	1045	2.2	49.500	GST14-2M □□□112C22	146
	29	1259	2.2	35	1040	2.6	50.000	GST11-3M □□□112C22	152
	27	1335	1.0	33	1103	1.2	53.044	GST09-3M □□□112C22	152
	26	1438	1.4	31	1188	1.8	56.250	GST11-2M □□□112C22	146
	26	1438	1.8	31	1188	2.2	56.250	GST14-2M □□□112C22	146
	25	1459	1.8	30	1206	2.1	57.968	GST11-3M □□□112C22	152



Selection tables

50 Hz, 60 Hz: $P_N = 4.0 \text{ kW}$

n_N	1450 r/min			1755 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	24	1518	1.0	29	1254	1.2	60.278	GST09-3M □□□112C22	152
	24	1542	1.8	29	1274	2.1	61.250	GST11-3M □□□112C22	152
	21	1738	2.8	25	1436	3.4	69.042	GST14-3M □□□112C22	152
	20	1788	1.5	25	1477	1.8	71.011	GST11-3M □□□112C22	152
	20	1809	0.8	24	1495	1.0	71.867	GST09-3M □□□112C22	152
	19	1975	2.8	22	1632	3.4	78.457	GST14-3M □□□112C22	152
	18	2031	1.4	22	1678	1.7	80.694	GST11-3M □□□112C22	152
	17	2197	1.2	20	1815	1.5	87.267	GST11-3M □□□112C22	152
	16	2355	2.3	19	1946	2.8	93.541	GST14-3M □□□112C22	152
	15	2421	2.4	18	2000	2.9	96.157	GST14-3M □□□112C22	152
	15	2497	1.1	18	2063	1.4	99.167	GST11-3M □□□112C22	152
	14	2676	2.2	17	2211	2.7	106.296	GST14-3M □□□112C22	152
	13	2843	0.9	16	2349	1.1	112.933	GST11-3M □□□112C22	152
	11	3249	0.9	14	2685	1.0	129.074	GST11-3M □□□112C22	152
	11	3280	1.8	13	2710	2.2	130.278	GST14-3M □□□112C22	152
	10	3505	1.6	13	2896	2.0	139.211	GST14-3M □□□112C22	152
	9.2	3983	1.5	11	3290	1.8	158.194	GST14-3M □□□112C22	152
	8.5	4308	1.4	10	3559	1.7	171.111	GST14-3M □□□112C22	152
	7.1	5154	1.1	8.6	4258	1.4	204.722	GST14-3M □□□112C22	152
	6.1	5957	1.0	7.4	4922	1.2	236.622	GST14-3M □□□112C22	152
	5.8	6255	0.9	7.0	5168	1.1	248.458	GST14-3M □□□112C22	152
	5.4	6769	0.9	6.5	5593	1.1	268.889	GST14-3M □□□112C22	152



Selection tables

50 Hz, 60 Hz: $P_N = 5.5 \text{ kW}$

n _N	2900 r/min			3510 r/min			i		
	f _N	50 Hz			60 Hz				
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1813	29	1.7	2188	24	2.0	1.600	GST06-1M □□□112C31	140
	1785	29	2.9	2154	24	3.3	1.625	GST07-1M □□□112C31	140
	1450	36	2.8	1750	29	3.2	2.000	GST07-1M □□□112C31	140
	1416	37	1.6	1709	30	1.8	2.048	GST06-1M □□□112C31	140
	1295	40	1.6	1563	33	1.8	2.240	GST06-1M □□□112C31	140
	1295	40	2.7	1563	33	3.1	2.240	GST07-1M □□□112C31	140
	1015	51	1.5	1225	42	1.7	2.857	GST06-1M □□□112C31	140
	1015	51	2.5	1225	42	2.8	2.857	GST07-1M □□□112C31	140
	956	53	2.5	1154	44	2.8	3.033	GST06-2M □□□112C31	146
	870	59	2.4	1050	48	2.7	3.333	GST06-2M □□□112C31	146
	829	62	1.3	1000	52	1.5	3.500	GST06-1M □□□112C31	140
	829	62	2.2	1000	52	2.5	3.500	GST07-1M □□□112C31	140
	697	73	2.1	841	60	2.4	4.160	GST06-2M □□□112C31	146
	637	81	1.8	768	67	2.1	4.556	GST07-1M □□□112C31	140
	634	80	2.0	766	66	2.3	4.571	GST06-2M □□□112C31	146
	621	83	3.0	750	69	3.4	4.667	GST09-1M □□□112C31	140
	545	94	1.8	657	77	2.0	5.324	GST06-2M □□□112C31	146
	519	100	1.6	627	82	1.8	5.583	GST07-1M □□□112C31	140
	512	101	2.5	618	84	2.9	5.667	GST09-1M □□□112C31	140
	496	103	1.7	598	85	2.0	5.850	GST06-2M □□□112C31	146
	453	112	1.6	547	93	1.9	6.400	GST06-2M □□□112C31	146
	412	124	1.5	497	102	1.7	7.040	GST06-2M □□□112C31	146
	406	126	3.1	490	104	3.5	7.150	GST07-2M □□□112C31	146
	396	131	2.0	477	108	2.3	7.333	GST09-1M □□□112C31	140
	357	143	3.0	431	118	3.4	8.125	GST07-2M □□□112C31	146
	355	143	1.4	429	119	1.6	8.163	GST06-2M □□□112C31	146
	330	155	2.7	398	128	3.1	8.800	GST07-2M □□□112C31	146
	326	159	1.7	393	131	1.9	8.900	GST09-1M □□□112C31	140
	322	158	1.3	389	131	1.5	9.010	GST06-2M □□□112C31	146
	294	173	2.5	355	143	2.9	9.856	GST07-2M □□□112C31	146
	290	176	1.2	350	145	1.4	10.000	GST06-2M □□□112C31	146
	259	197	1.1	313	163	1.3	11.200	GST06-2M □□□112C31	146
	259	197	2.4	313	163	2.8	11.200	GST07-2M □□□112C31	146
	231	221	1.1	278	183	1.2	12.571	GST06-2M □□□112C31	146
	231	221	2.2	278	183	2.5	12.571	GST07-2M □□□112C31	146
	203	251	1.0	245	207	1.1	14.286	GST06-2M □□□112C31	146
	203	251	2.1	245	207	2.3	14.286	GST07-2M □□□112C31	146
	188	271	1.1	227	224	1.2	15.400	GST06-2M □□□112C31	146
	188	271	2.2	227	224	2.5	15.400	GST07-2M □□□112C31	146
	166	308	0.9	200	254	1.1	17.500	GST06-2M □□□112C31	146

GST helical gearboxes

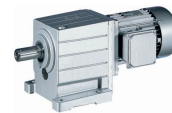
Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 5.5 \text{ kW}$

n_N	2900 r/min			3510 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	166	308	2.0	200	254	2.3	17.500	GST07-2M □□□112C31	146
	145	352	1.8	175	291	2.0	20.044	GST07-2M □□□112C31	146
	127	400	1.6	154	331	1.8	22.778	GST07-2M □□□112C31	146
	118	432	1.5	143	357	1.7	24.567	GST07-2M □□□112C31	146
	116	438	2.9	140	362	3.3	24.933	GST09-2M □□□112C31	146
	104	491	1.3	125	405	1.5	27.917	GST07-2M □□□112C31	146
	102	498	2.8	124	411	3.2	28.333	GST09-2M □□□112C31	146
	90	567	2.3	109	468	2.6	32.267	GST09-2M □□□112C31	146
	90	567	2.9	109	468	3.3	32.267	GST11-2M □□□112C31	146
	79	644	2.2	96	532	2.5	36.667	GST09-2M □□□112C31	146
	79	644	2.9	96	532	3.3	36.667	GST11-2M □□□112C31	146
	74	688	1.9	89	569	2.2	39.160	GST09-2M □□□112C31	146
	74	688	2.4	89	569	2.7	39.160	GST11-2M □□□112C31	146
	74	688	3.0	89	569	3.4	39.160	GST14-2M □□□112C31	146
	72	695	1.8	87	574	2.0	40.136	GST09-3M □□□112C31	152
	67	749	1.7	81	619	2.0	43.267	GST09-3M □□□112C31	152
	66	762	3.2	80	629	3.6	44.000	GST11-3M □□□112C31	152
	65	782	2.0	79	646	2.3	44.500	GST09-2M □□□112C31	146
	65	782	2.6	79	646	3.0	44.500	GST11-2M □□□112C31	146
	59	851	1.7	71	703	2.0	49.167	GST09-3M □□□112C31	152
	59	870	2.1	71	719	2.4	49.500	GST11-2M □□□112C31	146
	59	870	2.6	71	719	3.0	49.500	GST14-2M □□□112C31	146
	58	865	3.1	70	715	3.6	50.000	GST11-3M □□□112C31	152
	55	918	1.5	66	759	1.7	53.044	GST09-3M □□□112C31	152
	52	988	2.1	62	817	2.4	56.250	GST11-2M □□□112C31	146
	52	988	2.6	62	817	3.0	56.250	GST14-2M □□□112C31	146
	50	1003	2.6	60	829	2.9	57.968	GST11-3M □□□112C31	152
	48	1043	1.5	58	862	1.7	60.278	GST09-3M □□□112C31	152
	47	1060	2.6	57	876	3.0	61.250	GST11-3M □□□112C31	152
	41	1229	2.1	49	1015	2.5	71.011	GST11-3M □□□112C31	152
	40	1244	1.2	49	1028	1.4	71.867	GST09-3M □□□112C31	152
	36	1397	2.0	43	1154	2.3	80.694	GST11-3M □□□112C31	152
	36	1413	1.1	43	1168	1.3	81.667	GST09-3M □□□112C31	152
	33	1510	1.8	40	1248	2.0	87.267	GST11-3M □□□112C31	152
	29	1716	0.9	35	1418	1.1	99.167	GST09-3M □□□112C31	152
	29	1716	1.6	35	1418	1.9	99.167	GST11-3M □□□112C31	152
	27	1840	3.2	33	1520	3.7	106.296	GST14-3M □□□112C31	152
	26	1955	1.4	31	1615	1.6	112.933	GST11-3M □□□112C31	152
	23	2234	1.3	27	1846	1.4	129.074	GST11-3M □□□112C31	152
	22	2255	2.6	27	1863	3.0	130.278	GST14-3M □□□112C31	152



Selection tables

50 Hz, 60 Hz: $P_N = 5.5 \text{ kW}$

n_N	2900 r/min			3510 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	21	2409	2.4	25	1991	2.7	139.211	GST14-3M □□□112C31	152
	20	2544	1.1	24	2102	1.2	146.993	GST11-3M □□□112C31	152
	18	2738	1.0	22	2262	1.2	158.194	GST11-3M □□□112C31	152
	18	2738	2.2	22	2262	2.5	158.194	GST14-3M □□□112C31	152
	17	2962	2.0	21	2447	2.3	171.111	GST14-3M □□□112C31	152
	16	3118	0.9	19	2576	1.0	180.156	GST11-3M □□□112C31	152
	14	3543	1.7	17	2928	1.9	204.722	GST14-3M □□□112C31	152
	12	4095	1.4	15	3384	1.6	236.622	GST14-3M □□□112C31	152
	12	4300	1.4	14	3553	1.6	248.458	GST14-3M □□□112C31	152
	11	4654	1.3	13	3845	1.5	268.889	GST14-3M □□□112C31	152
	8.9	5648	1.0	11	4667	1.2	326.333	GST14-3M □□□112C31	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 5.5 \text{ kW}$

n _N f _N	1445 r/min			1750 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	903	57	1.1	1091	47	1.2	1.600	GST06-1M □□□112C32	140
	889	58	1.8	1074	48	2.1	1.625	GST07-1M □□□112C32	140
	723	72	1.7	873	59	2.0	2.000	GST07-1M □□□112C32	140
	706	73	1.0	852	61	1.1	2.048	GST06-1M □□□112C32	140
	645	80	1.0	779	66	1.1	2.240	GST06-1M □□□112C32	140
	645	80	1.7	779	66	1.9	2.240	GST07-1M □□□112C32	140
	619	84	3.1	748	69	3.6	2.333	GST09-1M □□□112C32	140
	514	101	2.8	621	83	3.2	2.810	GST09-1M □□□112C32	140
	506	102	0.9	611	84	1.0	2.857	GST06-1M □□□112C32	140
	506	102	1.6	611	84	1.8	2.857	GST07-1M □□□112C32	140
	476	107	1.6	575	88	1.8	3.033	GST06-2M □□□112C32	146
	474	107	3.0	573	89	3.5	3.048	GST07-2M □□□112C32	146
	434	118	1.5	524	97	1.7	3.333	GST06-2M □□□112C32	146
	431	118	3.0	521	98	3.5	3.350	GST07-2M □□□112C32	146
	420	123	2.4	507	102	2.7	3.444	GST09-1M □□□112C32	140
	413	125	0.8	500	103	1.0	3.500	GST06-1M □□□112C32	140
	413	125	1.4	499	103	1.6	3.500	GST07-1M □□□112C32	140
	347	147	1.3	420	121	1.5	4.160	GST06-2M □□□112C32	146
	342	149	2.7	413	123	3.1	4.225	GST07-2M □□□112C32	146
	317	163	1.1	383	135	1.3	4.556	GST07-1M □□□112C32	140
	316	161	1.2	382	133	1.4	4.571	GST06-2M □□□112C32	146
	311	164	2.5	376	135	2.9	4.643	GST07-2M □□□112C32	146
	310	167	1.9	374	138	2.1	4.667	GST09-1M □□□112C32	140
	278	183	2.3	336	151	2.7	5.200	GST07-2M □□□112C32	146
	271	188	1.1	328	155	1.3	5.324	GST06-2M □□□112C32	146
	259	200	1.0	313	165	1.1	5.583	GST07-1M □□□112C32	140
	255	203	1.6	308	168	1.8	5.667	GST09-1M □□□112C32	140
	253	202	2.2	305	166	2.6	5.714	GST07-2M □□□112C32	146
	247	206	1.1	298	170	1.2	5.850	GST06-2M □□□112C32	146
	226	226	1.0	273	186	1.2	6.400	GST06-2M □□□112C32	146
	226	226	2.1	273	186	2.4	6.400	GST07-2M □□□112C32	146
	217	235	3.1	262	194	3.6	6.667	GST09-2M □□□112C32	146
	205	248	1.0	248	205	1.1	7.040	GST06-2M □□□112C32	146
	202	252	1.9	244	208	2.2	7.150	GST07-2M □□□112C32	146
	198	258	2.8	239	213	3.2	7.305	GST09-2M □□□112C32	146
	197	263	1.3	238	217	1.5	7.333	GST09-1M □□□112C32	140
	180	283	2.8	217	234	3.2	8.027	GST09-2M □□□112C32	146
	178	287	1.9	215	237	2.2	8.125	GST07-2M □□□112C32	146
	177	288	0.9	214	238	1.0	8.163	GST06-2M □□□112C32	146
	164	310	1.7	198	256	2.0	8.800	GST07-2M □□□112C32	146



Selection tables

50 Hz, 60 Hz: $P_N = 5.5 \text{ kW}$

n_N	1445 r/min			1750 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	162	319	1.1	196	263	1.2	8.900	GST09-1M □□□112C32	140
	160	318	0.8	194	262	0.9	9.010	GST06-2M □□□112C32	146
	147	348	1.6	177	287	1.8	9.856	GST07-2M □□□112C32	146
	141	362	3.1	170	299	3.6	10.267	GST09-2M □□□112C32	146
	129	395	1.5	156	326	1.7	11.200	GST07-2M □□□112C32	146
	124	411	2.9	150	340	3.4	11.667	GST09-2M □□□112C32	146
	117	436	2.8	141	360	3.2	12.362	GST09-2M □□□112C32	146
	115	443	1.4	139	366	1.6	12.571	GST07-2M □□□112C32	146
	103	495	2.6	124	409	3.0	14.048	GST09-2M □□□112C32	146
	101	504	1.3	122	416	1.5	14.286	GST07-2M □□□112C32	146
	95	534	2.4	115	441	2.9	15.156	GST09-2M □□□112C32	146
	94	543	1.2	113	448	1.4	15.400	GST07-2M □□□112C32	146
	84	607	2.3	101	501	2.7	17.222	GST09-2M □□□112C32	146
	83	617	1.1	100	510	1.3	17.500	GST07-2M □□□112C32	146
	72	707	1.0	87	584	1.2	20.044	GST07-2M □□□112C32	146
	71	715	2.4	86	591	2.8	20.289	GST11-2M □□□112C32	146
	70	724	1.9	85	598	2.2	20.533	GST09-2M □□□112C32	146
	63	803	0.8	77	663	1.0	22.778	GST07-2M □□□112C32	146
	63	813	2.4	76	671	2.8	23.056	GST11-2M □□□112C32	146
	62	823	1.8	75	679	2.2	23.333	GST09-2M □□□112C32	146
	59	866	0.8	71	715	1.0	24.567	GST07-2M □□□112C32	146
	58	879	1.6	70	726	1.9	24.933	GST09-2M □□□112C32	146
	58	879	2.0	70	726	2.4	24.933	GST11-2M □□□112C32	146
	51	999	1.5	62	825	1.8	28.333	GST09-2M □□□112C32	146
	51	999	2.0	62	825	2.4	28.333	GST11-2M □□□112C32	146
	45	1138	1.3	54	940	1.5	32.267	GST09-2M □□□112C32	146
	45	1138	1.6	54	940	1.9	32.267	GST11-2M □□□112C32	146
	45	1138	2.0	54	940	2.4	32.267	GST14-2M □□□112C32	146
	39	1293	1.2	48	1068	1.4	36.667	GST09-2M □□□112C32	146
	39	1293	1.6	48	1068	1.9	36.667	GST11-2M □□□112C32	146
	39	1293	2.0	48	1068	2.4	36.667	GST14-2M □□□112C32	146
	37	1381	1.0	45	1140	1.3	39.160	GST09-2M □□□112C32	146
	37	1381	1.3	45	1140	1.6	39.160	GST11-2M □□□112C32	146
	37	1381	1.6	45	1140	2.0	39.160	GST14-2M □□□112C32	146
	36	1394	1.0	44	1151	1.2	40.136	GST09-3M □□□112C32	152
	36	1396	3.1	43	1153	3.8	40.185	GST14-3M □□□112C32	152
	35	1418	1.8	43	1171	2.2	40.816	GST11-3M □□□112C32	152
	34	1479	2.8	41	1221	3.3	42.580	GST14-3M □□□112C32	152
	33	1503	0.9	40	1241	1.0	43.267	GST09-3M □□□112C32	152
	33	1528	1.6	40	1262	1.9	44.000	GST11-3M □□□112C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 5.5 \text{ kW}$

n_N	1445 r/min			1750 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	33	1569	1.0	39	1296	1.2	44.500	GST09-2M □□□112C32	146
	33	1569	1.3	39	1296	1.6	44.500	GST11-2M □□□112C32	146
	33	1569	1.6	39	1296	2.0	44.500	GST14-2M □□□112C32	146
	30	1681	2.8	36	1388	3.3	48.386	GST14-3M □□□112C32	152
	29	1708	0.9	36	1410	1.0	49.167	GST09-3M □□□112C32	152
	29	1746	1.0	35	1441	1.3	49.500	GST11-2M □□□112C32	146
	29	1746	1.3	35	1441	1.6	49.500	GST14-2M □□□112C32	146
	29	1737	1.6	35	1434	1.9	50.000	GST11-3M □□□112C32	152
	27	1846	2.6	33	1524	3.1	53.148	GST14-3M □□□112C32	152
	26	1984	1.0	31	1638	1.3	56.250	GST11-2M □□□112C32	146
	26	1984	1.3	31	1638	1.6	56.250	GST14-2M □□□112C32	146
	25	2014	1.3	30	1663	1.5	57.968	GST11-3M □□□112C32	152
	24	2061	2.4	29	1701	2.9	59.321	GST14-3M □□□112C32	152
	24	2128	1.3	29	1757	1.6	61.250	GST11-3M □□□112C32	152
	21	2398	2.1	25	1980	2.5	69.042	GST14-3M □□□112C32	152
	20	2467	1.1	25	2037	1.3	71.011	GST11-3M □□□112C32	152
	18	2725	2.1	22	2250	2.5	78.457	GST14-3M □□□112C32	152
	18	2803	1.0	22	2314	1.2	80.694	GST11-3M □□□112C32	152
	17	3031	0.9	20	2503	1.1	87.267	GST11-3M □□□112C32	152
	15	3249	1.7	19	2683	2.1	93.541	GST14-3M □□□112C32	152
	15	3340	1.8	18	2758	2.1	96.157	GST14-3M □□□112C32	152
	15	3445	0.8	18	2844	1.0	99.167	GST11-3M □□□112C32	152
	14	3692	1.6	16	3049	1.9	106.296	GST14-3M □□□112C32	152
	11	4525	1.3	13	3737	1.6	130.278	GST14-3M □□□112C32	152
	10	4836	1.2	13	3993	1.4	139.211	GST14-3M □□□112C32	152
	9.1	5495	1.1	11	4537	1.3	158.194	GST14-3M □□□112C32	152
	8.4	5944	1.0	10	4908	1.2	171.111	GST14-3M □□□112C32	152
	7.1	7111	0.8	8.5	5872	1.0	204.722	GST14-3M □□□112C32	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 7.5 \text{ kW}$

n _N f _N	2890 r/min			3500 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1806	39	1.3	2181	32	1.4	1.600	GST06-1M □□□112C41	140
	1779	40	2.1	2148	33	2.4	1.625	GST07-1M □□□112C41	140
	1445	49	2.0	1745	40	2.3	2.000	GST07-1M □□□112C41	140
	1411	50	1.2	1704	41	1.3	2.048	GST06-1M □□□112C41	140
	1290	55	1.2	1558	45	1.3	2.240	GST06-1M □□□112C41	140
	1290	55	2.0	1558	45	2.2	2.240	GST07-1M □□□112C41	140
	1012	70	1.1	1222	58	1.2	2.857	GST06-1M □□□112C41	140
	1012	70	1.8	1222	58	2.1	2.857	GST07-1M □□□112C41	140
	953	73	1.8	1151	60	2.1	3.033	GST06-2M □□□112C41	146
	867	80	1.7	1047	66	2.0	3.333	GST06-2M □□□112C41	146
	839	84	2.8	1013	69	3.2	3.444	GST09-1M □□□112C41	140
	826	85	1.0	997	71	1.1	3.500	GST06-1M □□□112C41	140
	826	85	1.6	997	71	1.8	3.500	GST07-1M □□□112C41	140
	695	100	1.5	839	83	1.7	4.160	GST06-2M □□□112C41	146
	684	102	3.1	826	84	3.6	4.225	GST07-2M □□□112C41	146
	634	111	1.3	766	92	1.5	4.556	GST07-1M □□□112C41	140
	632	110	1.5	763	91	1.7	4.571	GST06-2M □□□112C41	146
	623	112	3.0	752	92	3.4	4.643	GST07-2M □□□112C41	146
	619	114	2.2	748	94	2.5	4.667	GST09-1M □□□112C41	140
	556	125	2.7	671	103	3.1	5.200	GST07-2M □□□112C41	146
	543	128	1.3	656	106	1.5	5.324	GST06-2M □□□112C41	146
	518	136	1.2	625	113	1.3	5.583	GST07-1M □□□112C41	140
	510	138	1.9	616	114	2.1	5.667	GST09-1M □□□112C41	140
	506	137	2.6	611	113	3.0	5.714	GST07-2M □□□112C41	146
	494	141	1.3	597	116	1.4	5.850	GST06-2M □□□112C41	146
	452	154	1.2	545	127	1.4	6.400	GST06-2M □□□112C41	146
	452	154	2.4	545	127	2.7	6.400	GST07-2M □□□112C41	146
	411	169	1.1	496	140	1.3	7.040	GST06-2M □□□112C41	146
	404	172	2.3	488	142	2.6	7.150	GST07-2M □□□112C41	146
	394	179	1.5	476	148	1.7	7.333	GST09-1M □□□112C41	140
	356	195	2.2	430	161	2.5	8.125	GST07-2M □□□112C41	146
	354	196	1.0	428	162	1.2	8.163	GST06-2M □□□112C41	146
	328	212	2.0	397	175	2.3	8.800	GST07-2M □□□112C41	146
	325	217	1.2	392	179	1.4	8.900	GST09-1M □□□112C41	140
	321	217	1.0	387	179	1.1	9.010	GST06-2M □□□112C41	146
	293	237	1.9	354	196	2.1	9.856	GST07-2M □□□112C41	146
	289	240	0.9	349	199	1.0	10.000	GST06-2M □□□112C41	146
	258	269	0.8	313	222	0.9	11.200	GST06-2M □□□112C41	146
	258	269	1.8	312	222	2.0	11.200	GST07-2M □□□112C41	146
	230	302	1.6	278	250	1.8	12.571	GST07-2M □□□112C41	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 7.5 \text{ kW}$

n _N f _N	2890 r/min			3500 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	206	338	3.1	248	279	3.5	14.048	GST09-2M □□□112C41	146
	202	343	1.5	244	284	1.7	14.286	GST07-2M □□□112C41	146
	191	364	3.2	230	301	3.6	15.156	GST09-2M □□□112C41	146
	188	370	1.6	227	306	1.8	15.400	GST07-2M □□□112C41	146
	168	414	3.0	203	342	3.4	17.222	GST09-2M □□□112C41	146
	165	421	1.5	199	347	1.7	17.500	GST07-2M □□□112C41	146
	144	482	1.3	174	398	1.5	20.044	GST07-2M □□□112C41	146
	142	488	3.1	172	403	3.6	20.289	GST11-2M □□□112C41	146
	141	494	2.5	170	408	2.8	20.533	GST09-2M □□□112C41	146
	127	548	1.1	153	452	1.3	22.778	GST07-2M □□□112C41	146
	125	554	3.1	151	458	3.6	23.056	GST11-2M □□□112C41	146
	124	561	2.5	150	463	2.8	23.333	GST09-2M □□□112C41	146
	118	591	1.1	142	488	1.2	24.567	GST07-2M □□□112C41	146
	116	599	2.1	140	495	2.4	24.933	GST09-2M □□□112C41	146
	116	599	2.6	140	495	3.0	24.933	GST11-2M □□□112C41	146
	104	671	0.9	125	554	1.1	27.917	GST07-2M □□□112C41	146
	102	681	2.0	123	563	2.3	28.333	GST09-2M □□□112C41	146
	102	681	2.6	123	563	3.0	28.333	GST11-2M □□□112C41	146
	90	776	1.7	108	641	1.9	32.267	GST09-2M □□□112C41	146
	90	776	2.1	108	641	2.4	32.267	GST11-2M □□□112C41	146
	90	776	2.6	108	641	3.0	32.267	GST14-2M □□□112C41	146
	79	882	1.6	95	728	1.8	36.667	GST09-2M □□□112C41	146
	79	882	2.1	95	728	2.4	36.667	GST11-2M □□□112C41	146
	79	882	2.6	95	728	3.0	36.667	GST14-2M □□□112C41	146
	74	942	1.4	89	777	1.6	39.160	GST09-2M □□□112C41	146
	74	942	1.8	89	777	2.0	39.160	GST11-2M □□□112C41	146
	74	942	2.2	89	777	2.5	39.160	GST14-2M □□□112C41	146
	72	951	1.3	87	785	1.5	40.136	GST09-3M □□□112C41	152
	71	967	2.4	86	798	2.7	40.816	GST11-3M □□□112C41	152
	67	1025	1.3	81	846	1.4	43.267	GST09-3M □□□112C41	152
	66	1042	2.3	79	860	2.7	44.000	GST11-3M □□□112C41	152
	65	1070	1.4	78	883	1.7	44.500	GST09-2M □□□112C41	146
	65	1070	1.9	78	883	2.2	44.500	GST11-2M □□□112C41	146
	65	1070	2.4	78	883	2.8	44.500	GST14-2M □□□112C41	146
	59	1164	1.3	71	961	1.4	49.167	GST09-3M □□□112C41	152
	58	1190	1.5	71	983	1.8	49.500	GST11-2M □□□112C41	146
	58	1190	1.9	71	983	2.2	49.500	GST14-2M □□□112C41	146
	58	1184	2.3	70	978	2.6	50.000	GST11-3M □□□112C41	152
	55	1256	1.1	66	1037	1.3	53.044	GST09-3M □□□112C41	152
	51	1352	1.5	62	1117	1.8	56.250	GST11-2M □□□112C41	146



Selection tables

50 Hz, 60 Hz: $P_N = 7.5 \text{ kW}$

n_N	2890 r/min			3500 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	51	1352	1.9	62	1117	2.2	56.250	GST14-2M □□□112C41	146
	50	1373	1.9	60	1134	2.2	57.968	GST11-3M □□□112C41	152
	48	1428	1.1	58	1179	1.3	60.278	GST09-3M □□□112C41	152
	47	1451	1.9	57	1198	2.2	61.250	GST11-3M □□□112C41	152
	42	1635	3.0	51	1350	3.5	69.042	GST14-3M □□□112C41	152
	41	1682	1.6	49	1389	1.8	71.011	GST11-3M □□□112C41	152
	40	1702	0.9	49	1405	1.0	71.867	GST09-3M □□□112C41	152
	37	1858	3.0	45	1534	3.5	78.457	GST14-3M □□□112C41	152
	36	1911	1.5	43	1578	1.7	80.694	GST11-3M □□□112C41	152
	35	1934	0.8	43	1597	0.9	81.667	GST09-3M □□□112C41	152
	33	2067	1.3	40	1707	1.5	87.267	GST11-3M □□□112C41	152
	31	2215	2.5	37	1829	2.9	93.541	GST14-3M □□□112C41	152
	30	2277	2.6	36	1880	3.0	96.157	GST14-3M □□□112C41	152
	29	2349	1.2	35	1939	1.4	99.167	GST11-3M □□□112C41	152
	27	2517	2.4	33	2079	2.7	106.296	GST14-3M □□□112C41	152
	26	2675	1.0	31	2208	1.2	112.933	GST11-3M □□□112C41	152
	22	3057	0.9	27	2524	1.1	129.074	GST11-3M □□□112C41	152
	22	3085	1.9	27	2548	2.2	130.278	GST14-3M □□□112C41	152
	21	3297	1.7	25	2722	2.0	139.211	GST14-3M □□□112C41	152
	18	3747	1.6	22	3094	1.8	158.194	GST14-3M □□□112C41	152
	17	4052	1.5	20	3346	1.7	171.111	GST14-3M □□□112C41	152
	14	4849	1.2	17	4003	1.4	204.722	GST14-3M □□□112C41	152
	12	5604	1.0	15	4627	1.2	236.622	GST14-3M □□□112C41	152
	12	5884	1.0	14	4859	1.2	248.458	GST14-3M □□□112C41	152
	11	6368	0.9	13	5258	1.1	268.889	GST14-3M □□□112C41	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 7.5 \text{ kW}$

n _N f _N	1455 r/min			1760 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	895	79	1.3	1080	65	1.5	1.625	GST07-1M □□□132C22	140
	728	97	1.3	878	80	1.5	2.000	GST07-1M □□□132C22	140
	650	109	1.2	784	90	1.4	2.240	GST07-1M □□□132C22	140
	518	136	3.1	625	113	3.5	2.810	GST09-1M □□□132C22	140
	509	139	1.1	614	115	1.3	2.857	GST07-1M □□□132C22	140
	477	146	2.4	576	120	2.8	3.048	GST07-2M □□□132C22	146
	434	160	2.3	524	132	2.6	3.350	GST07-2M □□□132C22	146
	422	167	2.7	510	138	3.0	3.444	GST09-1M □□□132C22	140
	416	170	1.0	501	140	1.2	3.500	GST07-1M □□□132C22	140
	344	202	2.0	415	167	2.3	4.225	GST07-2M □□□132C22	146
	319	221	0.8	386	183	1.0	4.556	GST07-1M □□□132C22	140
	313	222	1.9	378	183	2.1	4.643	GST07-2M □□□132C22	146
	312	226	1.7	376	187	1.9	4.667	GST09-1M □□□132C22	140
	280	248	1.7	338	205	2.0	5.200	GST07-2M □□□132C22	146
	257	275	1.7	310	227	1.9	5.667	GST09-1M □□□132C22	140
	255	273	1.6	307	226	1.9	5.714	GST07-2M □□□132C22	146
	227	306	1.5	274	253	1.7	6.400	GST07-2M □□□132C22	146
	204	341	1.4	246	282	1.6	7.150	GST07-2M □□□132C22	146
	199	349	3.2	240	288	3.6	7.305	GST09-2M □□□132C22	146
	181	383	3.0	219	317	3.4	8.027	GST09-2M □□□132C22	146
	179	388	1.4	216	321	1.6	8.125	GST07-2M □□□132C22	146
	165	420	1.3	199	347	1.4	8.800	GST07-2M □□□132C22	146
	162	430	2.6	195	356	3.0	9.010	GST09-2M □□□132C22	146
	148	471	1.2	178	389	1.3	9.856	GST07-2M □□□132C22	146
	142	490	2.4	171	405	2.8	10.267	GST09-2M □□□132C22	146
	130	535	1.1	157	442	1.3	11.200	GST07-2M □□□132C22	146
	125	557	2.2	150	461	2.5	11.667	GST09-2M □□□132C22	146
	118	590	2.1	142	488	2.4	12.362	GST09-2M □□□132C22	146
	116	600	1.0	140	496	1.1	12.571	GST07-2M □□□132C22	146
	104	671	1.9	125	555	2.2	14.048	GST09-2M □□□132C22	146
	102	682	0.9	123	564	1.1	14.286	GST07-2M □□□132C22	146
	96	724	1.9	116	598	2.2	15.156	GST09-2M □□□132C22	146
	95	735	0.9	114	608	1.1	15.400	GST07-2M □□□132C22	146
	85	822	1.7	102	680	2.0	17.222	GST09-2M □□□132C22	146
	83	836	0.8	100	691	1.0	17.500	GST07-2M □□□132C22	146
	72	969	2.8	87	801	3.4	20.289	GST11-2M □□□132C22	146
	71	981	1.5	86	811	1.8	20.533	GST09-2M □□□132C22	146
	63	1101	2.6	76	910	3.2	23.056	GST11-2M □□□132C22	146
	62	1114	1.4	75	921	1.6	23.333	GST09-2M □□□132C22	146
	58	1191	1.3	70	984	1.6	24.933	GST09-2M □□□132C22	146



Selection tables

50 Hz, 60 Hz: $P_N = 7.5 \text{ kW}$

n _N	1455 r/min			1760 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	58	1191	2.3	70	984	2.8	24.933	GST11-2M □□□132C22	146
	51	1353	1.1	62	1119	1.4	28.333	GST09-2M □□□132C22	146
	51	1353	2.2	62	1119	2.6	28.333	GST11-2M □□□132C22	146
	45	1541	1.8	54	1274	2.2	32.267	GST11-2M □□□132C22	146
	45	1541	3.1	54	1274	3.7	32.267	GST14-2M □□□132C22	146
	40	1751	1.7	48	1448	2.0	36.667	GST11-2M □□□132C22	146
	40	1751	3.1	48	1448	3.7	36.667	GST14-2M □□□132C22	146
	37	1870	1.5	45	1546	1.8	39.160	GST11-2M □□□132C22	146
	37	1870	2.6	45	1546	3.1	39.160	GST14-2M □□□132C22	146
	36	1890	2.4	44	1563	2.9	40.185	GST14-3M □□□132C22	152
	36	1920	1.3	43	1587	1.6	40.816	GST11-3M □□□132C22	152
	34	2003	2.1	41	1656	2.6	42.580	GST14-3M □□□132C22	152
	33	2070	1.2	40	1711	1.4	44.000	GST11-3M □□□132C22	152
	33	2125	1.4	39	1757	1.7	44.500	GST11-2M □□□132C22	146
	33	2125	2.6	39	1757	3.1	44.500	GST14-2M □□□132C22	146
	30	2276	2.1	36	1882	2.6	48.386	GST14-3M □□□132C22	152
	29	2364	1.8	36	1954	2.2	49.500	GST14-2M □□□132C22	146
	29	2352	1.2	35	1944	1.4	50.000	GST11-3M □□□132C22	152
	27	2500	1.9	33	2067	2.3	53.148	GST14-3M □□□132C22	152
	26	2686	1.8	31	2221	2.2	56.250	GST14-2M □□□132C22	146
	25	2727	0.9	30	2254	1.1	57.968	GST11-3M □□□132C22	152
	25	2791	1.9	30	2307	2.3	59.321	GST14-3M □□□132C22	152
	24	2881	0.9	29	2382	1.1	61.250	GST11-3M □□□132C22	152
	21	3248	1.5	25	2685	1.8	69.042	GST14-3M □□□132C22	152
	19	3691	1.5	22	3051	1.8	78.457	GST14-3M □□□132C22	152
	16	4400	1.3	19	3638	1.5	93.541	GST14-3M □□□132C22	152
	15	4523	1.3	18	3739	1.6	96.157	GST14-3M □□□132C22	152
	14	5000	1.2	17	4134	1.4	106.296	GST14-3M □□□132C22	152
	11	6128	1.0	14	5066	1.2	130.278	GST14-3M □□□132C22	152
	11	6549	0.9	13	5414	1.1	139.211	GST14-3M □□□132C22	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 9.0 \text{ kW}$

n _N	2890 r/min			3500 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	1779	48	1.8	2148	39	2.0	1.625	GST07-1M □□□132C21	140
	1445	59	1.7	1745	48	1.9	2.000	GST07-1M □□□132C21	140
	1290	66	1.6	1558	54	1.9	2.240	GST07-1M □□□132C21	140
	1012	84	1.5	1222	69	1.7	2.857	GST07-1M □□□132C21	140
	948	88	3.2	1145	73	3.6	3.048	GST07-2M □□□132C21	146
	863	97	3.0	1042	80	3.5	3.350	GST07-2M □□□132C21	146
	826	103	1.3	997	85	1.5	3.500	GST07-1M □□□132C21	140
	684	122	2.6	826	101	3.0	4.225	GST07-2M □□□132C21	146
	634	133	1.1	768	110	1.3	4.556	GST07-1M □□□132C21	140
	623	134	2.5	752	111	2.8	4.643	GST07-2M □□□132C21	146
	619	137	2.2	748	113	2.5	4.667	GST09-1M □□□132C21	140
	556	150	2.3	671	124	2.6	5.200	GST07-2M □□□132C21	146
	510	166	2.3	616	137	2.6	5.667	GST09-1M □□□132C21	140
	506	165	2.2	611	136	2.5	5.714	GST07-2M □□□132C21	146
	452	185	2.0	545	152	2.3	6.400	GST07-2M □□□132C21	146
	404	206	1.9	488	170	2.2	7.150	GST07-2M □□□132C21	146
	356	234	1.8	430	194	2.1	8.125	GST07-2M □□□132C21	146
	328	254	1.7	397	210	1.9	8.800	GST07-2M □□□132C21	146
	293	284	1.6	354	235	1.8	9.856	GST07-2M □□□132C21	146
	282	296	3.2	340	245	3.6	10.267	GST09-2M □□□132C21	146
	258	323	1.5	312	267	1.7	11.200	GST07-2M □□□132C21	146
	248	337	2.9	299	278	3.3	11.667	GST09-2M □□□132C21	146
	234	357	2.8	282	295	3.2	12.362	GST09-2M □□□132C21	146
	230	363	1.3	278	300	1.5	12.571	GST07-2M □□□132C21	146
	206	405	2.5	248	335	2.9	14.048	GST09-2M □□□132C21	146
	202	412	1.3	244	340	1.4	14.286	GST07-2M □□□132C21	146
	191	437	2.8	230	361	3.2	15.156	GST09-2M □□□132C21	146
	188	444	1.3	227	367	1.5	15.400	GST07-2M □□□132C21	146
	168	497	2.5	203	410	2.9	17.222	GST09-2M □□□132C21	146
	165	505	1.2	199	417	1.4	17.500	GST07-2M □□□132C21	146
	144	578	1.1	175	478	1.2	20.044	GST07-2M □□□132C21	146
	141	592	2.3	170	489	2.6	20.533	GST09-2M □□□132C21	146
	127	657	0.9	154	543	1.1	22.778	GST07-2M □□□132C21	146
	124	673	2.0	150	556	2.3	23.333	GST09-2M □□□132C21	146
	116	719	2.0	140	594	2.3	24.933	GST09-2M □□□132C21	146
	102	817	1.7	123	675	1.9	28.333	GST09-2M □□□132C21	146
	90	931	2.8	108	769	3.1	32.267	GST11-2M □□□132C21	146
	79	1058	2.5	95	874	2.9	36.667	GST11-2M □□□132C21	146
	74	1130	2.3	89	933	2.6	39.160	GST11-2M □□□132C21	146
	71	1160	2.0	86	958	2.3	40.816	GST11-3M □□□132C21	152



Selection tables

50 Hz, 60 Hz: $P_N = 9.0 \text{ kW}$

n _N	2890 r/min			3500 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	66	1250	1.9	79	1033	2.2	44.000	GST11-3M □□□132C21	152
	65	1284	2.3	78	1060	2.6	44.500	GST11-2M □□□132C21	146
	58	1428	3.0	71	1179	3.5	49.500	GST14-2M □□□132C21	146
	58	1421	1.9	70	1173	2.2	50.000	GST11-3M □□□132C21	152
	54	1510	3.2	66	1247	3.6	53.148	GST14-3M □□□132C21	152
	51	1623	3.0	62	1340	3.5	56.250	GST14-2M □□□132C21	146
	50	1647	1.6	60	1360	1.8	57.968	GST11-3M □□□132C21	152
	49	1686	3.1	59	1392	3.6	59.321	GST14-3M □□□132C21	152
	47	1741	1.6	57	1437	1.8	61.250	GST11-3M □□□132C21	152
	42	1962	2.5	51	1620	2.9	69.042	GST14-3M □□□132C21	152
	41	2018	1.3	49	1666	1.5	71.011	GST11-3M □□□132C21	152
	37	2230	2.5	45	1841	2.9	78.457	GST14-3M □□□132C21	152
	36	2293	1.2	43	1894	1.4	80.694	GST11-3M □□□132C21	152
	33	2480	1.1	40	2048	1.2	87.267	GST11-3M □□□132C21	152
	31	2658	2.1	37	2195	2.4	93.541	GST14-3M □□□132C21	152
	30	2733	2.2	36	2257	2.5	96.157	GST14-3M □□□132C21	152
	29	2818	1.0	35	2327	1.1	99.167	GST11-3M □□□132C21	152
	27	3021	2.0	33	2494	2.3	106.296	GST14-3M □□□132C21	152
	26	3210	0.8	31	2650	1.0	112.933	GST11-3M □□□132C21	152
	22	3703	1.6	27	3057	1.8	130.278	GST14-3M □□□132C21	152
	21	3956	1.4	25	3267	1.7	139.211	GST14-3M □□□132C21	152
	18	4496	1.3	22	3712	1.5	158.194	GST14-3M □□□132C21	152
	17	4863	1.2	20	4015	1.4	171.111	GST14-3M □□□132C21	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 9.2 \text{ kW}$

n _N	1450 r/min			1750 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	930	93	3.0	1122	77	3.4	1.560	GST09-1M □□□132C32	140
	892	97	1.1	1077	80	1.3	1.625	GST07-1M □□□132C32	140
	725	119	1.0	875	99	1.2	2.000	GST07-1M □□□132C32	140
	708	122	2.8	855	101	3.2	2.048	GST09-1M □□□132C32	140
	647	134	1.0	781	111	1.2	2.240	GST07-1M □□□132C32	140
	621	139	2.7	750	115	3.0	2.333	GST09-1M □□□132C32	140
	516	168	2.5	623	139	2.9	2.810	GST09-1M □□□132C32	140
	508	171	0.9	613	141	1.1	2.857	GST07-1M □□□132C32	140
	476	179	2.0	574	148	2.2	3.048	GST07-2M □□□132C32	146
	433	197	1.9	522	163	2.1	3.350	GST07-2M □□□132C32	146
	421	206	2.2	508	170	2.5	3.444	GST09-1M □□□132C32	140
	414	209	0.8	500	173	0.9	3.500	GST07-1M □□□132C32	140
	343	248	1.6	414	206	1.8	4.225	GST07-2M □□□132C32	146
	312	273	1.5	377	226	1.7	4.643	GST07-2M □□□132C32	146
	311	279	1.4	375	231	1.6	4.667	GST09-1M □□□132C32	140
	279	306	1.4	337	253	1.6	5.200	GST07-2M □□□132C32	146
	272	313	3.2	329	259	3.6	5.324	GST09-2M □□□132C32	146
	256	338	1.4	309	280	1.6	5.667	GST09-1M □□□132C32	140
	254	336	1.3	306	278	1.5	5.714	GST07-2M □□□132C32	146
	248	344	3.0	299	285	3.4	5.850	GST09-2M □□□132C32	146
	227	376	1.2	273	312	1.4	6.400	GST07-2M □□□132C32	146
	218	392	2.7	263	325	3.1	6.667	GST09-2M □□□132C32	146
	203	420	1.2	245	348	1.3	7.150	GST07-2M □□□132C32	146
	199	429	2.6	240	356	2.9	7.305	GST09-2M □□□132C32	146
	181	472	2.4	218	391	2.8	8.027	GST09-2M □□□132C32	146
	179	478	1.1	215	396	1.3	8.125	GST07-2M □□□132C32	146
	165	517	1.0	199	429	1.2	8.800	GST07-2M □□□132C32	146
	161	530	2.1	194	439	2.4	9.010	GST09-2M □□□132C32	146
	147	579	0.9	178	480	1.1	9.856	GST07-2M □□□132C32	146
	141	604	2.0	171	500	2.2	10.267	GST09-2M □□□132C32	146
	130	658	0.9	156	546	1.0	11.200	GST07-2M □□□132C32	146
	124	686	1.8	150	568	2.0	11.667	GST09-2M □□□132C32	146
	117	727	1.7	142	602	2.0	12.362	GST09-2M □□□132C32	146
	115	739	0.8	139	612	0.9	12.571	GST07-2M □□□132C32	146
	103	826	1.6	125	684	1.8	14.048	GST09-2M □□□132C32	146
	102	840	3.1	123	696	3.5	14.286	GST11-2M □□□132C32	146
	96	891	1.5	116	738	1.8	15.156	GST09-2M □□□132C32	146
	94	905	3.0	114	750	3.6	15.400	GST11-2M □□□132C32	146
	84	1012	1.4	102	839	1.6	17.222	GST09-2M □□□132C32	146
	83	1029	2.7	100	852	3.2	17.500	GST11-2M □□□132C32	146



Selection tables

50 Hz, 60 Hz: $P_N = 9.2 \text{ kW}$

n _N	1450 r/min			1750 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	72	1193	2.3	86	988	2.8	20.289	GST11-2M □□□132C32	146
	71	1207	1.2	85	1000	1.5	20.533	GST09-2M □□□132C32	146
	63	1355	2.1	76	1123	2.6	23.056	GST11-2M □□□132C32	146
	62	1372	1.1	75	1137	1.3	23.333	GST09-2M □□□132C32	146
	59	1444	3.1	71	1197	3.7	24.567	GST14-2M □□□132C32	146
	58	1466	1.1	70	1214	1.3	24.933	GST09-2M □□□132C32	146
	58	1466	1.9	70	1214	2.3	24.933	GST11-2M □□□132C32	146
	52	1641	3.1	63	1360	3.7	27.917	GST14-2M □□□132C32	146
	51	1666	0.9	62	1380	1.1	28.333	GST09-2M □□□132C32	146
	51	1666	1.8	62	1380	2.1	28.333	GST11-2M □□□132C32	146
	45	1897	1.5	54	1572	1.8	32.267	GST11-2M □□□132C32	146
	45	1897	2.5	54	1572	3.0	32.267	GST14-2M □□□132C32	146
	40	2155	1.4	48	1786	1.6	36.667	GST11-2M □□□132C32	146
	40	2155	2.5	48	1786	3.0	36.667	GST14-2M □□□132C32	146
	37	2302	1.2	45	1907	1.5	39.160	GST11-2M □□□132C32	146
	37	2302	2.1	45	1907	2.5	39.160	GST14-2M □□□132C32	146
	36	2327	1.9	44	1928	2.3	40.185	GST14-3M □□□132C32	152
	36	2363	1.1	43	1958	1.3	40.816	GST11-3M □□□132C32	152
	34	2465	1.7	41	2043	2.1	42.580	GST14-3M □□□132C32	152
	33	2548	0.9	40	2111	1.1	44.000	GST11-3M □□□132C32	152
	33	2616	1.1	39	2167	1.4	44.500	GST11-2M □□□132C32	146
	33	2616	2.1	39	2167	2.5	44.500	GST14-2M □□□132C32	146
	30	2802	1.7	36	2321	2.1	48.386	GST14-3M □□□132C32	152
	29	2910	1.5	35	2411	1.8	49.500	GST14-2M □□□132C32	146
	29	2895	0.9	35	2399	1.1	50.000	GST11-3M □□□132C32	152
	27	3077	1.6	33	2550	1.9	53.148	GST14-3M □□□132C32	152
	26	3307	1.5	31	2740	1.8	56.250	GST14-2M □□□132C32	146
	24	3435	1.5	30	2846	1.9	59.321	GST14-3M □□□132C32	152
	21	3998	1.2	25	3312	1.5	69.042	GST14-3M □□□132C32	152
	19	4543	1.2	22	3764	1.5	78.457	GST14-3M □□□132C32	152
	16	5416	1.0	19	4488	1.2	93.541	GST14-3M □□□132C32	152
	15	5568	1.1	18	4613	1.3	96.157	GST14-3M □□□132C32	152
	14	6155	1.0	17	5100	1.2	106.296	GST14-3M □□□132C32	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 11.0 \text{ kW}$

n _N f _N	1460 r/min			1770 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	936	111	2.5	1128	91	2.9	1.560	GST09-1M □□□160C22	140
	899	115	0.9	1083	95	1.1	1.625	GST07-1M □□□160C22	140
	730	142	0.9	880	117	1.0	2.000	GST07-1M □□□160C22	140
	713	145	2.3	860	120	2.7	2.048	GST09-1M □□□160C22	140
	652	159	0.8	786	131	1.0	2.240	GST07-1M □□□160C22	140
	626	165	2.2	754	136	2.6	2.333	GST09-1M □□□160C22	140
	520	199	2.1	626	164	2.4	2.810	GST09-1M □□□160C22	140
	479	213	1.7	577	176	1.9	3.048	GST07-2M □□□160C22	146
	436	234	1.6	525	193	1.8	3.350	GST07-2M □□□160C22	146
	424	244	1.8	511	201	2.1	3.444	GST09-1M □□□160C22	140
	360	283	3.1	434	234	3.6	4.056	GST09-2M □□□160C22	146
	346	295	1.3	417	243	1.5	4.225	GST07-2M □□□160C22	146
	328	311	3.0	395	257	3.4	4.457	GST09-2M □□□160C22	146
	315	324	1.3	379	267	1.5	4.643	GST07-2M □□□160C22	146
	281	363	1.2	339	299	1.4	5.200	GST07-2M □□□160C22	146
	274	372	2.7	331	307	3.1	5.324	GST09-2M □□□160C22	146
	256	399	1.1	308	329	1.3	5.714	GST07-2M □□□160C22	146
	250	408	2.5	301	337	2.9	5.850	GST09-2M □□□160C22	146
	228	447	1.0	275	369	1.2	6.400	GST07-2M □□□160C22	146
	219	465	2.3	264	384	2.6	6.667	GST09-2M □□□160C22	146
	204	499	1.0	246	412	1.1	7.150	GST07-2M □□□160C22	146
	200	510	2.2	241	421	2.5	7.305	GST09-2M □□□160C22	146
	182	560	2.0	219	462	2.3	8.027	GST09-2M □□□160C22	146
	180	567	1.0	217	468	1.1	8.125	GST07-2M □□□160C22	146
	166	614	0.9	200	507	1.0	8.800	GST07-2M □□□160C22	146
	162	629	1.8	195	519	2.1	9.010	GST09-2M □□□160C22	146
	142	717	1.6	171	591	1.9	10.267	GST09-2M □□□160C22	146
	130	782	3.0	157	645	3.5	11.200	GST11-2M □□□160C22	146
	125	814	1.5	151	672	1.7	11.667	GST09-2M □□□160C22	146
	118	863	1.5	142	712	1.7	12.362	GST09-2M □□□160C22	146
	116	878	2.9	140	724	3.3	12.571	GST11-2M □□□160C22	146
	104	981	1.3	125	809	1.5	14.048	GST09-2M □□□160C22	146
	102	997	2.6	123	823	3.0	14.286	GST11-2M □□□160C22	146
	96	1058	1.3	116	873	1.5	15.156	GST09-2M □□□160C22	146
	95	1075	2.5	114	887	3.0	15.400	GST11-2M □□□160C22	146
	85	1202	1.1	102	992	1.4	17.222	GST09-2M □□□160C22	146
	83	1222	2.3	101	1008	2.7	17.500	GST11-2M □□□160C22	146
	72	1416	1.9	87	1168	2.4	20.289	GST11-2M □□□160C22	146
	64	1590	3.2	77	1312	3.8	22.778	GST14-2M □□□160C22	146
	63	1609	1.8	76	1328	2.2	23.056	GST11-2M □□□160C22	146



Selection tables

50 Hz, 60 Hz: $P_N = 11.0 \text{ kW}$

n _N	1460 r/min			1770 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	59	1715	3.1	72	1415	3.7	24.567	GST14-2M □□□160C22	146
	59	1740	1.6	71	1436	1.9	24.933	GST11-2M □□□160C22	146
	52	1949	2.7	63	1607	3.3	27.917	GST14-2M □□□160C22	146
	52	1978	1.5	62	1631	1.8	28.333	GST11-2M □□□160C22	146
	45	2252	2.4	55	1858	2.9	32.267	GST14-2M □□□160C22	146
	40	2560	2.3	48	2111	2.7	36.667	GST14-2M □□□160C22	146
	37	2734	2.0	45	2255	2.4	39.160	GST14-2M □□□160C22	146
	36	2763	1.6	44	2279	2.0	40.185	GST14-3M □□□160C22	152
	34	2928	1.5	41	2415	1.8	42.580	GST14-3M □□□160C22	152
	33	3106	1.9	40	2562	2.3	44.500	GST14-2M □□□160C22	146
	30	3327	1.5	36	2744	1.8	48.386	GST14-3M □□□160C22	152
	28	3654	1.3	33	3014	1.6	53.148	GST14-3M □□□160C22	152
	25	4079	1.3	30	3364	1.6	59.321	GST14-3M □□□160C22	152
	21	4747	1.0	26	3916	1.3	69.042	GST14-3M □□□160C22	152
	19	5394	1.0	22	4450	1.3	78.457	GST14-3M □□□160C22	152
	15	6612	0.9	18	5454	1.1	96.157	GST14-3M □□□160C22	152

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 15.0 \text{ kW}$

n _N	1460 r/min			1760 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	936	151	1.8	1128	125	2.1	1.560	GST09-1M □□□160C32	140
	713	198	1.7	860	164	2.0	2.048	GST09-1M □□□160C32	140
	626	225	1.6	754	187	1.9	2.333	GST09-1M □□□160C32	140
	520	272	1.5	626	225	1.8	2.810	GST09-1M □□□160C32	140
	479	290	1.2	577	241	1.4	3.048	GST07-2M □□□160C32	146
	436	319	1.2	525	265	1.3	3.350	GST07-2M □□□160C32	146
	424	333	1.3	511	276	1.5	3.444	GST09-1M □□□160C32	140
	360	386	2.3	434	320	2.6	4.056	GST09-2M □□□160C32	146
	346	402	1.0	417	334	1.1	4.225	GST07-2M □□□160C32	146
	328	424	2.2	395	352	2.5	4.457	GST09-2M □□□160C32	146
	315	442	0.9	379	367	1.1	4.643	GST07-2M □□□160C32	146
	281	495	0.9	339	411	1.0	5.200	GST07-2M □□□160C32	146
	274	507	2.0	331	420	2.2	5.324	GST09-2M □□□160C32	146
	274	507	3.1	331	420	3.6	5.324	GST11-2M □□□160C32	146
	256	544	0.8	308	451	0.9	5.714	GST07-2M □□□160C32	146
	250	557	1.8	301	462	2.1	5.850	GST09-2M □□□160C32	146
	250	557	3.2	301	462	3.6	5.850	GST11-2M □□□160C32	146
	228	609	3.0	275	505	3.4	6.400	GST11-2M □□□160C32	146
	219	635	1.7	264	526	1.9	6.667	GST09-2M □□□160C32	146
	213	653	3.2	256	542	3.6	6.864	GST11-2M □□□160C32	146
	200	695	1.6	241	577	1.8	7.305	GST09-2M □□□160C32	146
	187	742	2.8	226	616	3.3	7.800	GST11-2M □□□160C32	146
	182	764	1.5	219	634	1.7	8.027	GST09-2M □□□160C32	146
	162	858	1.3	195	711	1.5	9.010	GST09-2M □□□160C32	146
	162	858	2.6	195	711	3.0	9.010	GST11-2M □□□160C32	146
	148	938	2.5	179	778	2.8	9.856	GST11-2M □□□160C32	146
	142	977	1.2	171	811	1.4	10.267	GST09-2M □□□160C32	146
	130	1066	2.2	157	884	2.6	11.200	GST11-2M □□□160C32	146
	125	1111	1.1	151	921	1.2	11.667	GST09-2M □□□160C32	146
	118	1177	1.1	142	976	1.2	12.362	GST09-2M □□□160C32	146
	116	1197	2.1	140	993	2.4	12.571	GST11-2M □□□160C32	146
	104	1337	1.0	125	1109	1.1	14.048	GST09-2M □□□160C32	146
	104	1337	3.2	125	1109	3.6	14.048	GST14-2M □□□160C32	146
	102	1360	1.9	123	1128	2.2	14.286	GST11-2M □□□160C32	146
	96	1443	0.9	116	1197	1.1	15.156	GST09-2M □□□160C32	146
	96	1443	3.1	116	1197	3.7	15.156	GST14-2M □□□160C32	146
	95	1466	1.8	114	1216	2.2	15.400	GST11-2M □□□160C32	146
	85	1639	0.8	102	1360	1.0	17.222	GST09-2M □□□160C32	146
	85	1639	2.8	102	1360	3.4	17.222	GST14-2M □□□160C32	146
	83	1666	1.7	101	1382	2.0	17.500	GST11-2M □□□160C32	146



Selection tables

50 Hz, 60 Hz: $P_N = 15.0 \text{ kW}$

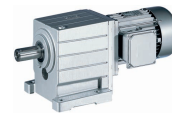
n _N	1460 r/min			1760 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	73	1908	2.6	88	1583	3.1	20.044	GST14-2M □□□160C32	146
	72	1931	1.4	87	1602	1.7	20.289	GST11-2M □□□160C32	146
	64	2168	2.3	77	1799	2.8	22.778	GST14-2M □□□160C32	146
	63	2195	1.3	76	1821	1.6	23.056	GST11-2M □□□160C32	146
	59	2338	2.2	72	1940	2.7	24.567	GST14-2M □□□160C32	146
	59	2373	1.2	71	1969	1.4	24.933	GST11-2M □□□160C32	146
	52	2657	2.0	63	2204	2.4	27.917	GST14-2M □□□160C32	146
	52	2697	1.1	62	2237	1.3	28.333	GST11-2M □□□160C32	146
	45	3071	1.8	55	2548	2.1	32.267	GST14-2M □□□160C32	146
	40	3490	1.7	48	2895	2.0	36.667	GST14-2M □□□160C32	146
	37	3728	1.5	45	3092	1.8	39.160	GST14-2M □□□160C32	146
	36	3768	1.2	44	3126	1.4	40.185	GST14-3M □□□160C32	152
	34	3992	1.1	41	3312	1.3	42.580	GST14-3M □□□160C32	152
	33	4236	1.4	40	3514	1.6	44.500	GST14-2M □□□160C32	146
	30	4537	1.1	36	3763	1.3	48.386	GST14-3M □□□160C32	152
	28	4983	1.0	33	4134	1.2	53.148	GST14-3M □□□160C32	152
	25	5562	0.9	30	4614	1.1	59.321	GST14-3M □□□160C32	152



Selection tables

50 Hz, 60 Hz: $P_N = 18.5 \text{ kW}$

n _N f _N	1470 r/min			1780 r/min			i		
	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	942	185	1.5	1135	153	1.7	1.560	GST09-1M □□□180C12	140
	718	242	1.4	864	200	1.6	2.048	GST09-1M □□□180C12	140
	630	276	1.3	759	228	1.5	2.333	GST09-1M □□□180C12	140
	523	333	1.3	630	275	1.4	2.810	GST09-1M □□□180C12	140
	427	408	1.1	514	337	1.2	3.444	GST09-1M □□□180C12	140
	362	473	1.9	436	391	2.1	4.056	GST09-2M □□□180C12	146
	362	473	3.2	436	391	3.6	4.056	GST11-2M □□□180C12	146
	330	520	1.8	397	429	2.0	4.457	GST09-2M □□□180C12	146
	330	520	3.1	397	429	3.5	4.457	GST11-2M □□□180C12	146
	276	621	1.6	333	513	1.8	5.324	GST09-2M □□□180C12	146
	276	621	2.6	333	513	2.9	5.324	GST11-2M □□□180C12	146
	251	682	1.5	303	563	1.7	5.850	GST09-2M □□□180C12	146
	251	682	2.6	303	563	3.0	5.850	GST11-2M □□□180C12	146
	230	746	2.4	277	616	2.8	6.400	GST11-2M □□□180C12	146
	221	777	1.4	266	642	1.6	6.667	GST09-2M □□□180C12	146
	214	800	2.6	258	661	3.0	6.864	GST11-2M □□□180C12	146
	201	852	1.3	242	703	1.5	7.305	GST09-2M □□□180C12	146
	189	909	2.3	227	751	2.7	7.800	GST11-2M □□□180C12	146
	183	936	1.2	221	773	1.4	8.027	GST09-2M □□□180C12	146
	163	1051	1.1	197	868	1.2	9.010	GST09-2M □□□180C12	146
	163	1051	2.2	197	868	2.5	9.010	GST11-2M □□□180C12	146
	149	1147	3.1	180	948	3.6	9.841	GST14-2M □□□180C12	146
	149	1149	2.0	180	949	2.3	9.856	GST11-2M □□□180C12	146
	143	1197	1.0	172	989	1.1	10.267	GST09-2M □□□180C12	146
	134	1283	3.1	161	1059	3.5	11.000	GST14-2M □□□180C12	146
	131	1306	1.8	158	1078	2.1	11.200	GST11-2M □□□180C12	146
	126	1360	0.9	152	1123	1.0	11.667	GST09-2M □□□180C12	146
	119	1441	0.9	143	1190	1.0	12.362	GST09-2M □□□180C12	146
	119	1441	2.9	143	1190	3.3	12.362	GST14-2M □□□180C12	146
	117	1466	1.7	141	1211	2.0	12.571	GST11-2M □□□180C12	146
	105	1638	2.6	126	1353	3.0	14.048	GST14-2M □□□180C12	146
	103	1666	1.5	124	1376	1.8	14.286	GST11-2M □□□180C12	146
	97	1767	2.5	117	1459	3.1	15.156	GST14-2M □□□180C12	146
	96	1796	1.5	115	1483	1.8	15.400	GST11-2M □□□180C12	146
	85	2008	2.3	103	1658	2.8	17.222	GST14-2M □□□180C12	146
	84	2040	1.4	101	1685	1.6	17.500	GST11-2M □□□180C12	146
	73	2337	2.1	88	1930	2.5	20.044	GST14-2M □□□180C12	146
	73	2366	1.2	87	1954	1.4	20.289	GST11-2M □□□180C12	146
	65	2656	1.9	78	2193	2.3	22.778	GST14-2M □□□180C12	146
	64	2688	1.1	77	2220	1.3	23.056	GST11-2M □□□180C12	146



Selection tables

50 Hz, 60 Hz: $P_N = 18.5 \text{ kW}$

n_N	1470 r/min			1780 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	60	2864	1.8	72	2366	2.2	24.567	GST14-2M □□□180C12	146
	59	2907	1.0	71	2401	1.2	24.933	GST11-2M □□□180C12	146
	53	3255	1.6	63	2688	2.0	27.917	GST14-2M □□□180C12	146
	52	3304	0.9	63	2728	1.1	28.333	GST11-2M □□□180C12	146
	46	3762	1.4	55	3107	1.7	32.267	GST14-2M □□□180C12	146
	40	4275	1.3	48	3531	1.6	36.667	GST14-2M □□□180C12	146
	38	4566	1.2	45	3771	1.4	39.160	GST14-2M □□□180C12	146
	37	4615	1.0	44	3812	1.2	40.185	GST14-3M □□□180C12	152
	35	4890	0.9	42	4039	1.1	42.580	GST14-3M □□□180C12	152
	33	5189	1.1	40	4285	1.4	44.500	GST14-2M □□□180C12	146
	30	5557	0.9	37	4589	1.1	48.386	GST14-3M □□□180C12	152

GST helical gearboxes

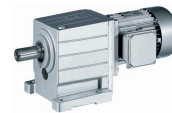
Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 22.0 \text{ kW}$

n_N	1465 r/min			1760 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	939	220	1.3	1131	183	1.4	1.560	GST09-1M □□□180C32	140
	716	289	1.2	862	241	1.3	2.048	GST09-1M □□□180C32	140
	628	330	1.1	756	274	1.3	2.333	GST09-1M □□□180C32	140
	521	397	1.1	628	330	1.2	2.810	GST09-1M □□□180C32	140
	425	487	0.9	512	405	1.0	3.444	GST09-1M □□□180C32	140
	361	564	1.6	435	470	1.8	4.056	GST09-2M □□□180C32	146
	361	564	2.6	435	470	3.0	4.056	GST11-2M □□□180C32	146
	329	620	1.5	396	516	1.7	4.457	GST09-2M □□□180C32	146
	329	620	2.6	396	516	3.0	4.457	GST11-2M □□□180C32	146
	282	723	3.2	339	602	3.6	5.200	GST14-2M □□□180C32	146
	275	741	1.3	332	617	1.5	5.324	GST09-2M □□□180C32	146
	275	741	2.2	332	617	2.5	5.324	GST11-2M □□□180C32	146
	256	795	3.2	309	662	3.6	5.714	GST14-2M □□□180C32	146
	250	814	1.3	302	678	1.4	5.850	GST09-2M □□□180C32	146
	250	814	2.2	302	678	2.5	5.850	GST11-2M □□□180C32	146
	233	875	3.1	281	728	3.5	6.286	GST14-2M □□□180C32	146
	229	890	2.0	276	741	2.3	6.400	GST11-2M □□□180C32	146
	220	928	1.1	265	772	1.3	6.667	GST09-2M □□□180C32	146
	213	955	2.2	257	795	2.5	6.864	GST11-2M □□□180C32	146
	201	1016	1.1	242	846	1.2	7.305	GST09-2M □□□180C32	146
	188	1085	1.9	226	903	2.2	7.800	GST11-2M □□□180C32	146
	183	1117	1.0	220	930	1.2	8.027	GST09-2M □□□180C32	146
	183	1117	2.9	220	930	3.3	8.027	GST14-2M □□□180C32	146
	167	1224	3.1	201	1019	3.5	8.800	GST14-2M □□□180C32	146
	163	1254	0.9	196	1043	1.0	9.010	GST09-2M □□□180C32	146
	163	1254	1.8	196	1043	2.1	9.010	GST11-2M □□□180C32	146
	149	1369	2.6	179	1140	3.0	9.841	GST14-2M □□□180C32	146
	149	1371	1.7	179	1141	1.9	9.856	GST11-2M □□□180C32	146
	143	1428	0.8	171	1189	0.9	10.267	GST09-2M □□□180C32	146
	133	1530	2.6	161	1274	2.9	11.000	GST14-2M □□□180C32	146
	131	1558	1.5	158	1297	1.7	11.200	GST11-2M □□□180C32	146
	119	1720	2.4	143	1432	2.8	12.362	GST14-2M □□□180C32	146
	117	1749	1.4	140	1456	1.6	12.571	GST11-2M □□□180C32	146
	104	1954	2.2	126	1627	2.5	14.048	GST14-2M □□□180C32	146
	103	1988	1.3	124	1654	1.5	14.286	GST11-2M □□□180C32	146
	97	2109	2.1	117	1755	2.5	15.156	GST14-2M □□□180C32	146
	95	2143	1.3	115	1784	1.5	15.400	GST11-2M □□□180C32	146
	85	2396	1.9	103	1995	2.3	17.222	GST14-2M □□□180C32	146
	84	2435	1.1	101	2027	1.4	17.500	GST11-2M □□□180C32	146
	73	2789	1.8	88	2321	2.1	20.044	GST14-2M □□□180C32	146



Selection tables

50 Hz, 60 Hz: $P_N = 22.0 \text{ kW}$

n_N	1465 r/min			1760 r/min			i		
f_N	50 Hz			60 Hz					
	n_2 [r/min]	M_2 [Nm]	c	n_2 [r/min]	M_2 [Nm]	c			
	72	2823	1.0	87	2350	1.2	20.289	GST11-2M □□□180C32	146
	64	3169	1.6	78	2638	1.9	22.778	GST14-2M □□□180C32	146
	64	3208	0.9	77	2670	1.1	23.056	GST11-2M □□□180C32	146
	60	3418	1.5	72	2845	1.8	24.567	GST14-2M □□□180C32	146
	59	3469	0.8	71	2888	1.0	24.933	GST11-2M □□□180C32	146
	53	3884	1.4	63	3233	1.7	27.917	GST14-2M □□□180C32	146
	45	4489	1.2	55	3737	1.5	32.267	GST14-2M □□□180C32	146
	40	5102	1.1	48	4246	1.4	36.667	GST14-2M □□□180C32	146
	37	5448	1.0	45	4535	1.2	39.160	GST14-2M □□□180C32	146
	37	5507	0.8	44	4584	1.0	40.185	GST14-3M □□□180C32	152
	33	6191	0.9	40	5154	1.1	44.500	GST14-2M □□□180C32	146

GST helical gearboxes

Technical data



Selection tables

50 Hz, 60 Hz: $P_N = 30.0 \text{ kW}$

n _N	1465 r/min			1770 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	939	300	0.9	1131	249	1.1	1.560	GST09-1M □□□180C42	140
	716	394	0.9	862	326	1.0	2.048	GST09-1M □□□180C42	140
	628	449	0.8	759	372	0.9	2.333	GST09-1M □□□180C42	140
	361	770	1.1	435	637	1.3	4.056	GST09-2M □□□180C42	146
	361	770	1.9	435	637	2.2	4.056	GST11-2M □□□180C42	146
	329	846	1.1	396	700	1.3	4.457	GST09-2M □□□180C42	146
	329	846	1.9	396	700	2.2	4.457	GST11-2M □□□180C42	146
	282	987	2.3	339	817	2.6	5.200	GST14-2M □□□180C42	146
	275	1010	1.0	332	836	1.1	5.324	GST09-2M □□□180C42	146
	275	1010	1.6	332	836	1.8	5.324	GST11-2M □□□180C42	146
	256	1084	2.3	309	897	2.6	5.714	GST14-2M □□□180C42	146
	250	1110	0.9	302	919	1.1	5.850	GST09-2M □□□180C42	146
	250	1110	1.6	302	919	1.8	5.850	GST11-2M □□□180C42	146
	233	1193	2.3	281	987	2.6	6.286	GST14-2M □□□180C42	146
	229	1214	1.5	276	1005	1.7	6.400	GST11-2M □□□180C42	146
	220	1265	0.8	266	1047	1.0	6.667	GST09-2M □□□180C42	146
	213	1302	1.6	257	1078	1.8	6.864	GST11-2M □□□180C42	146
	188	1480	1.4	226	1225	1.6	7.800	GST11-2M □□□180C42	146
	183	1523	2.1	220	1261	2.4	8.027	GST14-2M □□□180C42	146
	167	1670	2.2	201	1382	2.6	8.800	GST14-2M □□□180C42	146
	163	1709	1.3	196	1415	1.5	9.010	GST11-2M □□□180C42	146
	149	1867	1.9	179	1545	2.2	9.841	GST14-2M □□□180C42	146
	149	1870	1.2	179	1548	1.4	9.856	GST11-2M □□□180C42	146
	133	2087	1.9	161	1727	2.2	11.000	GST14-2M □□□180C42	146
	131	2125	1.1	158	1759	1.3	11.200	GST11-2M □□□180C42	146
	119	2345	1.8	143	1941	2.0	12.362	GST14-2M □□□180C42	146
	117	2385	1.1	140	1974	1.2	12.571	GST11-2M □□□180C42	146
	104	2665	1.6	126	2206	1.8	14.048	GST14-2M □□□180C42	146
	103	2710	1.0	124	2243	1.1	14.286	GST11-2M □□□180C42	146
	97	2875	1.6	117	2380	1.9	15.156	GST14-2M □□□180C42	146
	95	2922	0.9	115	2418	1.1	15.400	GST11-2M □□□180C42	146
	85	3268	1.4	103	2704	1.7	17.222	GST14-2M □□□180C42	146
	84	3320	0.8	101	2748	1.0	17.500	GST11-2M □□□180C42	146
	73	3803	1.3	88	3148	1.6	20.044	GST14-2M □□□180C42	146
	64	4322	1.2	78	3577	1.4	22.778	GST14-2M □□□180C42	146
	60	4661	1.1	72	3858	1.4	24.567	GST14-2M □□□180C42	146
	53	5297	1.0	63	4384	1.2	27.917	GST14-2M □□□180C42	146
	45	6122	0.9	55	5067	1.1	32.267	GST14-2M □□□180C42	146
	40	6957	0.8	48	5758	1.0	36.667	GST14-2M □□□180C42	146



Selection tables

50 Hz, 60 Hz: $P_N = 37.0 \text{ kW}$

n _N	1475 r/min			1780 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	364	943	1.6	436	781	1.8	4.056	GST11-2M □□□225C12	146
	349	982	2.8	419	814	3.2	4.225	GST14-2M □□□225C12	146
	331	1036	1.6	397	858	1.8	4.457	GST11-2M □□□225C12	146
	318	1079	2.7	381	894	3.1	4.643	GST14-2M □□□225C12	146
	284	1209	2.5	340	1001	2.9	5.200	GST14-2M □□□225C12	146
	277	1237	1.3	333	1025	1.5	5.324	GST11-2M □□□225C12	146
	258	1328	2.4	310	1100	2.8	5.714	GST14-2M □□□225C12	146
	252	1360	1.3	303	1127	1.5	5.850	GST11-2M □□□225C12	146
	235	1461	2.3	282	1211	2.7	6.286	GST14-2M □□□225C12	146
	231	1487	1.2	277	1233	1.4	6.400	GST11-2M □□□225C12	146
	215	1595	1.3	258	1322	1.5	6.864	GST11-2M □□□225C12	146
	206	1662	2.1	248	1377	2.4	7.150	GST14-2M □□□225C12	146
	189	1813	1.2	227	1502	1.3	7.800	GST11-2M □□□225C12	146
	184	1866	2.0	221	1546	2.3	8.027	GST14-2M □□□225C12	146
	168	2045	1.8	201	1695	2.1	8.800	GST14-2M □□□225C12	146
	164	2094	1.1	197	1735	1.2	9.010	GST11-2M □□□225C12	146
	150	2287	1.7	180	1895	1.9	9.841	GST14-2M □□□225C12	146
	150	2291	1.0	180	1898	1.2	9.856	GST11-2M □□□225C12	146
	134	2557	1.5	161	2118	1.8	11.000	GST14-2M □□□225C12	146
	132	2603	0.9	158	2157	1.0	11.200	GST11-2M □□□225C12	146
	119	2873	1.5	143	2381	1.7	12.362	GST14-2M □□□225C12	146
	117	2922	0.9	141	2421	1.0	12.571	GST11-2M □□□225C12	146
	105	3265	1.3	126	2705	1.5	14.048	GST14-2M □□□225C12	146
	97	3522	1.3	117	2919	1.5	15.156	GST14-2M □□□225C12	146
	86	4003	1.1	103	3317	1.4	17.222	GST14-2M □□□225C12	146
	74	4659	1.1	88	3860	1.3	20.044	GST14-2M □□□225C12	146
	65	5294	0.9	78	4387	1.1	22.778	GST14-2M □□□225C12	146



Selection tables

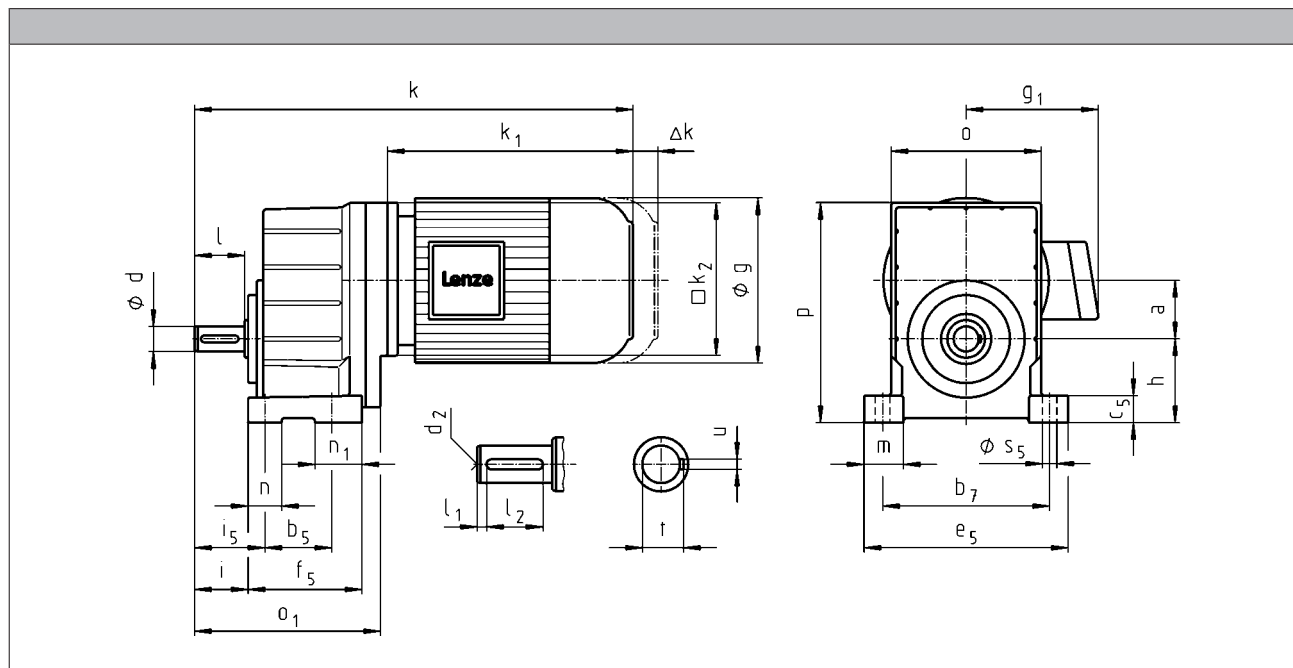
50 Hz, 60 Hz: $P_N = 45.0 \text{ kW}$

n _N	1480 r/min			1784 r/min			i		
f _N	50 Hz			60 Hz					
	n ₂ [r/min]	M ₂ [Nm]	c	n ₂ [r/min]	M ₂ [Nm]	c			
	365	1143	1.3	438	950	1.5	4.056	GST11-2M □□□225C22	146
	350	1190	2.3	420	990	2.6	4.225	GST14-2M □□□225C22	146
	332	1256	1.3	399	1044	1.5	4.457	GST11-2M □□□225C22	146
	319	1308	2.2	383	1087	2.5	4.643	GST14-2M □□□225C22	146
	285	1465	2.1	342	1218	2.4	5.200	GST14-2M □□□225C22	146
	278	1500	1.1	334	1247	1.2	5.324	GST11-2M □□□225C22	146
	259	1610	2.0	311	1338	2.3	5.714	GST14-2M □□□225C22	146
	253	1648	1.1	304	1370	1.2	5.850	GST11-2M □□□225C22	146
	236	1771	1.9	283	1472	2.2	6.286	GST14-2M □□□225C22	146
	231	1803	1.0	278	1499	1.1	6.400	GST11-2M □□□225C22	146
	216	1934	1.1	259	1608	1.2	6.864	GST11-2M □□□225C22	146
	207	2014	1.7	248	1675	2.0	7.150	GST14-2M □□□225C22	146
	190	2197	1.0	228	1827	1.1	7.800	GST11-2M □□□225C22	146
	184	2261	1.7	221	1880	1.9	8.027	GST14-2M □□□225C22	146
	168	2479	1.5	202	2061	1.7	8.800	GST14-2M □□□225C22	146
	164	2538	0.9	197	2110	1.0	9.010	GST11-2M □□□225C22	146
	150	2772	1.4	181	2305	1.6	9.841	GST14-2M □□□225C22	146
	150	2776	0.8	181	2309	1.0	9.856	GST11-2M □□□225C22	146
	135	3099	1.3	162	2576	1.4	11.000	GST14-2M □□□225C22	146
	120	3482	1.2	144	2895	1.4	12.362	GST14-2M □□□225C22	146
	105	3957	1.1	126	3290	1.2	14.048	GST14-2M □□□225C22	146
	98	4269	1.0	117	3550	1.3	15.156	GST14-2M □□□225C22	146
	86	4852	0.9	103	4034	1.1	17.222	GST14-2M □□□225C22	146
	74	5647	0.9	89	4695	1.0	20.044	GST14-2M □□□225C22	146



Dimensions

GST□□-1M VBR



		063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31 071C32 071C33 071C42	080C11 080C13 080C31 080C32 080C33 080C42	090C11 090C31	090C32
g		123		139	156	176		
g ₁	MDEMAXX	100		109	150	157		
	MDEMABR	107		118	132	137		
k ₁	MDEMAXX	187		207	224.5	274	248	
k ₂			120		145	180		
	MDEMABR	40		52	73	68		
Δ k	MDFMAXX			128				
	MDFMABR	170		165	183	181		
		k						
GST04		331		351	373	433	407	
GST05			352	372	394	454	428	
GST06			375		395	477	451	
GST07					446	506	480	
GST09						549	523	

GST helical gearboxes

Technical data



		100C12 100C31 100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32	180C42
g		194	218		258	310		348	
g ₁	MDEMAMXX	166	176		195	210		230	
	MDEMABR	147	158		187	210		230	
k ₁	MDEMAMXX	309	319	363	403	457.5	501.5	561	618
k ₂		180	222		265	300			
Δ k	MDEMABR	76	90		109.5	105		113	
	MDFMAXX	109	102		115	149		155	
	MDFMABR	170	183		201.5	179		215	
k									
GST05		489							
GST06		512	528	572					
GST07		541	557	601	649	708			
GST09		584	600	644	692	751	795	855	912

	a	h ¹⁾	o ¹⁾	p ¹⁾
GST04	36	50	100	138
GST05	45	63	115	168
GST06	56	80	145	211
GST07	70	100	180	264
GST09	89	125	222	329

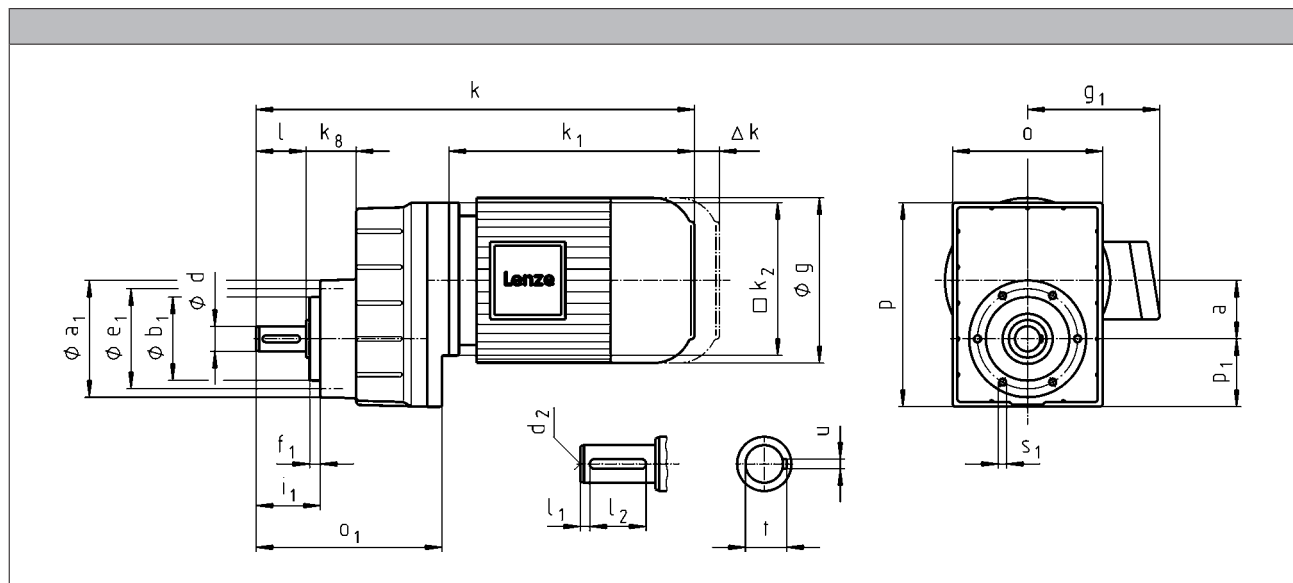
	d	d ₂	l	l ₁	l ₂	u	t	i	i ₅	o ₁	b ₅	b ₇	c ₅	e ₅	f ₅	m	n	n ₁	s ₅
	k6																		
GST04	16	M5	32	6	20	5	18	35	45	134	55	105	17	128	80	24	20	25	9
GST05	20	M6	40	6	28	6	22.5	43	56	165	70	125	22	154	99	32	26	29	11
GST06	25	M10	50	4	40	8	28	53	68	191	72	160	27	194	115	37	30	43	13.5
GST07	30	M10	60	7.5	45	8	33	64	84	223	80	200	35	245	137	48	40	57	18
GST09	40	M16	80	8.5	63	12	43	84	107	271	105	245	43	296	161	51	45	56	18

¹⁾ k₂ !



Dimensions

GST□□-1M VCR



		063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31 071C32 071C33 071C42	080C11 080C13 080C31 080C32 080C33 080C42	090C11 090C31	090C32
g		123		139		156	176	
g ₁	MDEMAXX	100		109		150	157	
	MDEMABR	107		118		132	137	
k ₁	MDEMAXX	187		207		224.5	274	248
k ₂		120				145	180	
Δ k	MDEMABR	40		52		73	68	
	MDFMAXX			128				
	MDFMABR	170		165		183	181	
		k						
GST04		331		351		373	433	407
GST05			352	372		394	454	428
GST06			375		395	417	477	451
GST07						446	506	480
GST09							549	523

GST helical gearboxes

Technical data



		100C12 100C31 100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32	180C42
g		194	218		258	310		348	
g ₁	MDEMAMXX	166	176		195	210		230	
	MDEMABR	147	158		187	210		230	
k ₁	MDEMAMXX	309	319	363	403	457.5	501.5	561	618
k ₂		180	222		265		300		
Δ k	MDEMABR	76	90		109.5	105		113	
	MDFMAXX	109	102		115		149		155
	MDFMABR	170	183		201.5	179		215	
k									
GST05		489							
GST06		512	528	572					
GST07		541	557	601	649	708			
GST09		584	600	644	692	751	795	855	912

	a	k _g	o ¹⁾	p ¹⁾	P ₁
GST04	36	35	100	129	41
GST05	45	43	115	156	51
GST06	56	48	145	194	63
GST07	70	60	180	245	82
GST09	89	74	222	304	101

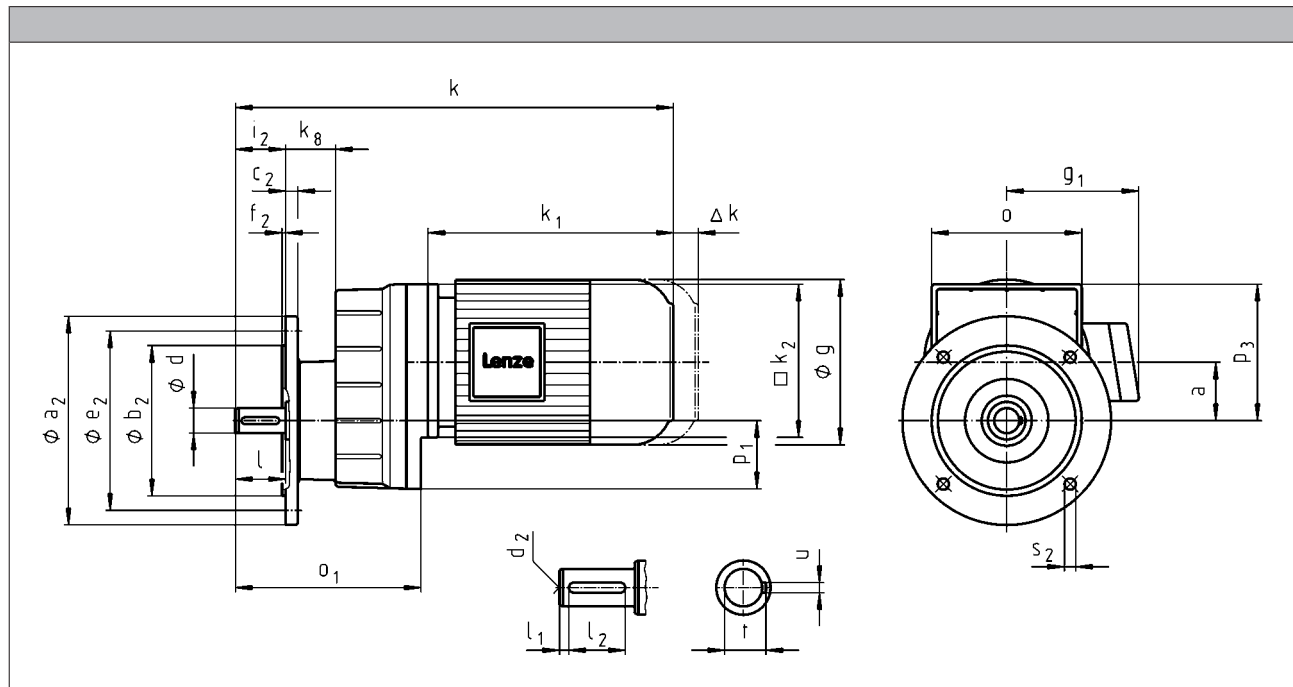
	d	d ₂	l	l ₁	l ₂	u	t	i ₁	o ₁	a ₁	b ₁	e ₁	f ₁	s ₁
	k6										h7			
GST04	16	M5	32	6	20	5	18	43	134	72	48	61	8	M5x10
GST05	20	M6	40	6	28	6	22.5	52	165	88	58	74	9	M6x10
GST06	25	M10	50	4	40	8	28	64	191	109	70	90	11	M8x14
GST07	30	M10	60	7.5	45	8	33	77	223	140	100	120	13	M10x18
GST09	40	M16	80	8.5	63	12	43	100	271	174	120	145	15	M12x20

¹⁾ k₂ !



Dimensions

GST□□-1M VCK



		063C11 063C12 063C31 063C32	063C42	071C11	071C13 071C31 071C32 071C33 071C42	080C11 080C13 080C31 080C32 080C33 080C42	090C11 090C31	090C32
g		123		139		156		176
g ₁	MDEMAXX	100		109		150		157
	MDEMABR	107		118		132		137
k ₁	MDEMAXX	187		207		224.5	274	248
k ₂			120			145		180
	MDEMABR	40		52		73		68
Δk	MDFMAXX				128			
	MDFMABR	170		165		183		181
k								
GST04		331		351		373	433	407
GST05			352	372		394	454	428
GST06			375		395	417	477	451
GST07						446	506	480
GST09							549	523

GST helical gearboxes

Technical data



		100C12 100C31 100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32	180C42
g		194	218		258	310		348	
g ₁	MDEMAYX	166	176		195	210		230	
	MDEMABR	147	158		187	210		230	
k ₁	MDEMAYX	309	319	363	403	457.5	501.5	561	618
k ₂		180	222		265		300		
	MDEMABR	76	90		109.5	105		113	
Δ k	MDFMAXX	109	102		115		149		155
	MDFMABR	170	183		201.5	179		215	
		k							
	GST05	489							
	GST06	512	528	572					
	GST07	541	557	601	649	708			
	GST09	584	600	644	692	751	795	855	912

	a	k _g	o ¹⁾	p ₁	p ₃ ¹⁾
GST04	36	35	100	41	88
GST05	45	43	115	51	105
GST06	56	48	145	63	131
GST07	70	60	180	82	164
GST09	89	74	222	101	204

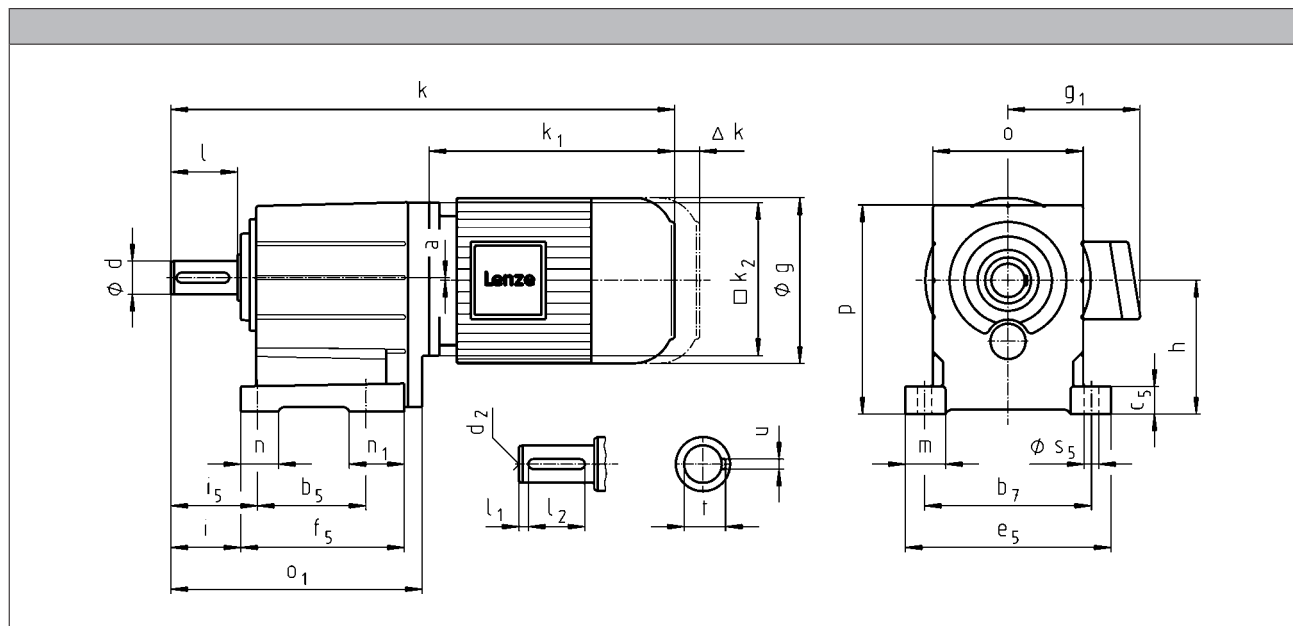
	d	d ₂	l	l ₁	l ₂	u	t	i ₂	o ₁	a ₂	b ₂	c ₂	e ₂	f ₂	s ₂
	k6										j7				
GST04	16	M5	32	6	20	5	18	32	134	120 140 160	80 95 110	10 10 10	100 115 130	3 3 3.5	7 9 9
GST05	20	M6	40	6	28	6	22.5	40	165	120 140 160 200	80 95 110 130	10 10 10 12	100 115 130 165	3 3 3.5 3.5	7 9 9 11
GST06	25	M10	50	4	40	8	28	50	191	160 200	110 130	12 12	130 165	3.5 3.5	9 11
GST07	30	M10	60	7.5	45	8	33	60	223	200 250	130 180	14 15	165 215	3.5 4	11 13.5
GST09	40	M16	80	8.5	63	12	43	80	271	250 300	180 230	16 18	215 265	4 4	13.5 13.5

¹⁾ k₂ !



Dimensions

GST□□-2M VBR



		063C02	063C11	063C12	063C22	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42	080C11	080C13 080C31 080C32 080C33 080C42
g		123							139					156	
g ₁	MDEMAXX	100							109					150	
	MDSMAXX														
	MDEMABR	107							118					132	
	MDSMABR														
k ₁	MDEMAXX	156	187	156	187				207					224.5	
k ₂	MDSMAXX	100	120	100	120							145			
Δ k	MDEMABR	71	40	71	40				52					73	
	MDSMABR														
	MDFMAXX		128						128						
	MDFMABR		170		170				165					183	
		k													
GST03		298		329	298		329					349		349	
GST04			371				371				391				413
GST05							401		421						443
GST06							427			447					469
GST07															525

GST helical gearboxes

Technical data

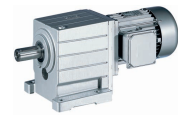


		090C11	090C31	090C32	100C12	100C31	100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32	180C42	225C12 225C22
g		176			194			218		258	310		348		447
g ₁	MDEMAXX	157			166			176		195	210		230		346
	MDEMABR	137			147			158		187	210		230		346
	MDSMABR														
k ₁	MDEMAXX	274		248	309			319	363	403	457.5	501.5	561	618	848
k ₂		180						222		265	300				
Δ k	MDEMABR	68			76			90		109.5	105		113		
	MDSMABR														
	MDFMAXX	128			109			102		115	149			155	213
	MDFMABR	181			170			183		201.5	179		215		213
		k													
GST04		473		447											
GST05		503		477	538										
GST06		529		503	564			580	624						
GST07		585		559	620			636	680	728	787	831			
GST09			648	622	683			699	743	791	850	894	954	1011	
GST11					740		740	756	800	848	907	951	1011	1068	1298
GST14								846	890	938	997	1041	1101	1158	1388

	a	h ¹⁾	o ¹⁾	p ¹⁾
GST03	2	65	90	101
GST04	0	80	100	132
GST05	1	100	115	158.5
GST06	2	125	145	198
GST07	3	160	180	251
GST09	4	200	222	311
GST11	4	250	270	385
GST14	6	315	328	479

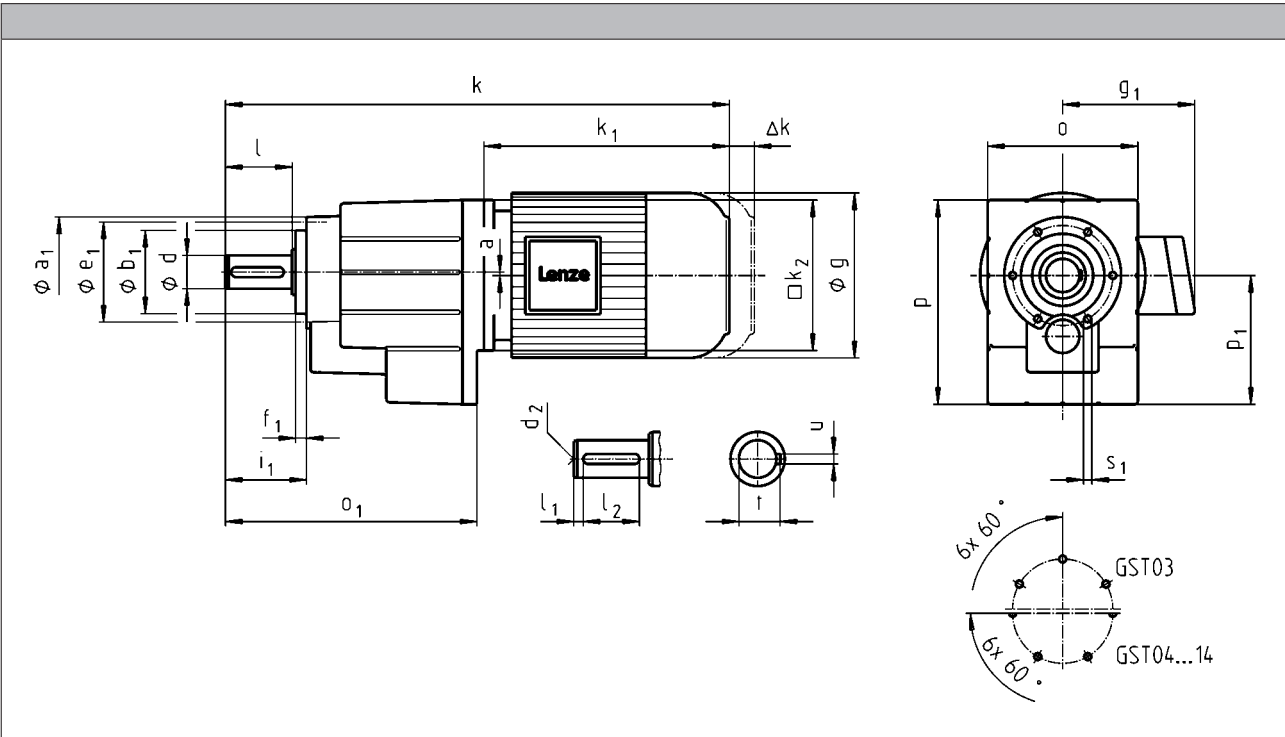
	d	d	d ₂	l	l ₁	l ₂	u	t	i	i ₅	o ₁	b ₅	b ₇	c ₅	e ₅	f ₅	m	n	n ₁	s ₅
	k6	m6																		
GST03	14 20		M5 M6	28 40	4 5	20 28	5 6	16 22.5	34 46	40 52	127 139	60	91	11	105	84	20			6.6
GST04	20		M6	40	5	28	6	22.5	43	53	174	76	105	18	129	112	24.5	20	36	9
GST05	25		M10	50	4	40	8	28	53	66	214	90	125	23	155	139	32.5	26	49	11
GST06	30		M10	60	6	45	8	33	64	79	243	106	160	28	196	157	38	35	52	13.5
GST07	40		M16	80	7	63	12	43	84	104	302	130	200	34	247	196	48.5	45	66	18
GST09	50		M16	100	8	80	14	53.5	105	127.5	370	165	245	44	298	239	54	48	74	18
GST11		60	M20	120	8	100	18	64	125	155	433	200	300	54	368	280	69	65	80	22
GST14		80	M20	160	15	125	22	85	165	200	533	250	380	65	460	340	85	85	91	26

¹⁾ k₂ !



Dimensions

GST□□-2M VCR



		063C02	063C11	063C12	063C22	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42	080C11	080C13 080C31 080C32 080C33 080C42
g		123							139					156	
g ₁	MDEMAXX	100							109					150	
	MDSMAXX														
g ₁	MDEMABR	107							118					132	
	MDSMABR														
k ₁	MDEMAXX	156	187	156	187				207					224.5	
k ₂	MDSMAXX	100	120	100	120							145			
Δ k	MDEMABR	71	40	71	40				52					73	
	MDSMABR														
	MDFMAXX		128		128										
	MDFMABR		170		170				165					183	
		k													
GST03		298		329	298		329					349		349	
GST04			371			371			391					413	
GST05							401		421					443	
GST06							427			447				469	
GST07															525

6.4

GST helical gearboxes

Technical data

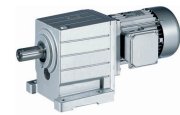


		090C11	090C31	090C32	100C12	100C31	100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32	180C42	225C12 225C22
g		176			194			218		258	310		348		447
g ₁	MDEMAXX	157			166			176		195	210		230		346
	MDEMABR MDSMABR	137			147			158		187	210		230		346
k ₁	MDEMAXX MDSMAXX	274		248	309			319	363	403	457.5	501.5	561	618	848
k ₂		180						222		265	300				
Δ k	MDEMABR MDSMABR	68			76			90		109.5	105		113		
	MDFMAXX	128			109			102		115	149			155	213
	MDFMABR	181			170			183		201.5	179		215		213
		k													
GST04		473		447											
GST05		503		477	538										
GST06		529		503	564			580	624						
GST07		585		559	620			636	680	728	787	831			
GST09			648	622	683			699	743	791	850	894	954	1011	
GST11					740		740	756	800	848	907	951	1011	1068	1298
GST14								846	890	938	997	1041	1101	1158	1388

	a	o ¹⁾	p ¹⁾	P ₁
GST03	2	90	100	64
GST04	0	100	129	77
GST05	1	115	156	98
GST06	2	145	194	121
GST07	3	180	245	155
GST09	4	222	304	194
GST11	4	270	378	243
GST14	6	328	470	306

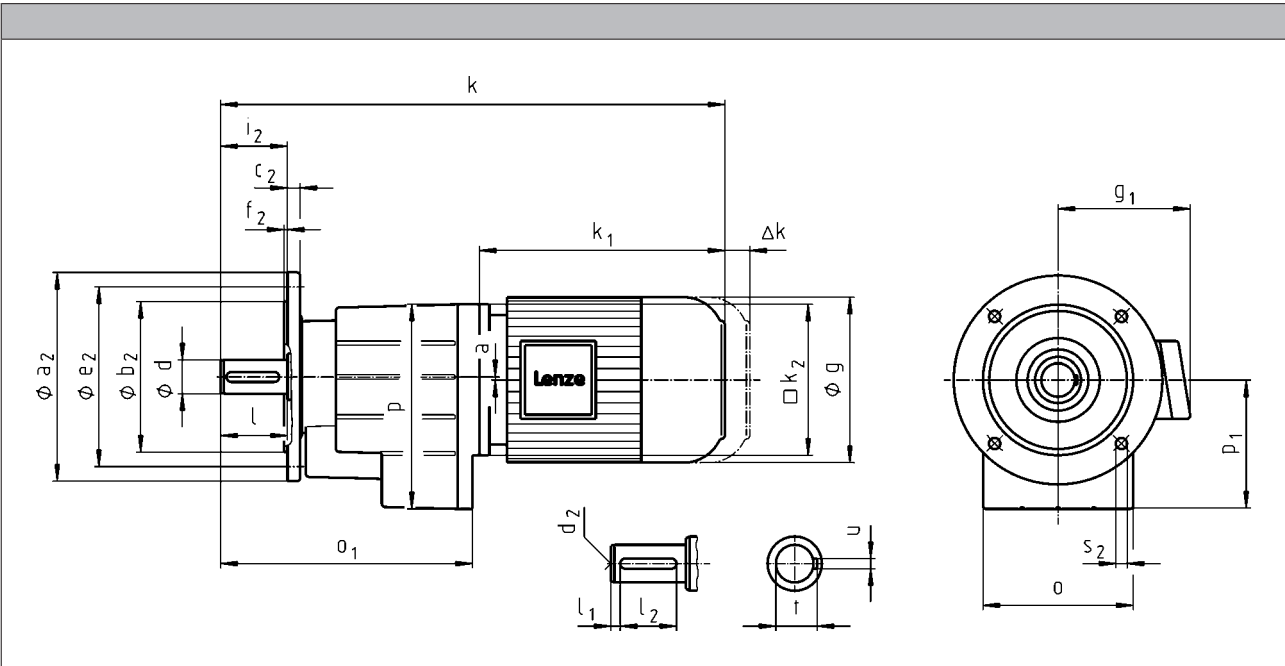
	d	d	d ₂	l	l ₁	l ₂	u	t	i ₁	o ₁	a ₁	b ₁	e ₁	f ₁	s ₁
	k6	m6										h7			
GST03	14 20		M5 M6	28 40	4 5	20 28	5 6	16 22.5	39 51	127 139	71	48	61	8	M5x10
GST04	20		M6	40	5	28	6	22.5	51	174	72	48	61	8	M5x10
GST05	25		M10	50	4	40	8	28	62	214	88	58	74	9	M6x12
GST06	30		M10	60	6	45	8	33	74	243	109	70	90	10	M8x14
GST07	40		M16	80	7	63	12	43	97	302	140	100	120	13	M10x18
GST09	50		M16	100	8	80	14	53.5	120	370	174	120	145	15	M12x20
GST11		60	M20	120	8	100	18	64	143	433	215	150	185	18	M16x26
GST14		80	M20	160	15	125	22	85	187	533	265	195	230	22	M20x34

¹⁾ k₂ !



Dimensions

GST□□-2M VCK



		063C02	063C11	063C12	063C22	063C31	063C32	063C42	071C11	071C13 071C31	071C32	071C33	071C42	080C11	080C13 080C31 080C32 080C33 080C42
g		123							139					156	
g ₁	MDEMAXX	100							109					150	
	MDSMAXX	107							118					132	
k ₁	MDEMAXX	156	187	156	187				207					224.5	
	MDSMAXX	100	120	100	120							145			
Δ k	MDEMABR	71	40	71	40				52					73	
	MDSMABR														
	MDFMAXX		128		128										
	MDFMABR		170		170				165					183	
		k													
GST03		298		329	298		329					349		349	
GST04			371			371			391					413	
GST05							401		421					443	
GST06							427			447				469	
GST07															525

GST helical gearboxes

Technical data



		090C11	090C31	090C32	100C12	100C31	100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32	180C42	225C12 225C22
g		176			194			218		258	310		348		447
g ₁	MDEMAXX	157			166			176		195	210		230		346
	MDSMAXX														
	MDEMABR	137			147			158		187	210		230		346
	MDSMABR														
k ₁	MDEMAXX	274		248	309			319	363	403	457.5	501.5	561	618	848
	MDSMAXX														
k ₂		180						222		265	300				
Δ k	MDEMABR	68			76			90		109.5	105		113		
	MDSMABR														
	MDFMAXX	128			109			102		115	149		155	213	
	MDFMABR	181			170			183		201.5	179		215		213
		k													
GST04		473		447											
GST05		503		477	538										
GST06		529		503	564			580	624						
GST07		585		559	620			636	680	728	787	831			
GST09			648	622	683			699	743	791	850	894	954	1011	
GST11					740		740	756	800	848	907	951	1011	1068	1298
GST14								846	890	938	997	1041	1101	1158	1388

	a	o ¹⁾	p ¹⁾	P ₁
GST03	2	90	100	64
GST04	0	100	129	77
GST05	1	115	156	98
GST06	2	145	194	121
GST07	3	180	245	155
GST09	4	222	304	194
GST11	4	270	378	243
GST14	6	328	470	306

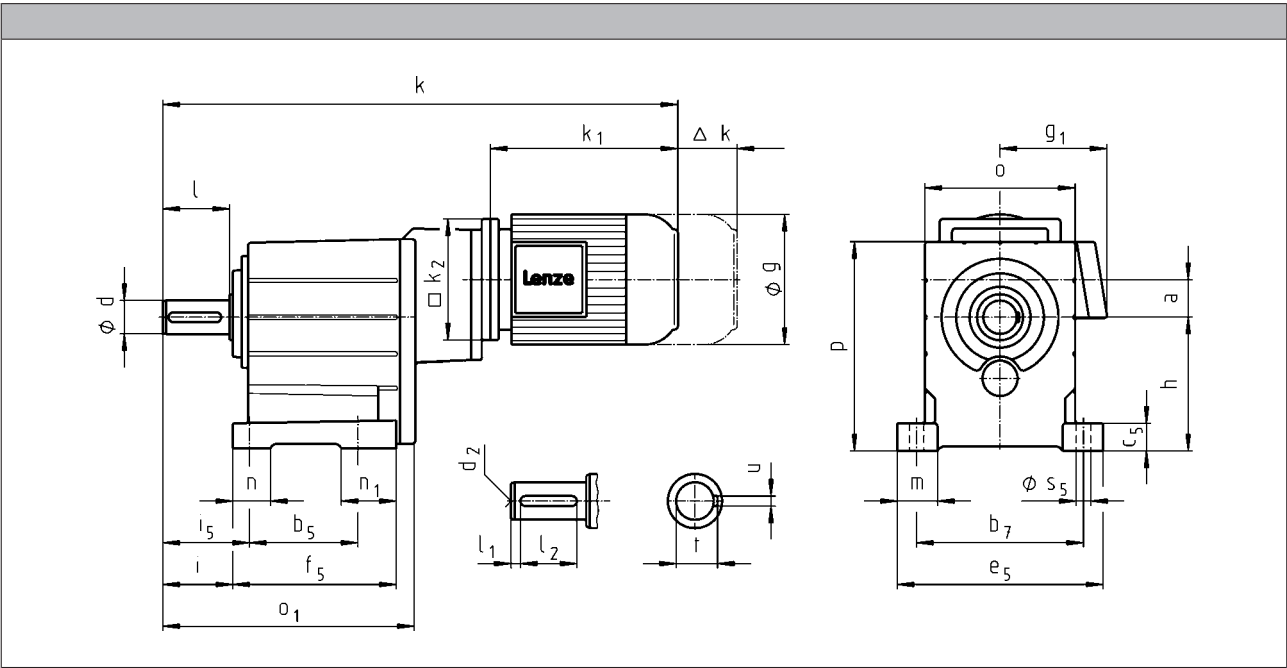
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	k6	m6										j7				
GST03	14		M5	28	4	20	5	16	28	127	120	80	10	100	3	7
	20		M6	40	5	28	6	22.5	40	139	140	95	10	115	3	9
											160	110	10	130	3.5	9
GST04	20		M6	40	5	28	6	22.5	40	174	120	80	10	100	3	7
											140	95	10	115	3	9
											160	110	10	130	3.5	9
GST05	25		M10	50	4	40	8	28	50	214	120	80	10	100	3	7
											140	95	10	115	3	9
											160	110	10	130	3.5	9
											200	130	12	165	3.5	11
GST06	30		M10	60	6	45	8	33	60	243	160	110	12	130	3.5	9
											200	130	12	165	3.5	11
GST07	40		M16	80	7	63	12	43	80	302	200	130	14	165	3.5	11
											250	180	15	215	4	13.5
GST09	50		M16	100	8	80	14	53.5	100	370	250	180	16	215	4	13.5
											300	230	18	265	4	13.5
GST11		60	M20	120	8	100	18	64	120	433	300	230	18	265	4	14
											350	250	20	300	5	18
GST14		80	M20	160	15	125	22	85	160	533	350	250	22	300	5	18
											400	300	24	350	5	18

¹⁾ k₂ !



Dimensions

GST□□-3M VBR



		063C11 063C12 063C31 063C32	063C42	071C11 071C13 071C31 071C32 071C33 071C42	080C11 080C13 080C31	080C32 080C33 080C42	090C11 090C31	090C32
g		123		139	156		176	
g ₁	MDEMAXX	100		109	150		157	
	MDEMABR	107		118	132		137	
k ₁	MDEMAXX	187		207	224.5		274	248
k ₂		120			145		180	
	MDEMABR	40		52	73		68	
Δ k	MDFMAXX				128			
	MDFMABR	170		165	183		181	
		k						
GST05		477		497	520			
GST06		520		540	563		622	596
GST07			587	607	630		689	663
GST09			668	688	711		770	744
GST11					787		846	820
GST14							970	944

GST helical gearboxes

Technical data



		100C12 100C31 100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32
g		194	218		258	310		348
g ₁	MDEMAXX	166	176		195	210		230
	MDEMABR	147	158		187	210		230
k ₁	MDEMAXX	309	319	363	403	457.5	501.5	561
k ₂		180	222		265	300		
Δ k	MDEMABR	76	90		109.5	105		113
	MDFMAXX	109	102		115	149		
	MDFMABR	170	183		201.5	179		215
k								
GST07		724						
GST09		805	821	865				
GST11		881	897	941	989			
GST14		1005	1021	1065	1113	1173	1217	1276

	a	h	o ¹⁾	p ¹⁾
GST05	35	100	115	158.5
GST06	34	125	145	198
GST07	42	160	180	251
GST09	52	200	222	311
GST11	66	250	270	385
GST14	83	315	328	479

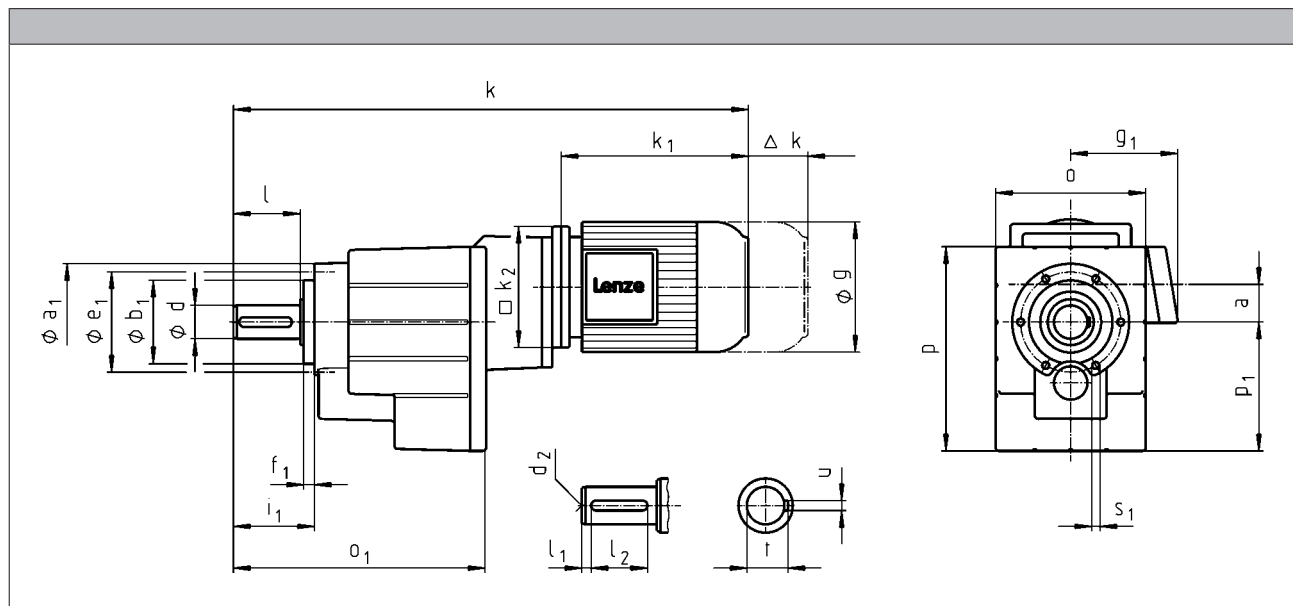
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	k6	m6																		
GST05	25		M10	50	4	40	8	28	53	66	208	90	125	23	155	139	32.5	26	49	11
GST06	30		M10	60	6	45	8	33	64	79	240	106	160	28	196	157	38	35	52	13.5
GST07	40		M16	80	7	63	12	43	84	104	302	130	200	34	247	196	48.5	45	66	18
GST09	50		M16	100	8	80	14	53.5	105	127.5	370	165	245	44	298	239	54	48	74	18
GST11		60	M20	120	8	100	18	64	125	155	433	200	300	54	368	280	69	65	80	22
GST14		80	M20	160	15	125	22	85	165	200	533	250	380	65	460	340	85	85	91	26

¹⁾ k₂ !



Dimensions

GST□□-3M VCR



		063C11 063C12 063C31 063C32	063C42	071C11 071C13 071C31 071C32 071C33 071C42	080C11 080C13 080C31	080C32 080C33 080C42	090C11 090C31	090C32
g		123		139	156		176	
g ₁	MDEMAXX	100		109	150		157	
	MDEMABR	107		118	132		137	
k ₁	MDEMAXX	187		207	224.5		274	248
k ₂		120			145		180	
	MDEMABR	40		52	73		68	
Δk	MDFMAXX				128			
	MDFMABR	170		165	183		181	
		k						
GST05		477		497	520			
GST06		520		540	563		622	596
GST07			587	607	630		689	663
GST09			668	688	711		770	744
GST11					787		846	820
GST14							970	944

GST helical gearboxes

Technical data



		100C12 100C31 100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32
g		194	218		258	310		348
g ₁	MDEMAXX	166	176		195	210		230
	MDEMABR	147	158		187	210		230
k ₁	MDEMAXX	309	319	363	403	457.5	501.5	561
k ₂		180	222		265	300		
Δ k	MDEMABR	76	90		109.5	105		113
	MDFMAXX	109	102		115	149		
	MDFMABR	170	183		201.5	179		215
k								
GST07		724						
GST09		805	821	865				
GST11		881	897	941	989			
GST14		1005	1021	1065	1113	1173	1217	1276

	a	o ¹⁾	p ¹⁾	p ₁
GST05	35	115	156	98
GST06	34	145	194	121
GST07	42	180	245	155
GST09	52	222	304	194
GST11	66	270	378	243
GST14	83	328	470	306

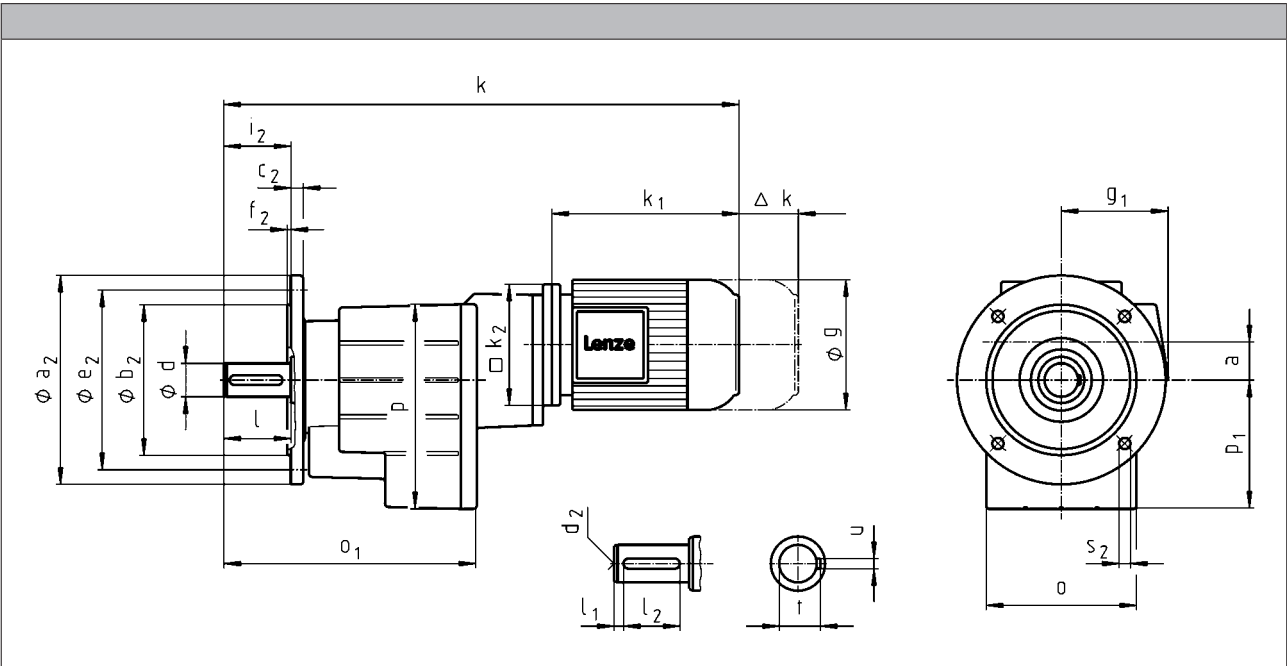
	d	d	d ₂	l	l ₁	l ₂	u	t	i ₁	o ₁	a ₁	b ₁	e ₁	f ₁	s ₁
	k6	m6										h7			
GST05	25		M10	50	4	40	8	28	62	208	88	58	74	9	M6x12
GST06	30		M10	60	6	45	8	33	74	240	109	70	90	10	M8x14
GST07	40		M16	80	7	63	12	43	97	302	140	100	120	13	M10x18
GST09	50		M16	100	8	80	14	53.5	120	370	174	120	145	15	M12x20
GST11		60	M20	120	8	100	18	64	143	433	215	150	185	18	M16x26
GST14		80	M20	160	15	125	22	85	187	533	265	195	230	22	M20x34

¹⁾ k₂ !



Dimensions

GST□□-3M VCK



		063C11 063C12 063C31 063C32	063C42	071C11 071C13 071C31 071C32 071C33 071C42	080C11 080C13 080C31	080C32 080C33 080C42	090C11 090C31	090C32
g		123		139	156		176	
g ₁	MDEMAXX	100		109	150		157	
	MDEMABR	107		118	132		137	
k ₁	MDEMAXX	187		207	224.5		274	248
k ₂		120			145		180	
Δ k	MDEMABR	40		52	73		68	
	MDFMAXX	128						
	MDFMABR							
	MHFMABR	170		165	183		181	
		k						
GST05		477		497	520			
GST06		520		540	563		622	596
GST07			587	607	630		689	663
GST09			668	688	711		770	744
GST11					787		846	820
GST14							970	944

GST helical gearboxes

Technical data



		100C12 100C31 100C32 100C41	112C22 112C31	112C32 112C41	132C21 132C22 132C32	160C22	160C32	180C12 180C32
g		194	218		258	310		348
g ₁	MDEMAXX	166	176		195	210		230
	MDEMABR	147	158		187	210		230
k ₁	MDEMAXX	309	319	363	403	457.5	501.5	561
k ₂		180	222		265	300		
Δ k	MDEMABR	76	90		109.5	105		113
	MDFMAXX	109	102		115	149		
	MDFMABR							
	MHFMABR	170	183		201.5	179		215
		k						
GST07		724						
GST09		805	821	865				
GST11		881	897	941	989			
GST14		1005	1021	1065	1113	1173	1217	1276

	a	o ¹⁾	p ¹⁾	p ₁
GST05	35	115	156	98
GST06	34	145	194	121
GST07	42	180	245	155
GST09	52	222	304	194
GST11	66	270	378	243
GST14	83	328	470	306

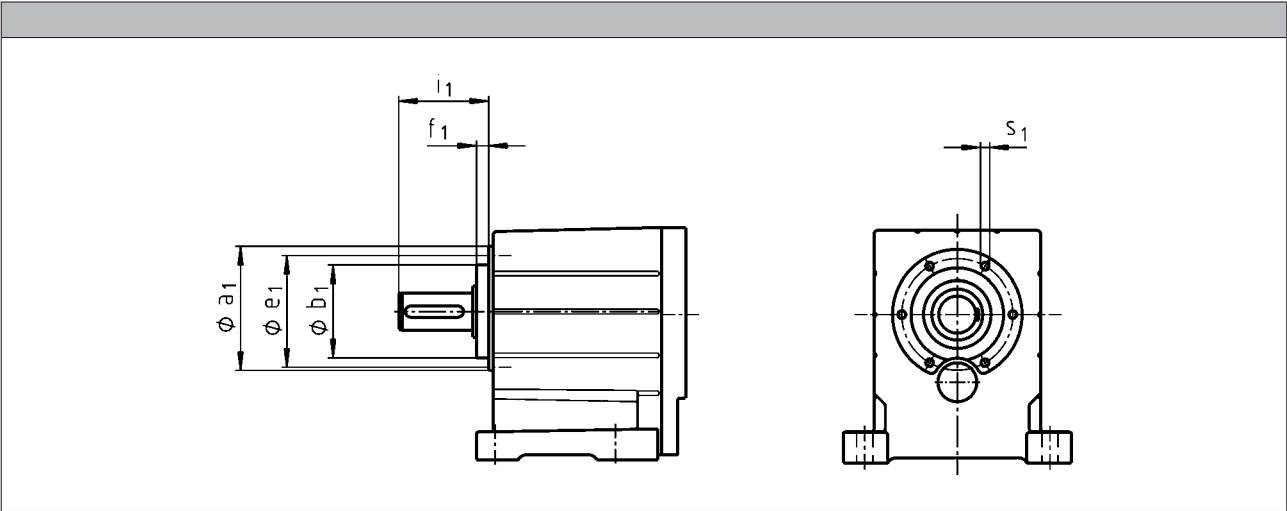
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GST05	25		M10	50	4	40	8	28	50	208	120	80	10	100	3	7
											140	95	10	115	3	9
											160	110	10	130	3.5	9
											200	130	12	165	3.5	11
GST06	30		M10	60	6	45	8	33	60	240	160	110	12	130	3.5	9
											200	130	12	165	3.5	11
GST07	40		M16	80	7	63	12	43	80	302	200	130	14	165	3.5	11
											250	180	15	215	4	13.5
GST09	50		M16	100	8	80	14	53.5	100	370	250	180	16	215	4	13.5
											300	230	18	265	4	13.5
GST11		60	M20	120	8	100	18	64	120	433	300	230	18	265	4	14
											350	250	20	300	5	18
GST14		80	M20	160	15	125	22	85	160	533	350	250	22	300	5	18
											400	300	24	350	5	18

¹⁾ k₂ !





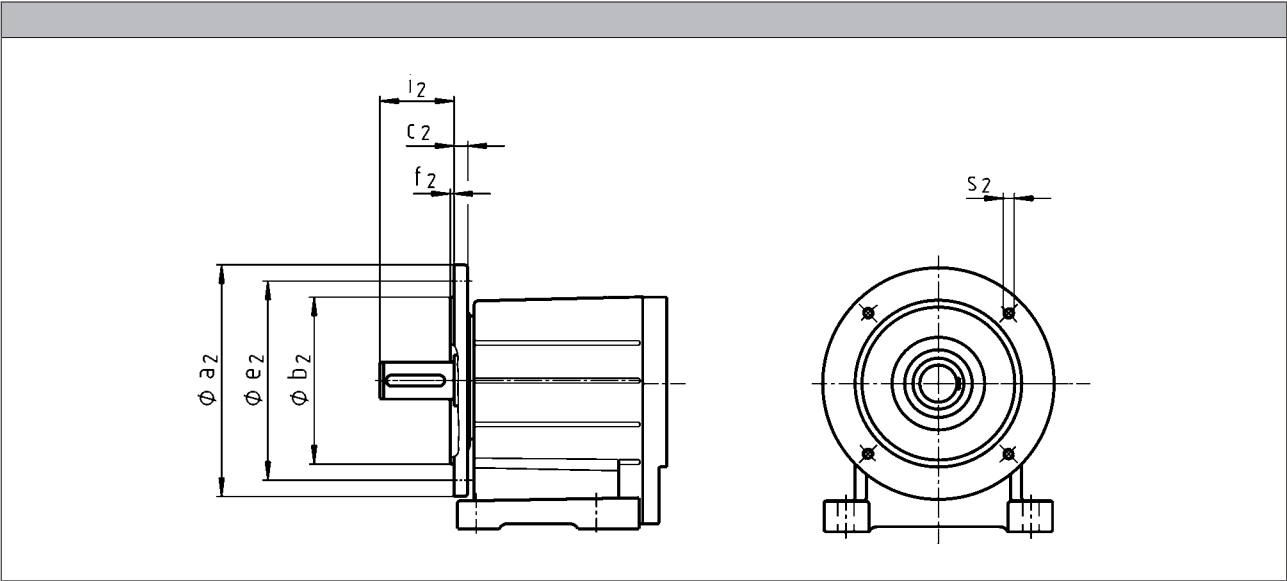
GST□□-2/3M VAR



	a ₁	b ₁	e ₁	f ₁	i ₁	s ₁
		h7				
GST04	72	48	61	8.0	51.0	M5x10
GST05	88	58	74	9.0	62.0	M6x12
GST06	109	70	90	10.0	74.0	M8x14
GST07	140	100	120	13.0	97.0	M10x18
GST09	174	120	145	15.0	120.0	M12x20
GST11	215	150	185	18.0	143.0	M16x26
GST14	265	195	230	22.0	187.0	M20x34



GST□□-2/3M VAL



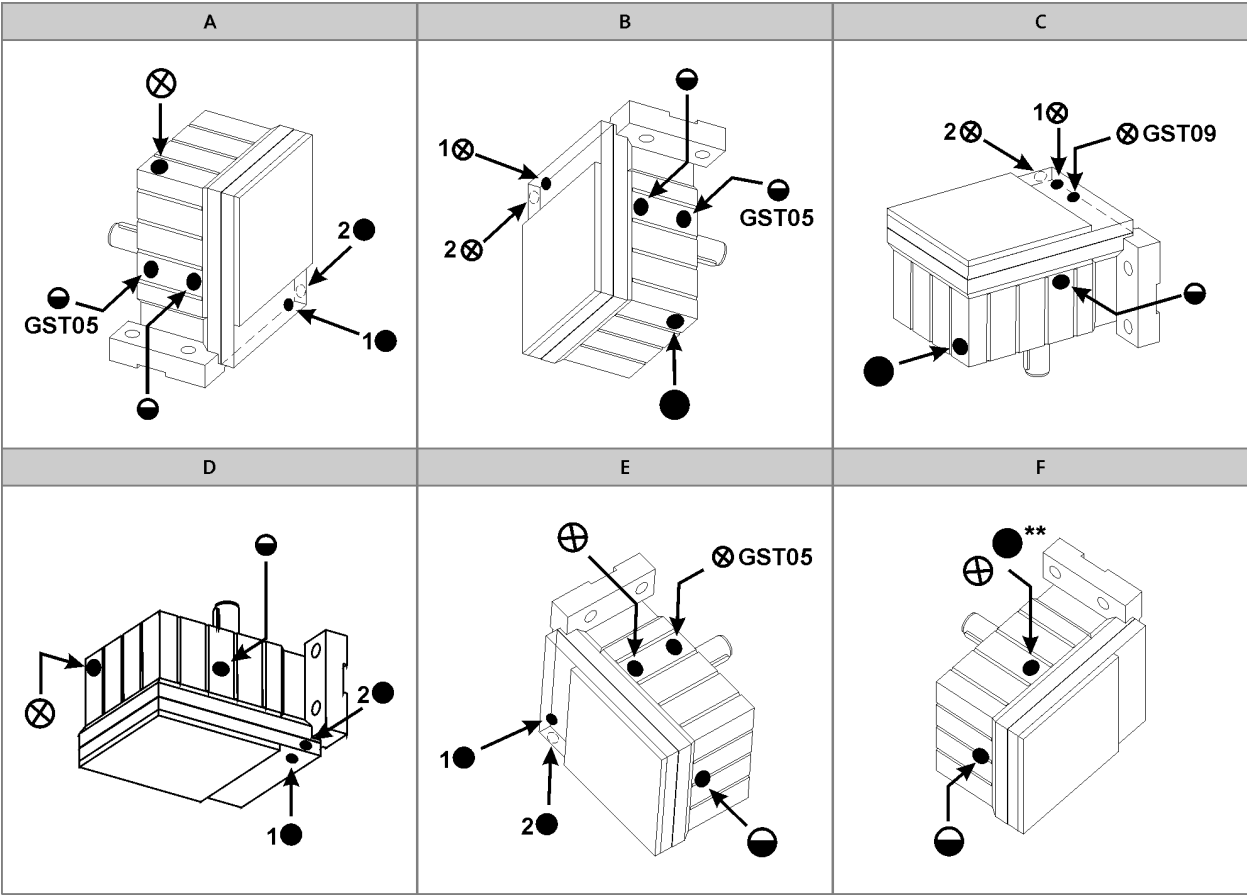
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		j7					
GST04	120	80	10	100	3.0	40	M6
	140	95	10	115	3.0		M8
GST05	120	80	10	100	3.0	50	M6
	140	95	10	115	3.0		M8
	160	110	10	130	3.5		M8
GST06	160	110	12	130	3.5	60	M8
	200	130	12	165	3.5		M10
GST07	200	130	14	165	3.5	80	M10
	250	180	15	215	4.0		M12
GST09	250	180	16	215	4.0	100	M12
	300	230	18	265	4.0		M12
GST11	300	230	18	265	4.0	120	M12
	350	250	20	300	5.0		M16
GST14	350	250	22	300	5.0	160	M16
	400	300	24	350	5.0		M16



Ventilations

Position of ventilation, sealing elements and oil level check

GST05...09-1



A ... F Mounting position
⊗ Ventilation / Oil filler plug
● Oil drain plug
◐ Oil control plug
* On both sides
** On opposite side

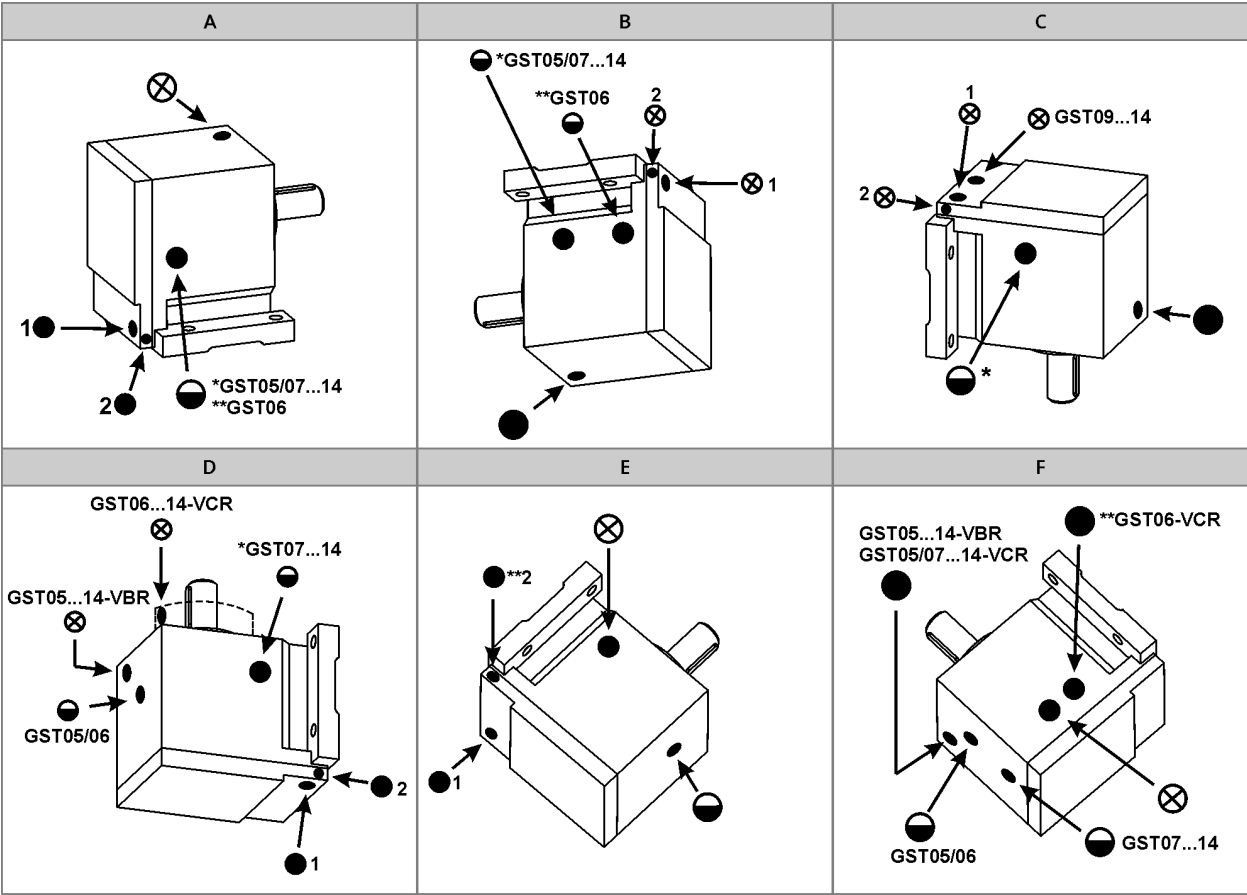
Item 1 standard
Item 2 only with:
• GST05-1M V□□ 090C□□
• GST05-1M V□□ 100C□□
• GST06-1M V□□ 112C□□
• GST07-1M V□□ 160C□□



Ventilations

Position of ventilation, sealing elements and oil level check

GST05...14-2



A ... F Mounting position
⊗ Ventilation / Oil filler plug
● Oil drain plug
◐ Oil control plug
* On both sides
** On opposite side

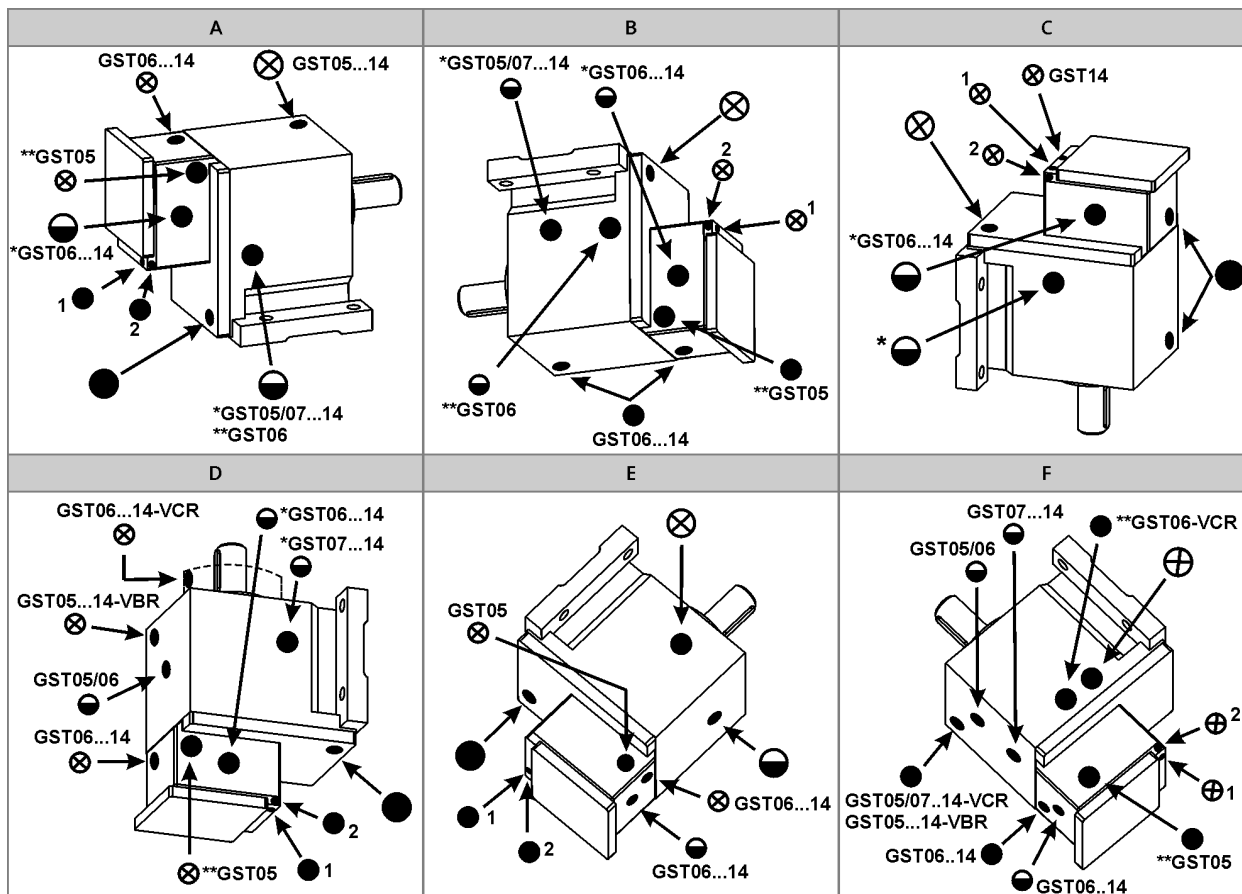
Item 1 standard
Item 2 only with:
• GST05-2M V□□ 090C□□
• GST05-2M V□□ 100C□□
• GST06-2M V□□ 112C□□
• GST07-2M V□□ 160C□□



Ventilations

Position of ventilation, sealing elements and oil level check

GST05...14-3



A ... F Mounting position

⊗ Ventilation / Oil filler plug

● Oil drain plug

◐ Oil control plug

* On both sides

** On opposite side

Item 1 standard

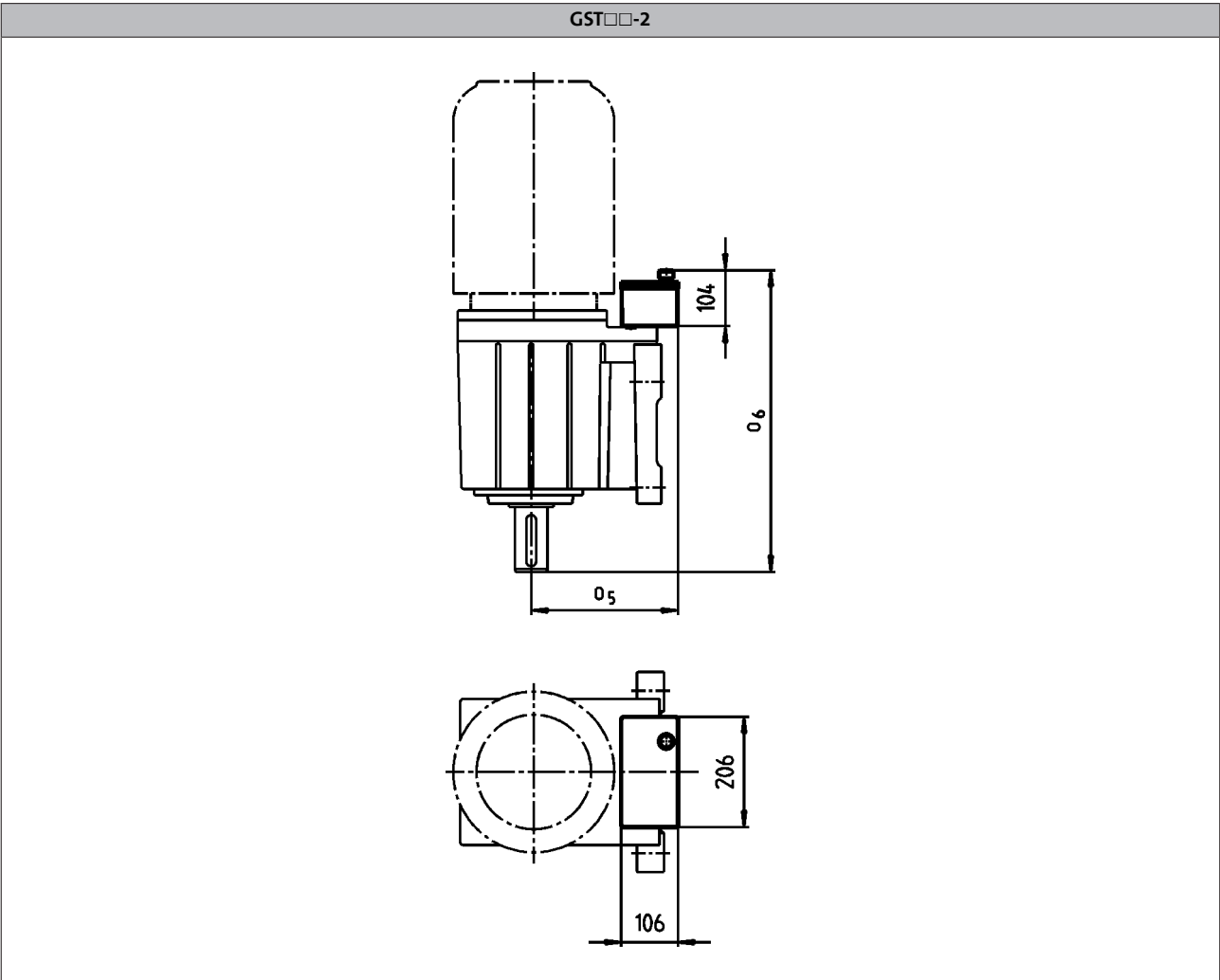
Item 2 only with:

- GST07-3M V□□ 090C□□
- GST07-3M V□□ 100C□□
- GST09-3M V□□ 112C□□



Ventilations

Compensation reservoir for mounting position C



Motor	090 100	112	132	160 180 225
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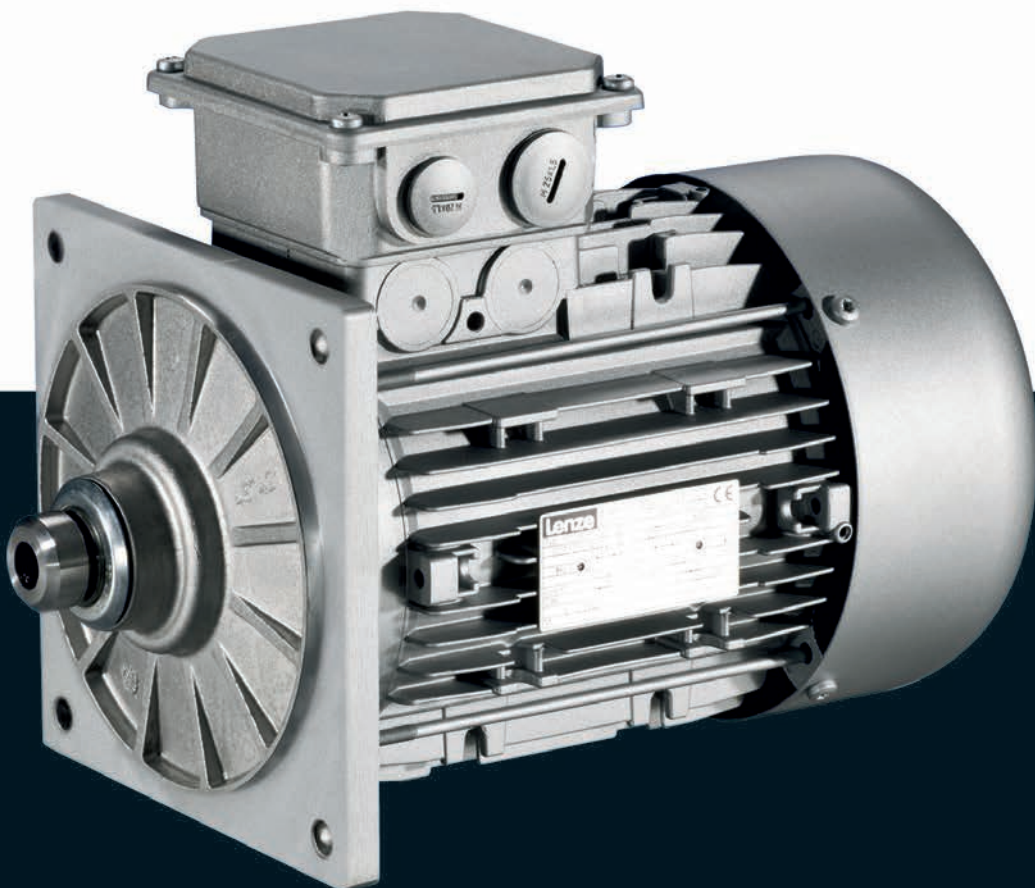
	o ₅ [mm]	o ₆ [mm]	o ₅ [mm]	o ₆ [mm]	o ₅ [mm]	o ₆ [mm]	o ₅ [mm]	o ₆ [mm]
GST09	206	477	226	477	245	477	260	477
GST11	208	536	230	540	254	540	268	540
GST14			252	640	282	640	282	640

► Terminal box position 4 not permitted.

Motors

MD three-phase AC motors

0.06 to 45 kW



MD three-phase AC motors

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MD three-phase AC motors

General information



List of abbreviations

$\eta_{100\%}$	[%]	Efficiency
$\eta_{75\%}$	[%]	Efficiency
$\eta_{50\%}$	[%]	Efficiency
$\cos \phi$		Power factor
I_N	[A]	Rated current
$I_{\max}$	[A]	Max. current consumption
J	[kgcm ²]	Moment of inertia
m	[kg]	Mass
M_a	[Nm]	Starting torque
M_b	[Nm]	Stalling torque
$M_{\max}$	[Nm]	Max. torque
M_N	[Nm]	Rated torque
n_N	[r/min]	Rated speed
P_N	[kW]	Rated power
$P_{\max}$	[kW]	Max. power input

$U_{\max}$	[V]	Max. mains voltage
$U_{\min}$	[V]	Min. mains voltage
$U_{N, \Delta}$	[V]	Rated voltage
$U_{N, Y}$	[V]	Rated voltage

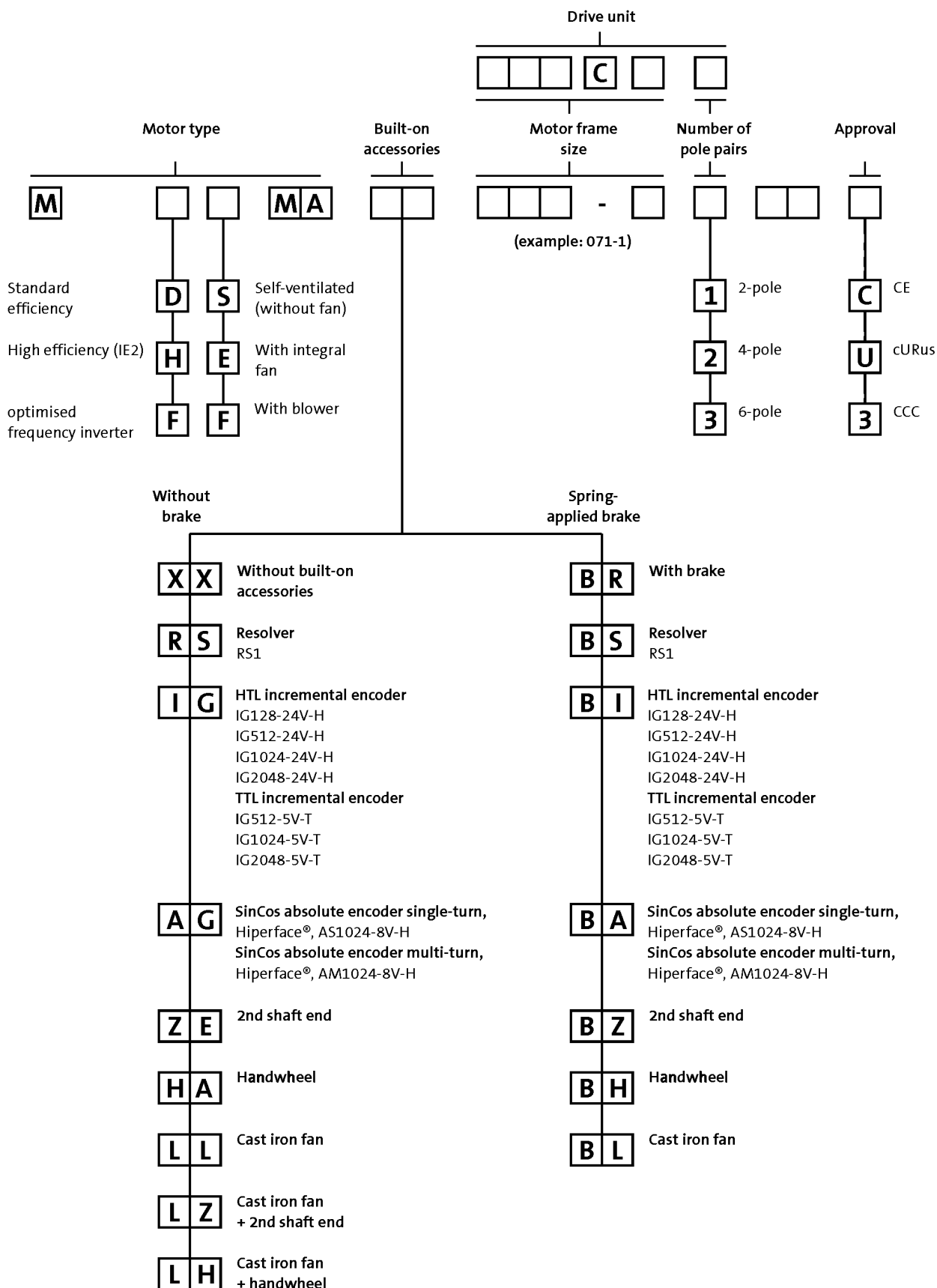
CE	Communauté Européenne
CSA	Canadian Standards Association
DIN	Deutsches Institut für Normung e.V.
EMC	Electromagnetic compatibility
EN	European standard
IEC	International Electrotechnical Commission
IM	International Mounting Code
IP	International Protection Code
NEMA	National Electrical Manufacturers Association
UL	Underwriters Laboratory Listed Product
UR	Underwriters Laboratory Recognized Product
VDE	Verband deutscher Elektrotechniker (Association of German Electrical Engineers)
CCC	China Compulsory Certificate
GOST	Certificate for Russian Federation
cURus	Combined certification marks of UL for the USA and Canada
UkrSEPRO	Certificate for Ukraine

MD three-phase AC motors

General information



Product key



MD three-phase AC motors

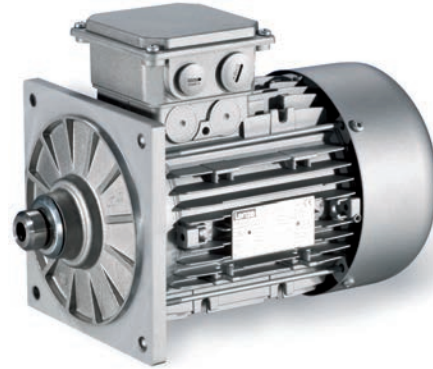
General information



Product information

Special motors have been designed for direct attachment to Lenze gearboxes.

These motors are attached to the gearbox without the use of a clutch. Torque transmission between the toothing and the motor shaft is friction-locked via a tapered connection here. This motor design means that the geared motors only require a small installation space.



L-force MD three-phase AC motors are available in a power range from 0.06 to 45 kW and comply with efficiency class 4IE1 (standard efficiency) as per IEC 60034-30.

Basic versions

- The thermal sensors integrated as standard allow for permanent temperature monitoring and are coordinated to the motor winding's temperature class F (155°C).
- The motors of the basic version are adapted to ambient conditions by enclosure IP55.
- In tough operating conditions, the surface and corrosion protection system is provided to reliably protect the motor from corrosive media.

Options

- Various brake sizes – each available with several braking torques – can be combined with the three-phase AC motors.
- The LongLife version of the brake can easily reach 10×10^6 switching cycles.
- A resolver and various incremental and absolute value encoders can be fitted for speed and position detection.
- For fast commissioning, the motors are also available with connectors for the power connection, brake, blower and feedback.
- Instead of an integral fan, the motor can optionally be equipped with a blower. No torque reduction is then necessary, even at speeds below 20 Hz.
- For drive tasks in decentralised applications, the motor can be ordered with the motec inverter connected to the terminal box.
- The motors are available with cURus, GOST-R, CCC and UkrSepr approval.
- Smooth start/braking is possible by increasing the motor's centrifugal mass with a cast iron fan.
- The motor can be equipped with a handwheel for manual setup or emergency operations.
- To protect the fan from falling objects, the fan cover can be equipped with a protection cover.
- A 2nd shaft end is available for further modifications.

MD three-phase AC motors

General information



Functions and features

Size				
Motor	063	071	080	090
Spring-applied brake				
Design	Standard or LongLife design Reduced or standard braking torque With rectifier With manual release lever Low noise		Standard or LongLife design Reduced, standard or increased braking torque With rectifier With manual release lever Low noise	
Feedback				
Design	Resolver ¹⁾ Incremental encoder ¹⁾ Absolute value encoder (multi-turn) ¹⁾			
Thermal sensor				
Thermal contact	TKO			
Thermal detector	KTY83-110 KTY84-130			
PTC thermistor	PTC			
Motor connection				
Power connection	Terminal box ICN connector HAN10E connector HAN modular connector			
Brake connection	Terminal box ICN connector HAN modular connector HAN10E connector			
Blower connection	Terminal box ICN connector			
Feedback connection	Terminal box ICN connector			
Temperature sensor connection	Terminal box TKO or PTC at connector in the power connection KTY at connector in the feedback connection			
Shaft bearings				
Position of the locating bearing	Standard motors (B3, B5, B14): side B Motors for gearbox direct mounting: side A			
Bearing type	Deep-groove ball bearing with high-temperature resistant grease, 2 sealing discs or cover plates			
Colour				
	Not coated Primed Paint in various corrosion-protection designs in accordance with RAL colours			
Further options				
	Protection cover	Protection cover Increased centrifugal mass Handwheel ¹⁾ 2nd shaft end		

¹⁾ With 2-pole motors not available.

MD three-phase AC motors

General information



Functions and features

Size	100	112	132
Motor			
Spring-applied brake			
Design	Standard or LongLife design Reduced, standard or increased braking torque With rectifier With manual release lever Low noise	Standard design Reduced, standard or increased braking torque With rectifier With manual release lever Low noise	
Feedback			
Design	Resolver ¹⁾ Incremental encoder ¹⁾ Absolute value encoder (multi-turn) ¹⁾		
Thermal sensor			
Thermal contact	TKO		
Thermal detector	KTY83-110 KTY84-130		
PTC thermistor	PTC		
Motor connection			
Power connection	Terminal box ICN connector HAN10E connector HAN modular connector		Terminal box ICN connector HAN modular connector
Brake connection	Terminal box ICN connector HAN modular connector HAN10E connector		Terminal box ICN connector HAN modular connector
Blower connection	Terminal box ICN connector		
Feedback connection	Terminal box ICN connector		
Temperature sensor connection	Terminal box TKO or PTC at connector in the power connection KTY at connector in the feedback connection		
Shaft bearings			
Position of the locating bearing	Standard motors (B3, B5, B14): side B Motors for gearbox direct mounting: side A		
Bearing type	Deep-groove ball bearing with high-temperature resistant grease, 2 sealing discs or cover plates		
Colour			
	Not coated Primed Paint in various corrosion-protection designs in accordance with RAL colours		
Further options			
	Protection cover Increased centrifugal mass Handwheel ¹⁾ 2nd shaft end		

¹⁾ With 2-pole motors not available.

MD three-phase AC motors

General information



Functions and features

Size			
Motor	160	180	225
Spring-applied brake			
Design	Standard design Reduced, standard or increased braking torque With rectifier With manual release lever Low noise		
Feedback			
Design	Resolver Incremental encoder Absolute value encoder (multi-turn)		
Thermal sensor			
Thermal contact	TKO		
Thermal detector	KTY83-110 KTY84-130		
PTC thermistor	PTC		
Motor connection			
Power connection	Terminal box HAN modular connector	Terminal box	
Brake connection	Terminal box HAN modular connector	Terminal box	
Blower connection	Terminal box ICN connector		
Feedback connection	Terminal box ICN connector		
Temperature sensor connection	Terminal box TKO or PTC at connector in the power connection KTY at connector in the feedback connection	Terminal box	
Shaft bearings			
Position of the locating bearing	Standard motors (B3, B5, B14): side B Motors for gearbox direct mounting: side A		Drive end
Bearing type	Deep-groove ball bearing with high-temperature resistant grease, 2 sealing discs or cover plates		
Colour			
	Not coated Primed Paint in various corrosion-protection designs in accordance with RAL colours		
Further options			
	Protection cover		

MD three-phase AC motors

General information



Functions and features

Surface and corrosion protection

For optimum protection of three-phase AC motors against ambient conditions, the surface and corrosion protection system (OKS) offers tailor-made solutions.

Various surface coatings ensure that the motors operate reliably even at high air humidity, in outdoor installation or in the presence of atmospheric impurities. Any colour from the RAL Classic collection can be chosen for the top coat. The three-phase AC motors are also available unpainted (no surface and corrosion protection).

Surface and corrosion protection system	Applications	Measures
OKS-G (primed)	Dependent on subsequent top coat applied	2K PUR priming coat (grey)
OKS-S (small)	- Standard applications - Internal installation in heated buildings - Air humidity up to 90%	Surface coating as per corrosivity category C1 (in line with EN 12944-2)
OKS-M (medium)	- Internal installation in non-heated buildings - Covered, protected external installation - Air humidity up to 95%	Surface coating as per corrosivity category C2 (in line with EN 12944-2)
OKS-L (high)	- External installation - Air humidity above 95% - Chemical industry plants - Food industry	- Surface coating as per corrosivity category C3 (in line with EN 12944-2) - Blower cover and B end shield additionally primed - Screws zinc-coated - Cable glands with gaskets - Corrosion-resistant brake with cover ring, stainless friction plate, and chrome-plated armature plate (on request) Optional measures: - Motor recesses sealed off (on request)

Structure of surface coating

Surface and corrosion protection system	Corrosivity category	Surface coating	Colour
	DIN EN ISO 12944-2	Structure	
Without OKS (uncoated)			
OKS-G (primed)		2K PUR priming coat	
OKS-S (small)	C1	2K-PUR top coat	
OKS-M (medium)	C2	2K PUR priming coat	
OKS-L (high)	C3	2K-PUR top coat	
			Standard: RAL 7012 Optional: RAL Classic

MD three-phase AC motors

General information



Motor – inverter assignment

Rated frequency 50/60 Hz

- Decentralised inverter 8400 motec (E84DVB)
- Inverter Drives 8400 (E84AV)

Rated power	Product key		
	Motor	Inverter	
P _N			
[kW]			
0.12	MD□□□□□063-12		
0.18	MD□□□□□063-32		
0.25	MD□□□□□063-42		
0.37	MD□□□□□071-32	E84DVB□3714S□□□2□	
0.55	MD□□□□□071-42	E84DVB□5514S□□□2□	
0.75	MD□□□□□080-32	E84DVB□7514S□□□2□	
1.10	MD□□□□□080-42	E84DVB□1124S□□□2□	
1.50	MD□□□□□090-32	E84DVB□1524S□□□2□	
2.20	MD□□□□□100-12	E84DVB□2224S□□□2□	
3.00	MD□□□□□100-32	E84DVB□3024S□□□2□	
4.00	MD□□□□□112-22	E84DVB□4024S□□□2□	
5.50	MD□□□□□112-32	E84DVB□5524S□□□2□	
7.50	MD□□□□□132-22	E84DVB□7524S□□□2□	
11.0	MD□□□□□160-22		
15.0	MD□□□□□160-32		
18.5	MD□□□□□180-12		
22.0	MD□□□□□180-32		
30.0	MD□□□□□180-42		
37.0	MD□□□□□225-12		
45.0	MD□□□□□225-22		

MD three-phase AC motors

General information



Motor – inverter assignment

Rated frequency 87 Hz

- Decentralised inverter 8400 motec (E84DVB)
- Inverter Drives 8400 (E84AV)

Rated power	Product key		
	Motor	Inverter	
P _N			
[kW]			
0.21	MD□□□□□063-12		
0.33	MD□□□□□063-32	E84DVB□5514S□□□2□	
0.45	MD□□□□□063-42		
0.66	MD□□□□□071-32	E84DVB□7514S□□□2□	
1.00	MD□□□□□071-42	E84DVB□1124S□□□2□	
1.35	MD□□□□□080-32	E84DVB□1524S□□□2□	
2.00	MD□□□□□080-42	E84DVB□2224S□□□2□	
2.70	MD□□□□□090-32	E84DVB□3024S□□□2□	
3.90	MD□□□□□100-12	E84DVB□4024S□□□2□	
5.40	MD□□□□□100-32	E84DVB□5524S□□□2□	
7.10	MD□□□□□112-22	E84DVB□7524S□□□2□	
9.70	MD□□□□□112-32		
13.2	MD□□□□□132-22		
19.3	MD□□□□□160-22		
26.4	MD□□□□□160-32		
32.4	MD□□□□□180-12		
38.7	MD□□□□□180-32		

MD three-phase AC motors

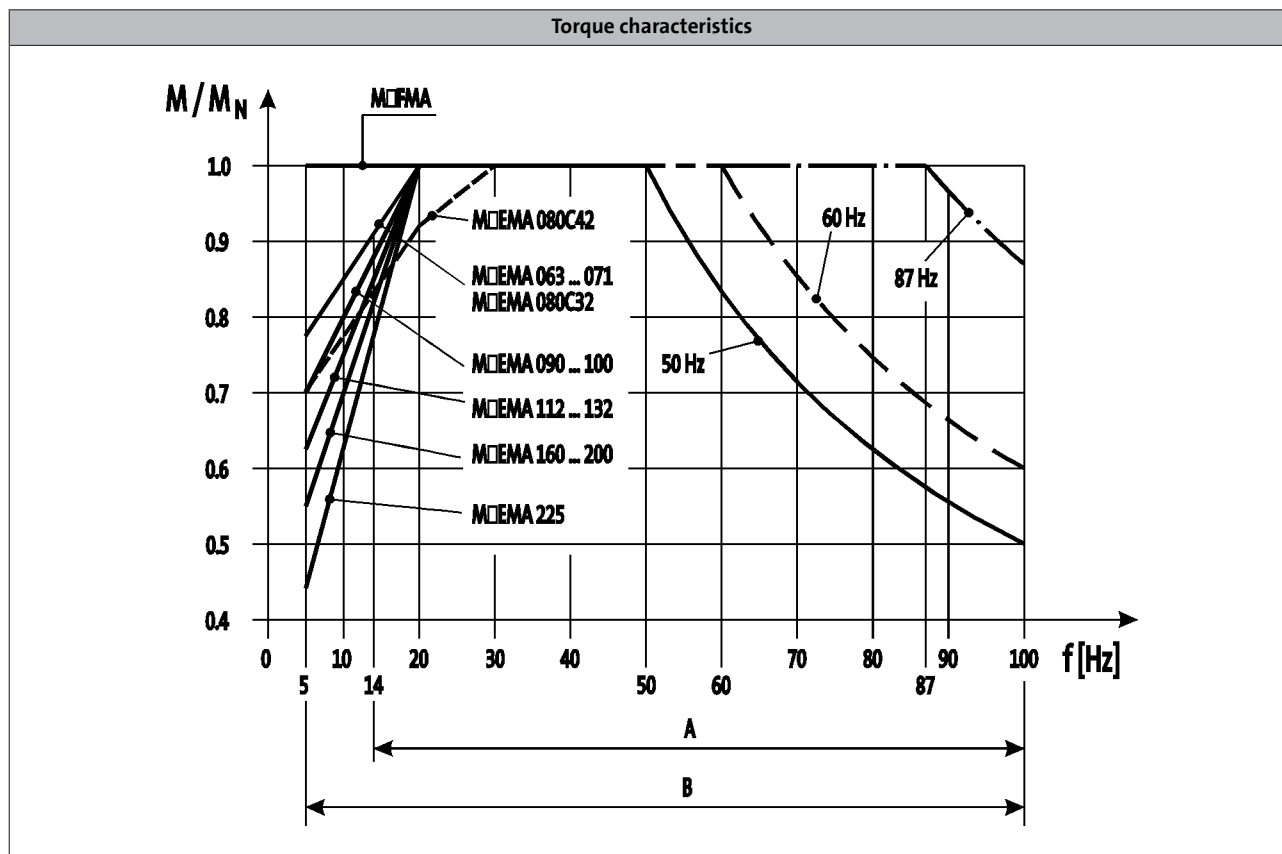
General information



Dimensioning

Torque derating at low motor frequencies

Motor size-dependent torque reduction, taking into account the thermal response during operation on the inverter.



A = Operation with integral fan and brake

B = Operation with integral fan and brake control "Holding current reduction"

- The motor specifications stated in this catalogue for inverter operation apply to operation with a Lenze inverter. If you are uncertain, get in touch with the manufacturer of the inverter to ask whether the device is capable of driving the motor with the stated specifications (e.g. setting range, base frequency).

You can use the Drive Solution Designer for precise drive dimensioning.

The Drive Solution Designer helps you to carry out a fast and high-quality drive dimensioning. The software includes well-founded and proven knowledge on drive applications and electro-mechanical drive components.

Please contact your Lenze sales office.

MD three-phase AC motors

General information



MD three-phase AC motors

Technical data



Standards and operating conditions

Enclosure			IP55
EN 60529			
Energy efficiency class			IE1 1)
IEC 60034-30			
IEC 60034-2-1			Methodology for measuring efficiency
Approval			cURus 2) CCC GOST-R UkrSepro
Class			
Temperature class			B
IEC/EN 60034-1; utilisation			
IEC/EN 60034-1; insulation system (enamel-insulated wire)			F
Min. ambient operating temperature			-20
	T _{opr,min}	[°C]	
Max. ambient operating temperature			40
	T _{opr,max}	[°C]	
With power reduction	T _{opr,max}	[°C]	60
Site altitude			4000
Amsl	H _{max}	[m]	
Max. speed			4500
	n _{max}	[r/min]	

¹⁾ Only applies to 4-pole motors.

²⁾ Motor frame size 225, in preparation.

- In the European Union, the ErP Directive stipulates minimum efficiency levels for three-phase AC motors. Geared three-phase AC motors that do not conform with this Directive do not meet CE requirements and must not be marketed in the European Economic Area. For further information about the ErP Directive and the Lenze products to which it relates, please refer to the brochure entitled "International efficiency directives for three-phase AC motors".

MD three-phase AC motors

Technical data



Rated data for 50 Hz

2-pole motors

	P_N	n_N	$U_{N,\Delta}$	$I_{N,\Delta}$	$U_{N,Y}$	$I_{N,Y}$	I_a/I_N
			$\pm 10\%$		$\pm 10\%$		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□□063-11	0.18	2740	230	0.80	400	0.46	4.30
MD□□□□□063-31	0.25	2710	230	1.10	400	0.60	3.70
MD□□□□□071-11	0.37	2720	230	1.50	400	0.90	4.40
MD□□□□□071-31	0.55	2630	230	2.40	400	1.40	3.80
MD□□□□□080-11	0.75	2720	230	3.10	400	1.80	4.70
MD□□□□□080-31	1.10	2720	230	4.50	400	2.60	4.70
MD□□□□□090-11	1.50	2710	230	5.50	400	3.20	4.50
MD□□□□□090-31	2.20	2730	230	8.30	400	4.80	3.70
MD□□□□□100-31	3.00	2890	230	10.2	400	5.90	7.00
MD□□□□□100-41	4.00	2840	230	14.2	400	8.30	6.60
MD□□□□□112-31	5.50	2900	400 ²⁾	11.5			6.00
MD□□□□□112-41	7.50	2890	400 ²⁾	16.5			6.00
MD□□□□□132-21	9.00	2890	400 ²⁾	17.0			6.50

	M_N	M_a	M_b	$\cos \phi$	$\eta_{75\%}$	$\eta_{100\%}$	$J^{1)}$	$m^{1)}$
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□063-11	0.63	1.50	1.50	0.88	66.5	66.0	1.70	3.90
MD□□□□□063-31	0.90	1.90	2.00	0.89	67.0	66.0	1.70	3.80
MD□□□□□071-11	1.29	3.10	2.90	0.92	71.0	69.0	5.10	6.00
MD□□□□□071-31	2.00	3.80	4.20	0.93	70.0	63.0	5.10	6.50
MD□□□□□080-11	2.65	5.40	6.50	0.89	70.0	70.0	9.70	10.0
MD□□□□□080-31	3.90	7.50	8.50	0.89	75.0	73.0	9.70	10.0
MD□□□□□090-11	5.20	10.1	10.4	0.95	76.5	75.0	35.0	17.0
MD□□□□□090-31	7.60	16.4	15.5	0.90	77.0	76.0	35.0	17.0
MD□□□□□100-31	9.90	19.0	27.0	0.90	83.0	82.0	32.6	21.0
MD□□□□□100-41	13.6	24.0	29.0	0.91	77.0	78.0	32.6	21.0
MD□□□□□112-31	18.1	46.0	49.0	0.83	86.0	86.0	53.8	28.0
MD□□□□□112-41	24.8	71.0	77.0	0.78	87.0	87.0	70.0	35.0
MD□□□□□132-21	29.8	72.0	72.0	0.92	88.0	88.0	205	68.0

¹⁾ Without accessories

²⁾ Star/delta start-up possible at 400 V.

MD three-phase AC motors

Technical data



Rated data for 50 Hz

4-pole motors

	P _N	n _N	U _{N, Δ} ²⁾	I _{N, Δ}	U _{N, Y}	I _{N, Y}	I _a /I _N
			± 10 %		± 10 %		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□□063-02	0.060	1425	230	0.42	400	0.24	3.50
MD□□□□□063-22	0.090	1375	230	0.48	400	0.28	2.90
MD□□□□□063-12	0.12	1425	230	0.85	400	0.49	3.10
MD□□□□□063-32	0.18	1365	230	1.00	400	0.58	2.70
MD□□□□□063-42	0.25	1370	230	1.40	400	0.82	2.90
MD□□□□□071-32	0.37	1410	230	1.60	400	0.95	3.30
MD□□□□□071-42	0.55	1405	230	2.40	400	1.40	3.50
MD□□□□□080-32	0.75	1410	230	3.30	400	1.90	4.60
MD□□□□□080-42	1.10	1390	230	4.80	400	2.80	4.40
MD□□□□□090-32	1.50	1410	230	6.60	400	3.80	4.80
MD□□□□□100-12	2.20	1440	230	9.20	400	5.30	6.00
MD□□□□□100-32	3.00	1430	230	12.5	400	7.20	4.60
MD□□□□□112-22	4.00	1450	230	16.1	400	9.30	6.20
MD□□□□□112-32	5.50	1445	230 400 ³⁾	21.7 12.5	400	12.5	6.10
MD□□□□□132-22	7.50	1455	230 400 ³⁾	28.6 16.5	400	16.5	5.90
MD□□□□□132-32	9.20	1450	230 400 ³⁾	34.1 19.7	400	19.7	5.10

	M _N	M _a	M _b	cos φ	η _{75 %}	η _{100 %}	J ¹⁾	m ¹⁾
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□063-02	0.40	1.30	1.36	0.57	59.0	63.0	3.30	3.90
MD□□□□□063-22	0.63	1.30	1.39	0.71	63.0	65.0	3.30	3.90
MD□□□□□063-12	0.80	2.50	2.64	0.56	58.0	63.0	3.30	4.10
MD□□□□□063-32	1.26	2.50	2.61	0.70	63.0	64.0	3.30	4.10
MD□□□□□063-42	1.74	3.80	4.10	0.67	65.0	66.0	3.70	4.40
MD□□□□□071-32	2.51	4.76	5.81	0.77	73.0	73.0	10.7	5.80
MD□□□□□071-42	3.74	7.85	9.12	0.77	74.0	74.0	12.8	6.40
MD□□□□□080-32	5.10	11.0	12.1	0.80	73.0	74.0	26.0	11.0
MD□□□□□080-42	7.50	16.5	18.4	0.80	77.0	77.0	26.0	11.0
MD□□□□□090-32	10.1	23.7	27.1	0.76	78.0	79.0	28.4	15.0
MD□□□□□100-12	14.6	38.0	44.0	0.73	83.0	84.0	61.0	24.0
MD□□□□□100-32	20.5	43.0	50.0	0.75	83.0	83.0	61.0	24.0
MD□□□□□112-22	26.3	70.0	95.0	0.73	85.0	86.0	107	31.0
MD□□□□□112-32	36.6	95.0	120	0.77	85.0	86.0	135	38.0
MD□□□□□132-22	49.2	100	150	0.76	87.0	88.0	336	66.0
MD□□□□□132-32	60.6	100	150	0.80	88.0	88.0	336	66.0

¹⁾ Without accessories

²⁾ Operation at 87 Hz is possible with 4-pole motors whose rated data at 50 Hz displays the voltage values Δ 230 V.
With motor frame sizes 132-12 to 180-32, the required voltage must also be specified in your order.

³⁾ Star/delta start-up possible at 400 V.

MD three-phase AC motors

Technical data



Rated data for 50 Hz

4-pole motors

	P_N	n_N	$U_{N, \Delta}^{2)}$	$I_{N, \Delta}$	$U_{N, Y}$	$I_{N, Y}$	I_a/I_N
			$\pm 10 \%$		$\pm 10 \%$		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□□160-22	11.0	1460	230 400 ³⁾	36.5 21.0	400	21.0	7.00
MD□□□□□160-32	15.0	1460	230 400 ³⁾	48.4 27.8	400	27.8	7.10
MD□□□□□180-12	18.5	1470	230 400 ³⁾	57.8 32.8	400	32.8	6.80
MD□□□□□180-32	22.0	1465	230 400 ³⁾	67.4 38.8	400	38.8	7.30
MD□□□□□180-42	30.0	1465	230 400 ³⁾	91.1 52.6	400	52.6	7.50
MD□□□□□225-12	37.0	1475	230 400 ³⁾	114 66.0	400	66.0	6.30
MD□□□□□225-22	45.0	1480	230 400 ³⁾	137 79.0	400	79.0	7.60

	M_N	M_a	M_b	$\cos \phi$	$\eta_{75 \%}$	$\eta_{100 \%}$	$J^{1)}$	$m^{1)}$
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□160-22	71.9	150	204	0.85	89.2	89.0	610	110
MD□□□□□160-32	98.1	214	288	0.87	89.7	90.0	750	130
MD□□□□□180-12	120	260	313	0.90	90.7	90.5	1350	165
MD□□□□□180-32	144	330	360	0.90	91.2	91.0	1550	175
MD□□□□□180-42	196	548	547	0.90	91.6	91.0	1850	200
MD□□□□□225-12	240	504	528	0.88	93.0	93.0	4400	320
MD□□□□□225-22	290	698	669	0.88	94.5	94.3	5300	415

¹⁾ Without accessories

²⁾ Operation at 87 Hz is possible with 4-pole motors whose rated data at 50 Hz displays the voltage values Δ 230 V.
With motor frame sizes 132-12 to 180-32, the required voltage must also be specified in your order.

³⁾ Star/delta start-up possible at 400 V.

MD three-phase AC motors

Technical data



Rated data for 50 Hz

6-pole motors

	P_N	n_N	$U_{N,\Delta}$	$I_{N,\Delta}$	$U_{N,Y}$	$I_{N,Y}$	I_a/I_N
			$\pm 10\%$		$\pm 10\%$		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□071-13	0.18	930	230	1.10	400	0.60	3.90
MD□□□□071-33	0.25	930	230	1.80	400	1.10	2.80
MD□□□□080-13	0.37	950	230	2.20	400	1.30	4.00
MD□□□□080-33	0.55	930	230	2.90	400	1.70	3.50

	M_N	M_a	M_b	$\cos \phi$	$\eta_{75\%}$	$\eta_{100\%}$	$J^{1)}$	$m^{1)}$
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□071-13	1.80	5.00	5.00	0.66	67.0	69.0	12.5	6.50
MD□□□□071-33	2.50	6.60	6.60	0.66	67.0	68.0	12.5	6.50
MD□□□□080-13	3.70	10.1	10.7	0.63	68.0	69.0	26.0	11.0
MD□□□□080-33	5.60	12.2	12.8	0.70	68.0	68.0	26.0	11.0

¹⁾ Without accessories

MD three-phase AC motors

Technical data



Rated data for 60 Hz

2-pole motors

- The motors are designed for an operation at 265/460 V but are also able to be operated at 230 V, 60 Hz. The same technical data apply, the starting torque is a bit lower.
- The motors have a service factor of 1.15 at 60 Hz. The service factor indicates the permissible overload during operation within the mains voltage fluctuations.

	P_N	n_N	$U_{N,\Delta}$	$I_{N,\Delta}$	$U_{N,Y}$	$I_{N,Y}$	I_a/I_N
			$\pm 10\%$		$\pm 10\%$		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□□063-11	0.18	3370	265	0.72	460	0.41	5.50
MD□□□□□063-31	0.25	3390	265	0.88	460	0.51	4.80
MD□□□□□071-11	0.37	3360	265	1.30	460	0.76	5.50
MD□□□□□071-31	0.55	3240	265	2.10	460	1.20	4.80
MD□□□□□080-11	0.75	3380	265	2.60	460	1.50	5.90
MD□□□□□080-31	1.10	3370	265	3.80	460	2.20	5.90
MD□□□□□090-11	1.50	3310	265	4.80	460	2.80	5.30
MD□□□□□090-31	2.20	3320	265	7.20	460	4.10	4.30
MD□□□□□100-31	3.00	3510	265	8.80	460	5.10	8.10
MD□□□□□100-41	4.00	3440	265	12.4	460	7.10	7.70
MD□□□□□112-31	5.50	3510	460 ²⁾	9.90			6.90
MD□□□□□112-41	7.50	3500	460 ²⁾	14.4			6.80
MD□□□□□132-21	9.00	3500	460 ²⁾	14.8			7.60

	M_N	M_a	M_b	$\cos \phi$	$\eta_{75\%}$	$\eta_{100\%}$	$J^{1)}$	$m^{1)}$
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□063-11	0.51	1.38	1.38	0.84	68.3	67.8	1.70	3.90
MD□□□□□063-31	0.72	1.74	1.84	0.86	71.1	70.0	1.70	3.80
MD□□□□□071-11	1.05	2.85	2.66	0.91	74.4	72.3	5.10	6.00
MD□□□□□071-31	1.62	3.49	3.86	0.90	73.6	66.3	5.10	6.50
MD□□□□□080-11	2.13	4.96	5.97	0.88	74.4	74.4	9.70	10.0
MD□□□□□080-31	3.14	6.89	7.81	0.87	79.2	77.1	9.70	10.0
MD□□□□□090-11	4.31	9.28	9.55	0.94	78.3	76.7	35.0	17.0
MD□□□□□090-31	6.25	15.1	14.2	0.89	78.7	77.7	35.0	17.0
MD□□□□□100-31	8.13	17.4	24.8	0.89	84.5	83.5	32.6	21.0
MD□□□□□100-41	11.3	22.0	26.6	0.90	78.6	79.7	32.6	21.0
MD□□□□□112-31	14.9	42.2	45.0	0.83	87.5	87.5	53.8	28.0
MD□□□□□112-41	20.5	65.2	70.7	0.77	88.5	88.5	70.0	35.0
MD□□□□□132-21	24.7	66.1	66.1	0.91	88.9	88.9	205	68.0

¹⁾ Without accessories

²⁾ Star/delta start-up possible at 460 V.

MD three-phase AC motors

Technical data



Rated data for 60 Hz

4-pole motors

- The motors are designed for an operation at 265/460 V but are also able to be operated at 230 V, 60 Hz. The same technical data apply, the starting torque is a bit lower.
- The motors have a service factor of 1.15 at 60 Hz. The service factor indicates the permissible overload during operation within the mains voltage fluctuations.

	P _N	n _N	U _{N, Δ} ²⁾	I _{N, Δ}	U _{N, Y}	I _{N, Y}	I _a /I _N
			± 10 %		± 10 %		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□□063-02	0.060	1735	265	0.37	460	0.21	4.40
MD□□□□□063-22	0.090	1695	265	0.43	460	0.25	4.20
MD□□□□□063-12	0.12	1735	265	0.69	460	0.40	4.00
MD□□□□□063-32	0.18	1695	265	0.80	460	0.46	3.60
MD□□□□□063-42	0.25	1680	265	1.30	460	0.75	3.80
MD□□□□□071-32	0.37	1720	265	1.50	460	0.84	3.90
MD□□□□□071-42	0.55	1720	265	2.10	460	1.20	4.10
MD□□□□□080-32	0.75	1720	265	2.90	460	1.70	5.60
MD□□□□□080-42	1.10	1705	265	4.20	460	2.40	5.40
MD□□□□□090-32	1.50	1720	265	5.80	460	3.40	5.70
MD□□□□□100-12	2.20	1745	265	8.10	460	4.70	6.90
MD□□□□□100-32	3.00	1740	265	10.8	460	6.30	5.30
MD□□□□□112-22	4.00	1755	265	14.1	460	8.20	6.90
MD□□□□□112-32	5.50	1750	265 460 ³⁾	18.9 10.9	460	10.9	6.90
MD□□□□□132-22	7.50	1760	265 460 ³⁾	25.7 14.8	460	14.8	6.50
MD□□□□□132-32	9.20	1750	265 460 ³⁾	29.6 17.1	460	17.1	5.70

	M _N	M _a	M _b	cos φ	η _{75 %}	η _{100 %}	J ¹⁾	m ¹⁾
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□063-02	0.33	1.10	1.36	0.54	60.0	63.0	3.30	3.90
MD□□□□□063-22	0.51	1.10	1.40	0.67	64.9	67.0	3.30	3.90
MD□□□□□063-12	0.66	2.25	2.64	0.55	58.0	63.0	3.30	4.10
MD□□□□□063-32	1.00	2.21	2.56	0.68	65.0	66.0	3.30	4.10
MD□□□□□063-42	1.40	3.71	4.20	0.60	64.0	66.0	3.70	4.40
MD□□□□□071-32	2.05	4.40	5.80	0.74	74.0	75.0	10.7	5.80
MD□□□□□071-42	3.05	7.00	9.00	0.73	76.0	77.0	12.8	6.40
MD□□□□□080-32	4.16	10.3	12.2	0.78	78.0	78.0	26.0	11.0
MD□□□□□080-42	6.16	15.5	18.5	0.78	79.0	80.0	26.0	11.0
MD□□□□□090-32	8.33	22.0	27.0	0.73	79.0	81.0	28.4	15.0
MD□□□□□100-12	12.0	33.0	43.0	0.71	83.0	85.0	61.0	24.0
MD□□□□□100-32	16.5	38.0	48.0	0.73	84.0	85.0	61.0	24.0
MD□□□□□112-22	21.8	57.0	89.0	0.72	85.0	87.0	107	31.0
MD□□□□□112-32	30.0	79.0	114	0.75	87.0	87.0	135	38.0
MD□□□□□132-22	40.7	83.0	137	0.75	88.0	89.0	336	66.0
MD□□□□□132-32	50.2	83.0	137	0.79	88.0	89.0	336	66.0

¹⁾ Without accessories

²⁾ Operation at 87 Hz is possible with 4-pole motors whose rated data at 60 Hz displays the voltage values Δ 265 V.
With motor frame sizes 112-32 to 180-42, the required voltage must also be specified in your order.

³⁾ Star/delta start-up possible at 460 V.

MD three-phase AC motors

Technical data



Rated data for 60 Hz

4-pole motors

- The motors are designed for an operation at 265/460 V but are also able to be operated at 230 V, 60 Hz. The same technical data apply, the starting torque is a bit lower.
- The motors have a service factor of 1.15 at 60 Hz. The service factor indicates the permissible overload during operation within the mains voltage fluctuations.

	P_N	n_N	$U_{N, \Delta}^{2)}$	$I_{N, \Delta}$	$U_{N, Y}$	$I_{N, Y}$	I_a/I_N
			$\pm 10 \%$		$\pm 10 \%$		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□□160-22	11.0	1770	265 460 ³⁾	31.7 18.3	460	18.3	7.60
MD□□□□□160-32	15.0	1760	265 460 ³⁾	40.7 23.5	460	23.5	7.60
MD□□□□□180-12	18.5	1780	265 460 ³⁾	48.5 28.0	460	28.0	7.20
MD□□□□□180-32	22.0	1760	265 460 ³⁾	57.2 33.0	460	33.0	7.60
MD□□□□□180-42	30.0	1770	265 460 ³⁾	78.8 45.5	460	45.5	7.80
MD□□□□□225-12	37.0	1780	265 460 ³⁾	97.2 56.1	460	56.1	6.50
MD□□□□□225-22	45.0	1784	265 460 ³⁾	111 64.2	460	64.2	8.80

	M_N	M_a	M_b	$\cos \phi$	$\eta_{75 \%}$	$\eta_{100 \%}$	$J^{1)}$	$m^{1)}$
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□160-22	59.5	122	187	0.84	91.1	90.0	610	110
MD□□□□□160-32	81.2	171	265	0.87	92.6	92.0	750	130
MD□□□□□180-12	99.3	203	287	0.90	93.0	92.0	1350	165
MD□□□□□180-32	119	248	331	0.90	94.0	93.0	1550	175
MD□□□□□180-42	162	395	502	0.90	91.8	92.0	1850	200
MD□□□□□225-12	199	358	485	0.88	94.0	94.0	4400	320
MD□□□□□225-22	241	660	635	0.88	93.5	93.6	5300	415

¹⁾ Without accessories

²⁾ Operation at 87 Hz is possible with 4-pole motors whose rated data at 60 Hz displays the voltage values Δ 265 V.
With motor frame sizes 112-32 to 180-42, the required voltage must also be specified in your order.

³⁾ Star/delta start-up possible at 460 V.

MD three-phase AC motors

Technical data



Rated data for 60 Hz

6-pole motors

- The motors are designed for an operation at 265/460 V but are also able to be operated at 230 V, 60 Hz. The same technical data apply, the starting torque is a bit lower.
- The motors have a service factor of 1.15 at 60 Hz. The service factor indicates the permissible overload during operation within the mains voltage fluctuations.

	P_N	n_N	$U_{N,\Delta}$	$I_{N,\Delta}$	$U_{N,Y}$	$I_{N,Y}$	I_a/I_N
			$\pm 10\%$		$\pm 10\%$		
	[kW]	[r/min]	[V]	[A]	[V]	[A]	
MD□□□□□071-13	0.18	1140	265	0.95	460	0.55	4.60
MD□□□□□071-33	0.25	1140	265	1.70	460	1.00	3.40
MD□□□□□080-13	0.37	1160	265	2.00	460	1.20	4.60
MD□□□□□080-33	0.55	1140	265	2.60	460	1.50	4.10

	M_N	M_a	M_b	$\cos \phi$	$\eta_{75\%}$	$\eta_{100\%}$	$J^{1)}$	$m^{1)}$
	[Nm]	[Nm]	[Nm]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□071-13	1.47	4.59	4.59	0.62	68.4	70.5	12.5	6.50
MD□□□□□071-33	2.04	6.06	6.06	0.61	69.1	70.1	12.5	6.50
MD□□□□□080-13	3.03	9.28	9.83	0.59	69.5	70.5	26.0	11.0
MD□□□□□080-33	4.56	11.2	11.8	0.66	70.7	70.7	26.0	11.0

¹⁾ Without accessories

MD three-phase AC motors

Technical data



Rated data for 87 Hz

4-pole motors

	P _N	n _N	M _N	M _{max}	U _{N, Δ}	I _{N, Δ}	cos φ	η _{75 %}	η _{100 %}	J ¹⁾	m ¹⁾
					± 10 %						
	[kW]	[r/min]	[Nm]	[Nm]	[V]	[A]		[%]	[%]	[kgcm ²]	[kg]
MD□□□□□063-02	0.11	2535	0.40	1.60	400	0.42	0.55	62.0	67.0	3.30	3.90
MD□□□□□063-22	0.16	2485	0.63	2.50	400	0.48	0.67	66.0	70.0	3.30	3.90
MD□□□□□063-12	0.21	2535	0.80	3.20	400	0.85	0.52	61.0	66.0	3.30	4.10
MD□□□□□063-32	0.33	2475	1.26	5.00	400	1.00	0.65	68.0	71.0	3.30	4.10
MD□□□□□063-42	0.45	2480	1.74	7.00	400	1.40	0.63	66.0	73.0	3.70	4.40
MD□□□□□071-32	0.66	2520	2.51	10.0	400	1.60	0.72	76.0	78.0	10.7	5.80
MD□□□□□071-42	1.00	2515	3.74	15.0	400	2.40	0.74	79.0	80.0	12.8	6.40
MD□□□□□080-32	1.35	2520	5.10	20.0	400	3.30	0.80	75.0	77.0	26.0	11.0
MD□□□□□080-42	2.00	2500	7.50	30.0	400	4.80	0.80	81.0	82.0	26.0	11.0
MD□□□□□090-32	2.70	2520	10.1	40.0	400	6.70	0.73	83.0	85.0	28.4	15.0
MD□□□□□100-12	3.90	2550	14.6	60.0	400	9.20	0.71	87.0	88.0	61.0	24.0
MD□□□□□100-32	5.40	2540	20.5	80.0	400	12.5	0.73	87.0	88.0	61.0	24.0
MD□□□□□112-22	7.10	2560	26.3	105	400	16.1	0.71	87.0	88.0	107	31.0
MD□□□□□112-32	9.70	2555	36.6	145	400	21.7	0.75	87.0	89.0	135	38.0
MD□□□□□132-22	13.2	2565	49.2	200	400	28.6	0.75	90.0	90.0	336	66.0
MD□□□□□132-32	16.2	2560	60.6	242	400	34.1	0.79	90.0	91.0	336	66.0
MD□□□□□160-22	19.3	2565	71.9	280	400	36.5	0.85	91.7	90.0	610	110
MD□□□□□160-32	26.4	2565	98.1	390	400	48.4	0.86	91.9	92.0	750	130
MD□□□□□180-12	32.4	2575	120	480	400	57.8	0.89	92.8	92.0	1350	165
MD□□□□□180-32	38.7	2560	144	572	400	67.4	0.89	92.8	92.0	1550	175
MD□□□□□180-42	52.7	2565	196	780	400	91.1	0.89	93.0	93.0	1850	200

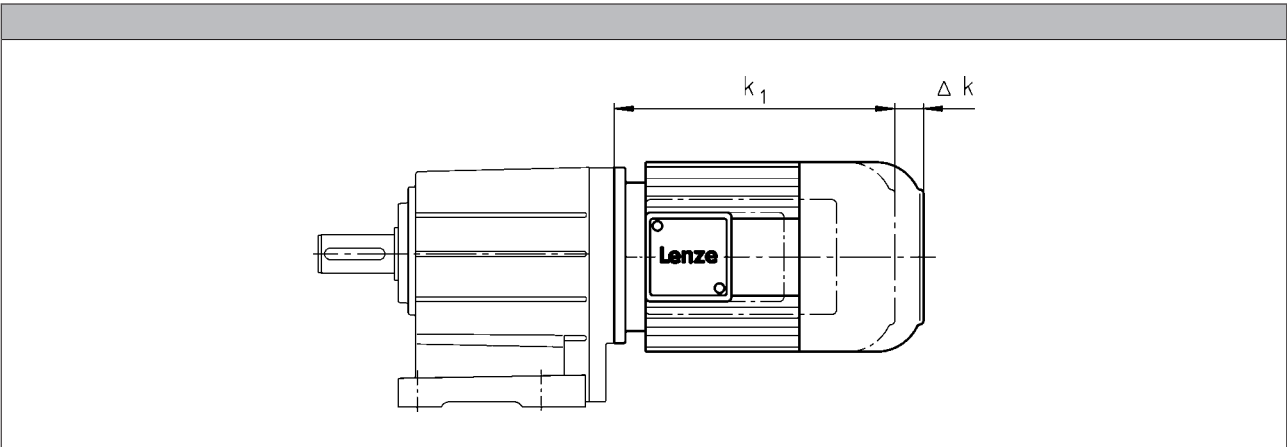
¹⁾ Without accessories

MD three-phase AC motors

Technical data



Dimensions, self-ventilated (2-pole)



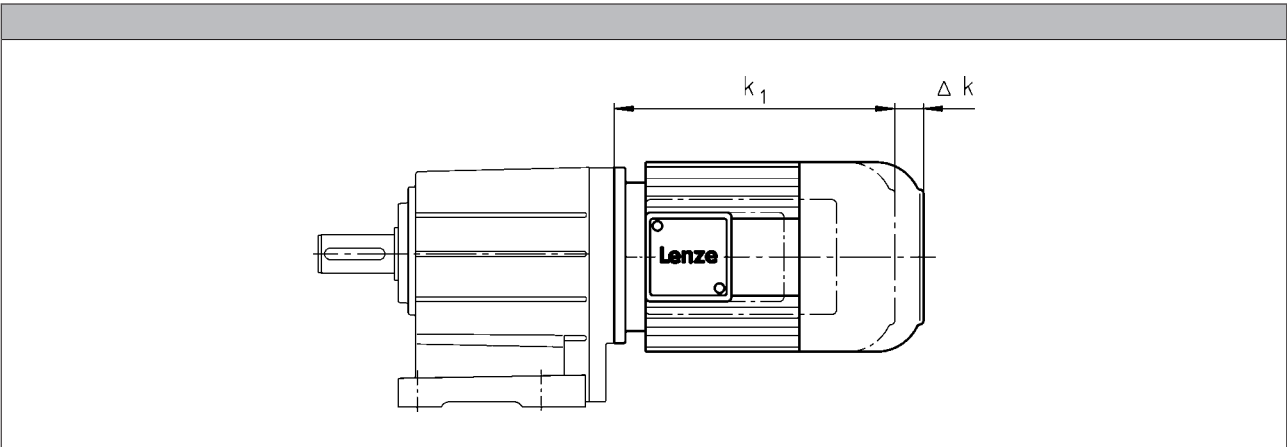
Motor type				
	MDEMAXX	MDEMABR	MDEMABL	MDEMALL
Motor frame size				
	Δ k	Δ k	Δ k	Δ k
	[mm]	[mm]	[mm]	[mm]
063-11 063-31	0	40		
071-11 071-31		52	52	0
080-11 080-31		73	73	4
090-11 090-31		68	68	0
100-31 100-41		76	76	76
112-31 112-41		90	90	0
132-21		110	110	

MD three-phase AC motors

Technical data



Dimensions, self-ventilated (4-pole)



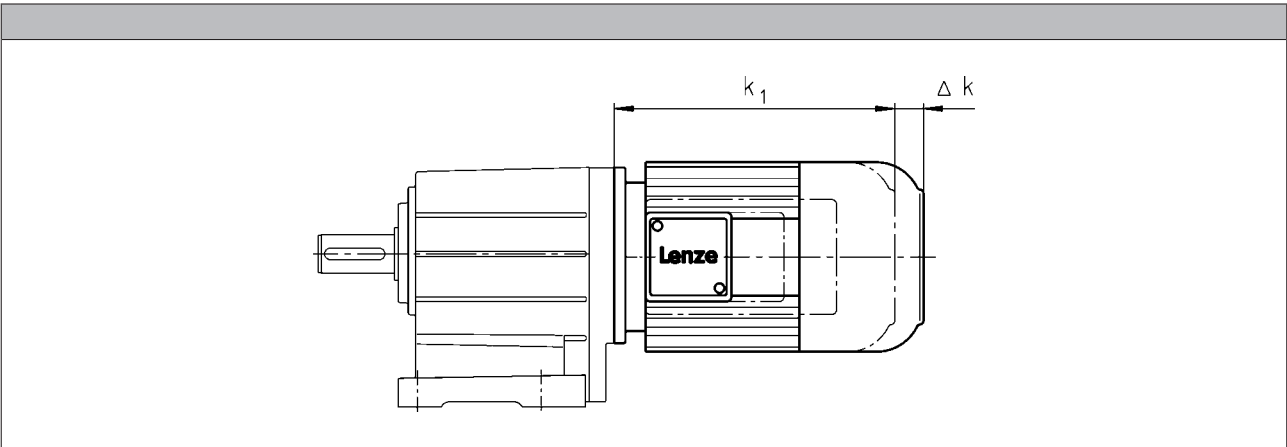
Motor type							
	MDEMAXX	MDEMABR	MDEMABS MDEMABI MDEMABA	MDEMABL	MDEMARS MDEMAIG MDEMAAG	MDEMALL	
Motor frame size							
	Δ k	Δ k	Δ k	Δ k	Δ k	Δ k	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
063-02 063-22	0	71	135		71		
063-12 063-32 063-42		40	103		56		
071-32 071-42		52	96	52	52	0	
080-32 080-42		73	111	73	111	4	
090-32		68	105	68	87	0	
100-12 100-32		76	101	76	81	76	
112-22 112-32		90	120	90	80	0	
132-22 132-32		110	125	110	103		
160-22 160-32		105	191		83		
180-12 180-32		113	192		79		
180-42			193		80		
225-12 225-22							

MD three-phase AC motors

Technical data



Dimensions, self-ventilated (6-pole)



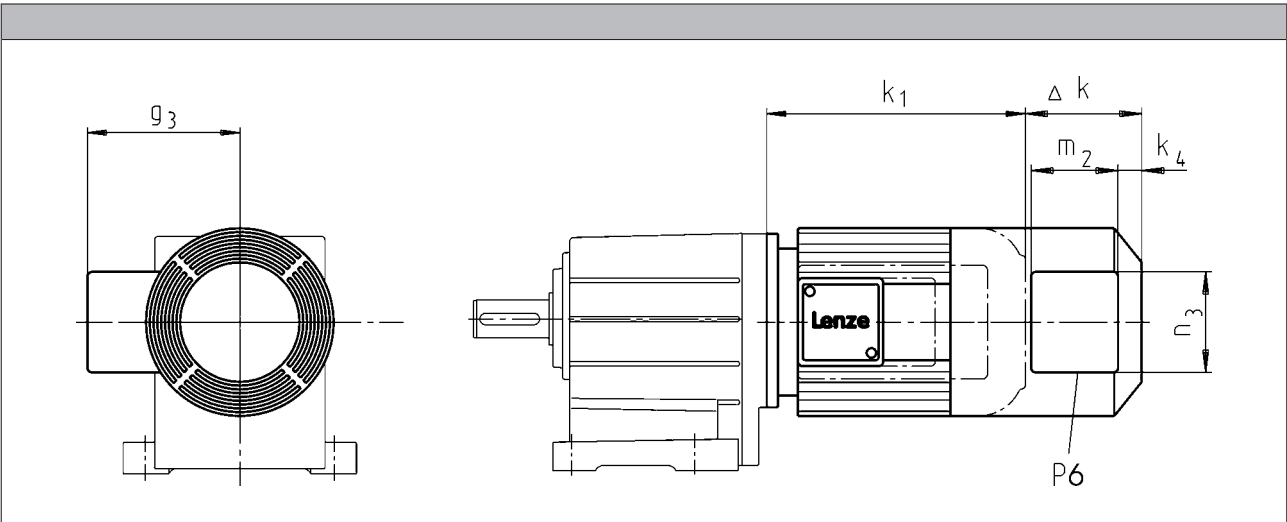
Motor type						
	MDEMAXX	MDEMABR	MDEMABS MDEMABI MDEMABA	MDEMABL	MDEMARS MDEMAIG MDEMAAG	MDEMALL
Motor frame size						
	Δ k [mm]	Δ k [mm]	Δ k [mm]	Δ k [mm]	Δ k [mm]	Δ k [mm]
071-13 071-33	0	52	96	52	52	0
080-13 080-33		73	111	73	111	4

MD three-phase AC motors

Technical data



Dimensions, forced ventilated (2-pole)



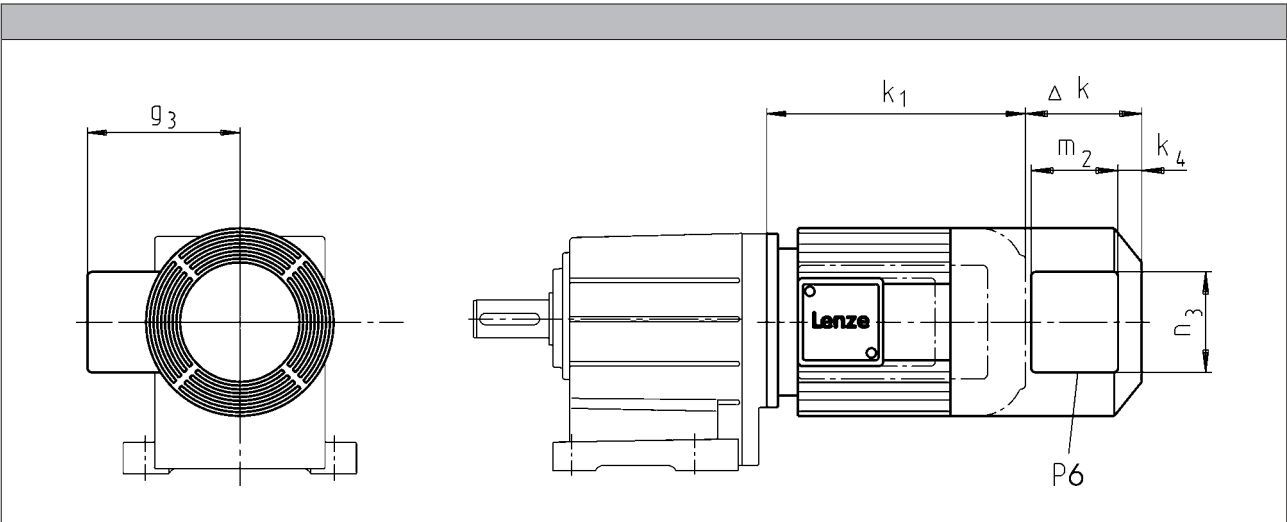
Motor type															
	MDFMAXX	MDFMABR													
Motor frame size															
	Δ k	Δ k	k ₄	g ₃	m ₂	n ₃	P ₆								
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]								
063-11	128	170	12	115	95	105	1x M16x1.5								
063-31		165		122											
071-11		183		96	106										
071-31		141													
080-11		181	22		95	105									
080-31			150												
090-11	109	170													
090-31		162													
100-31	102							183							
100-41		182													
112-31	115							202	32						
112-41															
132-21															

MD three-phase AC motors

Technical data



Dimensions, forced ventilated (4-pole)



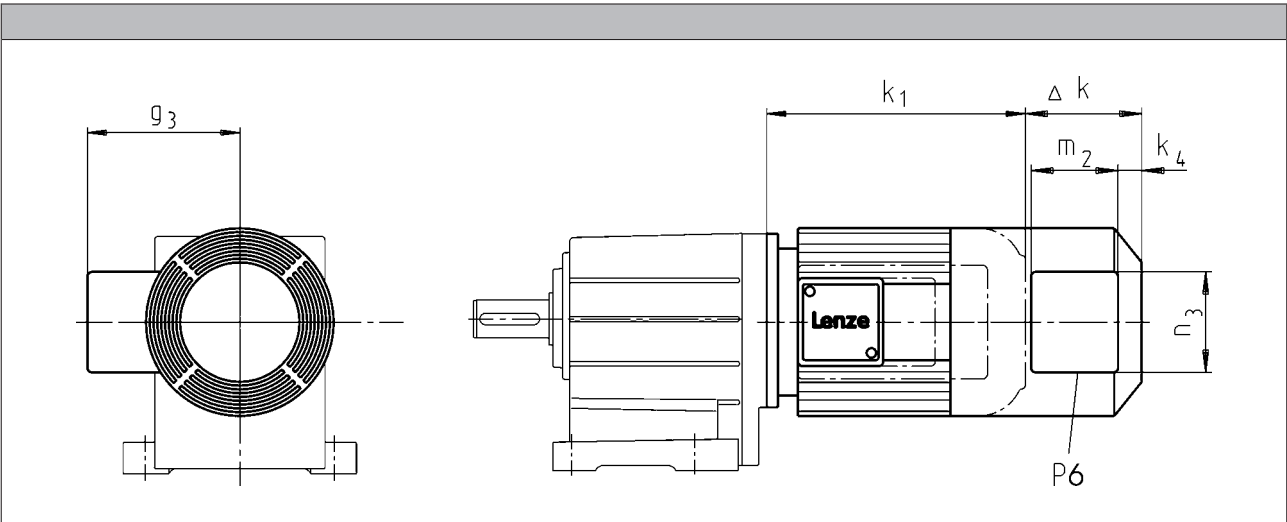
Motor type									
	MDFMAXX	MDFMABR	MDFMABS MDFMABI MDFMABA	MDFMARS MDFMAIG MDFMAAG					
Motor frame size									
	Δ k	Δ k	Δ k	Δ k	k ₄	g ₃	m ₂	n ₃	P ₆
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
063-12 063-32 063-42	128	170	170	128	12	115	95	105	1x M16x1.5
071-32 071-42		165	165			122			
080-32 080-42		183	183		13	132	96	106	
090-32		181	181		22	141	95	105	
100-12 100-32	109	170	170	109		150			
112-22 112-32	102	183	183	183		162			
132-22 132-32	115	202	202	202	32	182	96	106	
160-22 160-32	149	179	237	224	31	209			
180-12 180-32		215	275	215					
180-42	155		260						
225-12 225-22	213	213	213	213					

MD three-phase AC motors

Technical data



Dimensions, forced ventilated (6-pole)



Motor type									
	MDFMAXX	MDFMABR	MDFMABS MDFMABI MDFMABA	MDFMARS MDFMAIG MDFMAAG					
Motor frame size									
	Δ k	Δ k	Δ k	Δ k	k ₄	g ₃	m ₂	n ₃	P ₆
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
071-13 071-33	128	165	165	128	12	122	95	105	1xM16x1.5
080-13 080-33		183	183		13	132	96	106	

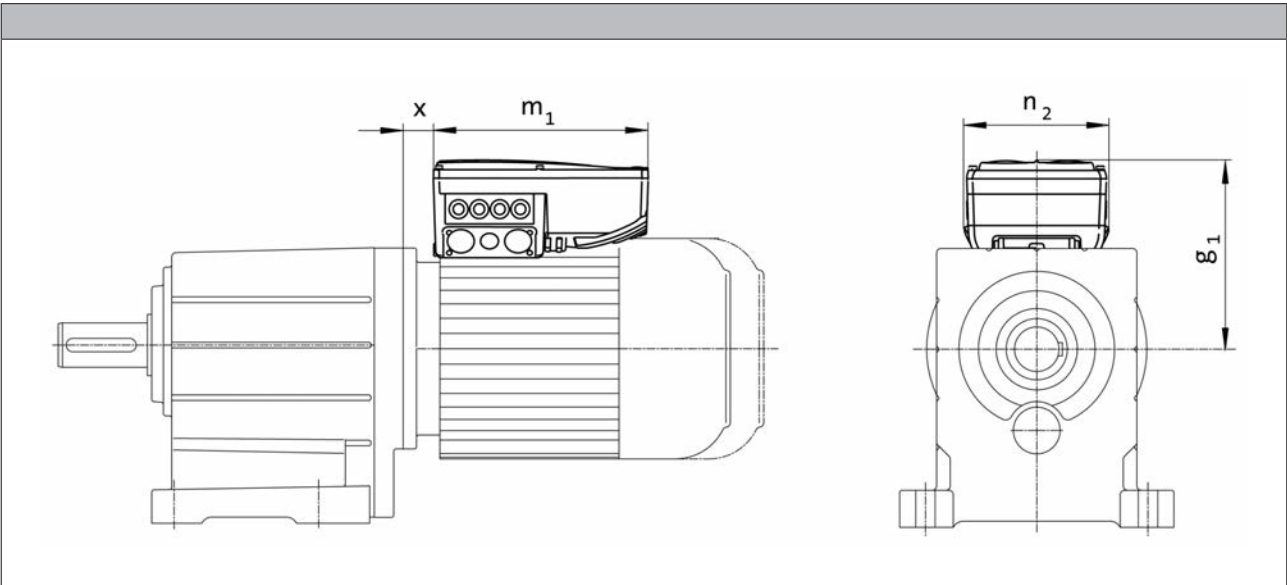
MD three-phase AC motors

Technical data



Dimensions, 8400 motec inverter

Rated frequency 50/60 Hz



Product key					
Motor	Inverter	g ₁ , 50Hz	m ₁ , 50Hz	n ₂ , 50Hz	x _{50Hz}
		[mm]	[mm]	[mm]	[mm]
MD□□□□□071-32	E84DVB□3714S□□□□2□	163	241	161	21.0
MD□□□□□071-42	E84DVB□5514S□□□□2□				25.5
MD□□□□□080-32	E84DVB□7514S□□□□2□				
MD□□□□□080-42	E84DVB□1124S□□□□2□	172	260	176	28.8
MD□□□□□090-32	E84DVB□1524S□□□□2□	177			29.6
MD□□□□□100-12	E84DVB□2224S□□□□2□	217			
MD□□□□□100-32	E84DVB□3024S□□□□2□	282	325	195	19.0
MD□□□□□112-22	E84DVB□4024S□□□□2□				34.5
MD□□□□□112-32	E84DVB□5524S□□□□2□				
MD□□□□□132-22	E84DVB□7524S□□□□2□	301			

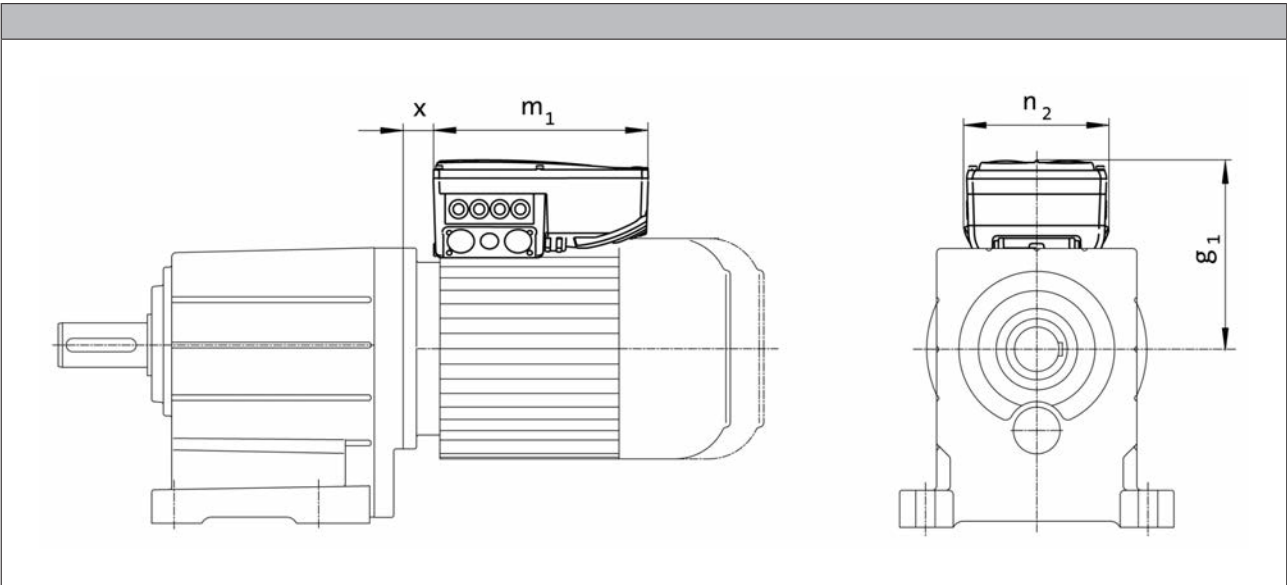
MD three-phase AC motors

Technical data



Dimensions, 8400 motec inverter

Rated frequency 87 Hz



Product key					
Motor	Inverter				
		g ₁ , 87Hz	m ₁ , 87Hz	n ₂ , 87Hz	x _{87Hz}
		[mm]	[mm]	[mm]	[mm]
MD□□□□063-32	E84DVB□3714S□□□2□	154	241	161	18.8
MD□□□□063-42	E84DVB□5514S□□□2□				21.0
MD□□□□071-32	E84DVB□7514S□□□2□	163			
MD□□□□071-42	E84DVB□1124S□□□2□			24.5	
MD□□□□080-32	E84DVB□1524S□□□2□		201		27.8
MD□□□□080-42	E84DVB□2224S□□□2□	260		176	
MD□□□□090-32	E84DVB□3024S□□□2□		272		195
MD□□□□100-12	E84DVB□4024S□□□2□			17.1	
MD□□□□100-32	E84DVB□5524S□□□2□	19.0			
MD□□□□112-22	E84DVB□7524S□□□2□		282		

MD three-phase AC motors

Accessories



Spring-applied brake

Three-phase AC motors can be fitted with a spring-applied brake. This is activated after the supply voltage is switched off (closed-circuit principle). For optimum adjustment of the brake motor to the application, a range of braking torques and control modes is available for every motor frame size. For applications with very high operating frequencies the brake is also available in a LongLife version, with reinforced mechanical brake components.

Features

Versions

- **Standard**
 - 1 x 10⁶ repeating switching cycles
 - 1 x 10⁶ reversing switching cycles
- **LongLife**
 - 10 x 10⁶ repeating switching cycles
 - 15 x 10⁶ reversing switching cycles

Control

- DC supply
- AC supply via rectifier in the terminal box

Enclosure

- Without manual release IP55
- With manual release IP54

Friction lining

- Non-asbestos, low wearing

Options

- Manual release
- UL/CSA approval
- Noise-reduced

Assignment of 4-pole motors and brakes

Design	Standard		LongLife	
Motor frame size	Size	Rated torque	Size	Rated torque
	Brake		Brake	
		M _k		M _k
		[Nm]		[Nm]
063-02 063-12 063-22 063-32 063-42	06 06	2.50 4.00	06	4.00
071-12 071-32	06 06 08	2.50 4.00 3.50	06 08	4.00 3.50
071-42	06 06 08 08	2.50 4.00 3.50 8.00	06 08 08	4.00 3.50 8.00
080-12 080-32	08 08 10	3.50 8.00 7.00	08 10	8.00 7.00
080-42	08 08 10 10	3.50 8.00 7.00 16.0	08 10 10	8.00 7.00 16.0

MD three-phase AC motors

Accessories



Spring-applied brake

Assignment of 4-pole motors and brakes

Design	Standard		LongLife	
Motor frame size	Size	Rated torque	Size	Rated torque
	Brake		Brake	
		M_k		M_k
		[Nm]		[Nm]
090-12 090-32	08	3.50	08 10 10	8.00 7.00 16.0
	08	8.00		
	10	7.00		
	10	16.0		
	10	23.0		
100-12	10	7.00	10 12 12	16.0 14.0 32.0
	10	16.0		
	12	14.0		
	12	32.0		
100-32	10	7.00		
	10	16.0		
	12	14.0		
	12	32.0		
	12	46.0		
112-22 112-32	12	14.0		
	12	32.0		
	14	35.0		
132-12	14	60.0		
	14	35.0		
	14	60.0		
	16	60.0		
132-22 132-32	16	80.0		
	16	100		
	16	35.0		
	16	60.0		
	16	60.0		
160-22	16	80.0		
	16	80.0		
	18	80.0		
	18	150		
160-32	18	200		
	18	80.0		
	18	150		
180-12	18	260		
	18	145		
	20	150		
	20	80.0		
180-32	18	80.0		
	18	150		
	20	145		
	20	260		
	20	315		
180-42	18	80.0		
	18	150		
	20	145		
	20	260		
	20	315		
	20	400		

6.11

MD three-phase AC motors

Accessories



Spring-applied brake

Assignment of 4-pole motors and brakes

Design	Standard		LongLife	
Motor frame size	Size	Rated torque	Size	Rated torque
	Brake		Brake	
		M _k		M _k
		[Nm]		[Nm]
225-12	25	265		
	25	400		
	25	490		
225-22	25	265		
	25	400		
	25	490		
	25	600		

Assignment of 2-pole motors and brakes

Design				
	Standard		LongLife	
Motor frame size	Size	Rated torque	Size	Rated torque
	Brake		Brake	
		M _k		M _k
		[Nm]		[Nm]
063-11	06	2.50	06	2.50
063-31	06	4.00	06	4.00
071-11	06	2.50	06	4.00
071-31	06	4.00	08	3.50
	08	3.50		
080-11	08	3.50	08	8.00
080-31	08	8.00	10	7.00
090-11	10	7.00		
090-31	08	3.50	08	8.00
	08	8.00	10	7.00
	10	7.00	10	16.0
	10	16.0		
100-31	12	14.0	12	14.0
100-41	12	32.0	12	32.0
112-31	12	14.0		
112-41	12	32.0		
	14	35.0		
	14	60.0		
132-21	14	35.0		
	16	60.0		
	14	60.0		
	16	80.0		



Spring-applied brake

Direct connection without rectifier

If the brake is activated directly without a rectifier, a freewheeling diode or a spark suppressor is required to protect against induction peaks.

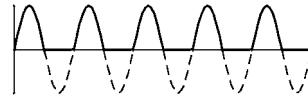
- Supply voltages
 - DC 24 V
 - DC 180 V
 - DC 205 V

Connection via mains voltage with brake rectifier

If the brake is not directly supplied with DC voltage, a rectifier is required. This is included in the scope of supply and is located in the terminal box of the motor. The rectifier converts the AC voltage of the connection into DC voltage. The following rectifiers are available:

Half-wave rectifier, 6-pole

- Ratio of supply voltage to brake coil voltage = 2.22
- Approved by UL/CSA
- Supply voltages
 - AC 230 V
 - AC 400 V
 - AC 460 V



Bridge rectifier, 6-pole

- Ratio of supply voltage to brake coil voltage = 1.11
- Supply voltage
 - AC 230 V



Bridge/half-wave rectifier, 6-pole

- Ratio of supply voltage to brake coil voltage
 - up to overexcitation time = 1.11
 - beyond overexcitation time = 2.22



Supply voltages:

- AC 230 V
- AC 400 V



Spring-applied brake

Connection via mains voltage with brake rectifier

Bridge/half-wave rectifier, 6-pole

- Ratio of supply voltage to brake coil voltage
up to overexcitation time = 1.11
beyond overexcitation time = 2.22



Supply voltages:

- AC 230 V
- AC 400 V

During the switching operation the bridge/half-wave rectifier functions as a bridge rectifier for the overexcitation time t_{ij} and then as a half-wave rectifier. This combination optimises the performance of the brake – depending on the assignment of brake coil voltage and supply voltage:

- **Short-time overexcitation of the brake coil**

Activating the brake coil for the overexcitation time t_{ij} with twice the rated voltage allows the disengagement time to be reduced. The brake opens more quickly and wear on the friction lining is reduced.

These features make this activation version particularly suitable for lifting applications. It is therefore only available in combination with a brake with increased braking torque.

- **Holding current reduction (cold brake)**

By reducing the holding current, the bridge/half-wave rectifier is able to reduce the power input to the open brake. As the brake heats up less, this type of activation is known as "cold brake".

MD three-phase AC motors

Accessories



Spring-applied brake

Rated data with reduced braking torque

- Please enquire for braking torques and maximum switching work values not listed here.

Size			06	08	10	12	14	16	18	20	25
Power input											
	P_{in}	[kW]	0.020	0.025	0.030	0.040	0.050	0.055	0.085	0.10	0.11
Braking torque											
100	M_B	[Nm]	2.50	3.50	7.00	14.0	35.0	60.0	80.0	145	265
1000	M_B	[Nm]	2.30	3.10	6.10	12.0	30.0	50.0	65.0	115	203
1200	M_B	[Nm]	2.30	3.10	6.00	12.0	29.0	48.0	63.0	112	199
1500	M_B	[Nm]	2.20	3.00	5.80	11.0	28.0	47.0	61.0	109 ¹⁾	193 ¹⁾
1800	M_B	[Nm]	2.10	2.90	5.70	11.0	28.0	46.0	60.0 ¹⁾		
3000	M_B	[Nm]	2.00	2.80	5.30	10.0	26.0 ¹⁾	43.0 ¹⁾			
3600	M_B	[Nm]	2.00	2.70	5.20	10.0 ¹⁾					
Maximum switching energy											
100	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1000	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1200	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1500	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	24.0 ¹⁾	36.0 ¹⁾
1800	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	36.0 ¹⁾		
3000	Q_E	[KJ]	3.00	7.50	12.0	24.0	18.0 ¹⁾	11.0 ¹⁾			
3600	Q_E	[KJ]	3.00	7.50	12.0	7.00 ¹⁾					
Transition operating frequency											
	$S_{h\ddot{u}}$	[1/h]	79.0	50.0	40.0	30.0	28.0	27.0	20.0	19.0	15.0
Moment of inertia											
	J	[kgcm ²]	0.015	0.061	0.20	0.45	0.63	1.50	2.90	7.30	20.0
Mass											
	m	[kg]	0.90	1.50	2.60	4.20	5.80	8.70	12.6	19.5	31.0

¹⁾ In the region of the load limit the value for friction energy Q_{BW} can be reduced to 40 %.

MD three-phase AC motors

Accessories



Spring-applied brake

Rated data with reduced braking torque

- Activation via half-wave or bridge rectifier

Size			06	08	10	12	14	16	18	20	25
Friction energy											
	Q_{BW}	[MJ]	113	210	264	706	761	966	1542	2322	3522
Delay time											
Engaging	t_{11}	[ms]	11.0	14.0	20.0	21.0	37.0	53.0	32.0	47.0	264
Rise time											
Braking torque	t_{12}	[ms]	13.0	10.0	17.0	19.0	22.0	30.0	20.0	100	120
Engagement time											
	t_1	[ms]	24.0		37.0	40.0	59.0	83.0	52.0	147	384
Disengagement time											
	t_2	[ms]	35.0	37.0	57.0	65.0	148	169	230	207	269

- Activation via bridge/half-wave rectifier

Design			Holding current reduction (cold brake)								
Size			06	08	10	12	14	16	18	20	25
Friction energy											
	Q_{BW}	[MJ]	113	210	264	706	761	966	1542	2322	3522
Overexcitation time											
	$t_{\bar{u}}$	[ms]	300						1300		
Min. rest time											
	t	[ms]	900						3900		
Delay time											
Engaging	t_{11}	[ms]	12.0	22.0	35.0	49.0	61.0	114	83.0	126	304
Rise time											
Braking torque	t_{12}	[ms]	14.0	16.0	30.0	45.0	37.0	65.0	52.0	269	138
Engagement time											
	t_1	[ms]	26.0	38.0	66.0	93.0	97.0	180	134	395	443
Disengagement time											
	t_2	[ms]	35.0	37.0	57.0	65.0	148	169	230	207	269

- The brake response and application times are guide values. The engagement time is 10 times longer with AC-side switching. With the maximum air gap the disengagement time t_2 – depending on the brake and control – is up to 4 times longer than the disengagement time with the rated air gap.

MD three-phase AC motors

Accessories



Spring-applied brake

Rated data with standard braking torque

- Please enquire for braking torques and maximum switching work values not listed here.

Size			06	08	10	12	14	16	18	20	25
Power input											
	P_{in}	[kW]	0.020	0.025	0.030	0.040	0.050	0.055	0.085	0.10	0.11
Braking torque											
100	M_B	[Nm]	4.00	8.00	16.0	32.0	60.0	80.0	150	260	400
1000	M_B	[Nm]	3.70	7.20	14.0	27.0	51.0	66.0	121	206	307
1200	M_B	[Nm]	3.60	7.00	14.0	27.0	50.0	65.0	118	201	300
1500	M_B	[Nm]	3.50	6.80	13.0	26.0	48.0	63.0	115	195 ¹⁾	291 ¹⁾
1800	M_B	[Nm]	3.40	6.70	13.0	26.0	47.0	61.0	112 ¹⁾		
3000	M_B	[Nm]	3.20	6.30	12.0	24.0	44.0 ¹⁾	57.0 ¹⁾			
3600	M_B	[Nm]	3.20	6.10	12.0	23.0 ¹⁾					
Maximum switching energy											
100	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1000	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1200	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	80.0	120
1500	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	60.0	24.0 ¹⁾	36.0 ¹⁾
1800	Q_E	[KJ]	3.00	7.50	12.0	24.0	30.0	36.0	36.0 ¹⁾		
3000	Q_E	[KJ]	3.00	7.50	12.0	24.0	18.0 ¹⁾	11.0 ¹⁾			
3600	Q_E	[KJ]	3.00	7.50	12.0	7.00 ¹⁾					
Transition operating frequency											
	$S_{h\ddot{u}}$	[1/h]	79.0	50.0	40.0	30.0	28.0	27.0	20.0	19.0	15.0
Moment of inertia											
	J	[kgcm ²]	0.015	0.061	0.20	0.45	0.63	1.50	2.90	7.30	20.0
Mass											
	m	[kg]	0.90	1.50	2.60	4.20	5.80	8.70	12.6	19.5	31.0

¹⁾ In the region of the load limit the value for friction energy Q_{BW} can be reduced to 40 %.

MD three-phase AC motors

Accessories



Spring-applied brake

Rated data with standard braking torque

- Activation via half-wave or bridge rectifier

Size			06	08	10	12	14	16	18	20	25
Friction energy											
	Q_{BW}	[MJ]	85.0	158	264	530	571	966	1542	2322	3522
Delay time											
Engaging	t_{11}	[ms]	15.0		28.0		17.0	27.0	33.0	65.0	110
Rise time											
Braking torque	t_{12}	[ms]	13.0	16.0	19.0	25.0		30.0	45.0	100	120
Engagement time											
	t_1	[ms]	28.0	31.0	47.0	53.0	42.0	57.0	78.0	165	230
Disengagement time											
	t_2	[ms]	45.0	57.0	76.0	115	210	220	270	340	390

- Activation via bridge/half-wave rectifier

Design			Holding current reduction (cold brake)								
Size			06	08	10	12	14	16	18	20	25
Friction energy											
	Q_{BW}	[MJ]	85.0	158	264	530	571	966	1542	2322	3522
Overexcitation time											
	$t_{\bar{u}}$	[ms]		300					1300		
Min. rest time											
	t	[ms]		900					3900		
Delay time											
Engaging	t_{11}	[ms]	16.0	25.0	31.0	48.0	33.0	58.0	80.0	102	154
Rise time											
Braking torque	t_{12}	[ms]	14.0	27.0	21.0	43.0	49.0	64.0	109	157	168
Engagement time											
	t_1	[ms]	30.0	52.0		90.0	82.0	122	189	259	322
Disengagement time											
	t_2	[ms]	45.0	57.0	76.0	115	210	220	270	340	390

- The brake response and application times are guide values. The engagement time is 10 times longer with AC-side switching. With the maximum air gap the disengagement time t_2 – depending on the brake and control – is up to 4 times longer than the disengagement time with the rated air gap.

MD three-phase AC motors

Accessories



Spring-applied brake

Rated data with increased braking torque

- Please enquire for braking torques and maximum switching work values not listed here.

Size			10	12	14	16	16	18	20	20	25	25
Power input												
	P_{in}	[kW]	0.030	0.040	0.050	0.055	0.055	0.085	0.10	0.10	0.11	0.11
Braking torque												
100	M_B	[Nm]	23.0	46.0	75.0	100	125	200	315	400	490	600
1000	M_B	[Nm]	20.0	39.0	64.0	83.0	103	162	249	317	376	461
1200	M_B	[Nm]	20.0	39.0	62.0	81.0	101	158	244	309	367	449
1500	M_B	[Nm]	19.0	38.0	60.0	78.0	98.0	153	237 ¹⁾	300 ¹⁾	356 ¹⁾	436 ¹⁾
1800	M_B	[Nm]	19.0	37.0	59.0	77.0	96.0	150 ¹⁾				
3000	M_B	[Nm]	17.0	34.0	55.0 ¹⁾	71.0 ¹⁾	89.0 ¹⁾					
3600	M_B	[Nm]	17.0	33.0 ¹⁾								
Maximum switching energy												
100	Q_E	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	80.0	80.0	120	120
1000	Q_E	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	80.0	80.0	120	120
1200	Q_E	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	80.0	80.0	120	120
1500	Q_E	[KJ]	12.0	24.0	30.0	36.0	36.0	60.0	24.0 ¹⁾	24.0 ¹⁾	36.0 ¹⁾	36.0 ¹⁾
1800	Q_E	[KJ]	12.0	24.0	30.0	36.0	36.0	36.0 ¹⁾				
3000	Q_E	[KJ]	12.0	24.0	18.0 ¹⁾	11.0 ¹⁾	11.0 ¹⁾					
3600	Q_E	[KJ]	12.0	7.00 ¹⁾								
Transition operating frequency												
	$S_{h\ddot{u}}$	[1/h]	40.0	30.0	28.0	27.0	27.0	20.0	19.0	19.0	15.0	15.0
Moment of inertia												
	J	[kgcm ²]	0.20	0.45	0.63	1.50	1.50	2.90	7.30	7.30	20.0	20.0
Mass												
	m	[kg]	2.60	4.20	5.80	8.70	8.70	12.6	19.5	19.5	31.0	31.0

¹⁾ In the region of the load limit the value for friction energy Q_{BW} can be reduced to 40 %.

- Activation via half-wave or bridge rectifier

Size												
			10	12	14	16		18	20		25	
Friction energy												
	Q _{BW}	[MJ]	198	353	253	563	241	578	1596	580	2465	1409
Delay time												
Engaging	t ₁₁	[ms]	10.0	16.0	11.0	22.0	17.0	24.0	46.0	17.0	77.0	38.0
Rise time												
Braking torque	t ₁₂	[ms]	19.0	25.0		30.0		45.0	100		120	
Engagement time												
	t ₁	[ms]	29.0	41.0	36.0	52.0	47.0	69.0	146	117	197	158
Disengagement time												
	t ₂	[ms]	109	193	308	297	435	356	378	470	451	532

MD three-phase AC motors

Accessories



Spring-applied brake

Rated data with increased braking torque

- Activation via bridge/half-wave rectifier

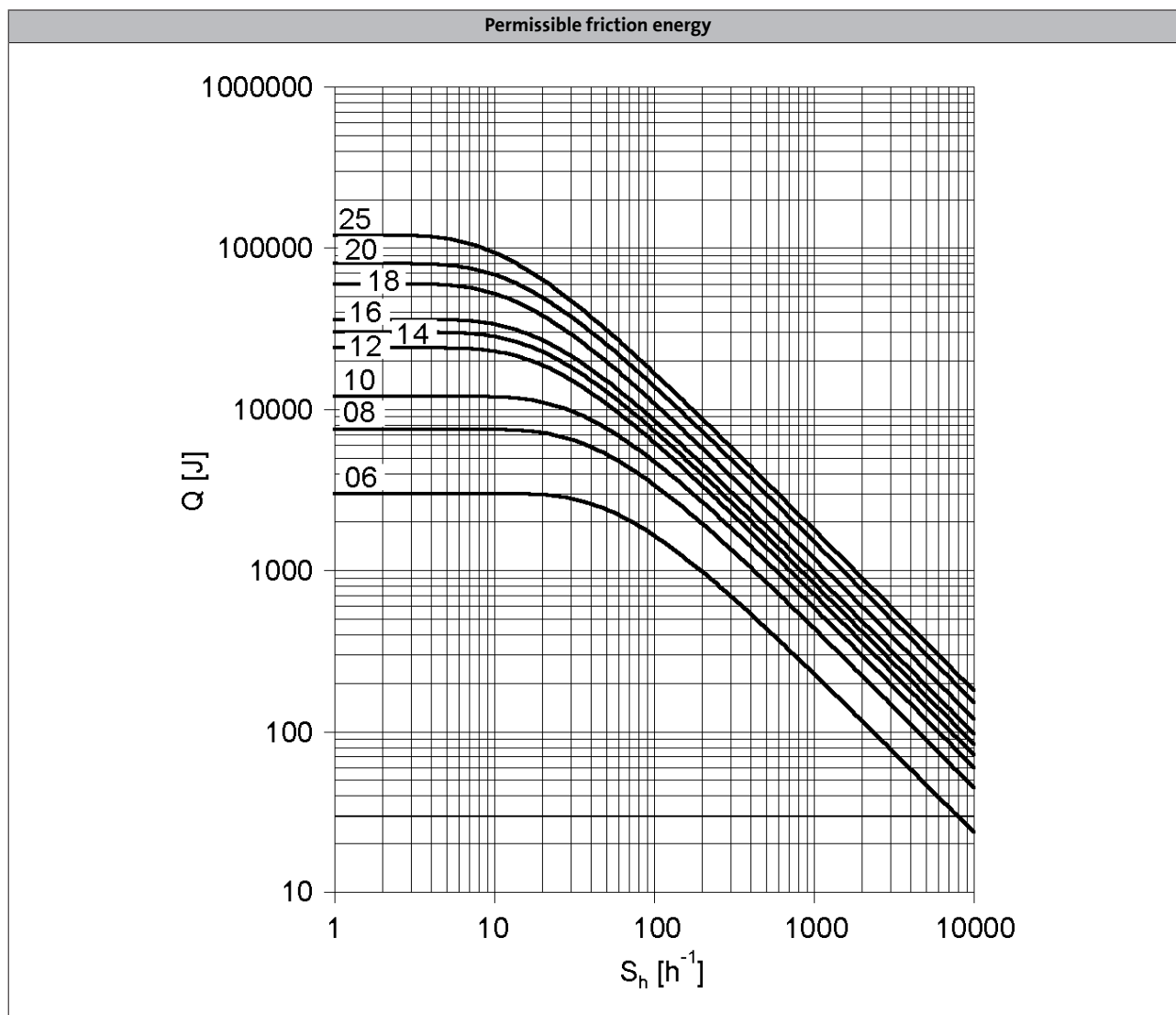
Design			Holding current reduction (cold brake)									
Size			10	12	14	16	18	20	25			
Friction energy	Q_{BW}	[MJ]	198	353	253	563	241	578	1596	580	2465	1409
Overexcitation time	$t_{\ddot{u}}$	[ms]	300			1300						
Min. rest time	t	[ms]	900			3900						
Delay time												
Engaging	t_{11}	[ms]	24.0	27.0	17.0	41.0	21.0	60.0	69.0	17.0	123	85.0
Rise time												
Braking torque	t_{12}	[ms]	44.0	43.0	37.0	55.0	37.0	113	148	100	190	270
Engagement time	t_1	[ms]	68.0	70.0	54.0	97.0	57.0	173	217	334	313	355
Disengagement time	t_2	[ms]	109	193	308	297	435	356	378	470	451	532

Design			Over-excitation									
Size			10	12	14	16	18	20	25			
Friction energy	Q _{BW}	[MJ]	264	706	761	966	1542	2322	3522			
Overexcitation time	t _ü	[ms]	300			1300						
Min. rest time	t	[ms]	900			3900						
Delay time												
Engaging	t ₁₁	[ms]	29.0	54.0	31.0	70.0	46.0	86.0	103	55.0	171	135
Rise time												
Braking torque	t ₁₂	[ms]	53.0	87.0	68.0	93.0	83.0	160	222	319	266	430
Engagement time												
	t ₁	[ms]	82.0	141	99.0	163	129	246	325	374	437	565
Disengagement time												
	t ₂	[ms]	53.0	81.0	117	141	168	151	160	167	184	204

- The brake response and application times are guide values. The engagement time is 10 times longer with AC-side switching. With the maximum air gap the disengagement time t_2 – depending on the brake and control – is up to 4 times longer than the disengagement time with the rated air gap.



Spring-applied brake



Q = Switching energy per switching cycle

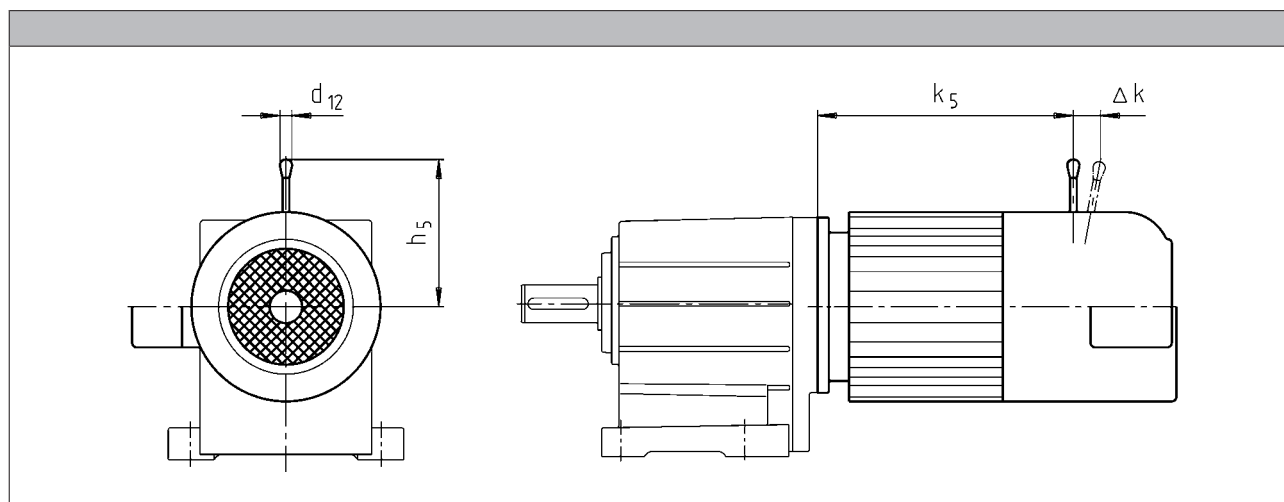
S_h = Operating frequency

Brake size = 06 to 25



Spring-applied brake

Manual release lever



Motor frame size			Size				
			Brake				
				k ₅	Δ k	h ₅	d ₁₂
				[mm]	[mm]	[mm]	[mm]
063-11 063-31	063-02 063-22		06	185	29	107	13.0
	063-12 063-32 063-42		06	173	29	107	13.0
	071-11 071-31	071-13 071-33	06 08	186 187	29 27	107 116	13.0 13.0
080-11 080-31	080-32 080-42	080-13 080-33	06 08	207 218	29 27	107 116	13.0 13.0
	090-11 090-31	090-32	08 10	245 256	27 28	116 132	13.0 13.0
100-31 100-41	100-12 100-32		10 12	279 281	28 37	132 161	13.0 13.0
	112-31	112-22	12 14	292 296	37 41	161 195	13.0 24.0
112-41	112-32		12 14	336 340	37 41	161 195	13.0 24.0
	132-21	132-22 132-32	14 16	373 373	41 55	195 240	24.0 24.0
	160-22		16 18	420 423	59 55	279 240	24.0 24.0
	160-32		16 18	464 467	55 59	240 279	24.0 24.0
	180-12 180-32		18 20	539 546	59 74	279 319	24.0 24.0
	180-42		18 20	596 603	59 74	279 319	24.0 24.0
	225-12 225-22		25 25	785 785	103 103	445 445	24.0 24.0

The following combinations with manual release lever and motor connection in the same position are not possible:

- HAN connector with connection in position 1
- Inverter motec
- Terminal box of motor sizes 071, 080, 090 for brake and retracting (M□□MA BR/BS/BA/BI)

MD three-phase AC motors

Accessories



Resolver

Stator-fed resolver with two stator windings offset by 90° and one rotor winding with transformer winding.

- The three-phase AC motors with resolver cannot be used for speed-dependent safety functions in connection with the SM 301 safety module.

Product key				
				RS1
Accuracy				
			[°]	-10 ... 10
Absolute positioning				
				1 revolution
Max. input voltage				
DC	$U_{in,max}$		[V]	10.0
Max. input frequency				
	$f_{in,max}$		[kHz]	4.00
Ratio				
Stator / rotor		$\pm 5 \%$		0.30
Rotor impedance				
	Z_{ro}		[Ω]	51 + j90
Stator impedance				
	Z_{so}		[Ω]	102 + j150
Impedance				
	Z_{rs}		[Ω]	44 + j76
Min. insulation resistance				
At DC 500 V	R		[MΩ]	10.0
Number of pole pairs				
				1

MD three-phase AC motors

Accessories



Incremental encoder and SinCos absolute value encoder

- The three-phase AC motors with incremental encoders or SinCos absolute value encoders cannot be used for speed-dependent safety functions in connection with the SM 301 safety module.

Encoder type			HTL incremental				TTL incremental			SinCos absolute value
Product key			IG128-24V-H	IG512-24V-H	IG1024-24V-H	IG2048-24V-H	IG512-5V-T	IG1024-5V-T	IG2048-5V-T	AM1024-8V-H
Encoder type										Multi-turn
Pulses										
			128	512	1024	2048	512	1024	2048	1024
Output signals			HTL				TTL			1 Vss
Interfaces										
			A, B track	A, B, N track and inverted						Hiperface
Absolute revolutions										
			0							4096
Accuracy										
		[°]	-22.5 ... 22.5	-2 ... 2						-0.8 ... 0.8
Min. input voltage										
DC	U _{in,min}	[V]	8.00				4.75			7.00
Max. input voltage										
DC	U _{in,max}	[V]	26.0	30.0			5.25			12.0
Max. current consumption										
	I _{max}	[A]	0.040	0.15						0.080
Limit frequency										
	f _{max}	[kHz]	30.0	160			300			200
Inverter assignment										
			E84AVSC E84AVHC	E84AVHC			E84AVTC E94A ECS EVS93			

Inverters

- Inverter Drives 8400 StateLine (E84AVSC)
- Inverter Drives 8400 HighLine (E84AVHC)
- Inverter Drives 8400 TopLine (E84AVTC)

Servo-Inverters

- Servo Drives 9400 (E94A)
- 9300 servo inverters (EVS93)
- Servo Drives ECS

MD three-phase AC motors

Accessories



Blowers

- The use of a blower enables operation below 20 Hz without torque derating.

Rated data for 50 Hz

Size	Number of phases	Connection method					
Motor							
			U _{min}	U _{max}	P _{max}	I _{max}	m
			[V]	[V]	[kW]	[A]	[kg]
063	1		230	277	0.027	0.11	2.00
	3	Δ	200	303	0.028	0.12	
		Y	346	525		0.070	
071	1		230	277	0.027	0.10	2.10
	3	Δ	200	303	0.031	0.11	
		Y	346	525		0.060	
080	1		230	277	0.029	0.11	2.30
	3	Δ	200	303	0.031	0.11	
		Y	346	525		0.060	
090	1		220	277	0.065	0.29	2.70
	3	Δ	200	303	0.091	0.38	
		Y	346	525		0.22	
100	1		220	277	0.066	0.28	3.00
	3	Δ	200	303	0.091	0.37	
		Y	346	525		0.22	
112	1		220	277	0.071	0.28	3.10
	3	Δ	200	303	0.097	0.35	
		Y	346	525		0.20	
132	1		230	277	0.098	0.40	4.20
	3	Δ	200	303	0.12	0.58	
		Y	346	525		0.33	
160	1		230	277	0.25	0.97	6.20
	3	Δ	200	303		0.87	
		Y	346	525		0.50	
180	1		230	277		0.97	8.00
	3	Δ	200	303		0.87	
		Y	346	525		0.50	

MD three-phase AC motors

Accessories



Blowers

Rated data for 50 Hz

Size	Number of phases	Connection method					
Motor							
			$U_{\min}$	$U_{\max}$	$P_{\max}$	$I_{\max}$	m
			[V]	[V]	[kW]	[A]	[kg]
200	1		230	277	0.25	0.97	8.00
	3	Δ	200	303		0.87	
		Y	346	525		0.50	
225	3	Δ	200	400	0.28	1.10	15.0
		Y	346	525	0.17	0.35	

Rated data for 60 Hz

Size	Number of phases	Connection method					
Motor							
			$U_{\min}$	$U_{\max}$	$P_{\max}$	$I_{\max}$	m
			[V]	[V]	[kW]	[A]	[kg]
063	1		230	277	0.032	0.12	2.00
	3	Δ	220	332	0.028	0.10	
		Y	380	575		0.060	
071	1		230	277	0.033	0.12	2.10
	3	Δ	220	332	0.029	0.10	
		Y	380	575		0.060	
080	1		230	277	0.037	0.14	2.30
	3	Δ	220	332	0.034	0.10	
		Y	380	575		0.060	
090	1		220	277	0.065	0.25	2.70
	3	Δ		332	0.077	0.33	
		Y	380	575		0.19	
100	1		220	277	0.075	0.30	3.00
	3	Δ		332	0.087	0.31	
		Y	380	575		0.18	
112	1		220	277	0.094	0.37	3.10
	3	Δ		332	0.10	0.31	
		Y	380	575		0.18	
132	1		230	277	0.15	0.57	4.20
	3	Δ	220	332		0.44	
		Y	380	575		0.25	
160	3	Δ	220	332	0.36	0.93	6.20
		Y	380	575		0.56	
180	3	Δ	220	332	0.36	0.93	8.00
		Y	380	575		0.56	
200	3	Δ	220	332	0.36	0.93	8.00
		Y	380	575		0.56	
225	3	Δ	220	400	0.28	0.76	15.0
		Y	380	575	0.26	0.43	

MD three-phase AC motors

Accessories



Temperature monitoring

- The thermal sensors are integrated in the windings. The use of an additional motor protection switch is recommended.

TKO thermal contacts

Function	Operating temperature	Min. reset temperature	Max. reset temperature	Max. input current	Max. input voltage
	T	$T_{\min}$	$T_{\max}$	$I_{\text{in,max}}$	AC $U_{\text{in,max}}$
	-5 ... 5 [°C]				
	[°C]	[°C]	[°C]	[A]	[V]
NC contact	150	90.0	135	2.50	250

PTC thermistor

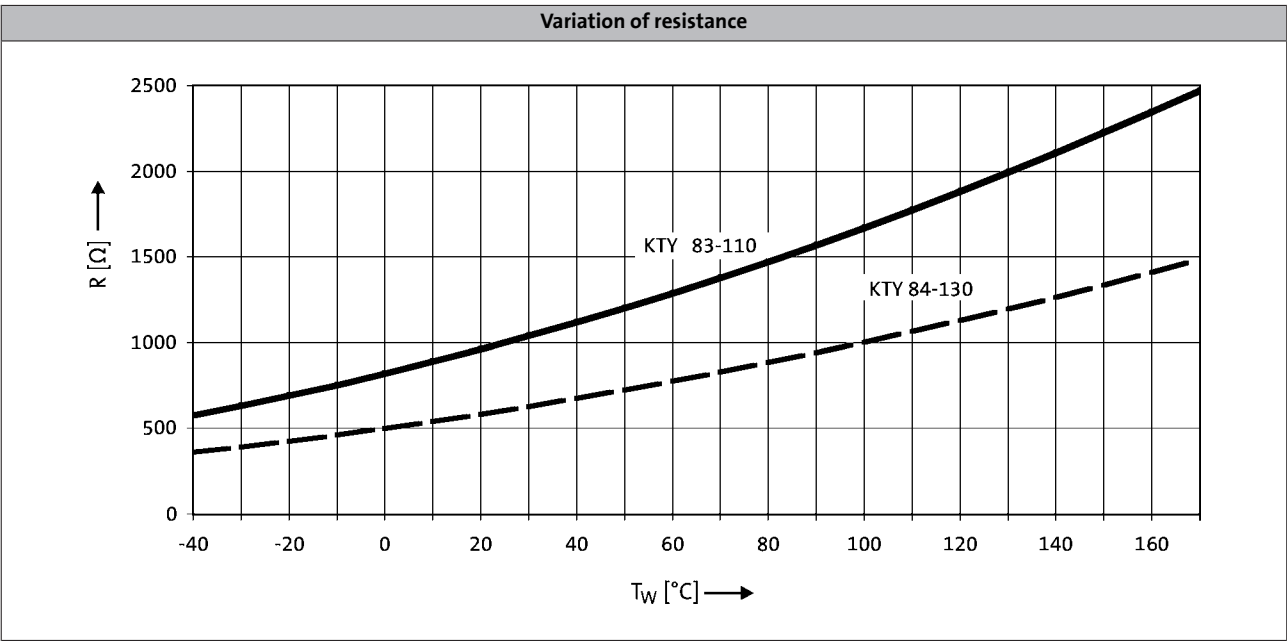
Function	Operating temperature	Rated resistance			Standard
		155 °C	-20 °C	140 °C	
	T	R_N	R_N	R_N	
	-5 ... 5 [°C]				
	[°C]	[Ω]	[Ω]	[Ω]	
Sudden change in resistance	150	550	30.0	250	DIN 44080 DIN VDE 0660 Part 303



Temperature monitoring

KTY temperature sensor

	Function	Rated resistance			Max. input current	
		25 °C	150 °C	170 °C	25 °C	170 °C
		R _N	R _N	R _N	I _{in,max}	I _{in,max}
		[Ω]	[Ω]	[Ω]	[A]	[A]
KTY83-110	Continuous resistance change	1000	2225	2471	0.010	0.002
KTY84-130	Continuous resistance change	603	1334	1482	0.010	0.002



- If the detector is supplied with a measured current of 1 mA, the above relationship between the temperature and the resistance applies.

MD three-phase AC motors

Accessories



Terminal box

The three-phase AC motors are designed for operation at a constant mains frequency and with an inverter.

For 50 Hz operation, the motors are operated in Δ configuration at 230 V or in star configuration at 400 V.

For inverter operation, the base frequency has been specified as 87 Hz at a rated voltage of 400 V in Δ configuration.

In the standard version, the motors are connected in the terminal box. As an option, the motors are also available with the connectors described on the following pages as long as the permissible ratings are not exceeded.

Motor terminal box - built-on accessories assignment: 4-pole / 6-pole motors

Motor type	M□□MAXX	M□□MARS M□□MAIG M□□MAAG	M□□MAZE M□□MAHA	M□□MALL	M□□MALZ M□□MALH
Motor frame size	Terminal box				
063-02 063-22	KK1	KK2			
063-12 063-32 063-42	KK1	KK2			
071-32 071-42 071-13 071-33	KK1	KK2	KK2	KK1	KK1
080-13 080-32 080-33 080-42	KK1	KK2	KK2	KK1	KK1
090-12 090-32	KK1	KK2	KK2	KK1	KK1
100-12 100-32	KK1	KK2	KK2	KK2	KK2
112-22 112-32	KK1	KK2	KK2	KK1	KK1
132-12 132-22 132-32	KK1	KK3	KK3	KK1	KK1
160-22 160-32	KK3	KK3			
180-12 180-32 180-42 180-42	KK3	KK3			
225-12 225-22	KK3	KK3			

MD three-phase AC motors

Accessories



Terminal box

Motor terminal box - built-on accessories assignment: 4-pole / 6-pole motors

Motor type	M□□MABR	M□□MABS M□□MABI M□□MABA	M□□MABZ M□□MABH	M□□MABL
Motor frame size	Terminal box			
063-02 063-22	KK2	KK3		
063-12 063-32 063-42	KK2	KK3		
071-32 071-42 071-13 071-33	KK2	KK3	KK2	KK2
080-13 080-32 080-33 080-42	KK2	KK3	KK2	KK2
090-12 090-32	KK2	KK3	KK2	KK2
100-12 100-32	KK2	KK3	KK2	KK2
112-22 112-32	KK2	KK3	KK2	KK2
132-12 132-22 132-32	KK3	KK3	KK3	KK3
160-22 160-32	KK3	KK3		
180-12 180-32 180-42	KK3	KK3		
225-12 225-22	KK3	KK3		

MD three-phase AC motors

Accessories



Terminal box

Motor terminal box - built-on accessories assignment: 2-pole motors

Motor type	M□□MAXX	M□□MAZE	M□□MALL	M□□MALZ
------------	---------	---------	---------	---------

Motor frame size	Terminal box			
063-11 063-31	KK1			
071-11 071-31	KK1	KK2	KK1	KK2
080-11 080-31	KK1	KK2	KK1	KK2
090-31 090-11	KK1	KK2	KK1	KK2
100-31 100-41	KK1	KK2	KK1	KK2
112-31 112-41	KK1	KK2	KK1	KK2
132-21	KK1	KK3	KK1	KK3

Motor type	MD□MABR	MD□MABZ	MD□MABL
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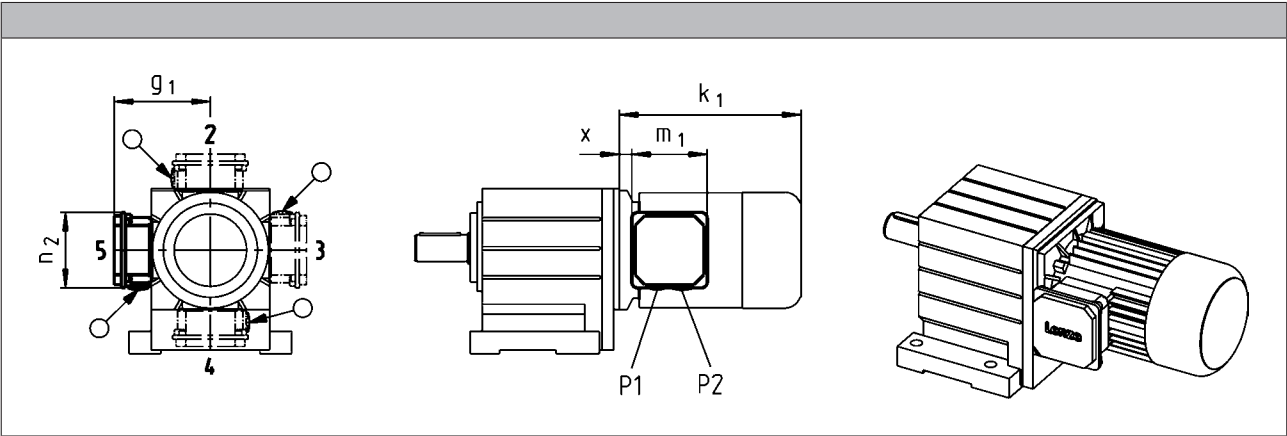
Motor frame size	Terminal box		
063-11 063-31	KK2		
071-11 071-31	KK2	KK2	
080-11 080-31	KK2	KK2	KK2
090-31 090-11	KK2	KK2	KK2
100-31 100-41	KK2	KK2	KK2
112-31 112-41	KK2	KK2	KK2
132-21	KK3	KK3	KK3



Terminal box

Dimensions of KK1

- For motors with motor terminal box KK1, the connector position can be selected in accordance with the terminal box position.
- If preferred positions are not specified in the order, the cable entry will be positioned as circled on the diagram below.



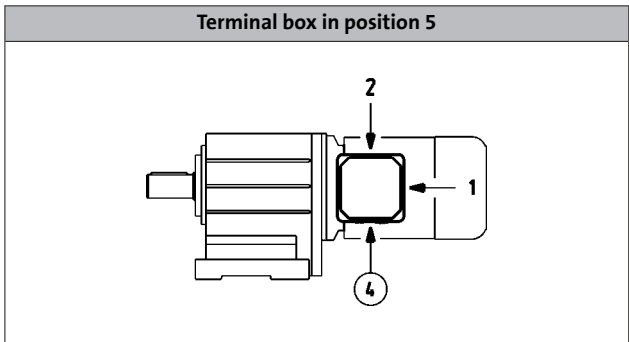
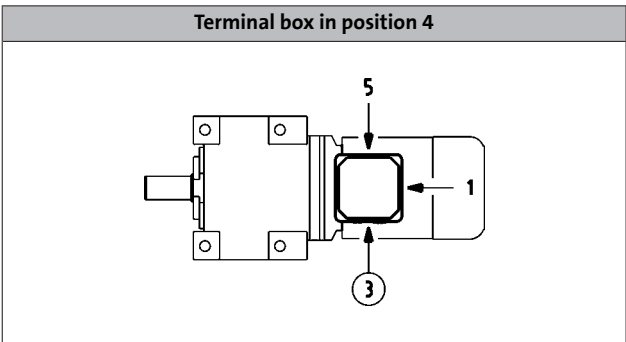
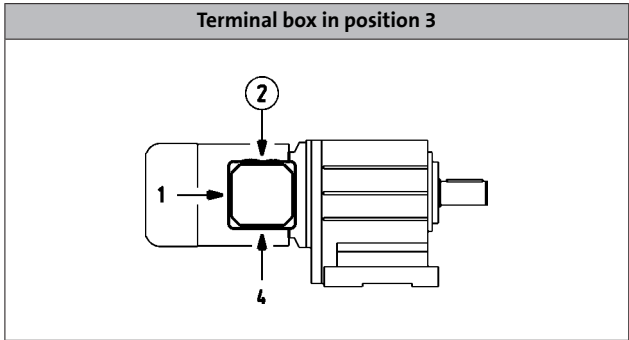
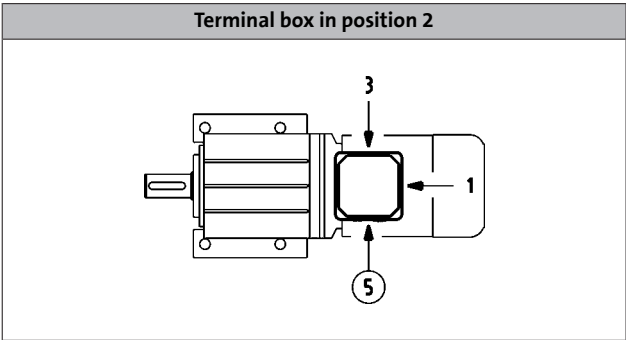
Size						
Motor						
	x	g ₁	m ₁	n ₂	P ₁	P ₂
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
063	21	100	75.0 93.0 ¹⁾	75.0 93.0 ¹⁾	M16x1.5 M20x1.5 ¹⁾	M20x1.5 M20x1.5
071	12 ¹⁾	117 ¹⁾				
	24	109	115	115	M20x1.5	M25x1.5
080	15 ¹⁾	126 ¹⁾				
090	14	150				
100	19	157				
112	20	166				
132	22	176				
	33	195	122	122	M32x1.5	M32x1.5

¹⁾ UL/CSA approval: cURus



Terminal box

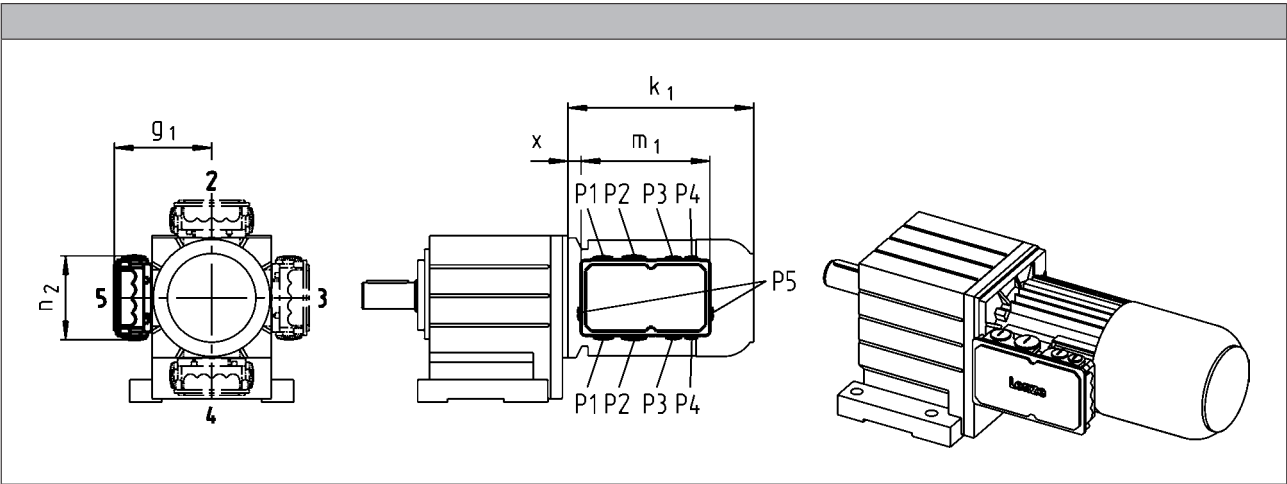
Cable entry position when using KK1





Terminal box

Dimensions of KK2

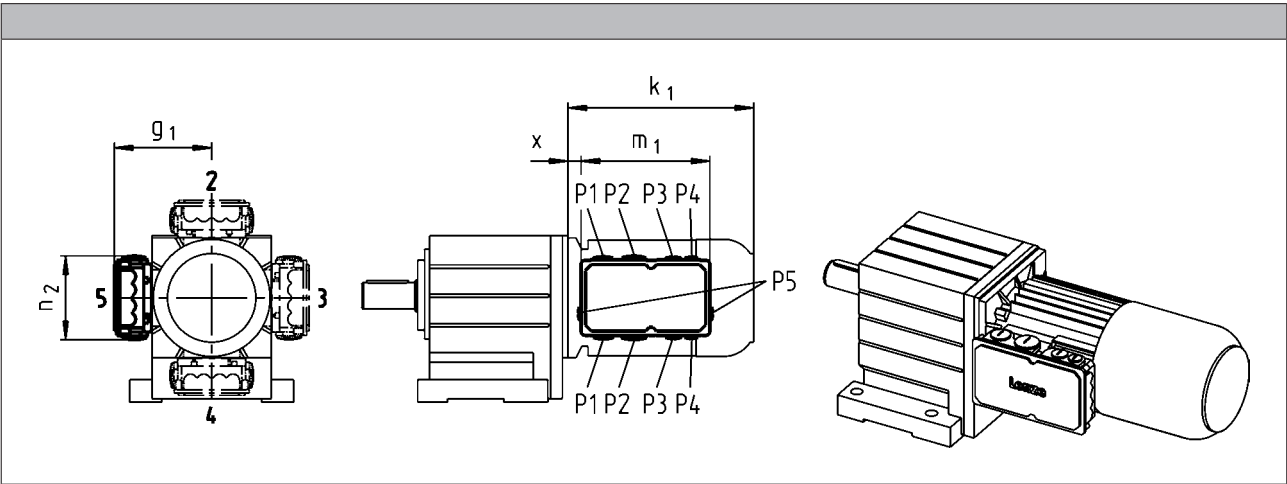


Size						
Motor						
	x	g ₁	m ₁	n ₂	P ₁	P ₂
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
063	13	107	136	103	M16x1.5	M20x1.5
071	15	118				
080	17	132				
090	22	137	152	121	M20x1.5	M25x1.5
100	23	147				
112	25	158				



Terminal box

Dimensions of KK3



Size									
Motor									
	x	g ₁	m ₁	n ₂	P ₁	P ₂	P ₃	P ₄	P ₅
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
063	2	124	195	125	M25x1.5	M32x1.5	M20x1.5	M20x1.5	
071	5	133							
080	15	142							
090	20	147							
100	21	158							
112	23	168							
132	38	187	226	127	M50x1.5	M16x1.5	M16x1.5	M16x1.5	
160	35	210							
180	73	230							
225	95	346							
			354	205		M63x1.5 ¹⁾	M50x1.5 ¹⁾		M16x1.5

¹⁾ Cable entry only possible at one position.
Terminal box position 2: cable entry at position 5.
Terminal box position 3: cable entry at position 2.
Terminal box position 4: cable entry at position 3.
Terminal box position 5: cable entry at position 4.

MD three-phase AC motors

Accessories

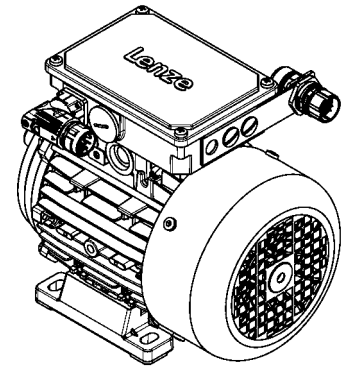


Plug connectors

ICN, HAN and M12 connectors (only for IG128-24V-H incremental encoder) are available for the three-phase AC motors.

ICN connector

A connector is used for power, brake and temperature monitoring. The connections to the feedback system and the blower each employ a separate connector.



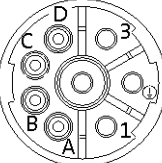
Connection for power, brake and temperature monitoring

The connectors can be rotated through 270° and are fitted with a bayonet catch for SpeedTec connectors. As this connector is also compatible with conventional union nuts, existing mating connectors can continue to be used without difficulty. The motor connection is determined in the terminal box and must be checked before commissioning.

► ICN 6-pole

Pin assignment			
Contact	Designation	Meaning	
1	BD1 / BA1	Brake +/AC	
2	BD2 / BA2	Brake /AC	
PE	PE	PE conductor	
4	U	Phase U power	
5	V	Phase V power	
6	W	Phase W power	

► ICN 8-pole

Pin assignment					
Contact	Designation	Meaning			
1	U	Phase U power			
PE	PE	PE conductor			
3	V	Phase V power			
4	W	Phase W power			
A	TB1 / TP1 / R1	Thermal sensor: TKO/PTC/ +KTY			
B	TB2 / TP2 / R2	Thermal sensor: TKO/PTC/-KTY			
C	BD1 / BA1	Brake +/AC	D <td>BD2 / BA2</td> <td>Brake /AC</td>	BD2 / BA2	Brake /AC

MD three-phase AC motors

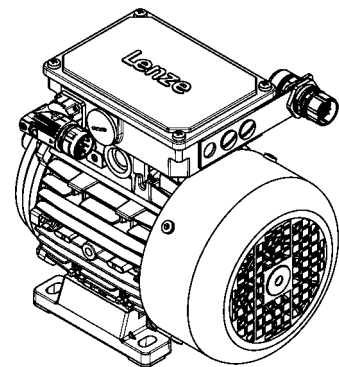
Accessories



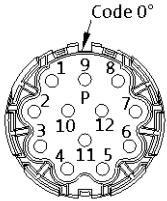
ICN connector

Feedback connection

All encoder systems (apart from IG128-24V-H) are also available with an ICN connector fixed to the motor terminal box for exceptionally fast commissioning. The connectors are fitted with a bayonet fixing, which is also compatible with conventional union nuts. Existing mating connectors can therefore continue to be used without difficulty.



► Resolver

Pin assignment			
Contact	Designation	Meaning	
1	+Ref	Transformer windings	
2	-Ref		
3	+VCC ETS	Supply: Electronic nameplate	
4	+COS	Cosine stator windings	
5	-COS		
6	+SIN	Sine stator windings	
7	-SIN		
8		Not assigned	
9			
10			
11	+KTY	KTY temperature sensor	
12	-KTY		

► Hiperface incremental encoder and SinCos absolute value encoder

Pin assignment		
Contact	Designation	Meaning
1	B	Track B/+SIN
2	A ⁻	Track A inverse/-COS
3	A	Track A/+COS
4	+U _B	Supply +
5	GND	Mass
6	Z ⁻	Zero track inverse/-RS485
7	Z	Zero track/+RS485
8		Not assigned
9	B ⁻	Track B inverse/-SIN
10		Not assigned
11	+KTY	KTY temperature sensor
12	-KTY	

Code 20°

MD three-phase AC motors

Accessories



ICN connector

Motor terminal box with ICN connectors - built-on accessories assignment: 2-pole motors

Motor type	M□□MAXX	M□□MAZE	M□□MALL	M□□MALZ
Motor frame size	Terminal box with ICN connector			
063-11 063-31	KK1			
071-11 071-31	KK1	KK2	KK1	KK2
080-11 080-31	KK1	KK2	KK1	KK2
090-31 090-11	KK1	KK2	KK1	KK2
100-31 100-41	KK1	KK2	KK1	KK2
112-31 112-41	KK1	KK2	KK1	KK2
132-21	KK1	KK3	KK1	KK3

Motor type	M□□MABR	M□□MABZ	M□□MABL
Motor frame size	Terminal box with ICN connector		
063-11 063-31	KK2		
071-11 071-31	KK2	KK2	
080-11 080-31	KK2	KK2	KK2
090-31 090-11	KK2	KK2	KK2
100-31 100-41	KK2	KK2	KK2
112-31 112-41	KK2	KK2	KK2
132-21	KK3	KK3	KK3

MD three-phase AC motors

Accessories



ICN connector

Motor terminal box with ICN connectors - built-on accessories assignment: 4-pole / 6-pole motors

Motor type	M□□MAXX	M□□MARS M□□MAIG M□□MAAG	M□□MAZE M□□MAHA	M□□MALL	M□□MALZ M□□MALH
Motor frame size	Terminal box with ICN connector				
063-02 063-22	KK1	KK2			
063-12 063-32 063-42	KK1	KK2			
071-32 071-42 071-13 071-33	KK1	KK2	KK2	KK1	KK1
080-13 080-32 080-33 080-42	KK1	KK2	KK2	KK1	KK1
090-12 090-32	KK1	KK2	KK2	KK1	KK1
100-12 100-32	KK1	KK2	KK2	KK2	KK2
112-22 112-32	KK1	KK2	KK2	KK1	KK1
132-12 132-22 132-32	KK1	KK3	KK3	KK1	KK1

MD three-phase AC motors

Accessories



ICN connector

Motor terminal box with ICN connectors - built-on accessories assignment: 4-pole / 6-pole motors

Motor type	M□□MABR	M□□MABS M□□MABI M□□MABA	M□□MABZ M□□MABH	M□□MABL
Motor frame size	Terminal box with ICN connector			
063-02 063-22	KK2	KK2		
063-12 063-32 063-42	KK2	KK2		
071-32 071-42 071-13 071-33	KK2	KK2	KK2	KK2
080-13 080-32 080-33 080-42	KK2	KK2	KK2	KK2
090-12 090-32	KK2	KK2	KK2	KK2
100-12 100-32	KK2	KK2	KK2	KK2
112-22 112-32	KK2	KK2	KK2	KK2
132-12 132-22 132-32	KK3	KK3	KK3	KK3

MD three-phase AC motors

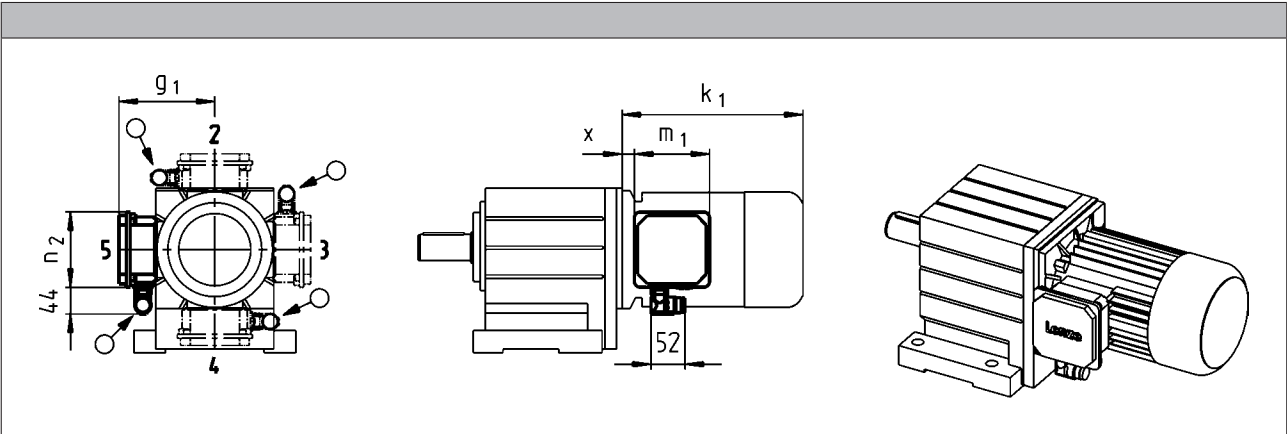
Accessories



ICN connector

Dimensions of KK1

- For motors with connectors, the connector position can be selected in accordance with the terminal box position.
- If preferred positions are not specified in the order, the connector will be positioned as circled on the diagram below.

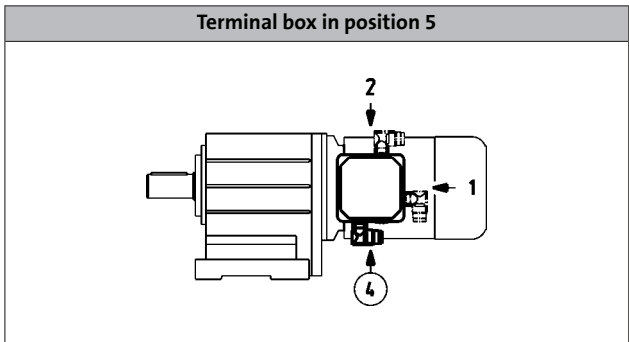
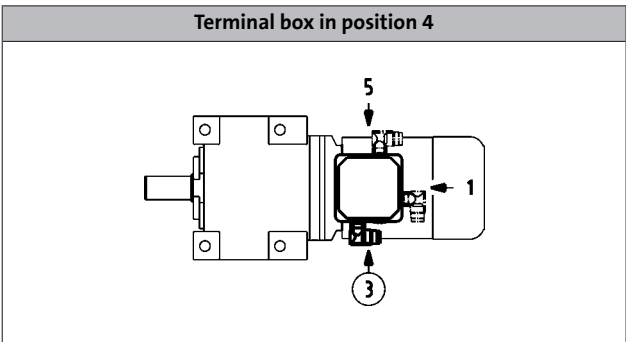
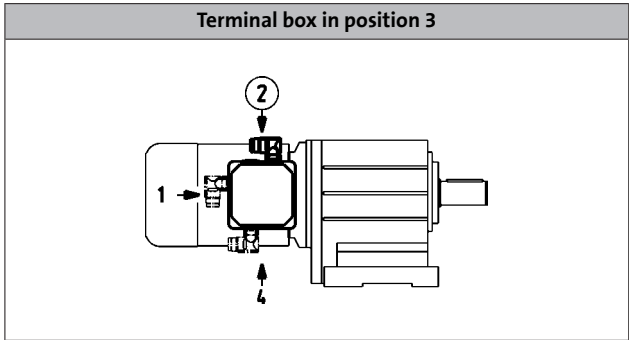
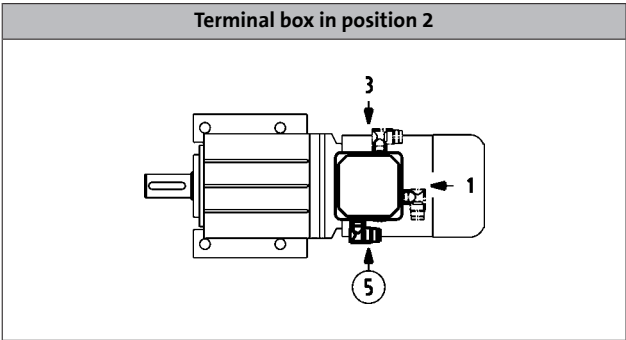


Size				
Motor				
	x	g ₁	m ₁	n ₂
	[mm]	[mm]	[mm]	[mm]
063	12	117	93.0	93.0
071	15	126		
080	14	150		
090	19	157	115	115
100	20	166		
112	22	176		
132	33	195	122	122



ICN connector

Connector position when using KK1



MD three-phase AC motors

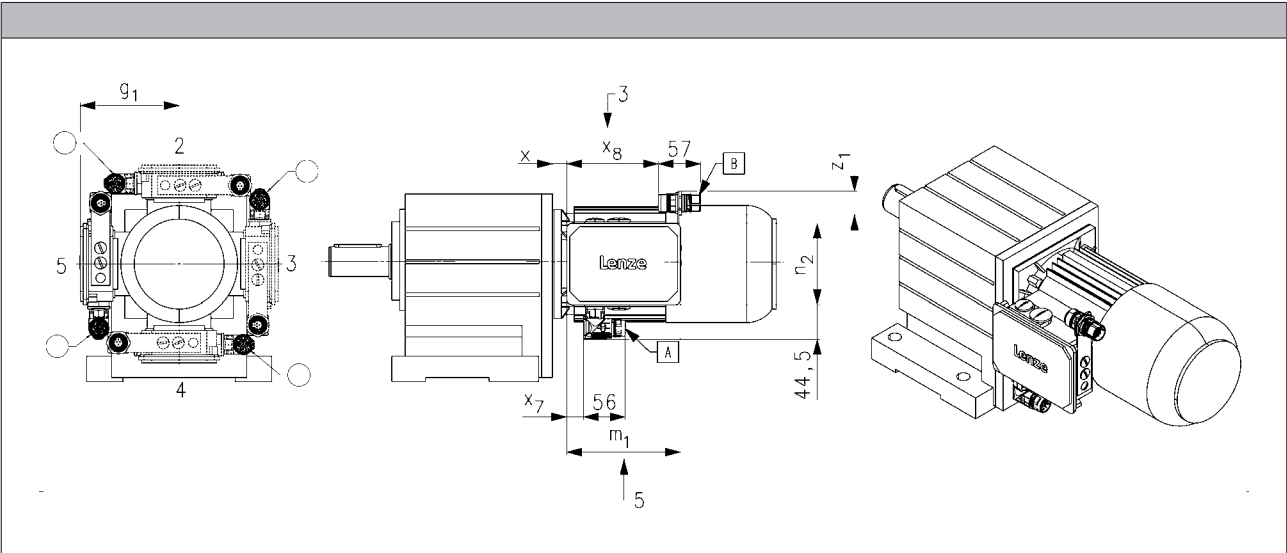
Accessories



ICN connector

Dimensions of KK2/KK3

- For motors with connectors, the connector position can be selected in accordance with the terminal box position.
- If preferred positions are not specified in the order, the connector will be positioned as circled on the diagram below.

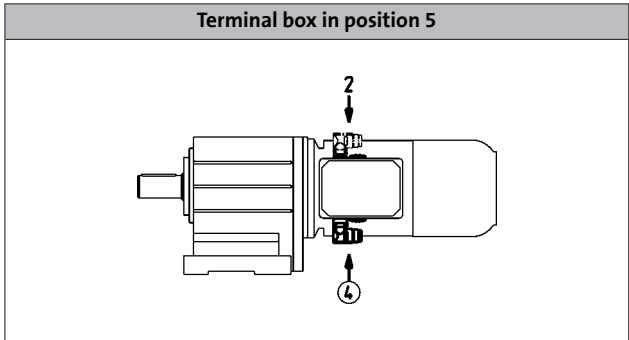
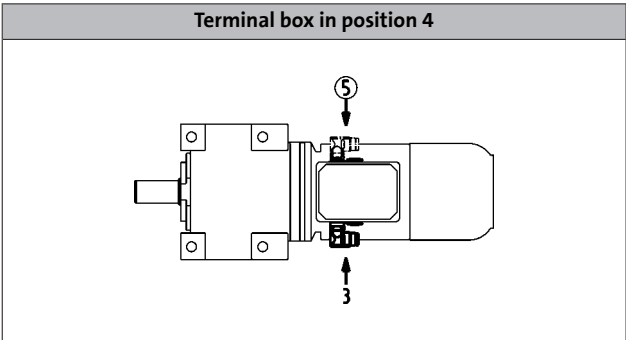
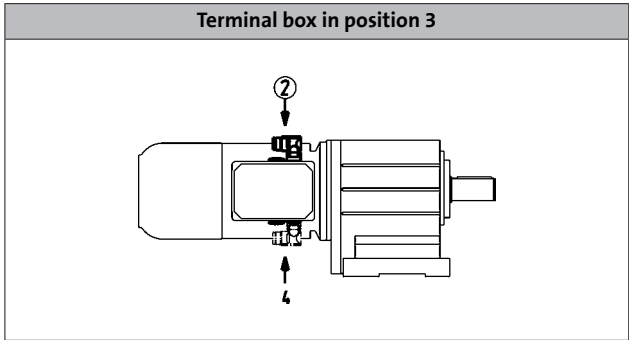
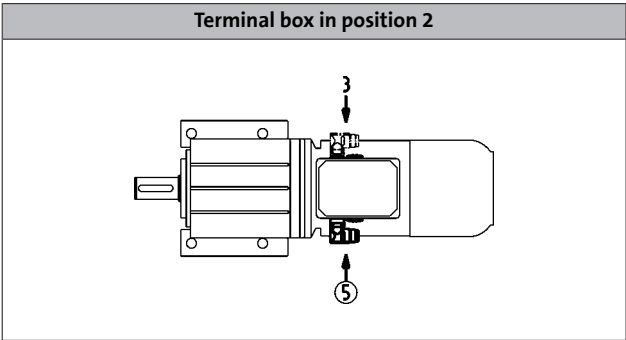


Size							
Motor							
	x	g ₁	m ₁	n ₂	x ₇	x ₈	z _{1, max}
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
063	13	107	136	103	16	109	43
071	15	118					
080	17	132	152	121	23	125	41
090	22	137					
100	23	147					
112	25	158	195	125	27	166	71
132	38	187					



ICN connector

Connector position when using KK2/KK3



MD three-phase AC motors

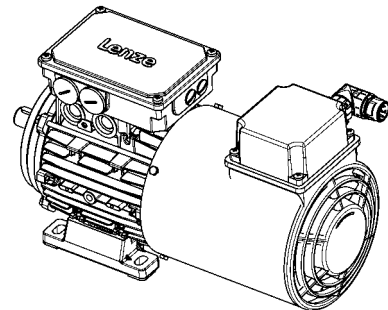
Accessories



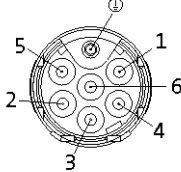
ICN connector

Blower connection

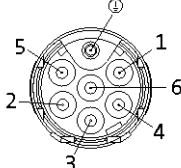
The blower is also optionally available with an ICN connector fixed to the terminal box of the blower for exceptionally fast commissioning. The connectors are fitted with a bayonet fixing, which is also compatible with conventional union nuts. Existing counter plugs can therefore continue to be used without difficulty.



► Blower 1-ph

Pin assignment			
Contact	Designation	Meaning	
PE	PE	PE conductor	
1	U1	Fan	
2	U2		
3		Not assigned	
4			
5			
6			

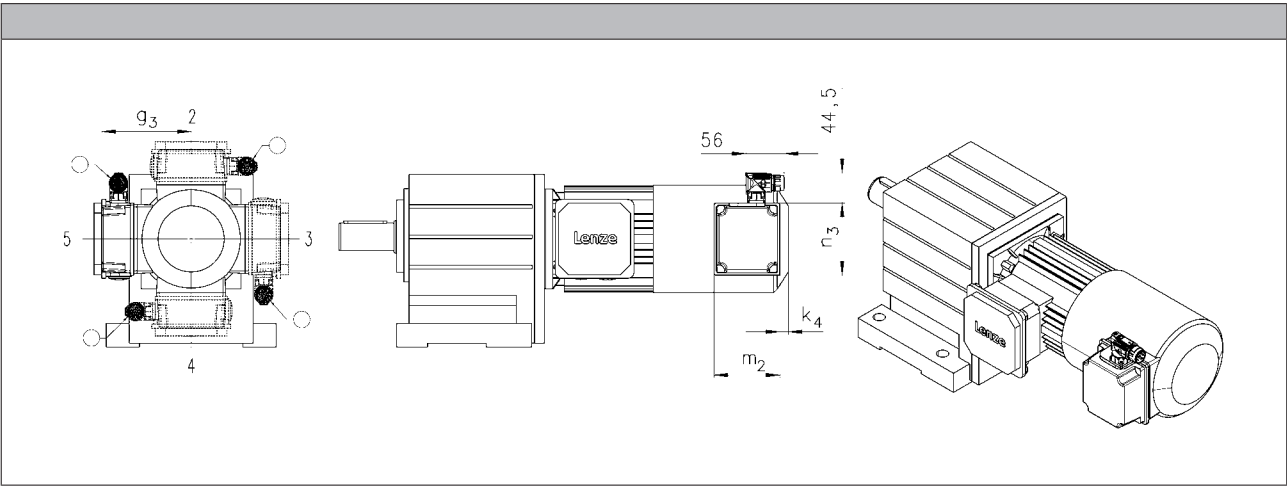
► Blower 3-ph

Pin assignment			
Contact	Designation	Meaning	
PE	PE	PE conductor	
1	U	Phase U power	
2		Not assigned	
3	V	Phase V power	
4		Not assigned	
5			
6	W	Phase W power	



ICN connector

Dimensions of blower



Size				
Motor				
	k ₄	g ₃	m ₂	n ₃
	[mm]	[mm]	[mm]	[mm]
063	12	115	95	105
071		122		
080	13	132	96	106
090	22	141	95	105
100		150		
112		162		
132		182		
160	31	209	96	106
180				
225				

- In addition, the cover of the blower terminal box (including connectors) can be rotated progressively through 90° if necessary.

MD three-phase AC motors

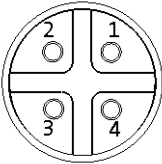
Accessories



M12 connector

IG128-24V-H incremental encoder connection

As a standard this incremental encoder is equipped with a connection cable of about 0.5 m length and with a common industry standard M12 connector at its end.

Pin assignment			
Contact	Designation	Meaning	
1	+U _B	Supply +	
2	B	Track B	
3	GND	Mass	
4	A	Track A	

MD three-phase AC motors

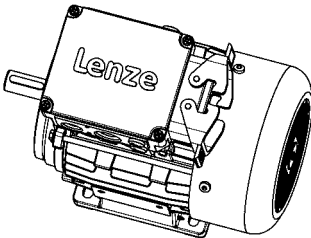
Accessories



HAN connector

10E

In the case of the rectangular HAN-10E connectors, all six ends of the three winding phases are taken out to the power contacts. The motor circuit is therefore determined in the mating connector.



Pin assignment		
Contact	Meaning	
1	Terminal board: U1	
2	Terminal board: V1	
3	Terminal board: W1	
4	Brake +/AC	
5	Brake -/AC	
6	Terminal board: W2	
7	Terminal board: U2	
8	Terminal board: V2	
9	Thermal sensor: +KTY/PTC/TKO	
10	Thermal sensor: KTY/PTC/TKO	

MD three-phase AC motors

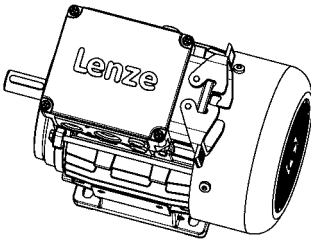
Accessories



HAN connector

Modular

The connector is available with two different power modules (16 A or 40 A), depending on the rated motor current. The motor connection is determined in the terminal box and must be checked before commissioning.



► HAN modular 16 A

Pin assignment			
Module	Contact	Meaning	
B		Dummy module	
C	1	Thermal sensor: +KTY/PTC/TKO	
	2	Brake +/-AC	
	3	Brake -/AC	
	4	Rectifier: Switching contact	
	5		
	6	Thermal sensor: KTY/PTC/TKO	

► HAN modular 40 A

Pin assignment			
Module	Contact	Meaning	
A	1	Terminal board: U1	
	2	Terminal board: V1	
	3	Terminal board: W1	
B		Dummy module	
C	1	Thermal sensor: +KTY/PTC/TKO	
	2	Brake +/-AC	
	3	Brake -/AC	
	4	Rectifier: Switching contact	
	5		
	6	Thermal sensor: KTY/PTC/TKO	

MD three-phase AC motors

Accessories



HAN connector

Motor terminal box with HAN connectors - built-on accessories assignment: 2-pole motors

Motor type	M□□MAXX M□□MABR	M□□MAZE M□□MABZ	M□□MALL M□□MABL	M□□MALZ
Motor frame size	Terminal box with HAN connector			
063-11 063-31	HAN-10E HAN modular			
071-11 071-31	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
080-11 080-31	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
090-31 090-11	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
100-31 100-41	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
112-31 112-41	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
132-21	HAN modular	HAN modular	HAN modular	HAN modular

MD three-phase AC motors

Accessories



HAN connector

Motor terminal box with HAN connectors - built-on accessories assignment: 4-pole / 6-pole motors

Motor type	M□□MAXX M□□MABR	M□□MAZE M□□MAHA M□□MABZ M□□MABH	M□□MALL M□□MABL	M□□MALZ M□□MALH
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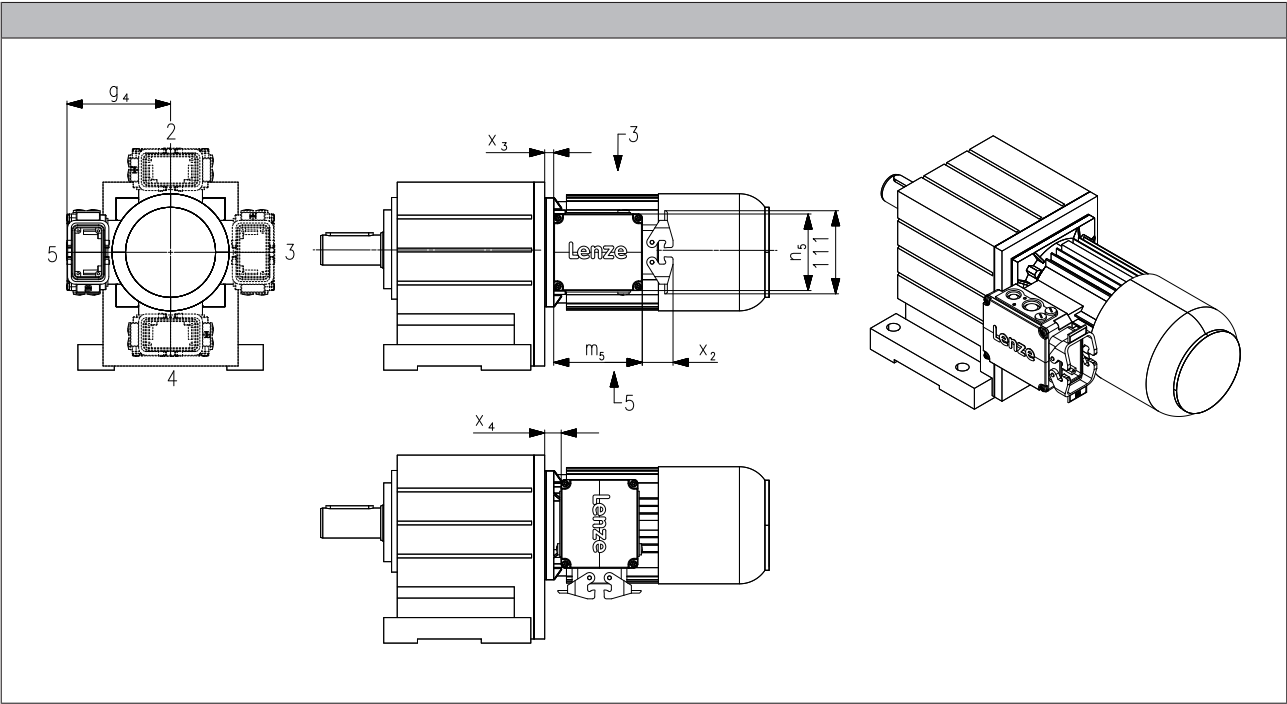
Motor frame size	Terminal box with HAN connector			
063-02 063-22	HAN-10E HAN modular			
063-12 063-32 063-42	HAN-10E HAN modular			
071-32 071-42 071-13 071-33	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
080-13 080-32 080-33 080-42	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
090-12 090-32	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
100-12 100-32	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
112-22 112-32	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular	HAN-10E HAN modular
132-12 132-22 132-32	HAN modular	HAN modular	HAN modular	HAN modular
160-22 160-32	HAN modular			



HAN connector

Dimensions

- For motors with connectors, the connector position can be selected in accordance with the terminal box position.
- Unless the connector position is specified, it will be supplied in position 1.

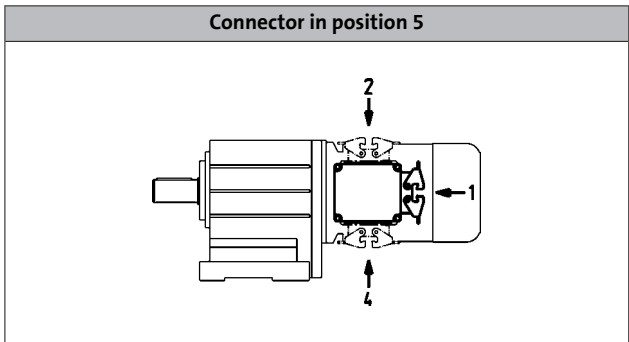
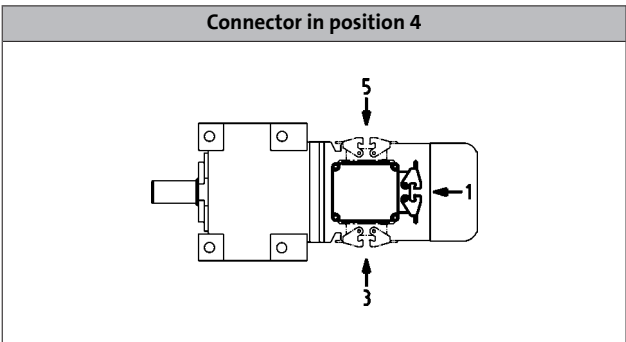
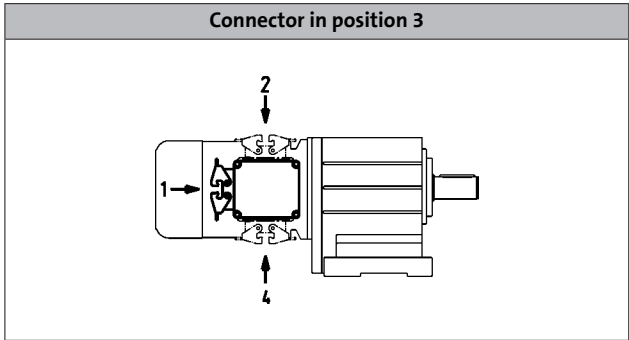
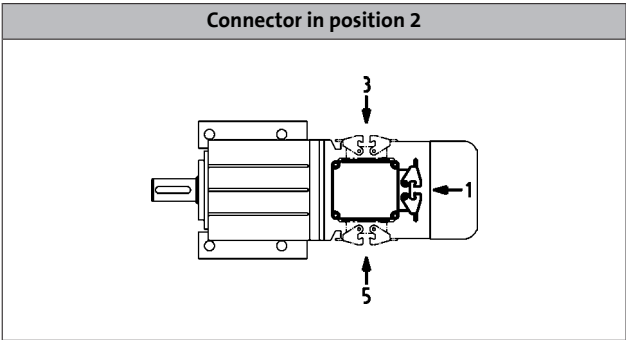


Size			
Motor			
	g ₄	x ₃	x ₄
	[mm]	[mm]	[mm]
063	120	5.00	6.00
071	129	7.00	8.00
080	138	11.0	19.0
090	143	15.0	23.0
100	154	16.0	24.0
112	164	13.5	21.5
132	233	34.5	4.50
160	248	39.0	9.00



HAN connector

Position of connector



MD three-phase AC motors

Accessories



Handwheel

Design	Handwheel made from alloy, smooth wheel surface
Function	Manual operation: • Emergency operation • Setting-up operation for machines/systems
Note	The increased moment of inertia must be taken into account during project planning! For frequent switching operations, in particular if the direction of rotation changes: Please contact Lenze.

Size	Moment of inertia	Mass
Motor	Additional	Additional
	J	m
	[kgcm ²]	[kg]
071	16.0	0.60
080	16.0	0.60
090	16.0	0.60
100	16.0	0.60
112	16.0	0.60
132	139	1.80

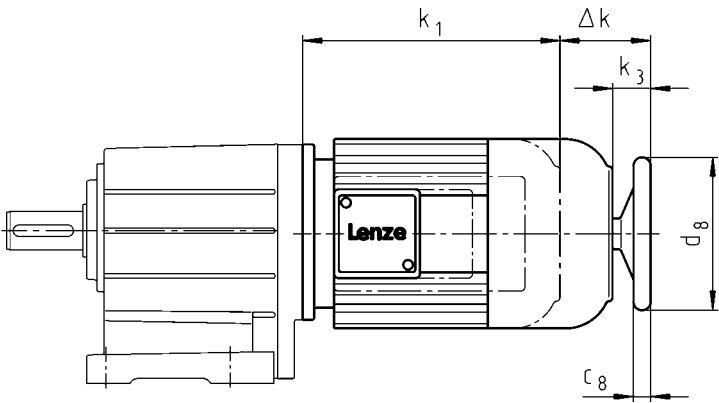
MD three-phase AC motors

Accessories



Handwheel

Dimensions, self-ventilated (4/6-pole)



Motor type	M□□MAHA M□□MABH M□□MALH
Built-on accessories	

Motor frame size				
	Δk	k_3	c_8	d_8
	[mm]	[mm]	[mm]	[mm]
071-32 071-42 071-13 071-33	70	34.0	18.0	160
080-32 080-42 080-13 080-33	91	34.0	18.0	160
090-12 090-32	80	32.0	18.0	160
100-12 100-32	94	42.0	18.0	160
112-22 112-32	107	39.0	18.0	160
132-12 132-22 132-32	126	50.0	26.0	250

MD three-phase AC motors

Accessories



Centrifugal mass

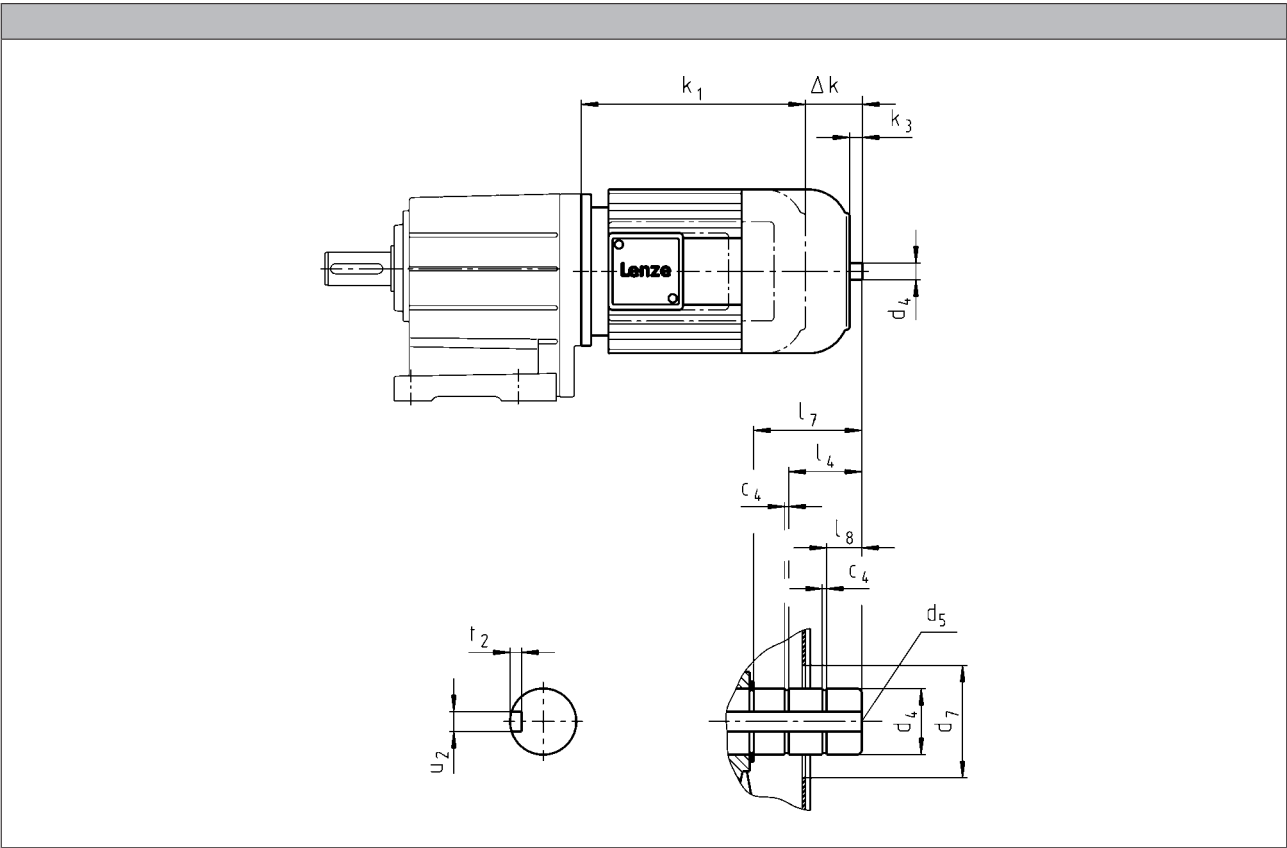
Note	The increased moment of inertia must be taken into account during project planning! For frequent switching operations, in particular if the direction of rotation changes: Please contact Lenze.
Function	Increased motor centrifugal mass for smooth starting/braking
Design	Integral fan made from cast iron

Motor frame size	Moment of inertia	Mass
	Additional	Additional
	J	m
	[kgcm ²]	[kg]
071	18.0	1.20
080	29.0	1.40
090-□1	83.0	2.80
090-□2	55.0	2.00
100	77.0	2.50
112	153	3.80
132	356	6.00



2nd shaft end

Dimensions, self-ventilated (2-pole)



Motor type	M□□MAZE M□□MABZ M□□MALZ
Built-on accessories	

Motor frame size												
	Δ k	k ₃	c ₄	d ₄	d ₄	d ₅	d ₇ ¹⁾	l ₄	l ₇	l ₈	u ₂	t ₂
				h6	j6							
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
071-11 071-31	47	11.0	1.10	14.0		M5	34.0		19.0	3.00	5.00	3.00
080-11 080-31	68	9.00	1.30	19.0		M6	34.0		19.0	4.50	6.00	3.20
090-11 090-31	57	9.00	1.30		20.0	M6	34.0		19.5	5.50	6.00	3.50
100-31 100-41	71	18.5	1.30		25.0	M10	34.0	17.0	32.5	10.5	8.00	4.00
112-31 112-41	84	16.0	1.30		25.0	M10	34.0	17.0	28.5	7.00	8.00	4.00
132-21	101	24.5	1.60		30.0	M10	48.0	24.5	42.0	8.50	8.00	4.00

¹⁾ During operation, appropriate measures must be taken to make fan cover opening safe.

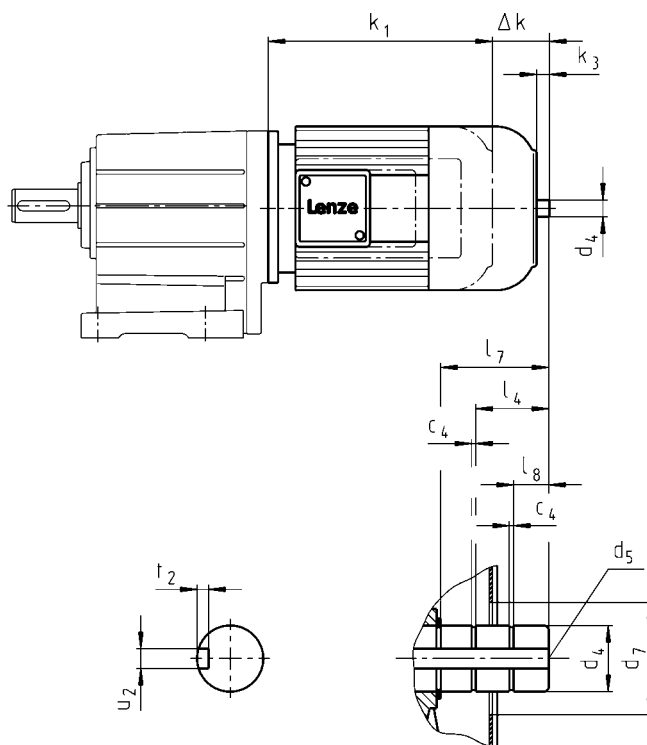
MD three-phase AC motors

Accessories



2nd shaft end

Dimensions, self-ventilated (4/6-pole)



Motor type	
Built-on accessories	M□□MAZE M□□MABZ M□□MALZ

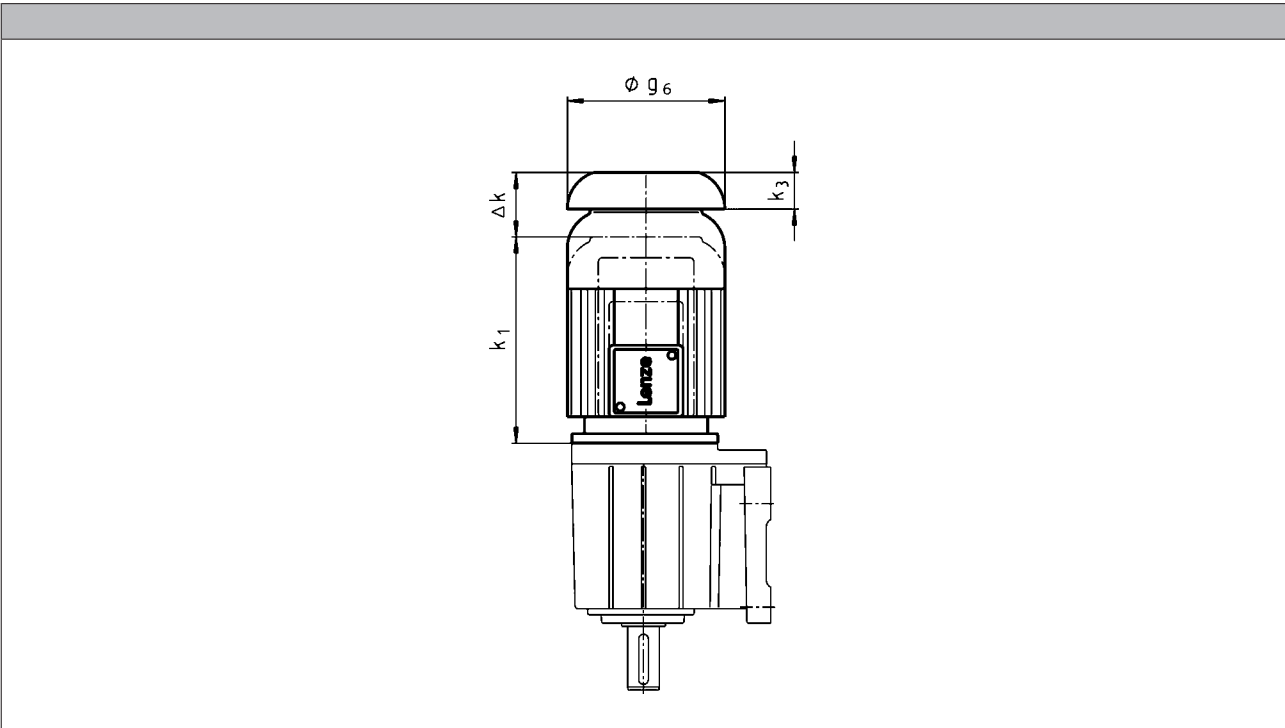
Motor frame size	Δ k	k ₃	c ₄	d ₄ h6	d ₄ j6	d ₅	d ₇ ¹⁾	l ₄	l ₇	l ₈	u ₂	t ₂
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
071-32 071-42 071-13 071-33	47	11.0	1.10	14.0		M5	34.0		19.0	3.00	5.00	3.00
080-32 080-42 080-13 080-33	68	9.00	1.10	14.0		M5	34.0		19.0	4.50	5.00	3.00
090-12 090-32	57	9.00	1.10	14.0		M5	34.0		19.0	5.00	5.00	3.00
100-12 100-32	71	18.5	1.30		20.0	M6	34.0	17.0	32.5	10.5	6.00	3.50
112-22 112-32	84	16.0	1.30		20.0	M6	34.0	17.0	28.5	7.00	6.00	3.50
132-12 132-22 132-32	101	24.5	1.60		30.0	M10	46.0	24.5	42.0	8.50	8.00	4.00

¹⁾ During operation, appropriate measures must be taken to make fan cover opening safe.



Protection cover

Dimensions, self-ventilated (2-pole)

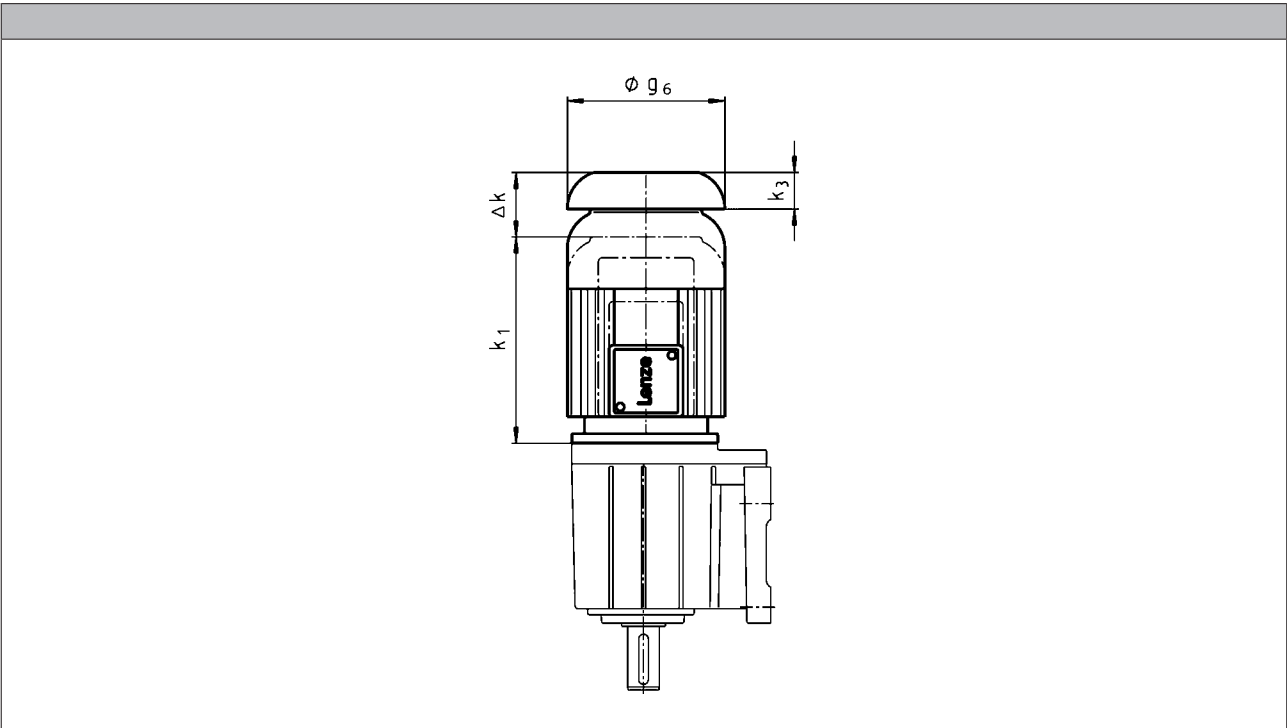


Motor type						
	M□□MAXX	M□□MABR	M□□MABL	M□□MALL		
Motor frame size						
	Δ k	Δ k	Δ k	Δ k	k ₃	g ₆
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
063-11 063-31	26	66			11.0	123
071-11 071-31	26	78	78	26	12.0	138
080-11 080-31	26	99	99	30	16.0	156
090-11 090-31	26	94	94	26	15.0	176
100-31 100-41	31	107	107	107	17.0	194
112-31 112-41	31	121	121	31	18.0	218
132-21	31	141	141	31	20.0	257



Protection cover

Dimensions, self-ventilated (4/6-pole)

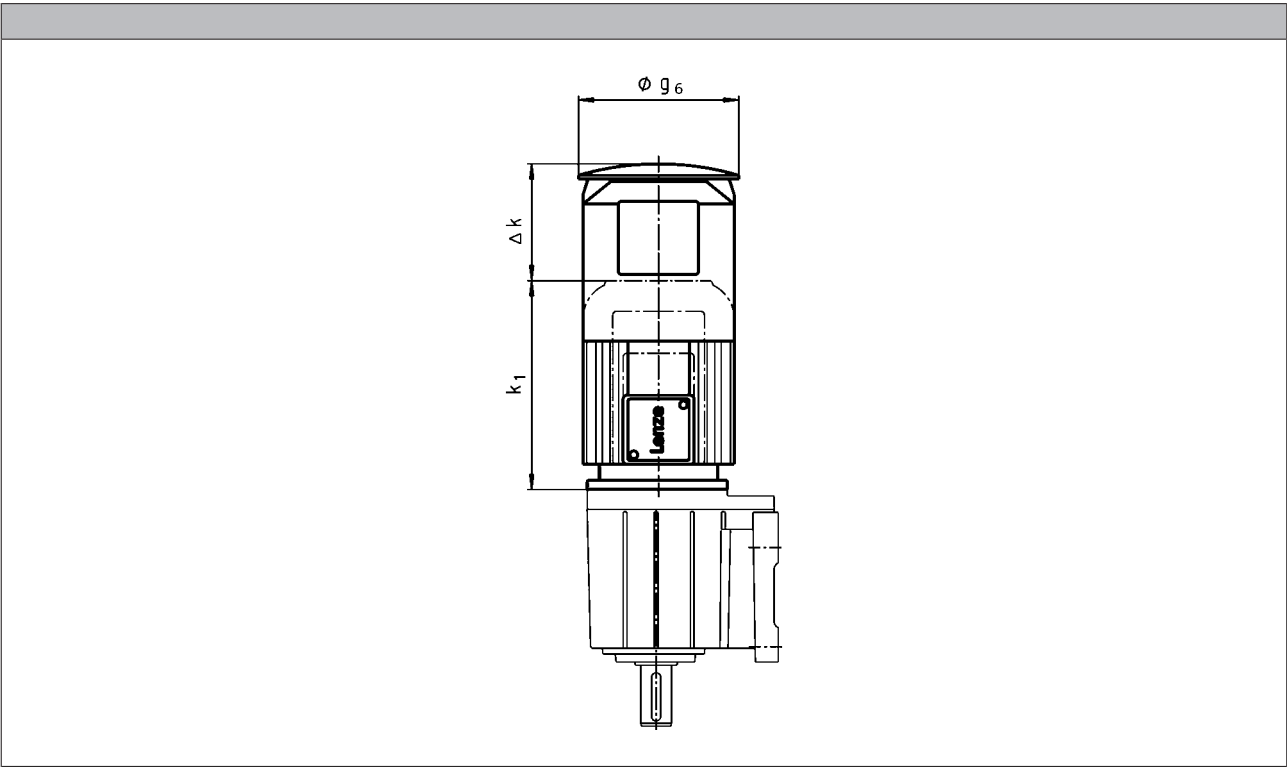


Motor type								
	M□□MAXX	M□□MABR	M□□MABS M□□MABI M□□MABA	M□□MABL	M□□MARS M□□MAIG M□□MAAG	M□□MALL		
Motor frame size	Δ k	Δ k	Δ k	Δ k	Δ k	Δ k	k ₃	g ₆
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
063-02 063-22		97	160		97		11.0	123
063-12 063-32 063-42	26	66	129		82		11.0	123
071-32 071-42 071-13 071-33	26	78	122	78	78	26	12.0	138
080-32 080-42 080-13 080-33	26	99	137	99	127	30	16.0	156
090-12 090-32	26	94	131	94	113	26	15.0	176
100-12 100-32	31	107	132	107	112	107	17.0	194
112-22 112-32	31	121	151	121	111	31	18.0	218
132-12 132-22 132-32	31	141	156	141	134	31	20.0	257
160-22 160-32	37	142	228		120		25.0	310



Protection cover

Dimensions, forced ventilated (2-pole)



Motor type			
	M□□MAXX	M□□MABR	
Motor frame size	Δ k	Δ k	g ₆
	[mm]	[mm]	[mm]
063-11	169	209	133
063-31			
071-11	165	202	150
071-31			
080-11	168	224	170
080-31			
090-11	157		
090-31			
100-31	137	198	210
100-41			
112-31	135	216	249
112-41			
132-21	140	226	300

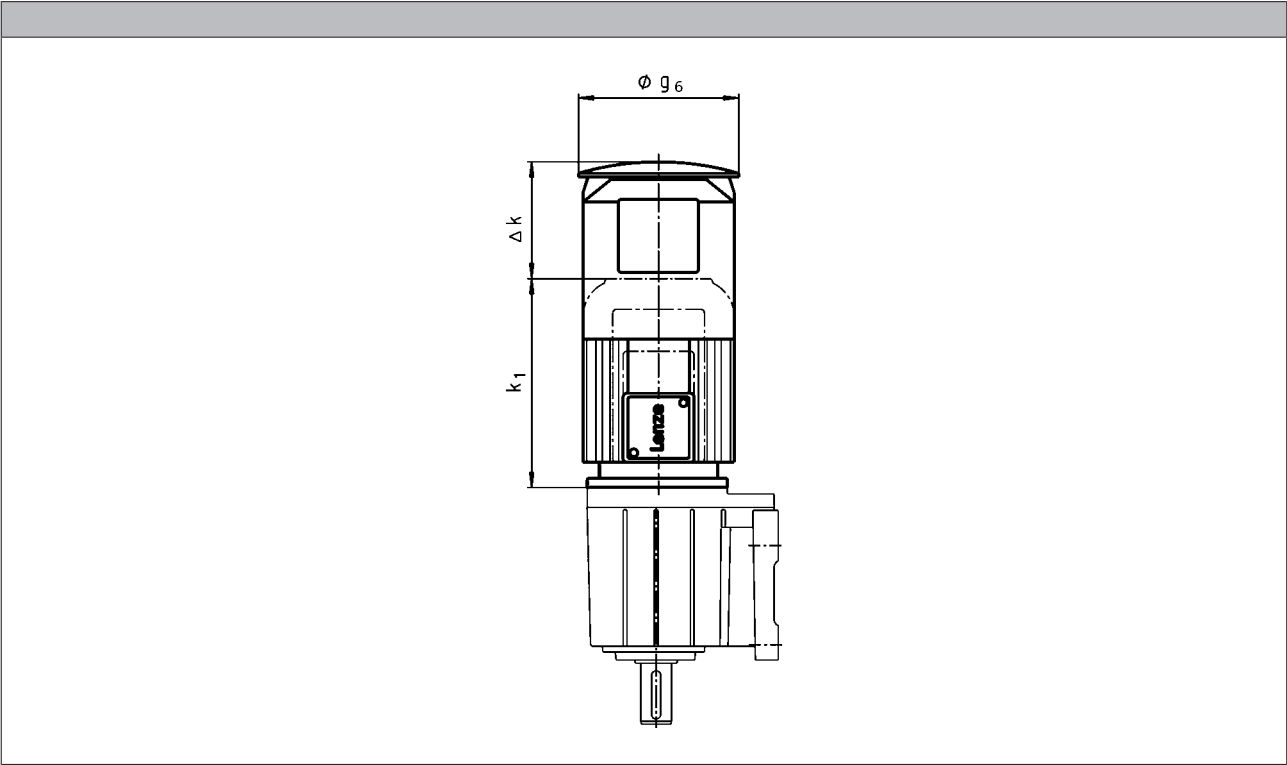
MD three-phase AC motors

Accessories



Protection cover

Dimensions, forced ventilated (4/6-pole)



Motor type				
	M□□MAXX	M□□MABR M□□MABS M□□MABI M□□MABA	M□□MARS M□□MAIG M□□MAAG	

Motor frame size				
	Δ k	Δ k	Δ k	g ₆
	[mm]	[mm]	[mm]	[mm]
063-12 063-32 063-42	169	209	209	133
071-32 071-42 071-13 071-33	165	202	202	150
080-32 080-42 080-13 080-33	168	224	224	170
090-12 090-32	157	210	210	188
100-12 100-32	137	198	198	210
112-22 112-32	135	216	216	249
132-12 132-22 132-32	140	226	226	300
160-22 160-32	155	267	267	338

MD three-phase AC motors

Accessories



MD three-phase AC motors

Accessories



MD three-phase AC motors

Accessories



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