R3G133-AM07-05

EC centrifugal fan

backward curved, single inlet

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**R3G133-AM07-05**
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}	4540
Power input	W	57
Current draw	A	0.53
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

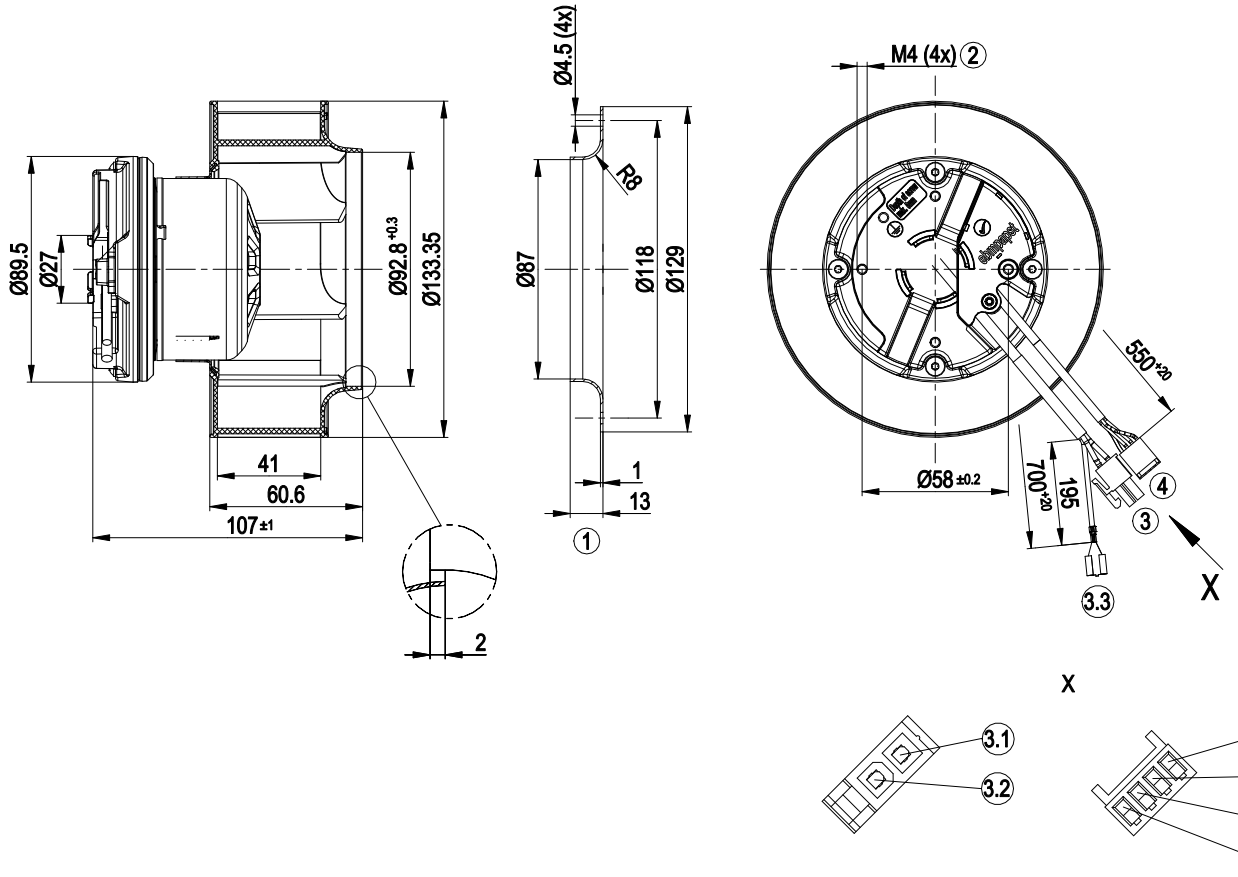
Mass	0.9 kg
Size	133 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	PA plastic
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
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 - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
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



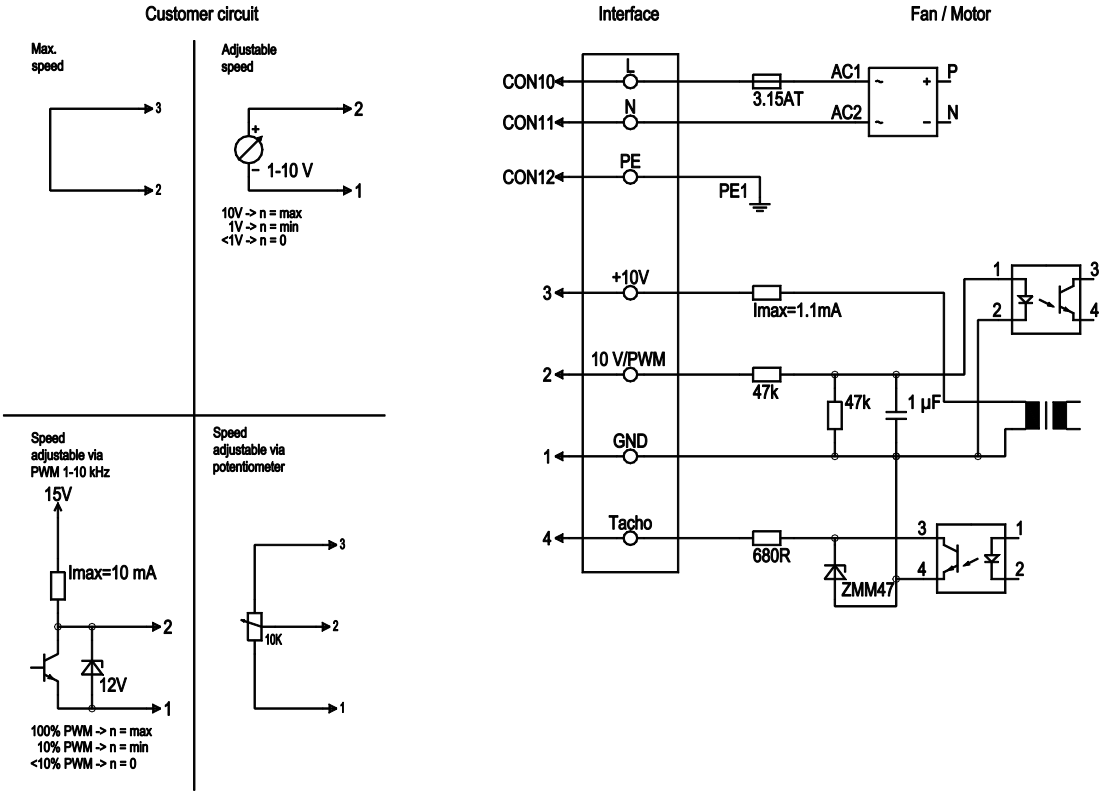
1	Accessory part: Inlet nozzle 09566-2-4013 not included in scope of delivery
2	Depth of screw max. 5 mm
3	Connection line PVC AWG20 with connector housing 2-pole Molex 50-36-1673, 2x female connector Molex 39-00-0059 crimped
3.1	L (black)
3.2	N (blue)
3.3	Threaded pin 6.3 x 0.8 (PE)
4	Connection line PVC AWG22 with connector housing 4-pole Molex 22-01-2045, 4x plug pin Molex 08-50-0031
4.1	GND (blue)
4.2	+10 V (red)
4.3	0-10 V PWM (yellow)
4.4	Tach (white)

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Connection screen



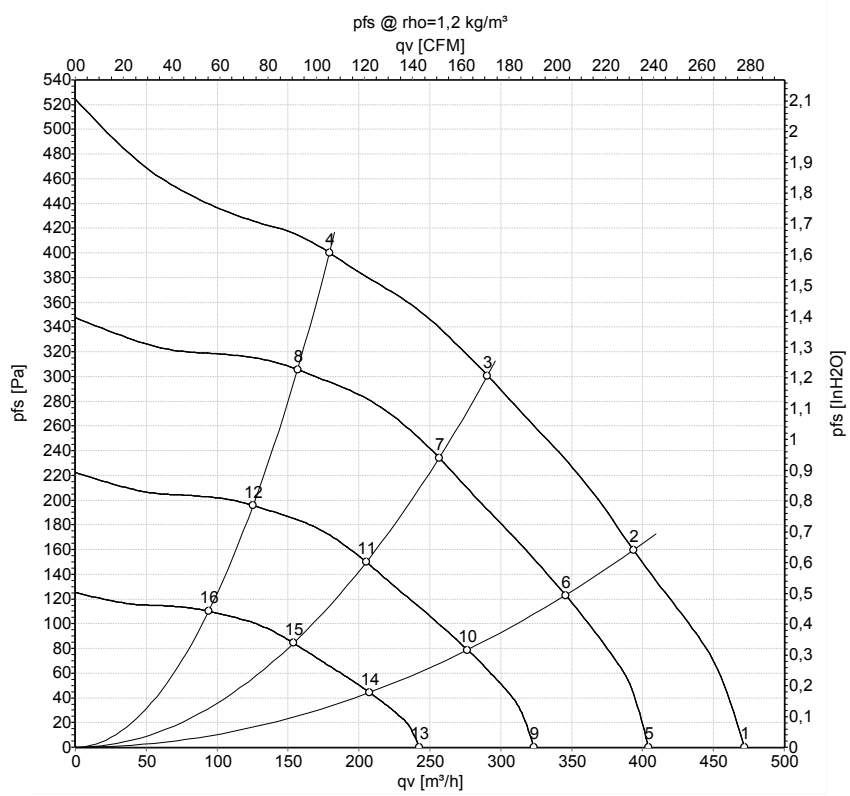
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated

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Charts: Air flow 50 Hz



Measurement: LU-155314-1

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	4670	46	0.45	79	86	470	0	280	0.00
2	230	50	4550	53	0.50	71	78	395	160	230	0.64
3	230	50	4540	57	0.53	59	67	290	300	170	1.20
4	230	50	4575	51	0.49	64	72	180	400	105	1.61
5	230	50	4000	29	0.28	75	82	405	0	240	0.00
6	230	50	4000	36	0.34	67	75	345	123	205	0.49
7	230	50	4000	37	0.35	56	64	255	234	150	0.94
8	230	50	4000	34	0.33	61	69	155	306	90	1.23
9	230	50	3200	17	0.14	69	77	325	0	190	0.00
10	230	50	3200	19	0.18	62	69	275	79	160	0.32
11	230	50	3200	20	0.18	50	58	205	150	120	0.60
12	230	50	3200	19	0.17	55	63	125	196	75	0.79
13	230	50	2400	10.0	0.06	62	69	245	0	145	0.00
14	230	50	2400	11	0.07	55	62	205	44	120	0.18
15	230	50	2400	11	0.08	43	51	155	84	90	0.34
16	230	50	2400	10.0	0.07	48	56	95	110	55	0.44

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

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