R3G140-AW17-15

EC centrifugal fan

forward curved

R3G140-AW17-15 ebmpapst Datasheet
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Nominal data

Type	**R3G140-AW17-15**	
Motor	**M3G055-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Speed (rpm)	min^{-1}	2750
Power input	W	100
Current draw	A	0.75
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

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Technical features

Mass	1.1 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	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Set value input Lin 0-10 VDC / PWM (1.7 V corresponds to 50 m³/h, 10 V corresponds to 300 m³/h) - Control interface with SELV potential safely disconnected from the mains
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
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
Approval	EAC

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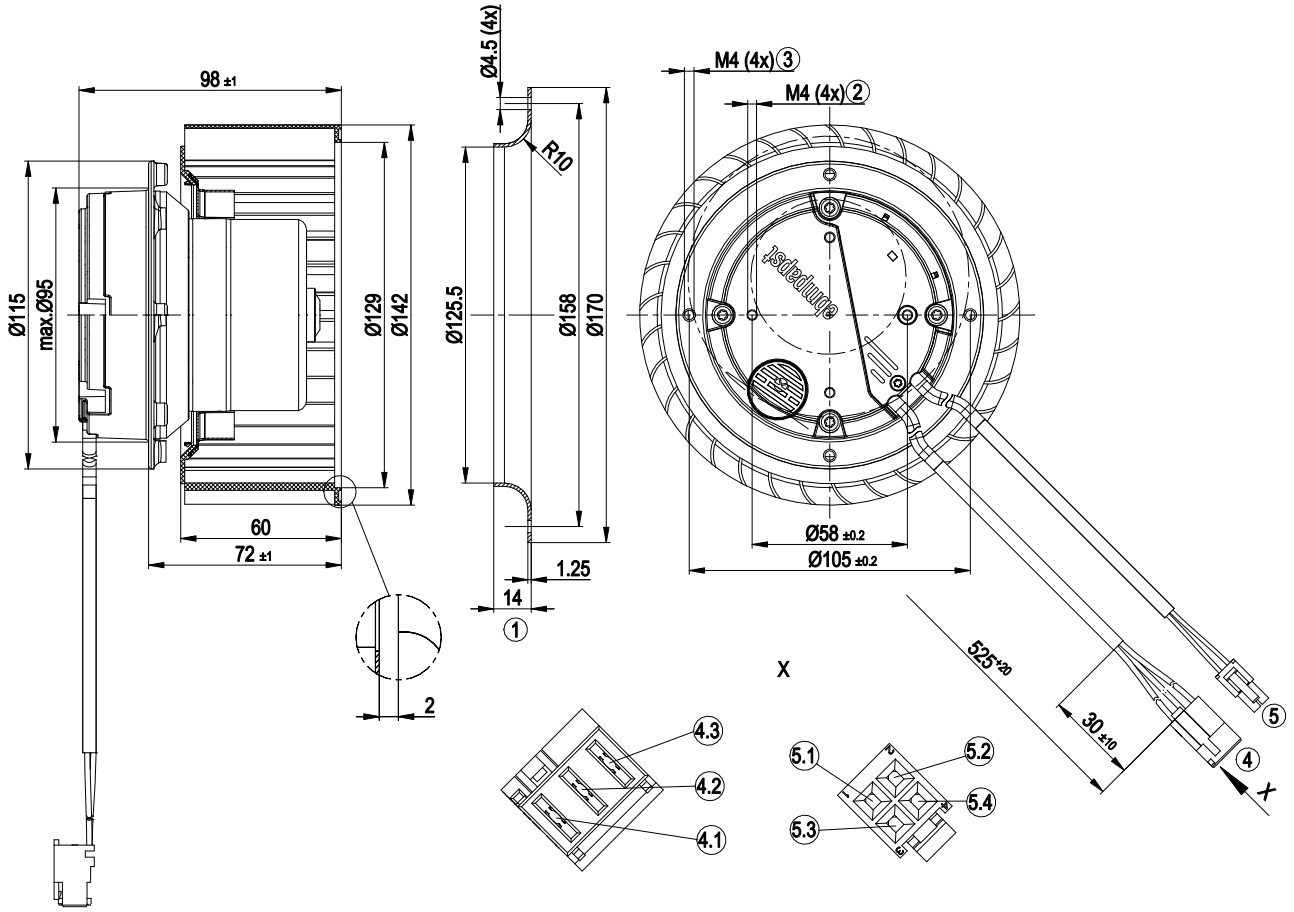
Product drawing



1	Accessory part: Inlet nozzle: 09576-2-4013 not included in 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 with connector housing Lumberg 3623 03
4.1	green/yellow (PE)
4.2	blue (N)
4.3	brown (L)
5	Connector housing PVC 4G 0.25 mm², 4x plug pin Molex 39-00-0059 crimped with connector housing Molex 39-01-2040
5.1	red (+10 V)
5.2	yellow (0 - 10 V/PWM)
5.3	blue (GND)
5.4	white (Tach)

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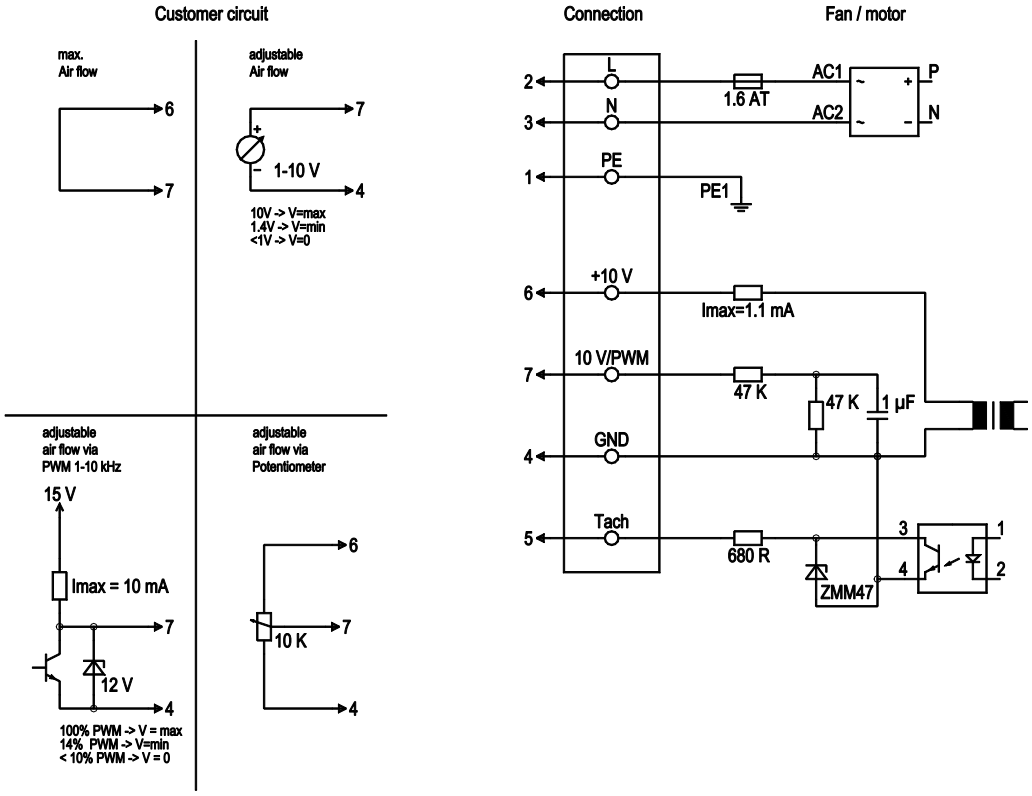
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
1	1	PE	green/yellow	Protective earth
1	2	L	brown	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
1	3	N	blue	Neutral conductor
2	4	GND	blue	GND - Connection for control interface
2	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
2	6	10 V	red	Max. 1.1 mA, voltage output 10 V/ 1 mA, electrically isolated
2	7	0- 10V PWM	yellow	Control input 0 - 10 V PWM, electrically isolated

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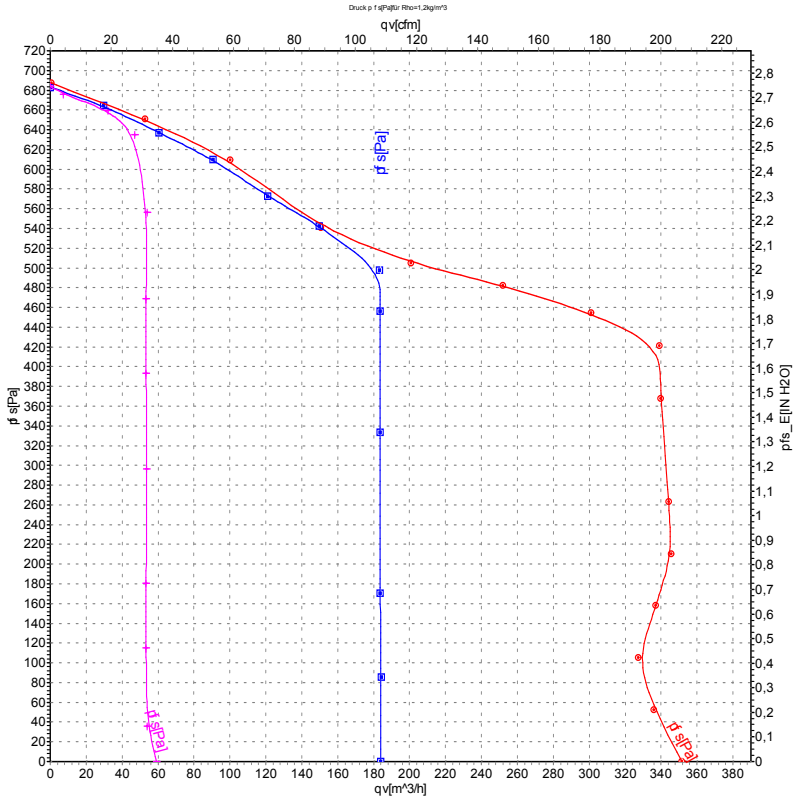
Charts: Air flow 50 Hz



Measurement: LU-111232-1
Measurement: LU-72126-1
Measurement: LU-72127-1

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	230	50	1495	38	0.29	340	0	200	0.00
2	230	50	1990	57	0.43	340	150	200	0.60
3	230	50	2410	82	0.63	340	300	200	1.20
4	230	50	2740	105	0.79	340	400	200	1.61
5	230	50	790	8.5	0.08	185	0	110	0.00
6	230	50	1735	27	0.20	185	150	110	0.60
7	230	50	2450	48	0.35	185	300	110	1.20
8	230	50	2820	64	0.47	185	400	110	1.61
9	230	50	265	2.80	0.04	50	0	30	0.00
10	230	50	1660	13	0.12	50	150	30	0.60
11	230	50	2775	23	0.17	50	300	30	1.20
12	230	50	2640	34	0.25	50	400	30	1.61

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