EC motor

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Nominal data

Type	**M3G055-BI11-18**
Motor	**M3G055-BI**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	3600
Power input	W	60
Power output	W	45
Current draw	A	1.0
Rated torque	Ncm	12
Max. ambient temperature	°C	50

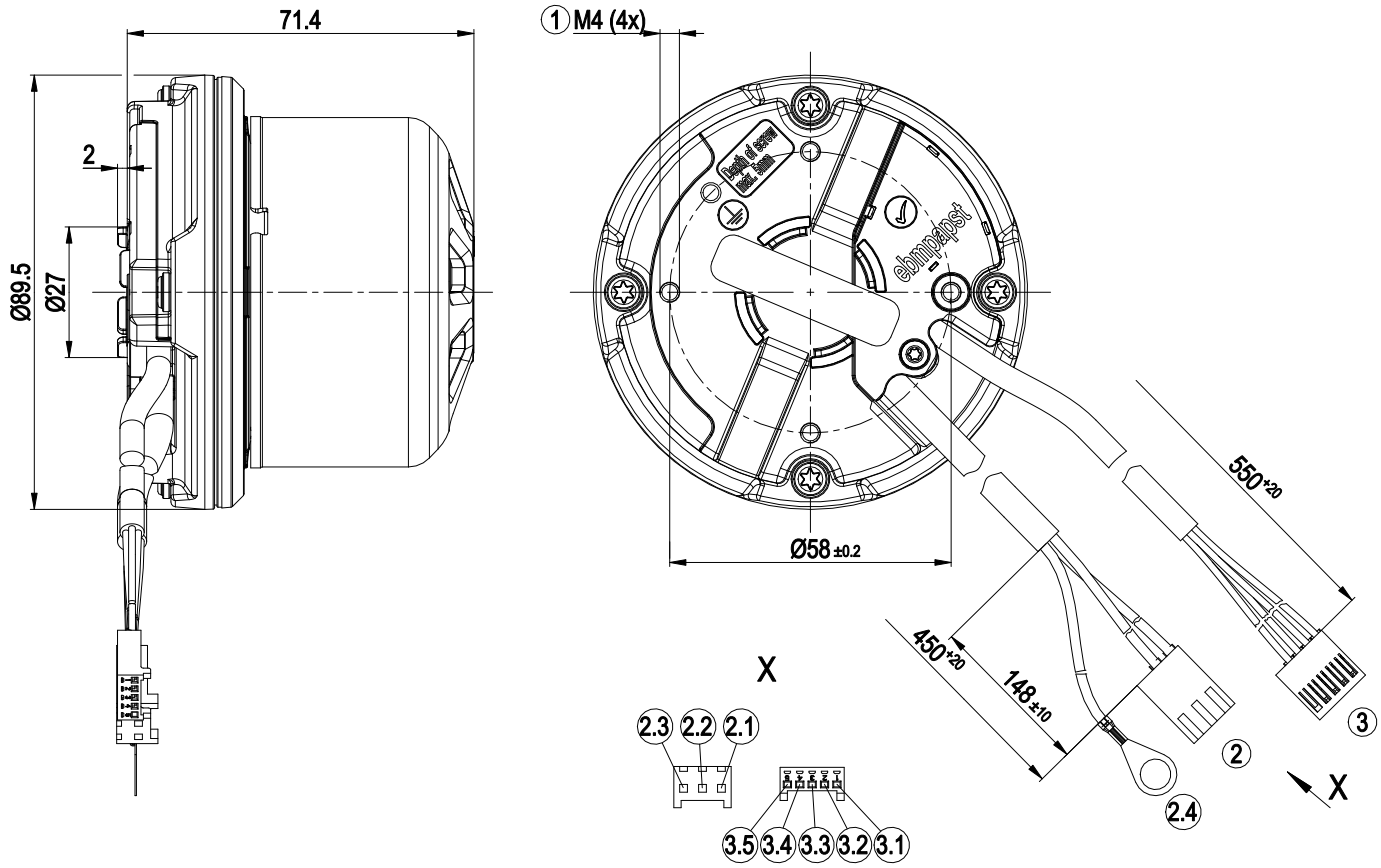
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Technical features

Mass	0.8 kg
Motor size	55
Surface of rotor	Thick layer passivated
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP54
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	- mA
Electrical connection	Connector with connection line
Motor protection	Electronic motor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1; EN 60204-1; CE
Approval	CSA C22.2 no. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1

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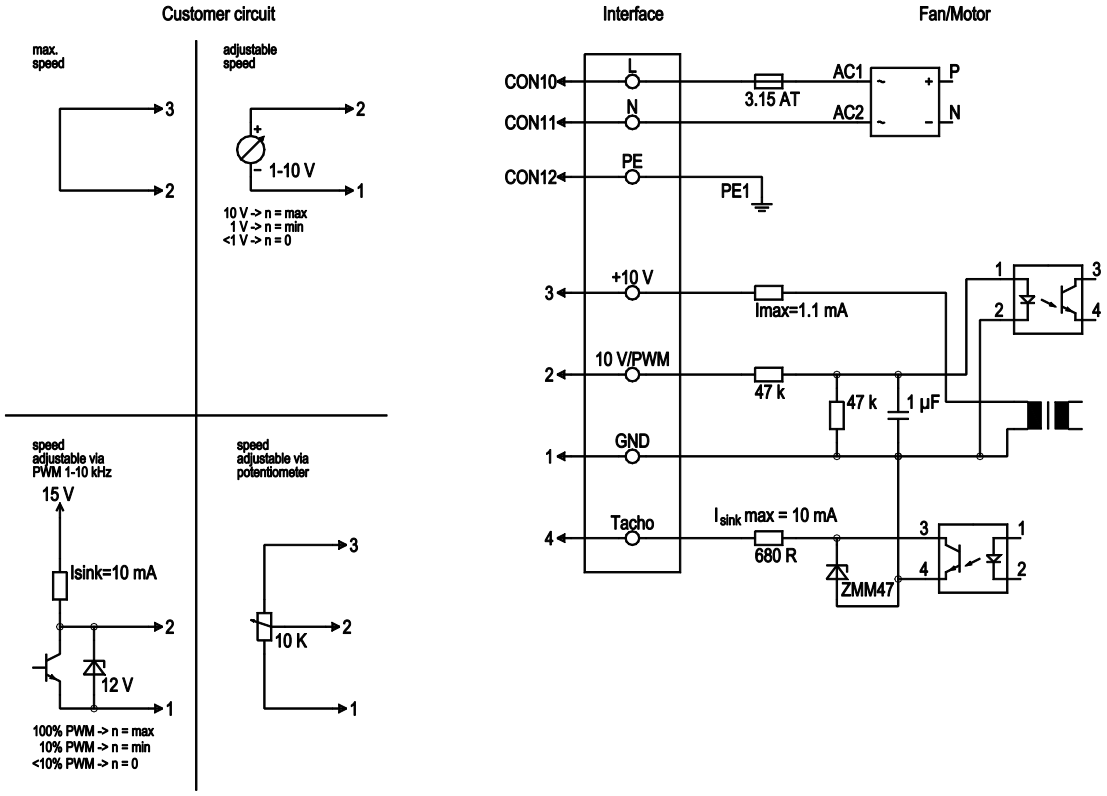
Product drawing



1	Thread reach max. 5 mm
2	Connection line PVC AWG20, 3-pole connector housing tyco 770849-3, 2x plug contact tyco 350980-2
2.1	L (black)
2.2	N (blue)
2.3	not used
2.4	PE (green/yellow), threaded pin 6.3x0.8
3	Connection line PVC AWG22, 5-pole connector housing tyco 1375820-5, 4x plug contact tyco 1375819-1
3.1	0-10 V PWM (yellow)
3.2	GND (blue)
3.3	+10 V (red)
3.4	Tach (white)
3.5	not used

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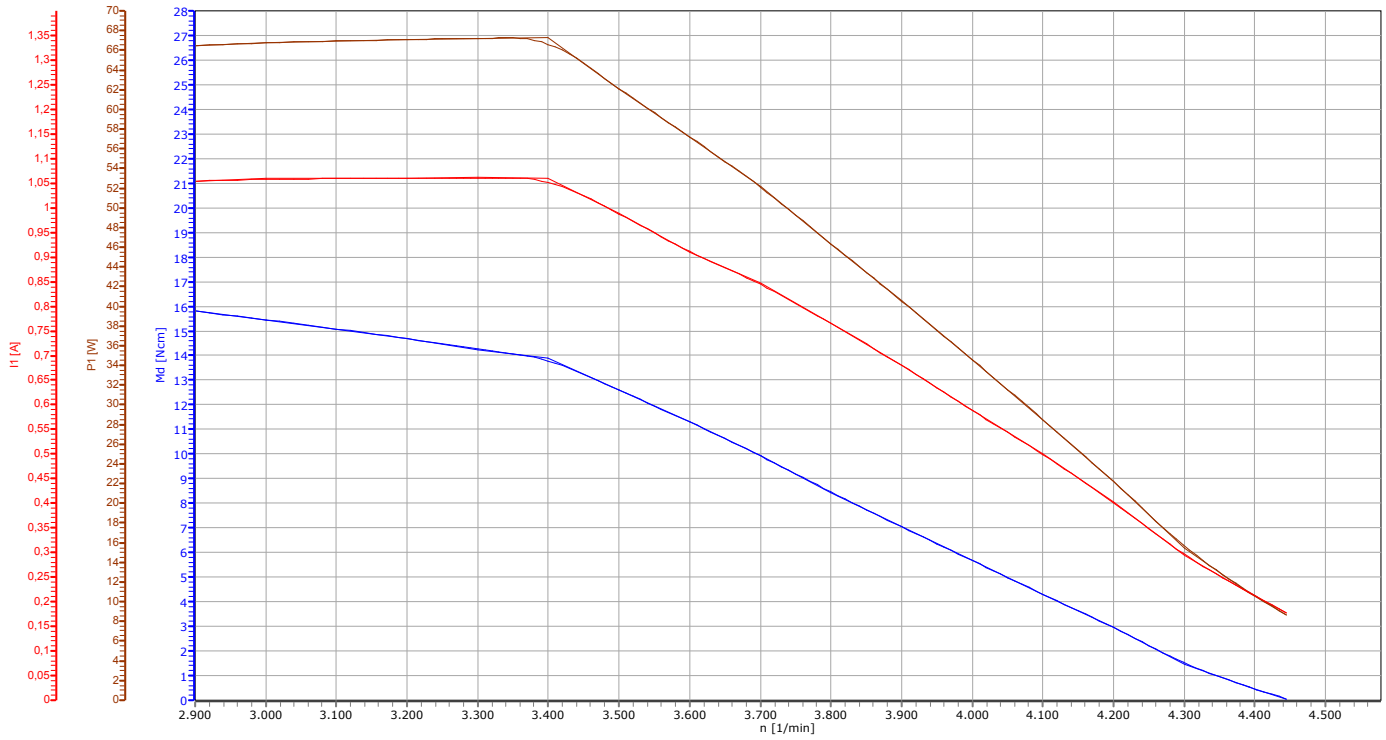
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 115 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0- 10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

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Charts: Speed (rpm)



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