Operating instructions

3. TECHNICAL DATA

3.1 Product drawing
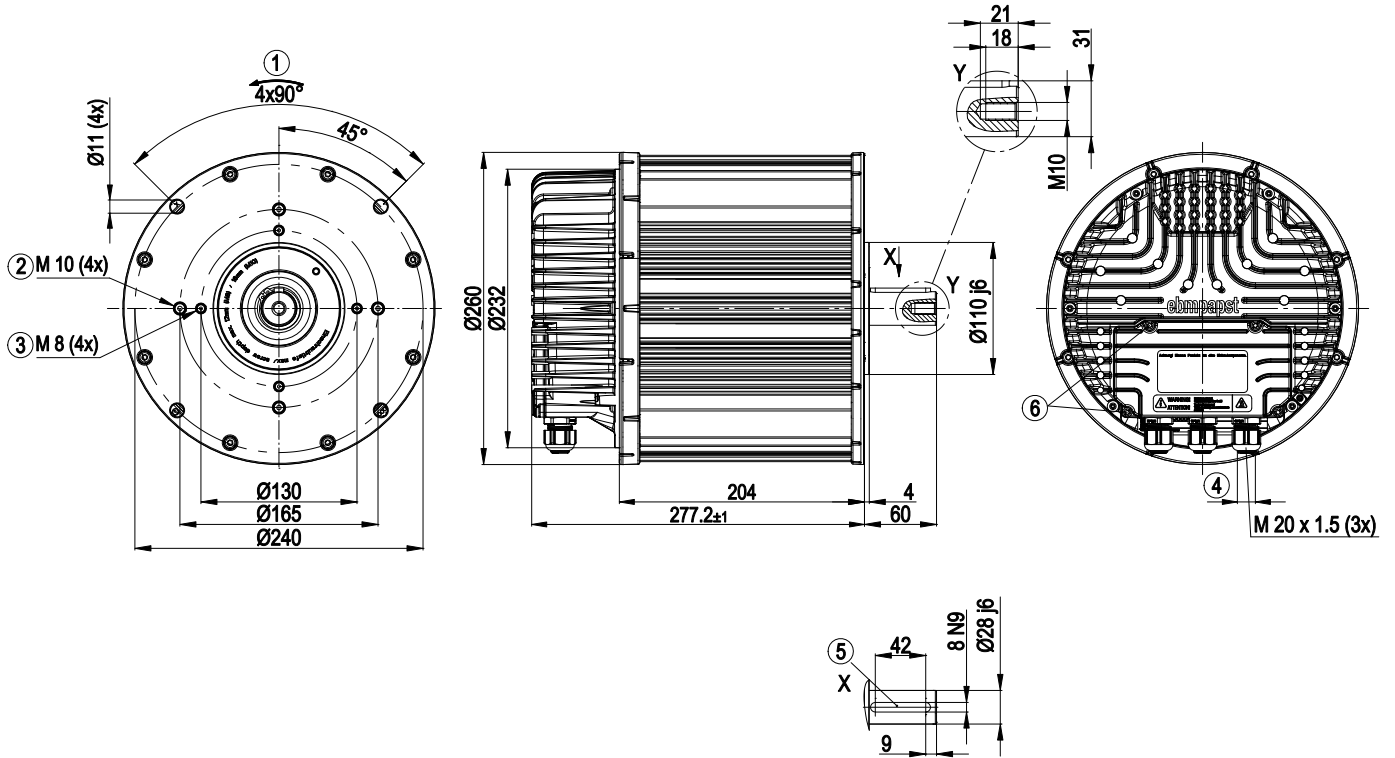
All measures have the unit mm.

1	Direction of rotation counter-clockwise, seen on shaft
2	Depth of screw max. 16 mm (M 10)
3	Depth of screw max. 12 mm (M 8)
4	Cable diameter: min. 4 mm, max. 10 mm, tightening torque: 4±0.6 Nm
5	Groove depth 4 mm
6	Tightening torque 3.5±0.5 Nm

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3.2 Nominal data

Motor	M3G150-IF

Phase	3~
Nominal voltage / VAC	400
Nominal voltage range / VAC	380 .. 480
Frequency / Hz	50/60

Type of data definition	ml
State	prelim.
Speed / min⁻¹	1500
Power input / W	2100
Power output / W	1890
Current draw / A	3.3
Rated torque / Ncm	1200
Min. ambient temperature / °C	-25
Max. ambient temperature / °C	40

ml = Max. load · me = Max. efficiency · fa = Running at free air
cs = Customer specs · cu = Customer unit

Subject to alterations

3.3 Technical features

Mass	26.2 kg
Size	150 mm
Material of electronics housing	Die-cast aluminium
Housing material	Die-cast aluminium
Direction of rotation	Counter-clockwise, seen on shaft
Type of protection	IP 55
Insulation class	"F"
Humidity class	F3-1
Mounting position	Any
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Output 20 VDC, max. 50 mA - Output for slave 0-10 V - Operation and alarm display - Input for sensor 0-10 V or 4-20 mA - External 24 V input (programming) - External release input - Alarm relay - Integrated PID controller - Motor current limit - PFC, passive - RS485 MODBUS RTU - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage / phase failure detection

Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	I (if earth wire is connected by customer)
Product conforming to standard	EN 61800-5-1; CE

ℹ️ For cyclic speed loads, note that the rotating parts of the device are designed for maximum one million load cycles. If you have specific questions, contact ebm-papst for support.

3.4 Mounting data

⇒ Secure the mounting screws against accidentally coming loose (e.g. by using self-locking screws).

Strength class for mounting screws	8.8

You can obtain additional mounting data from the product drawing if necessary.

3.5 Transport and storage conditions

⇒ Use the device in accordance with its protection type.

Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C

3.6 Electromagnetic compatibility

EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)

ℹ️ If several devices are switched in parallel on the mains side so that the line current of the arrangement is in the range of 16 - 75 A, then this arrangement conforms to IEC 61000-3-12 provided that the short-circuit power S_{sc} at the connection point of the customer system to the public power system is greater than or equal to 120 times the rated output of the arrangement.
It is the responsibility of the installation engineer or operator/ owner of the device to ensure, if necessary after consultation with the network operator, that this device is only connected to a connection point with a S_{sc} value that is greater than or equal to 120 times the rated output of the arrangement.

Translation of the original operating instructions

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