R3G150-AC01-01

EC hot-air circulation blower

for solid fuel heating systems

R3G150-AC01-01 ebmpapst Datasheet
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Nominal data

Type	**R3G150-AC01-01**	
Motor	**M3G055-BD**	
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}	2770
Power input	W	30
Current draw	A	0.3
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	1.7 kg
Size	150 mm
Surface of rotor	Thick layer passivated
Material of impeller	Sheet steel, stainless
Material of mounting plate	Sheet steel, hot-galvanised
Number of blades	6
Motor suspension	Motor anti-vibration mounted on one side via mounting plate
Direction of rotation	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
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 - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor
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

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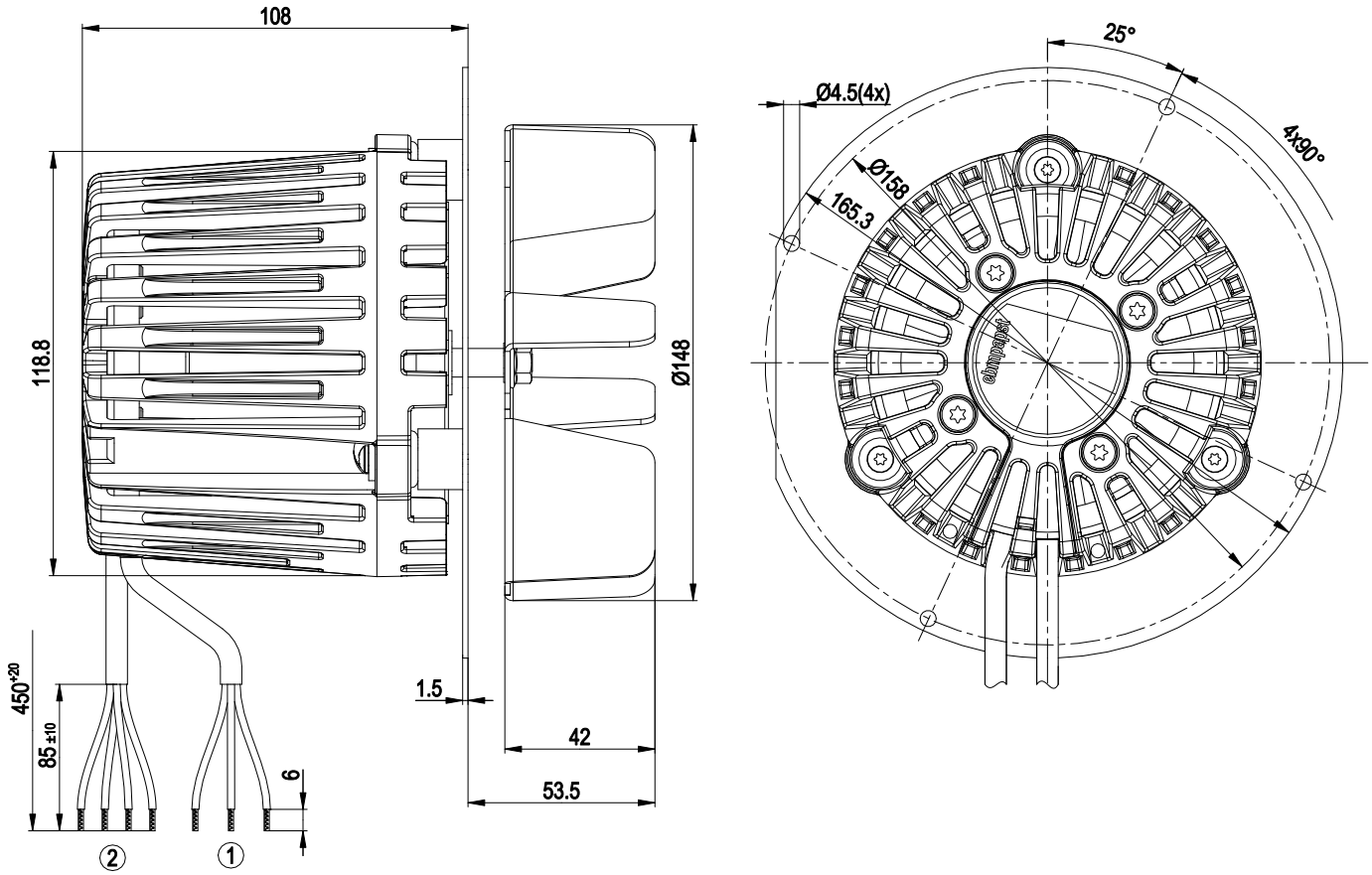
Product drawing



1	Connection line PVC 3G 0.5 mm², 3x brass lead tips crimped
2	Control line PVC 4X 0.25 mm², 4x brass lead tips crimped

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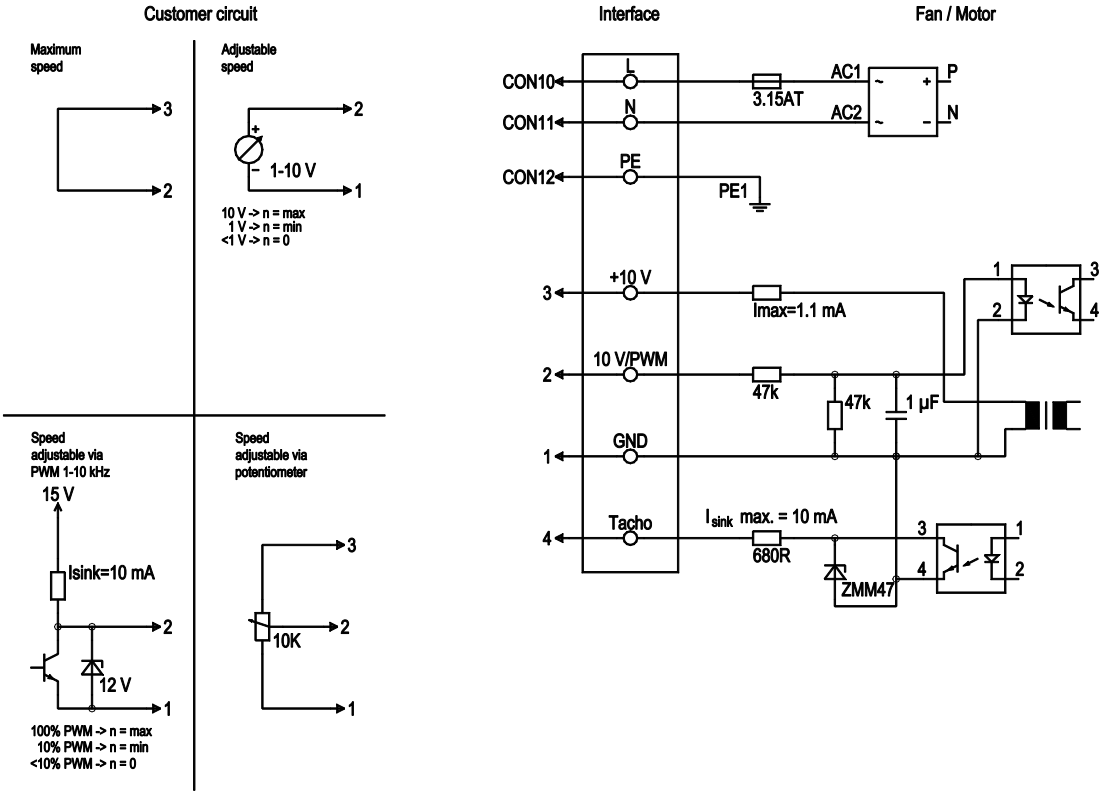
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	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
	3	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

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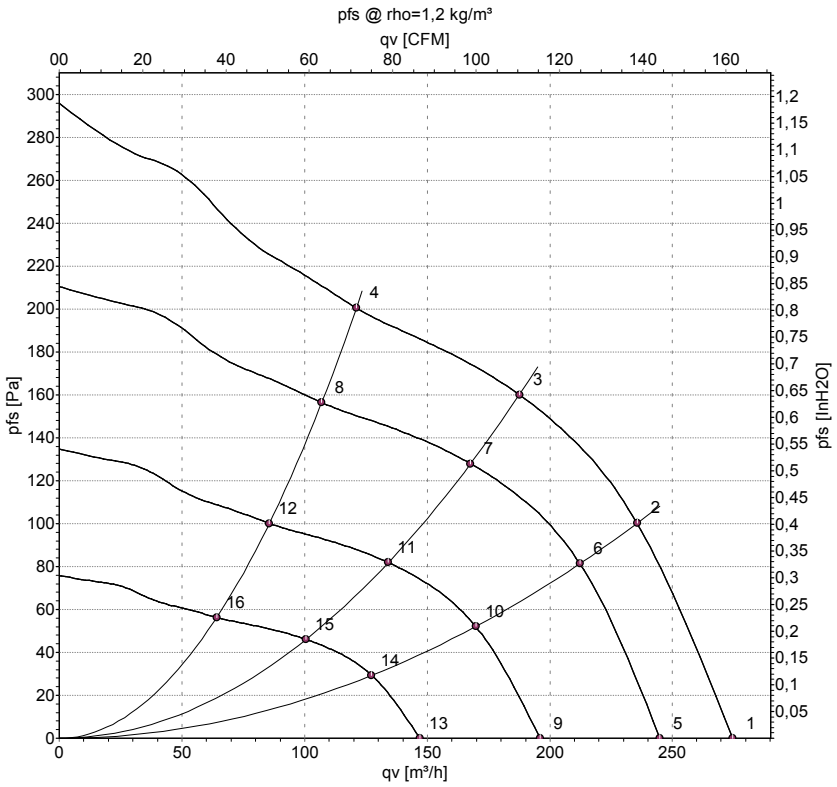
Charts: Air flow 50 Hz



Measurement: LU-157986-1

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	2805	29	0.30	275	0	160	0.00
2	230	50	2770	30	0.30	235	100	140	0.40
3	230	50	2795	29	0.30	190	160	110	0.64
4	230	50	2830	27	0.29	120	200	70	0.80
5	230	50	2500	20	0.21	245	0	145	0.00
6	230	50	2500	22	0.22	210	81	125	0.33
7	230	50	2500	21	0.21	170	128	100	0.51
8	230	50	2500	19	0.20	105	156	65	0.63
9	230	50	2000	10.0	0.11	195	0	115	0.00
10	230	50	2000	11	0.12	170	52	100	0.21
11	230	50	2000	11	0.11	135	82	80	0.33
12	230	50	2000	10.0	0.10	85	100	50	0.40
13	230	50	1500	4.0	0.05	145	0	85	0.00
14	230	50	1500	5.0	0.05	125	29	75	0.12
15	230	50	1500	4.0	0.05	100	46	60	0.18
16	230	50	1500	4.0	0.04	65	56	40	0.22

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