R3G140-AW17-34

EC centrifugal fan

forward curved

R3G140-AW17-34 ebmpapst Datasheet
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Nominal data

Type	**R3G140-AW17-34**	
Motor	**M3G055-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed (rpm)	min^{-1}	2550
Power input	W	116
Current draw	A	0.9
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

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Technical features

Mass	1.17 kg
Size	140 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	PA plastic
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
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- PFC, passive - Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	EAC

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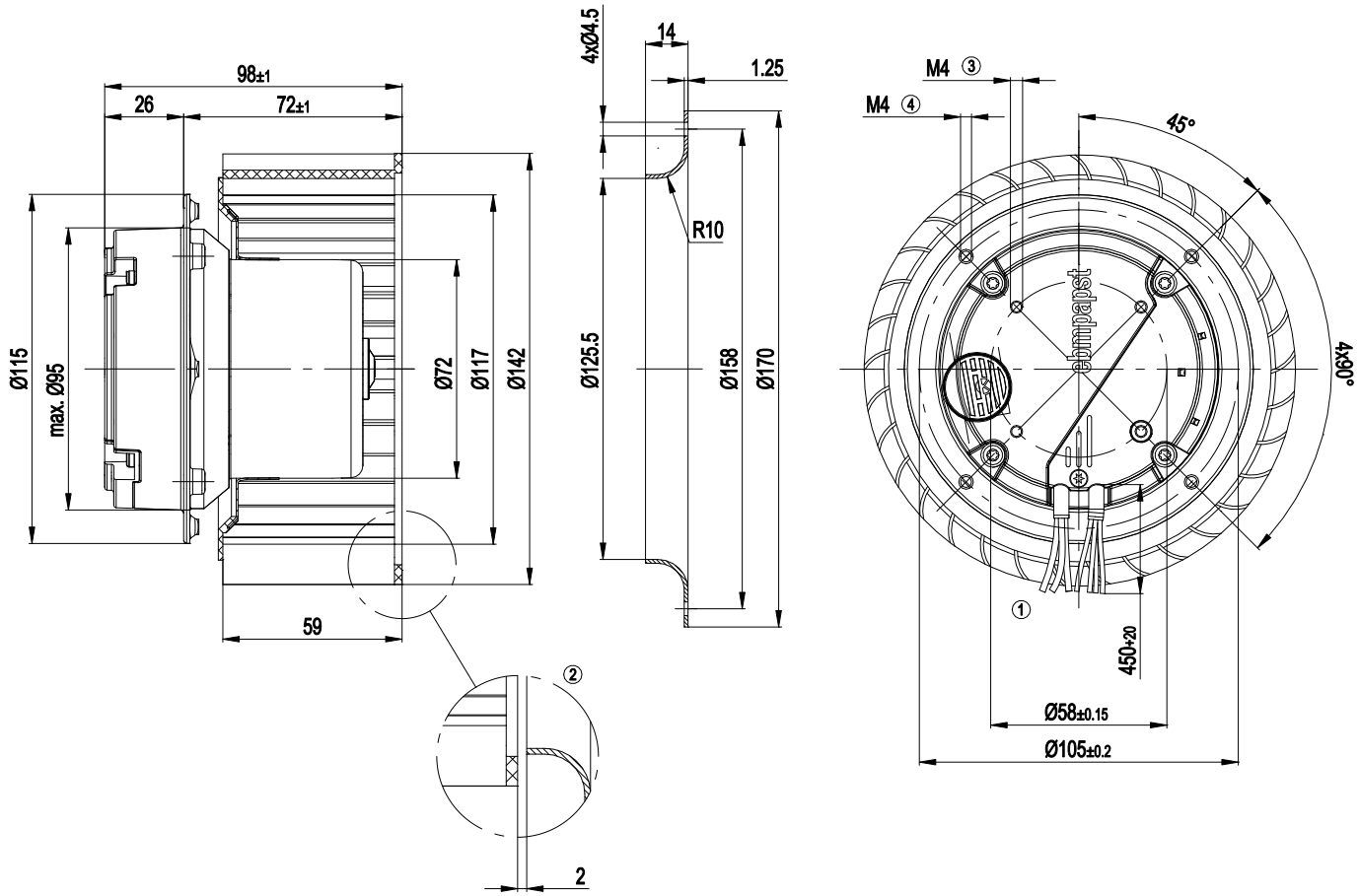
Product drawing



1	Connection line, 7x brass lead tips crimped
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 6 mm
4	Depth of screw max. 6 mm

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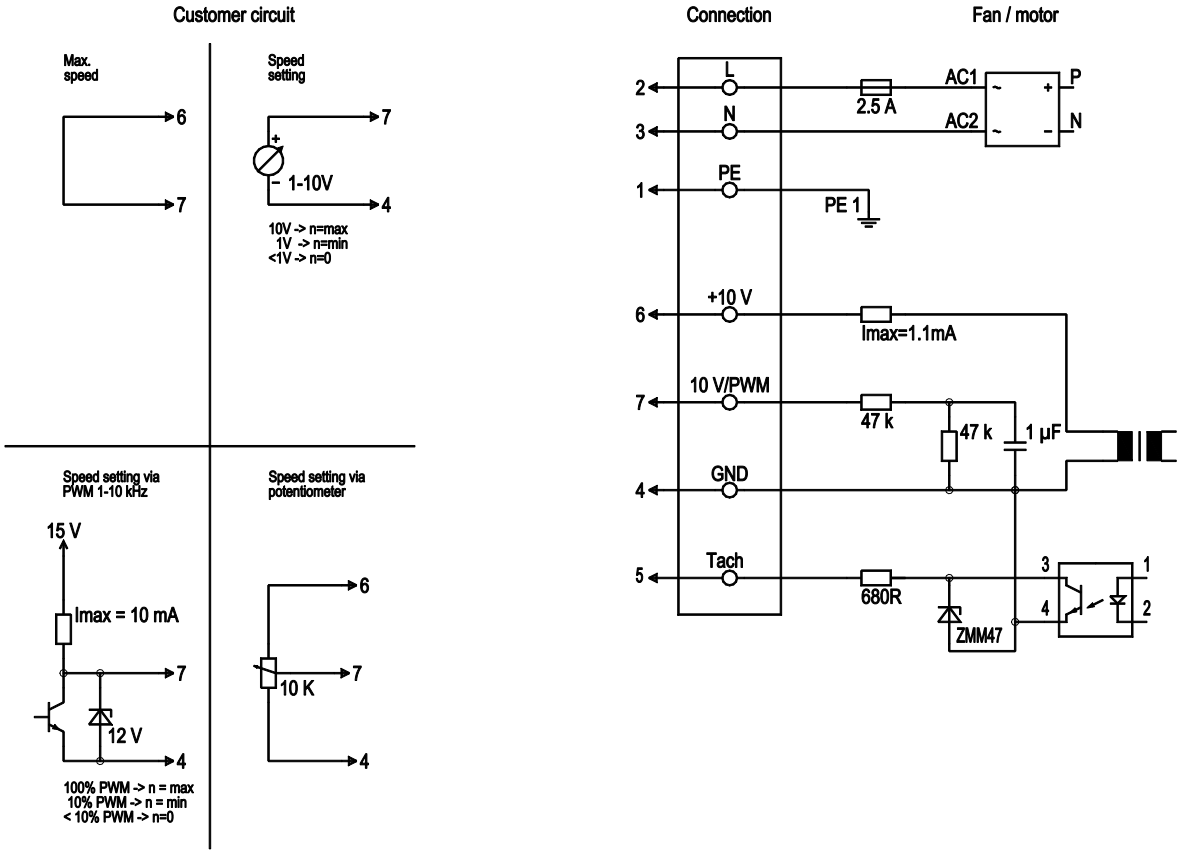
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	7	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	5	Tach	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
	6	10V / max. 1.1 mA	red	Voltage output 10V / 1.1mA, electrically isolated, not short-circuit-proof
	4	GND	blue	GND - Connection for control interface

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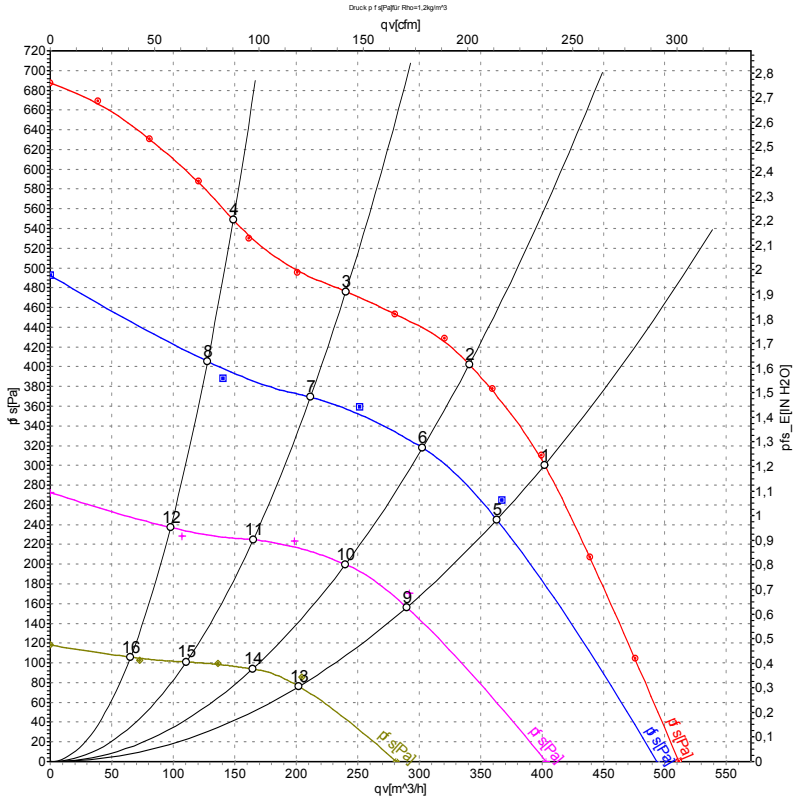
Charts: Air flow 50 Hz



Measurement: LU-117910-1
Measurement: LU-121008-1
Measurement: LU-121009-1
Measurement: LU-121010-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	2550	116	0.90	65	72	400	300	235	1.20
2	230	50	2705	108	0.82	65	72	340	400	200	1.61
3	230	50	2980	87	0.65	64	71	240	475	140	1.91
4	230	50	3175	72	0.55	65	72	150	550	90	2.21
5	230	50	2385	88	0.69	63	70	365	268	215	1.08
6	230	50	2490	76	0.59	62	69	305	318	180	1.28
7	230	50	2645	61	0.47	62	69	210	370	125	1.49
8	230	50	2770	51	0.40	62	69	130	397	75	1.59
9	230	50	1900	44	0.34	58	65	290	172	170	0.69
10	230	50	1980	37	0.30	57	63	240	200	140	0.80
11	230	50	2065	29	0.24	56	62	165	225	95	0.90
12	230	50	2105	24	0.21	56	63	100	232	60	0.93
13	230	50	1335	16	0.15	49	57	200	86	120	0.35
14	230	50	1375	14	0.13	48	55	165	94	95	0.38
15	230	50	1415	11	0.11	46	54	110	101	65	0.41
16	230	50	1430	9.5	0.10	46	53	65	104	40	0.42

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase