EC motor

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County court Stuttgart · HRA 590344

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Nominal data

Type	**M3G084-CA54-24**
Motor	**M3G084-CA**

Phase		1
Nominal voltage	VDC	400
Type of data definition		ml/cu
Speed (rpm)	min^{-1}	1600
Power input	W	200
Power output	W	150
Current draw	A	0.5
Rated torque	Ncm	90
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

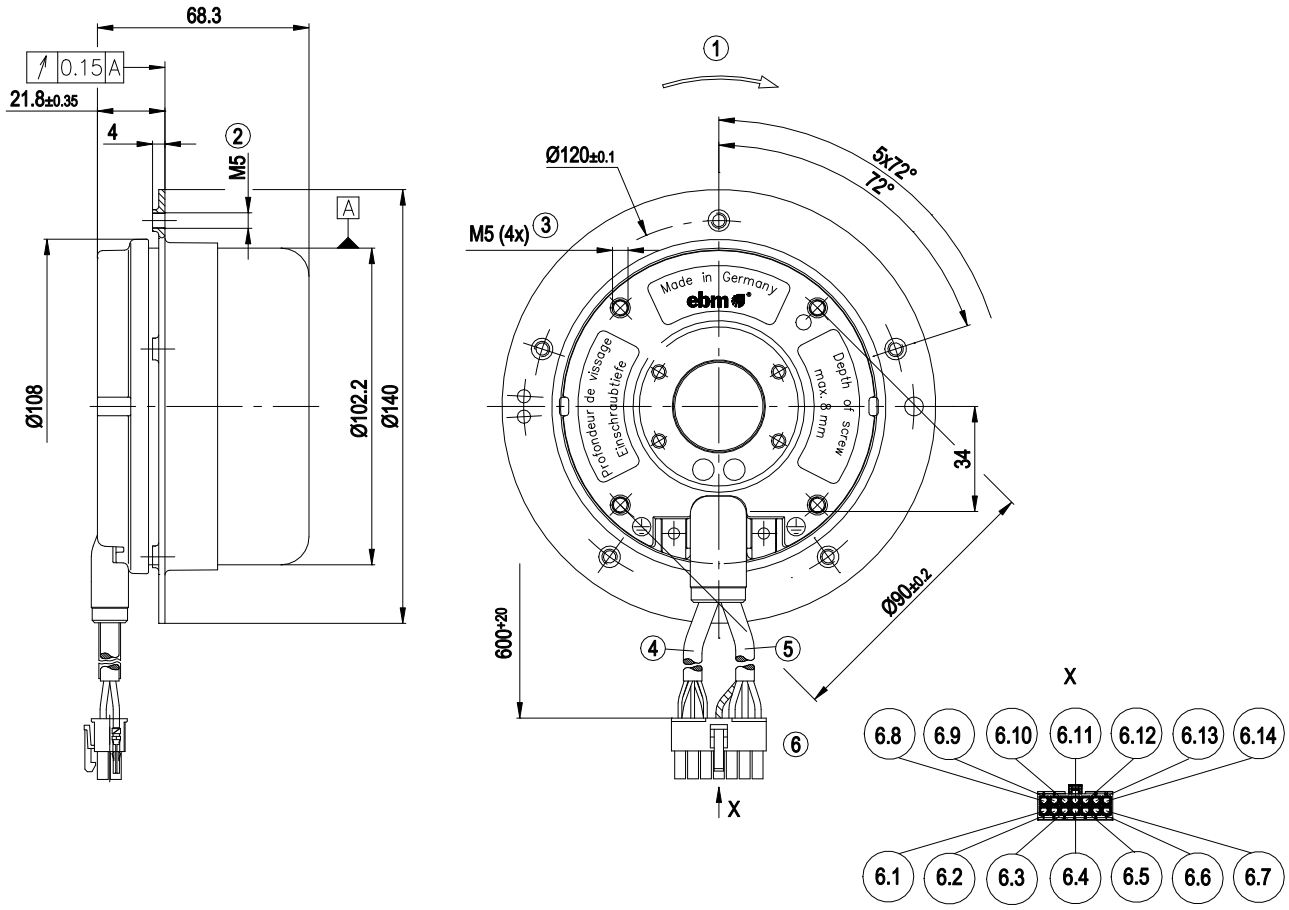
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Technical features

Mass	2 kg
Motor size	84
Surface of rotor	Coated in black
Stator bush material	Die-cast aluminium
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP42
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on top
Condensation drainage holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 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 61800-5-1
Remark	The motor is only to be operated in combination with the following Kyung-Jin impeller: KBD430H40; the motor has to be balanced together with the customer impeller as a single unit; the balance quality as per DIN ISO 1940-1 must not exceed G 6.3 on assembly with the customer impeller.

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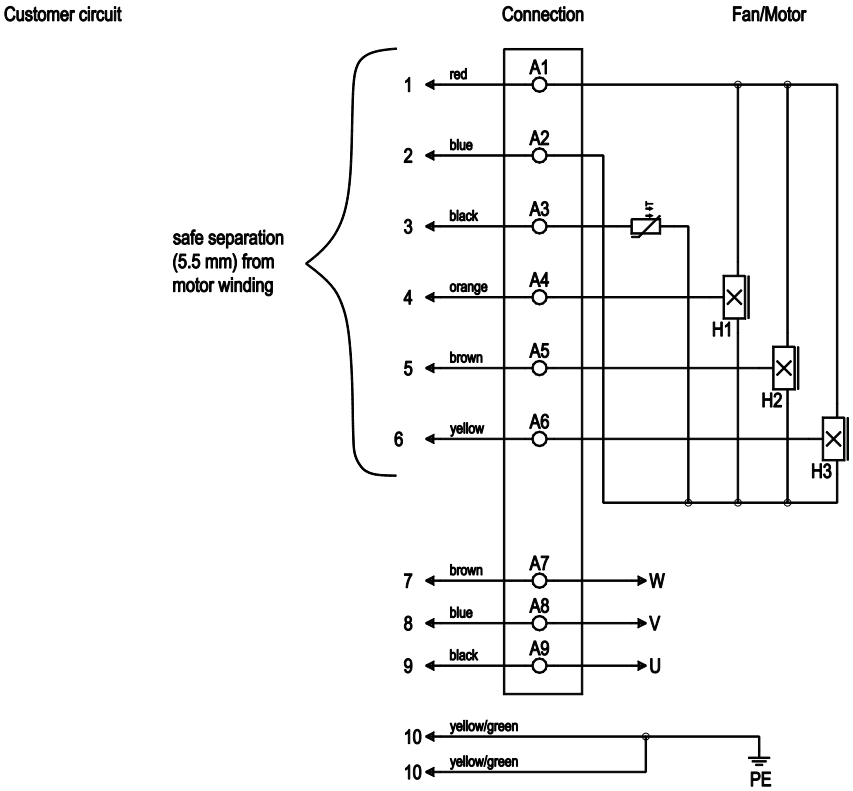
Product drawing



1	Direction of rotation anticlockwise, viewed towards rotor
2	Thread rim hole conforming to DIN 7952
3	Thread reach max. 8 mm
4	Connection line PVC AWG20, 6x female connector Molex 39-00-0059 crimped
5	Connection line PVC 4x 0.75 mm², 4x female connector Molex 39-00-0059 crimped
6	Connector housing 14-pole Molex 39-01-2145
6.1	+ (red)
6.2	Hall 2 (brown) open collector, pull-up resistor to UB 4.5-24 V
6.3	- (blue)
6.4	not used
6.5	not used
6.6	Motor connection U (black)
6.7	not used
6.8	Hall 1 (orange) open collector, pull-up resistor to UB 4.5-24 V
6.9	Hall 3 (yellow) open collector, pull-up resistor to UB 4.5-24 V
6.10	PTC (black)
6.11	PE (green/yellow)
6.12	Motor connection V (blue)
6.13	not used
6.14	Motor connection W (brown)

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Connection screen

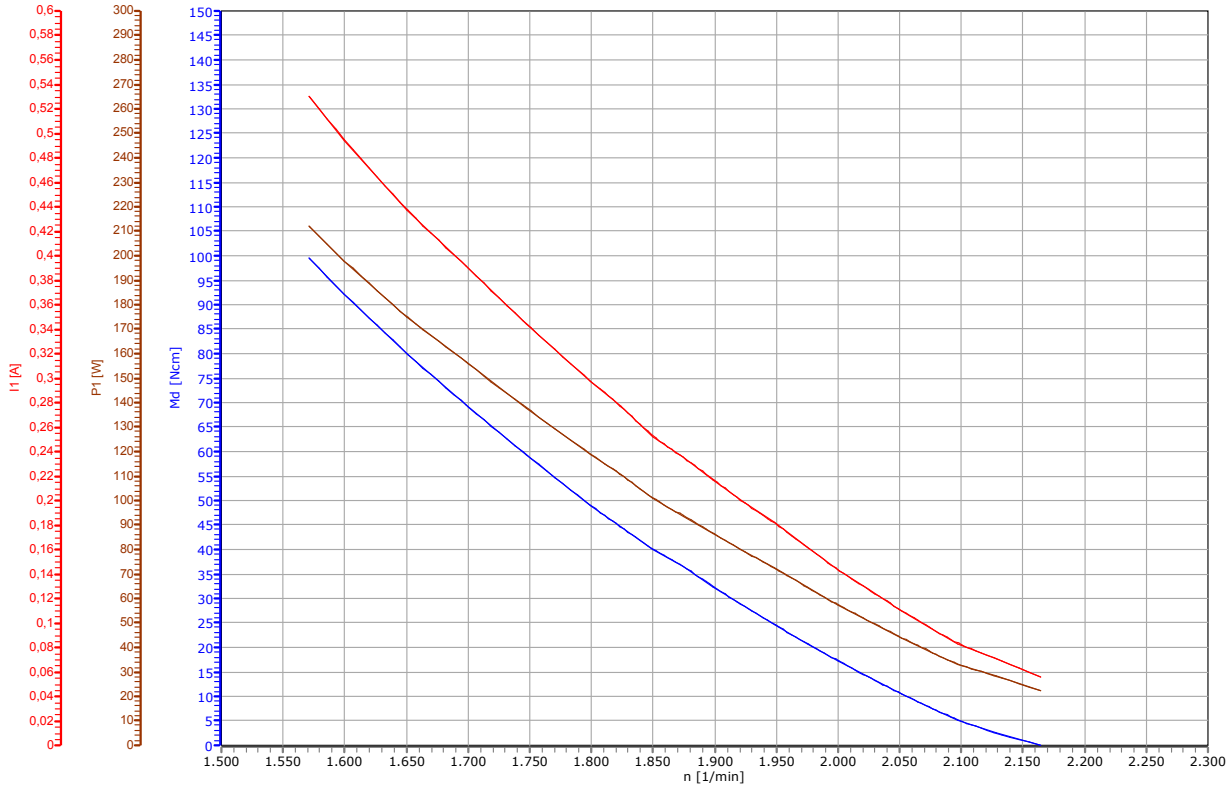


Connection according to customer specification

No.	Conn.	Designation	Function / assignment
	1	A1	+ (red)
	2	A2	- (blue)
	3	A3	PTC (black)
	4	A4	Hall 1 (orange) open collector, pull-up resistor to UB 4.5-24 V
	5	A5	Hall 2 (brown) open collector, pull-up resistor to UB 4.5-24 V
	6	A6	Hall 3 (yellow) open collector, pull-up resistor to UB 4.5-24 V
	7	A7	Motor connection W (brown)
	8	A8	Motor connection V (blue)
	9	A9	Motor connection U (black)
	10	-	PE (green/yellow)

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Charts: Speed (rpm)



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