R3G140-AV19-02

EC centrifugal fan

forward curved, single inlet

R3G140-AV19-02 ebmpapst Datasheet
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Nominal data

Type	**R3G140-AV19-02**	
Motor	**M3G055-CF**	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1850
Power input	W	71
Current draw	A	1.1
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Approval	EAC; UL 2111

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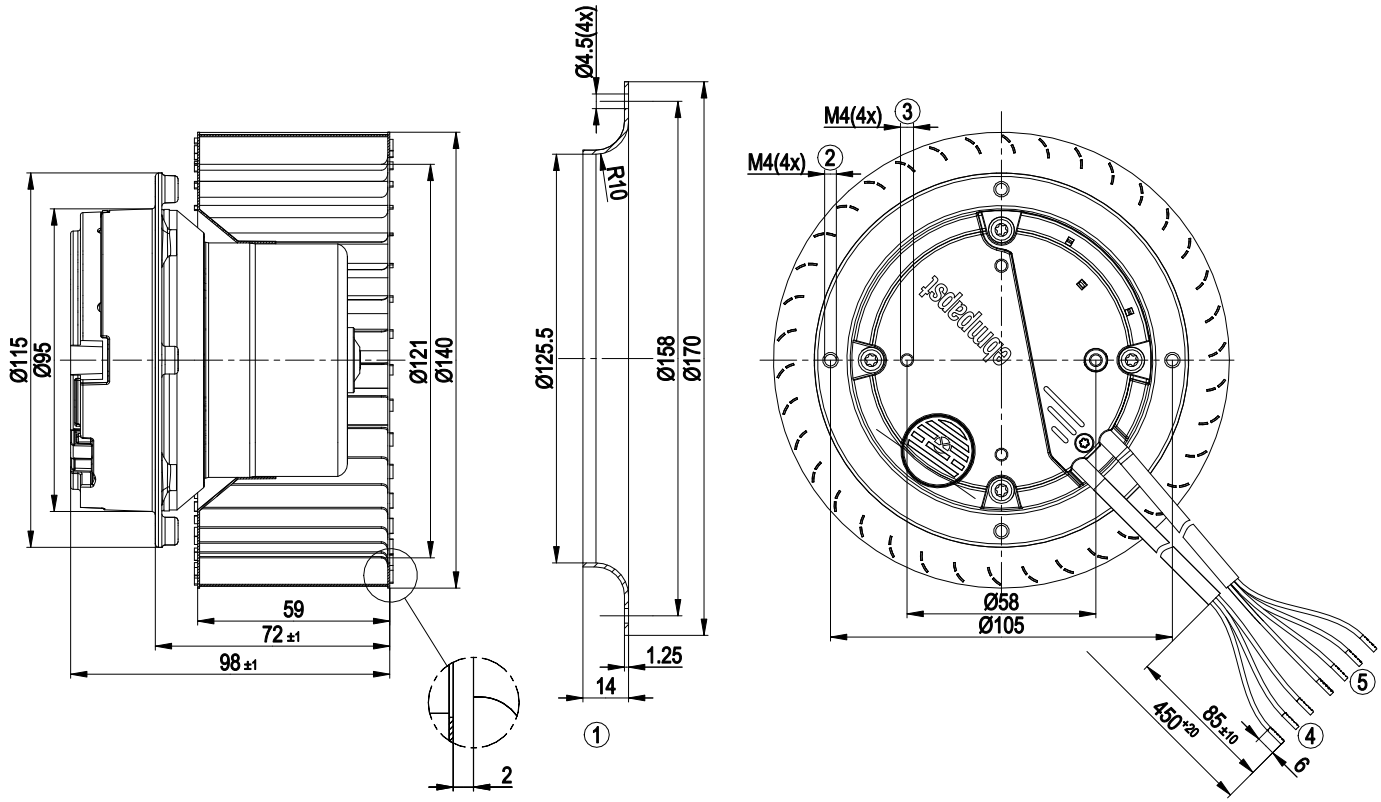
Product drawing



1	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 6 mm
3	Depth of screw max. 6 mm
4	Connection line PVC 3G 0.5 mm², 3 x brass lead tips crimped
5	Connection line PVC 4 x 0.25 mm²; 4 x brass lead tips crimped

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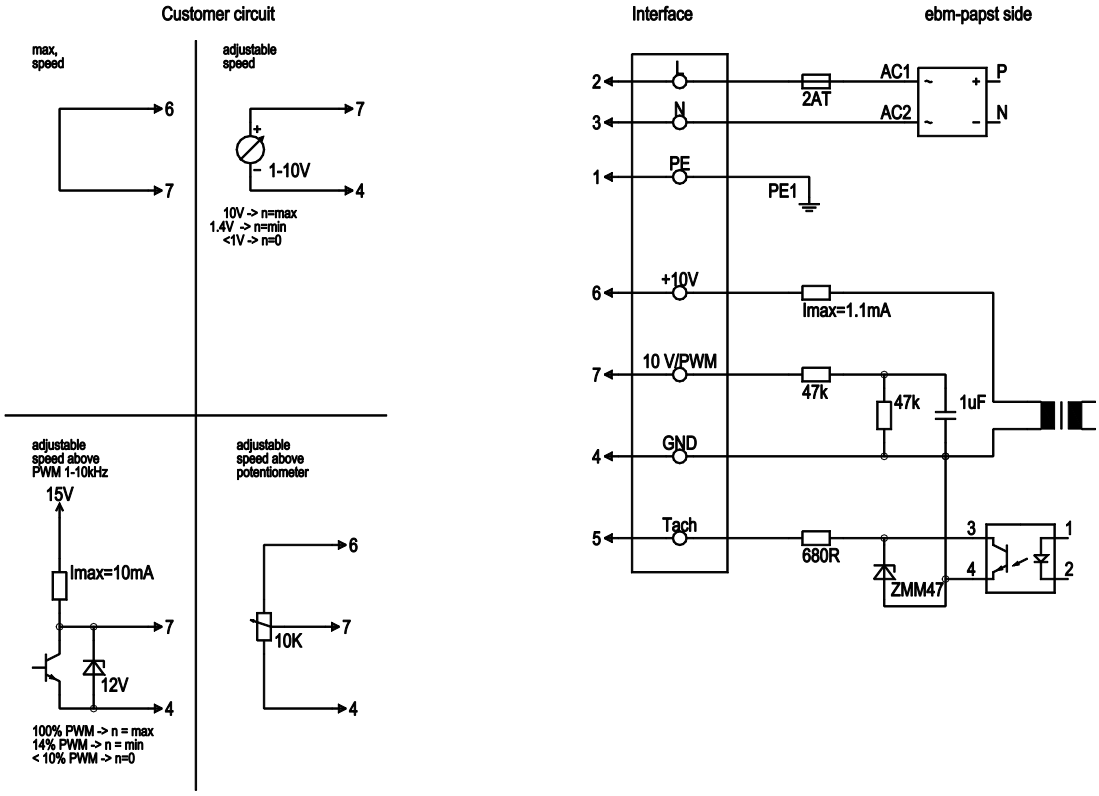
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 115 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	4	GND	blue	GND - Connection for control interface
	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	6	10V/ max. 1,1mA	red	Voltage output 10 V/ 1.1 mA, electrically isolated
	7	0-10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated

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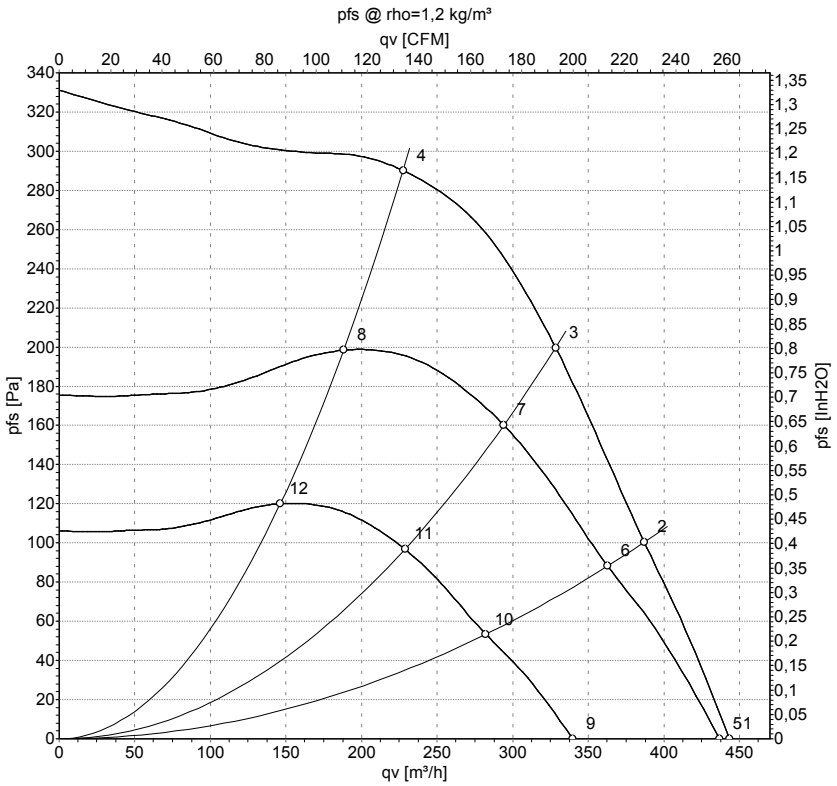
Charts: Air flow 50 Hz



Measurement: LU-77636-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	115	50	1850	71	1.10	445	0	260	0.00
2	115	50	1920	65	0.96	385	100	230	0.40
3	115	50	2010	58	0.85	330	200	195	0.80
4	115	50	2175	45	0.67	225	290	135	1.16
5	115	50	1800	68	1.00	435	0	255	0.00
6	115	50	1800	54	0.79	365	87	215	0.35
7	115	50	1800	41	0.61	295	161	175	0.65
8	115	50	1800	26	0.38	190	199	110	0.80
9	115	50	1400	32	0.47	340	0	200	0.00
10	115	50	1400	25	0.37	280	53	165	0.21
11	115	50	1400	19	0.29	230	97	135	0.39
12	115	50	1400	12	0.18	145	120	85	0.48

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