R3G175-AF19-02

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	**R3G175-AF19-02**	
Motor	**M3G055-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	4500
Power input	W	104
Current draw	A	0.8
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

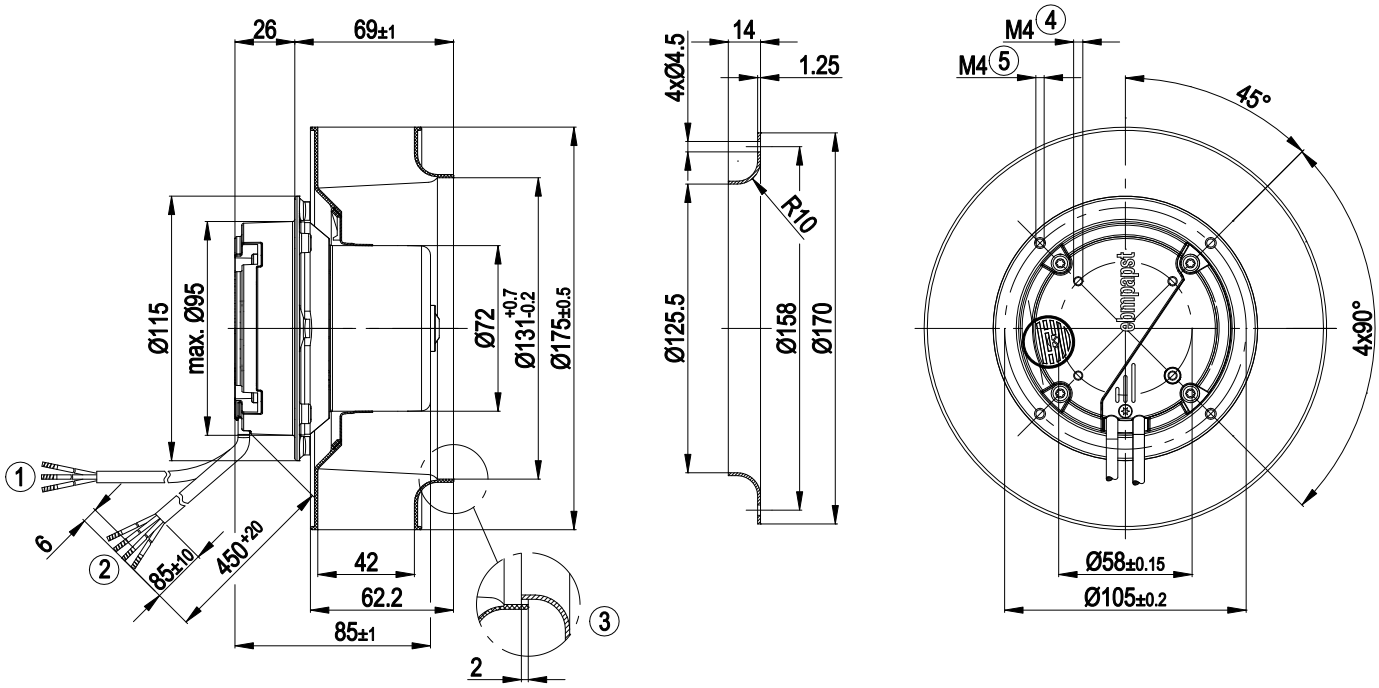
General description	Integrated electronics
Mass	1.23 kg
Size	175 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	Plastic PA66, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	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	- Control input 0-10 VDC / PWM - Output 10 VDC max. 1.1 mA - Tach output
EMC interference immunity	Acc. to EN 61000-6-2
EMC interference emission	Acc. to EN 61000-6-3
EMC harmonics	Acc. to EN 61000-3-2/3
Leakage current	<= 3.5 mA
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

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Product drawing



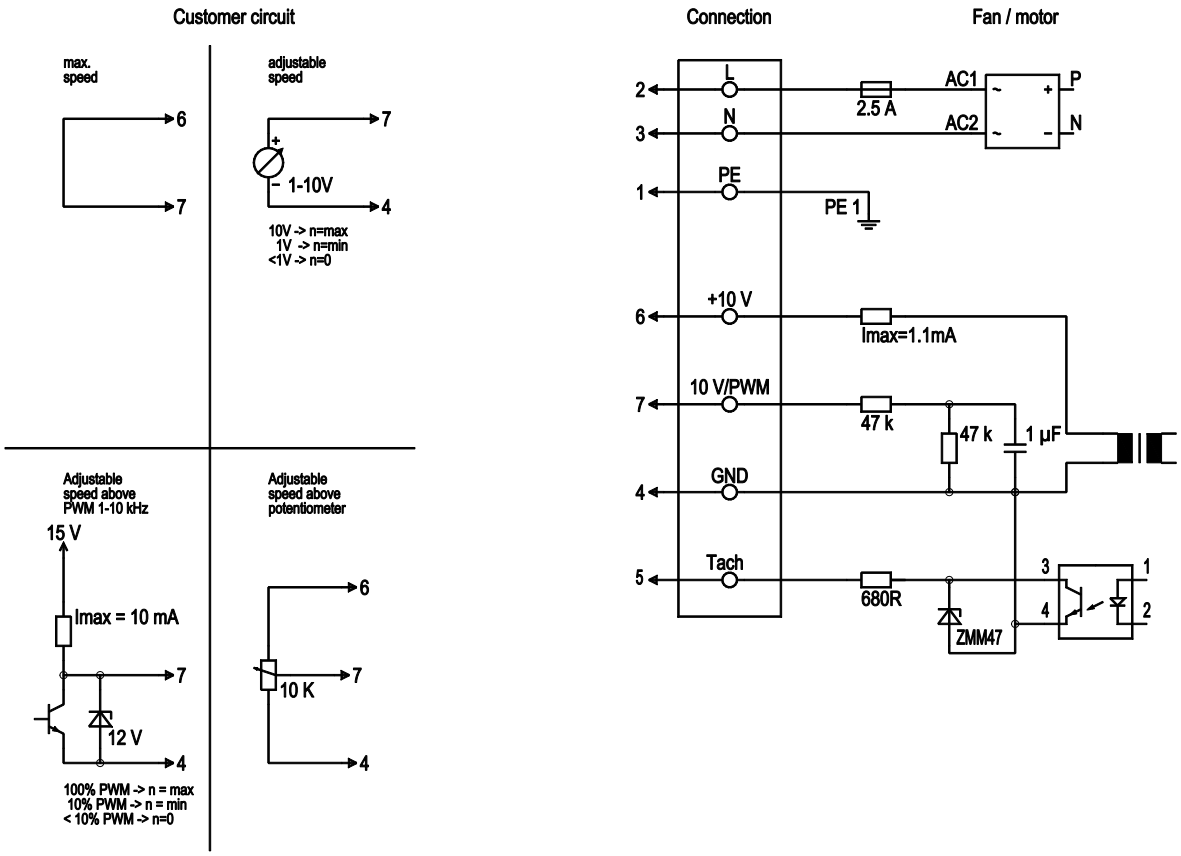
1	Connection line H03VV-F3G0.5, 3 x brass lead tips crimped
2	Connection line A03VV-F4x0.25, 4 x brass lead tips crimped
3	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
4	Depth of screw max. 6 mm
5	Depth of screw max. 6 mm

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Connection screen



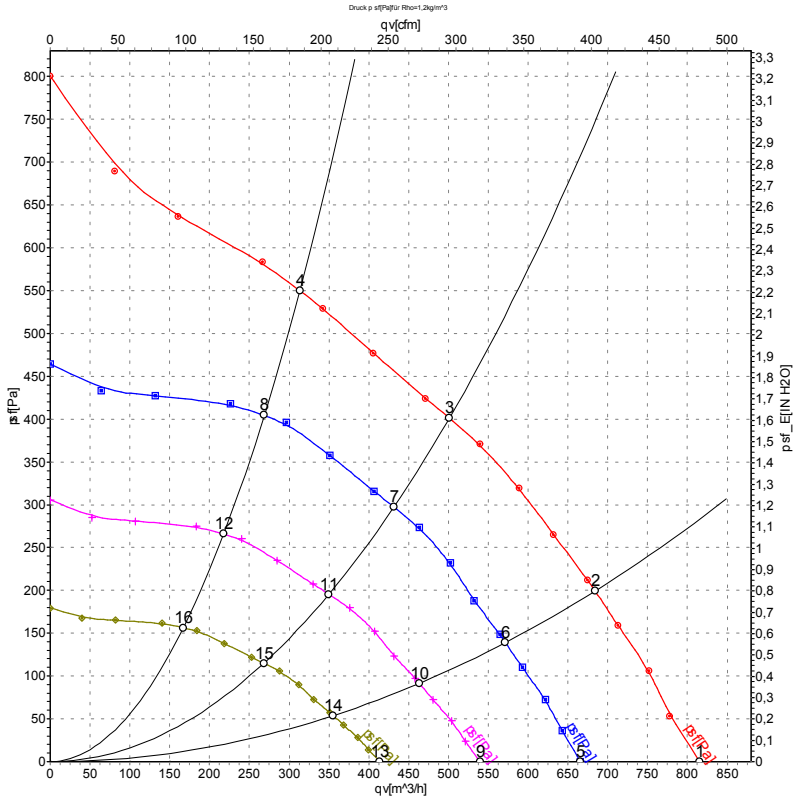
Line	No.	Signal	Colour	Function / assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	7	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	5	Tacho	white	Tach output: Open Collector, 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-74646

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_e	I	qv	p_{sf}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	4535	104	0.80	815	0
2	230	50	4430	112	0.84	685	200
3	230	50	4295	119	0.89	500	400
4	230	50	4315	120	0.89	315	550
5	230	50	3700	56	0.42	665	0
6	230	50	3700	65	0.49	570	139
7	230	50	3700	76	0.57	430	297
8	230	50	3700	76	0.56	270	405
9	230	50	3000	30	0.22	540	0
10	230	50	3000	35	0.26	465	92
11	230	50	3000	41	0.30	350	196
12	230	50	3000	40	0.30	220	266
13	230	50	2300	14	0.10	415	0
14	230	50	2300	16	0.12	355	54
15	230	50	2300	18	0.14	270	115
16	230	50	2300	18	0.13	165	156

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