EC motor

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Nominal data

Type	**M3G112-GA33-27**
Motor	**M3G112-GA**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed	min^{-1}	1250
Power input	W	770
Power output	W	655
Current draw	A	3.4
Rated torque	Ncm	500
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

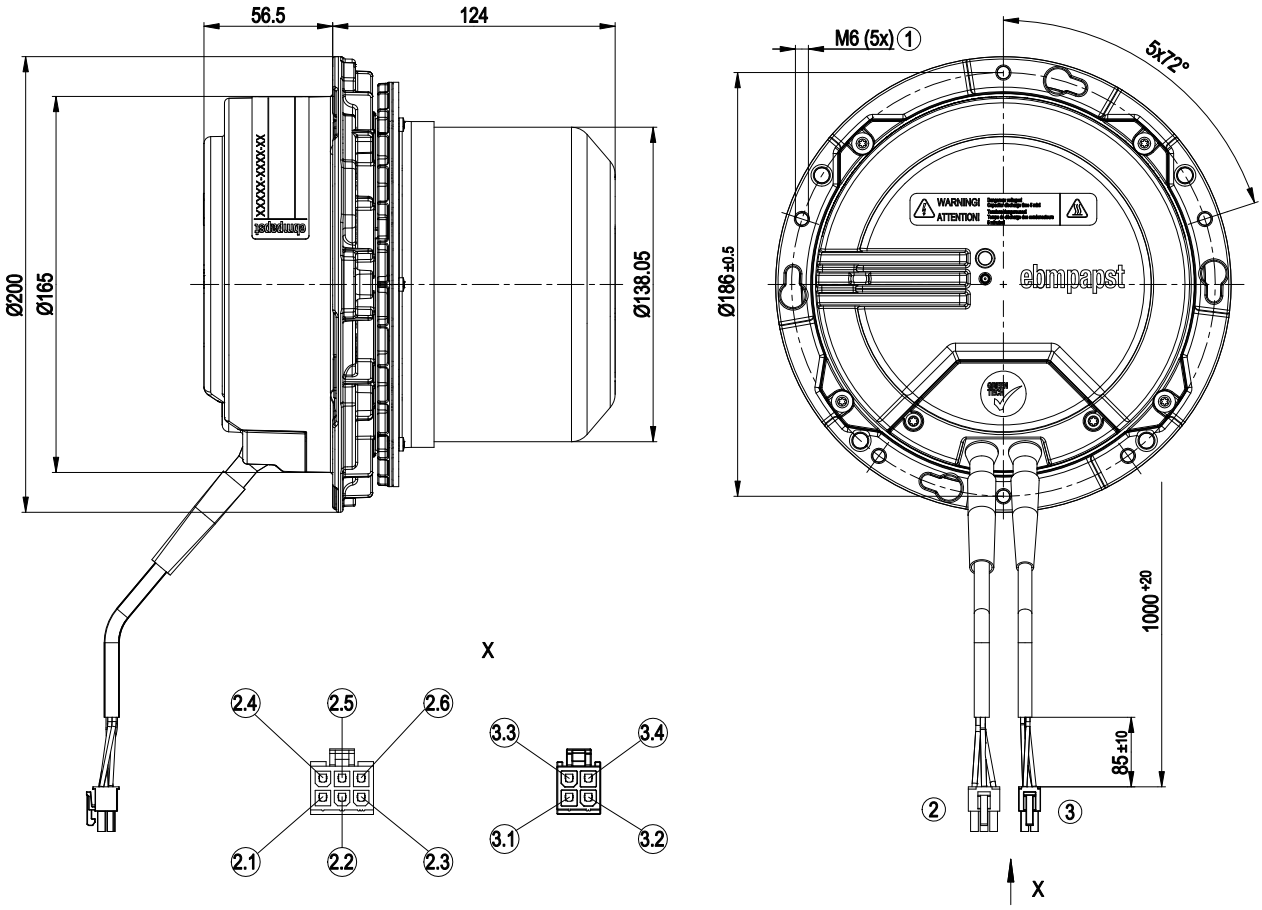
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Technical features

Mass	7.7 kg
Size	112 mm
Material of electronics housing	Die-cast aluminium
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Operation and alarm display: reversible voltage output 0 V / +15 V - Integrated PID controller - Motor current limit - PFC, active - RS485 ebmBUS - Soft start - 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
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Approval	CCC

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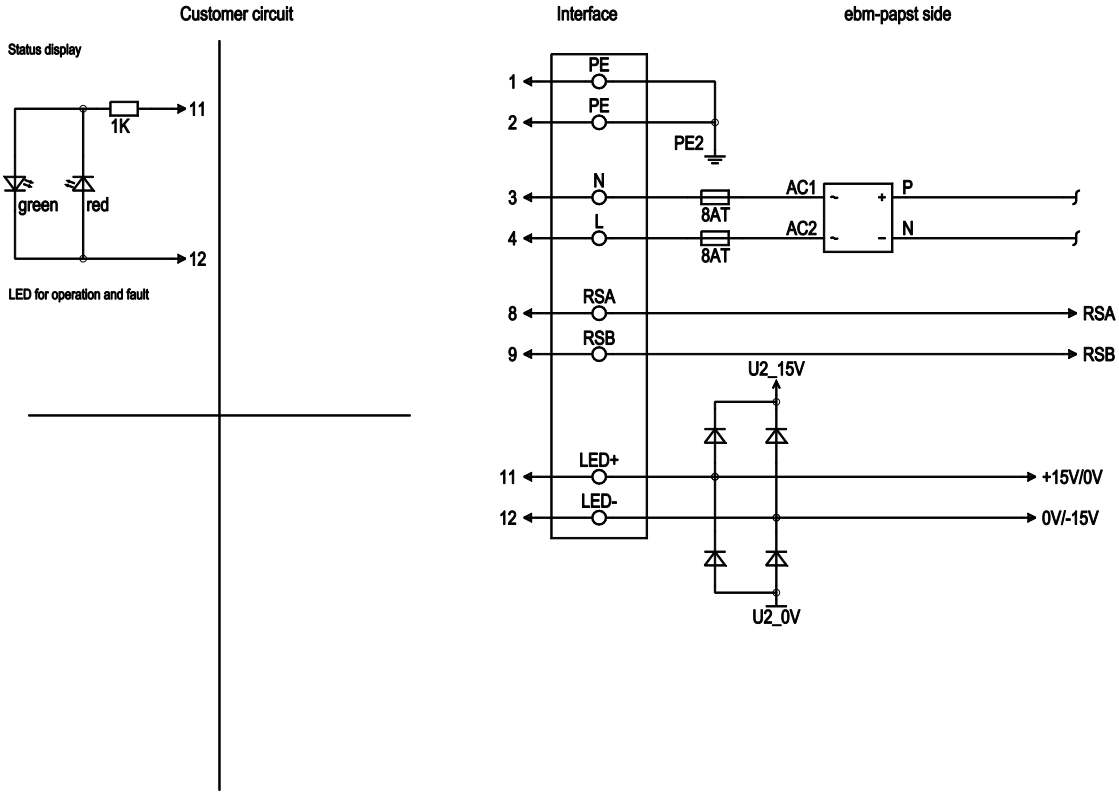
Product drawing



1	Depth of screw max. 16 mm
2	Connection line PVC AWG18 with connector shell Molex, order No. 39-01-2065 with 3x female terminal Molex order No. 39-00-0038
2.1	Not assigned
2.2	PE (green/yellow)
2.3	Not assigned
2.4	L (black)
2.5	Not assigned
2.6	N (blue)
3	Connection line PVC AWG22 with connector shell Molex, order No. 39-01-2040 with 4x female terminal Molex order No. 39-00-0038
3.1	RSA (yellow)
3.2	RSB (white)
3.3	+15V (red)
3.4	0V (blue)

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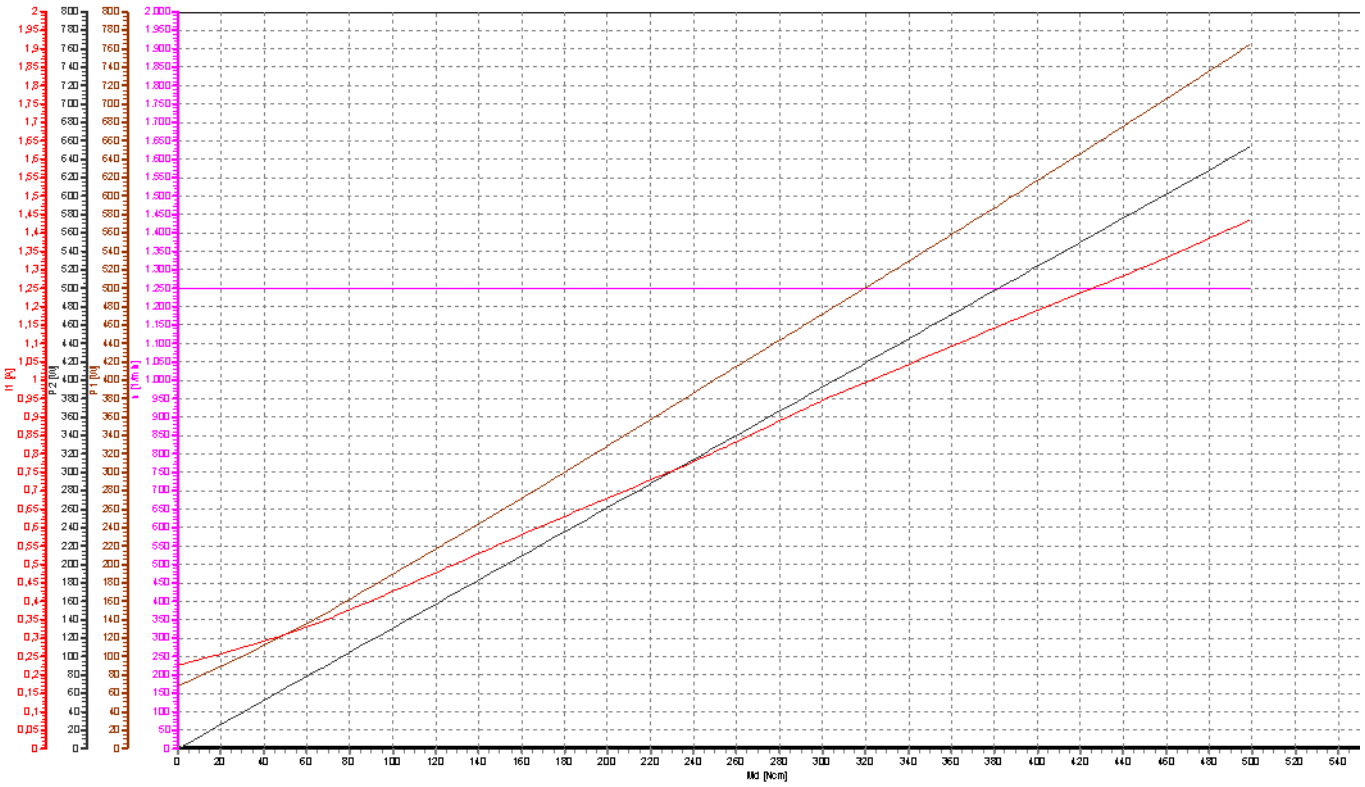
Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1, 2	PE	green/yellow	Protective earth
1	3	N	blue	Supply voltage, neutral conductor, for voltage range refer to rating plate, 50/60 Hz
1	4	L	black	Supply voltage, phase, for voltage range refer to rating plate, 50/60 Hz
2	8	RSA	yellow	RS485 interface for ebm BUS, RSA, SELV
2	9	RSB	white	RS485 interface for ebmBUS, RSB, SELV
2	11	LED+	red	Voltage output 15 V (+15 % / -10 %) max. 30 mA, Supply voltage for external device (e.g. status display for LED), SELV
2	12	LED-	blue	Signal ground for control interface, SELV

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Charts: Air flow



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