R3G133-AD05-02

EC centrifugal fan

forward curved, single inlet

R3G133-AD05-02 ebmpapst Datasheet
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Nominal data

Type	**R3G133-AD05-02**	
Motor	**M3G055-BD**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1925
Power input	W	38
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	1.1 kg
Size	133 mm
Surface of rotor	Galvanised
Material of electronics housing	Die-cast aluminium
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
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
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)
Product conforming to standard	EN 60335-1
Approval	CCC; EAC

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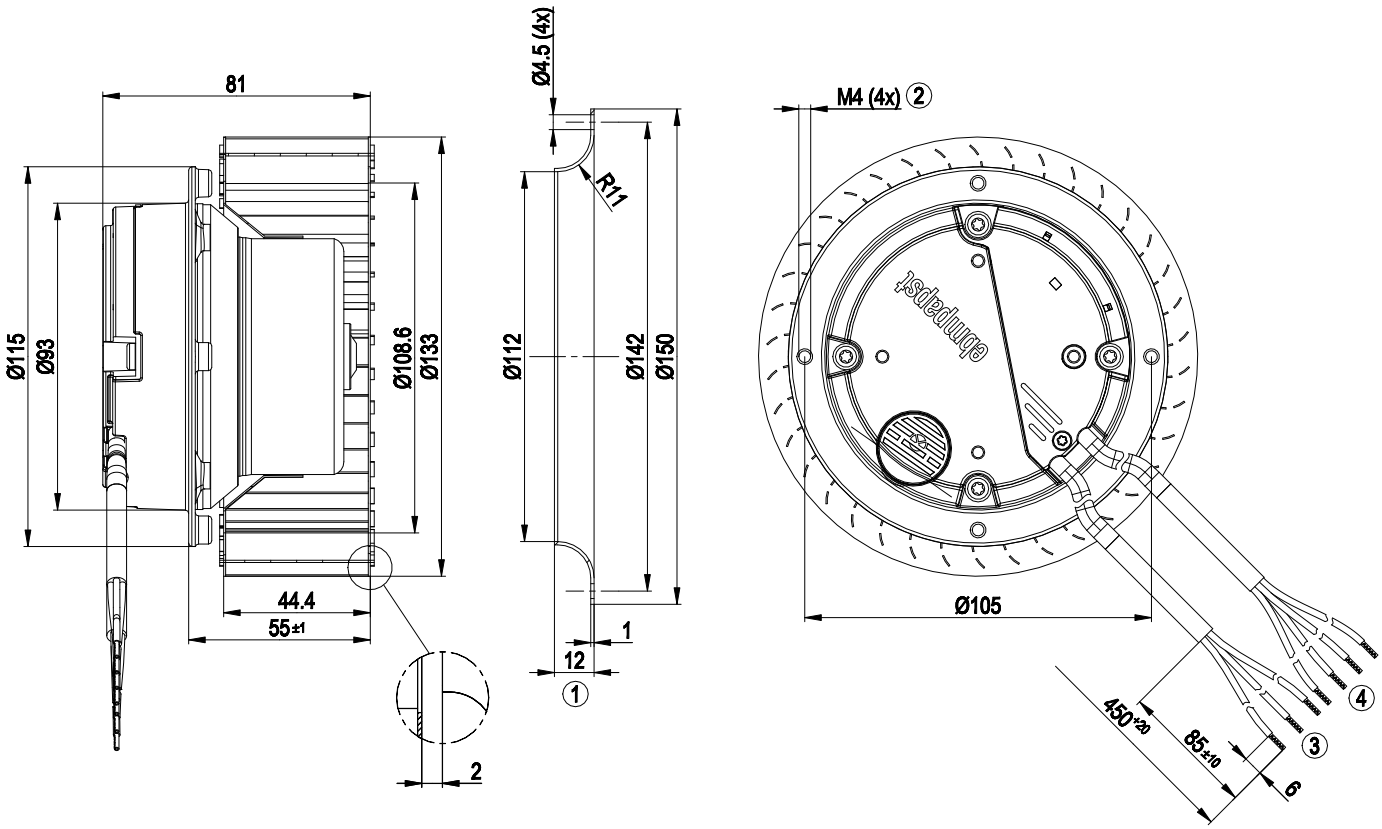
Product drawing



1	Accessory part: inlet nozzle 09572-2-4013, not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PVC 3x AWG20, 3x lead tips crimped
4	Connection line PVC 4X AWG22, 4x lead tips crimped

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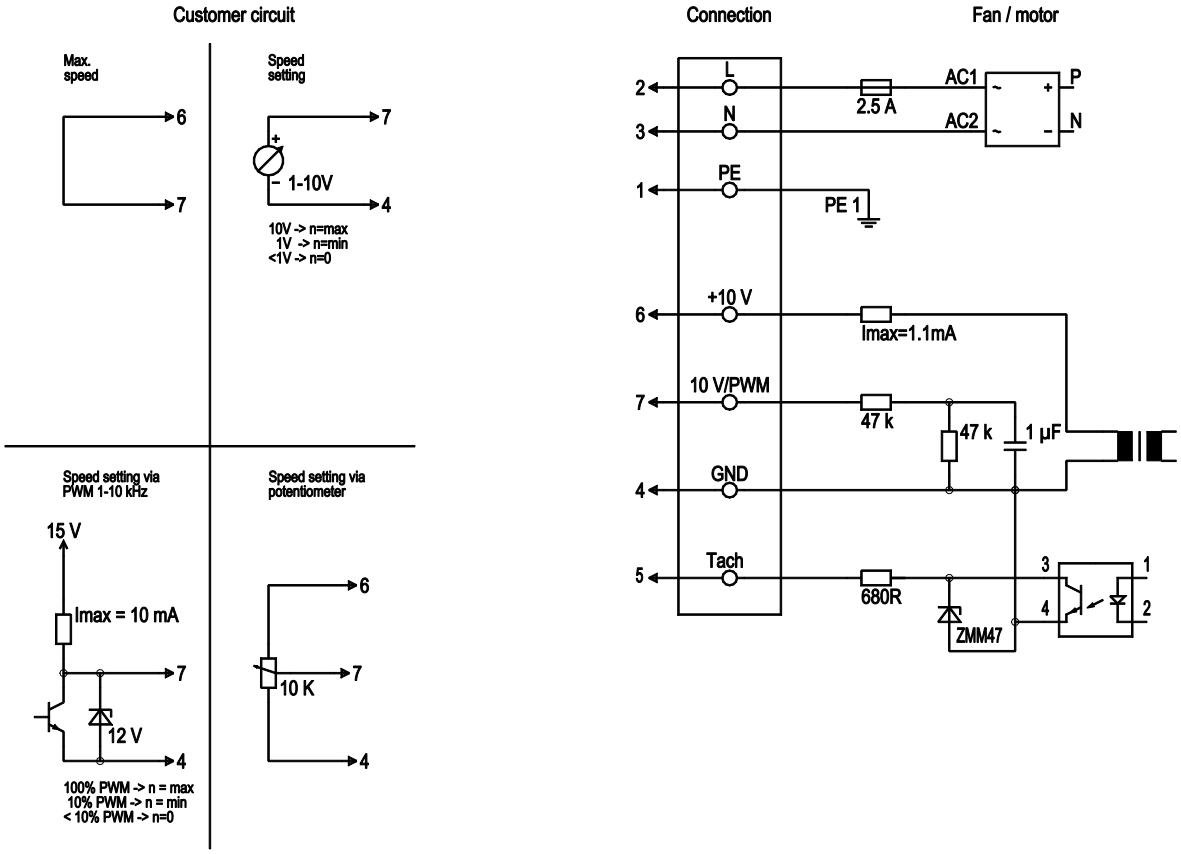
Connection screen



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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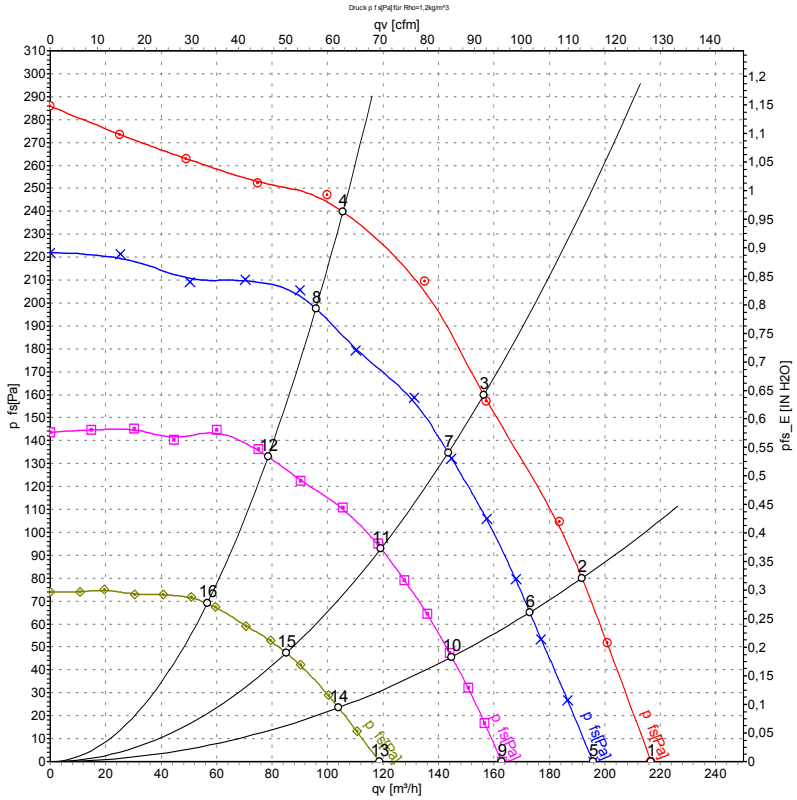
Charts: Air flow 50 Hz



Measurement: LU-69544-1
Measurement: LU-64013-1
Measurement: LU-64016-1
Measurement: LU-64017-1

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	1925	38	0.30	215	0	130	0.00
2	230	50	2035	35	0.26	190	80	115	0.32
3	230	50	2130	29	0.22	155	160	90	0.64
4	230	50	2305	22	0.18	105	240	60	0.96
5	230	50	1780	30	0.23	195	0	115	0.00
6	230	50	1840	26	0.20	175	65	100	0.26
7	230	50	1925	23	0.17	145	135	85	0.54
8	230	50	2095	17	0.14	95	198	55	0.79
9	230	50	1495	18	0.14	165	0	95	0.00
10	230	50	1545	17	0.13	145	46	85	0.18
11	230	50	1610	14	0.12	120	93	70	0.37
12	230	50	1720	11	0.10	80	133	45	0.53
13	230	50	1100	9.1	0.08	120	0	70	0.00
14	230	50	1130	8.3	0.07	105	24	60	0.10
15	230	50	1170	7.4	0.07	85	47	50	0.19
16	230	50	1240	6.4	0.06	55	69	35	0.28

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