



M3G084-DF18-81 ebmpapst Datasheet
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Nominal data

Type	M3G084-DF18-81	
Motor	M3G084-DF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed	min ⁻¹	3000
Power input	W	500
Power output	W	380
Current draw	A	2.2
Rated torque	Ncm	120
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

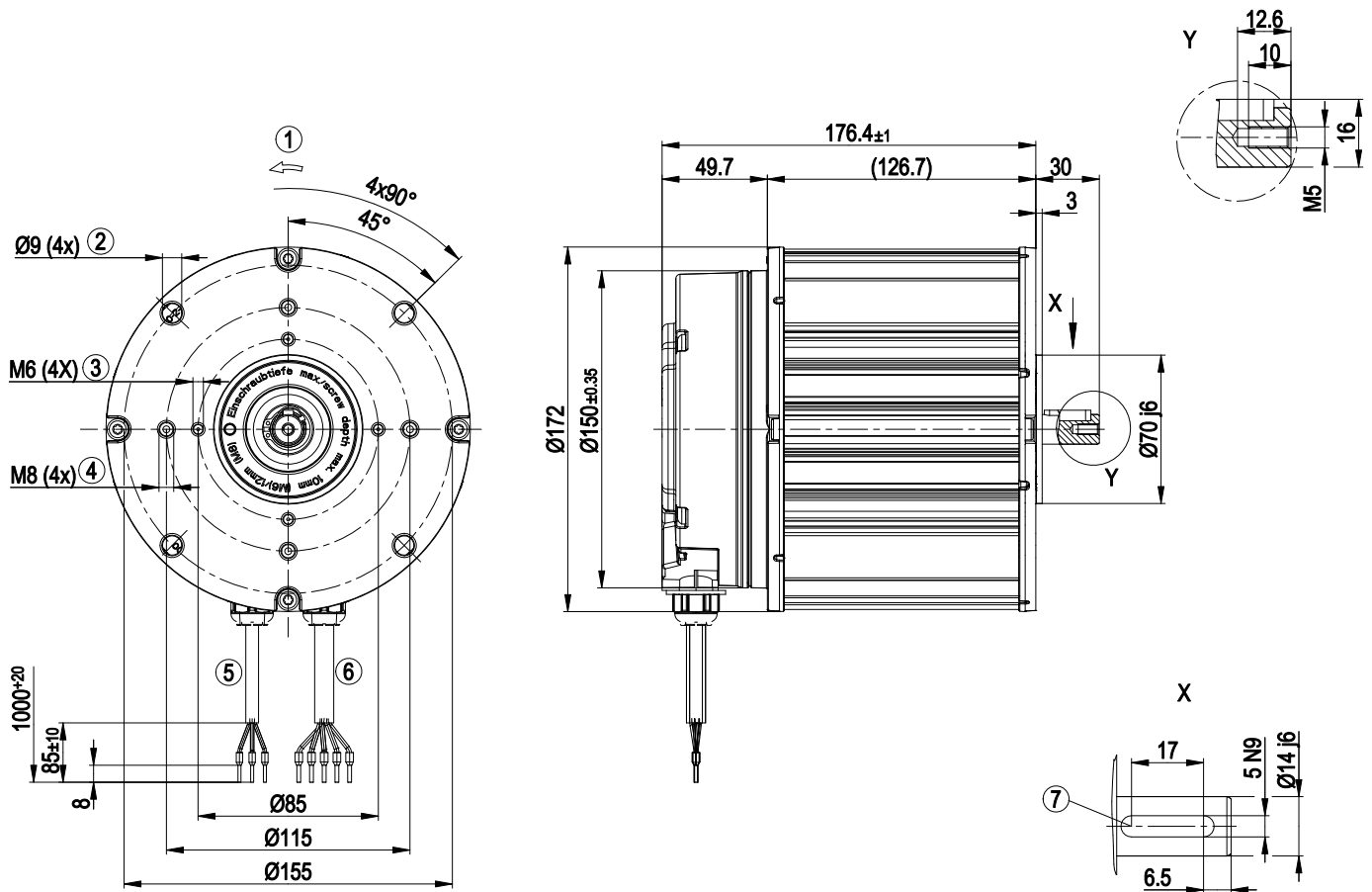
ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



Technical features

Mass	5.3 kg
Size	84 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	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Alarm relay - Motor current limit - PFC, active - 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
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 55022 (Class B)
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

Product drawing

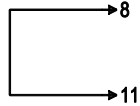


1	Direction of rotation counter-clockwise, seen on shaft
2	Through-hole for screw M8
3	Depth of screw max. 10 mm
4	Depth of screw max. 12 mm
5	Connection line PVC 3X AWG22, 3x crimped core-end sleeves
6	Connection line PVC 5XAWG18, 5x crimped core-end sleeves
7	Groove depth 3 mm

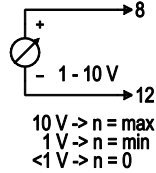
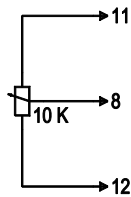
Connection screen

Customer circuit

Full speed

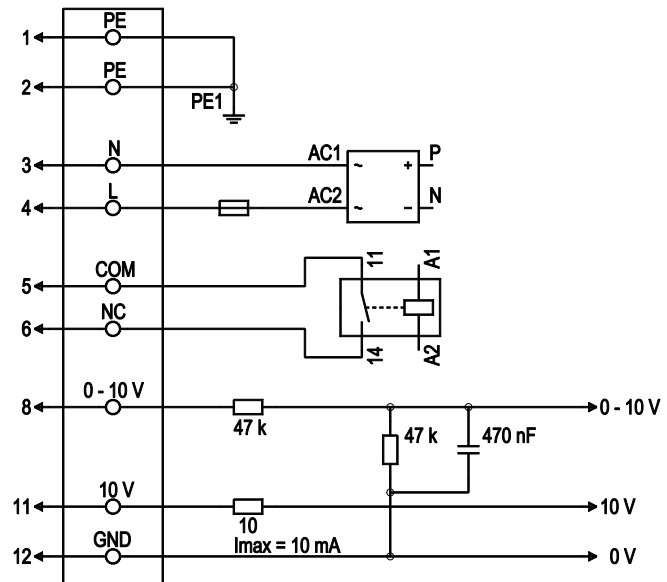


Speed setting

Speed setting
via potentiometer

Connection

Fan / motor



Line	No.	Signal	Colour	Function / assignment
1	1,2	PE	green/yellow	Protective earth
1	3	N	blue	Supply voltage, neutral conductor, 50/60 Hz
1	4	L	black	Supply voltage, phase, 50/60 Hz
1	5	COM	white 1	Floating status message contact, normally closed connection (2 A, max. 250 VAC, min. 10 mA)
1	6	NC	white 2	Floating status message contact, normally closed connection
2	8	0 - 10 V	yellow	Control input, set value 0 - 10 VDC, impedance 100 kOhm, SELV
2	11	10 VDC	red	Voltage output 10 VDC (+/-3%), max. 10 mA, supply voltage for ext. devices (e.g. potentiometer), SELV
2	12	GND	blue	Reference mass for control interface, SELV

Charts: Speed

