R3G140-AA17-08

EC centrifugal fan

forward curved, single inlet

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**R3G140-AA17-08**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1942
Power input	W	84
Current draw	A	0.7
Min. back pressure	Pa	0
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

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Technical features

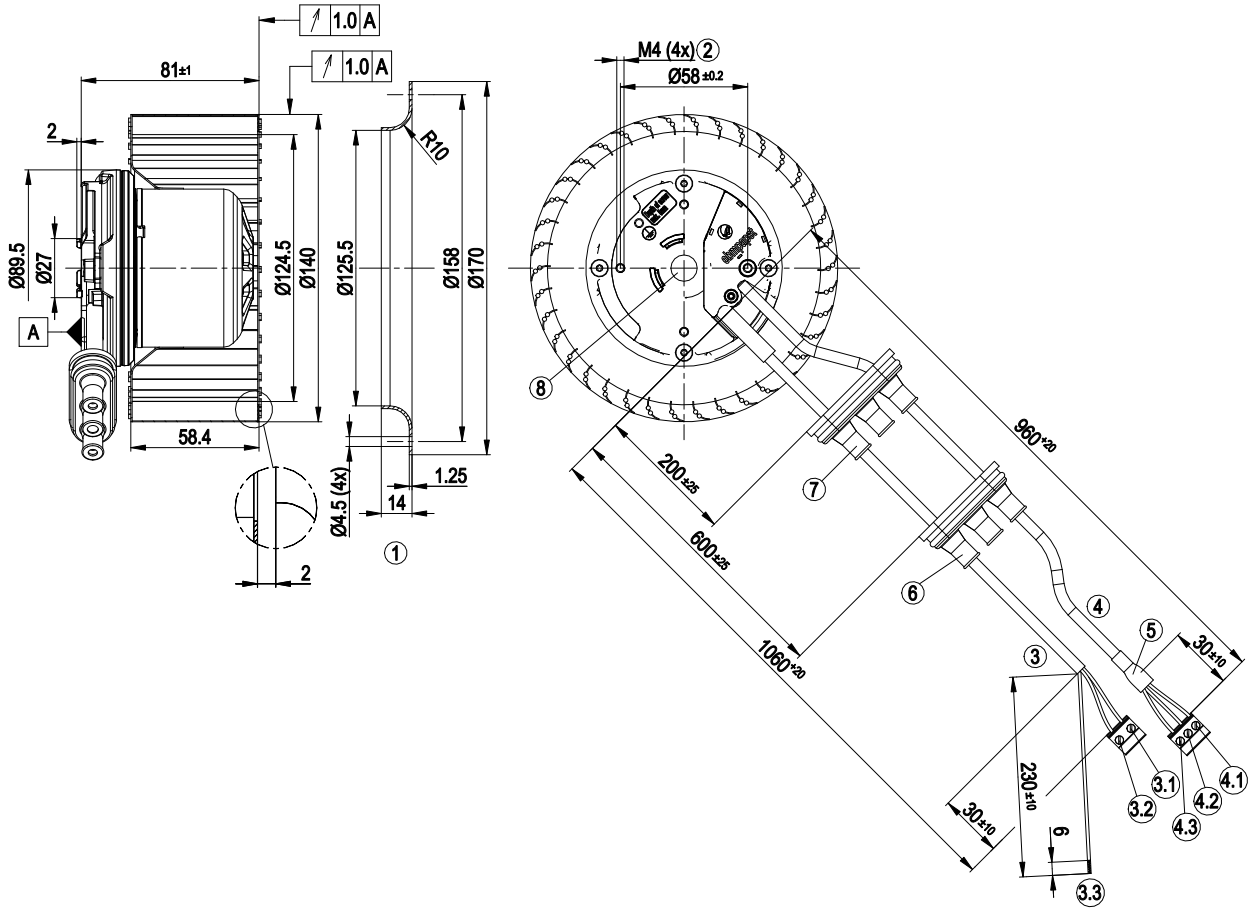
Mass	1.2 kg
Size	140 mm
Surface of rotor	Thick layer passivated
Material of impeller	Sheet steel, galvanised
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Motor bearing	Ball bearing
Technical features	- 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 - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage 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 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 No.77

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Product drawing



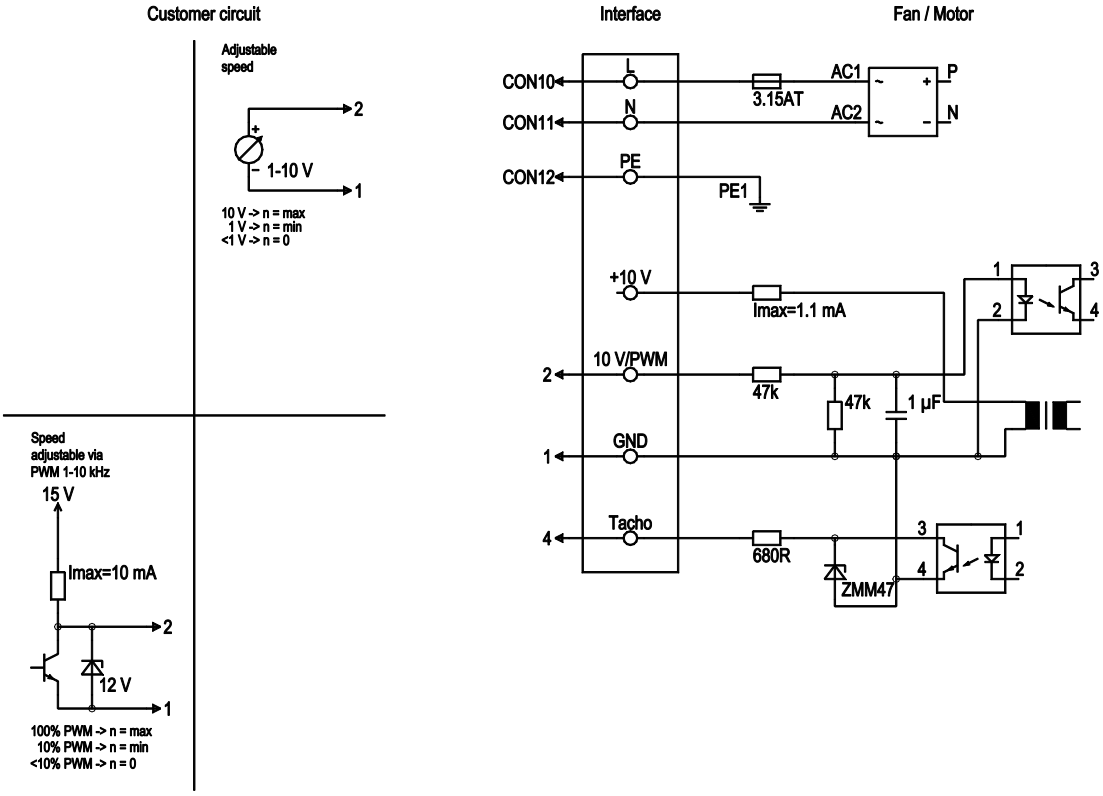
1	Accessory part: inlet nozzle 09576-2-4013, not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PVC AWG20, connector housing 2-pole Phoenix GMVSTBR 2.5/2-ST (green)
3.1	N (blue)
3.2	L (black)
3.3	PE (green/yellow), lead tip crimped
4	Connection line PVC AWG22, connector housing Phoenix MVSTBR 2.5/3-ST (blue)
4.1	Tach (white)
4.2	0-10 V PWM (yellow)
4.3	GND (blue)
5	Heat shrink tube
6	Grommet Dutch Rubber Seals no. 860010020
7	Grommet Dutch Rubber Seals no. 981000530
8	Red adhesive dot

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Connection screen



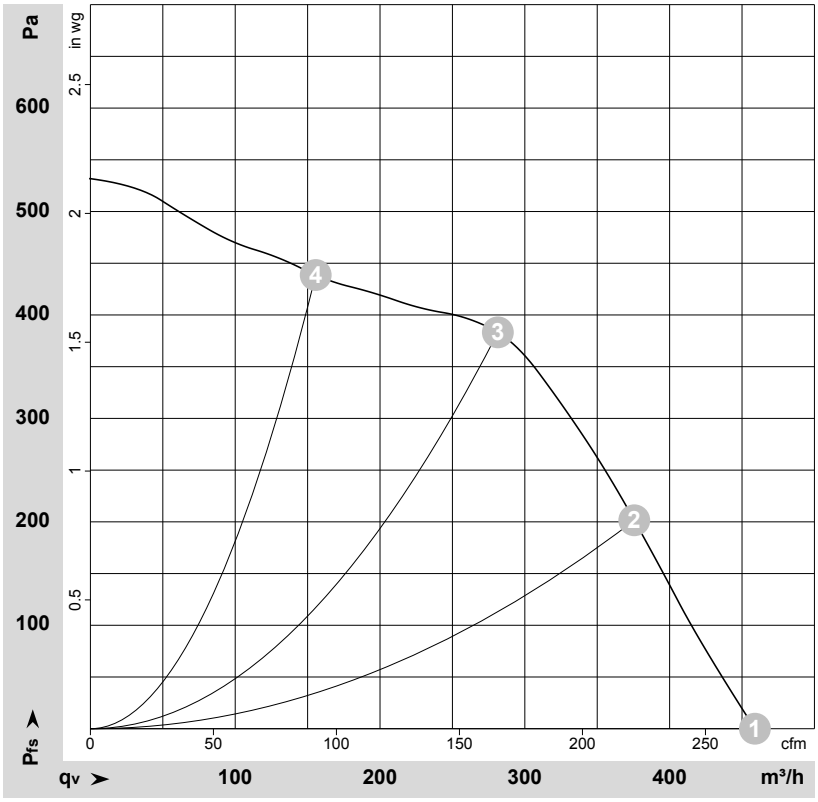
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, Isink_max=10 mA

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-167208-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1940	84	0.70	460	0	270	0.00
2	230	50	2235	84	0.70	375	200	220	0.80
3	230	50	2635	84	0.70	280	380	165	1.53
4	230	50	2865	61	0.57	155	440	90	1.77

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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