R3G133-RA01-01

EC centrifugal fan - RadiCal

backward curved

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Nominal data

Type	**R3G133-RA01-01**
Motor	**M3G045-AI**

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}	3770
Power input	W	27
Current draw	A	0.27
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

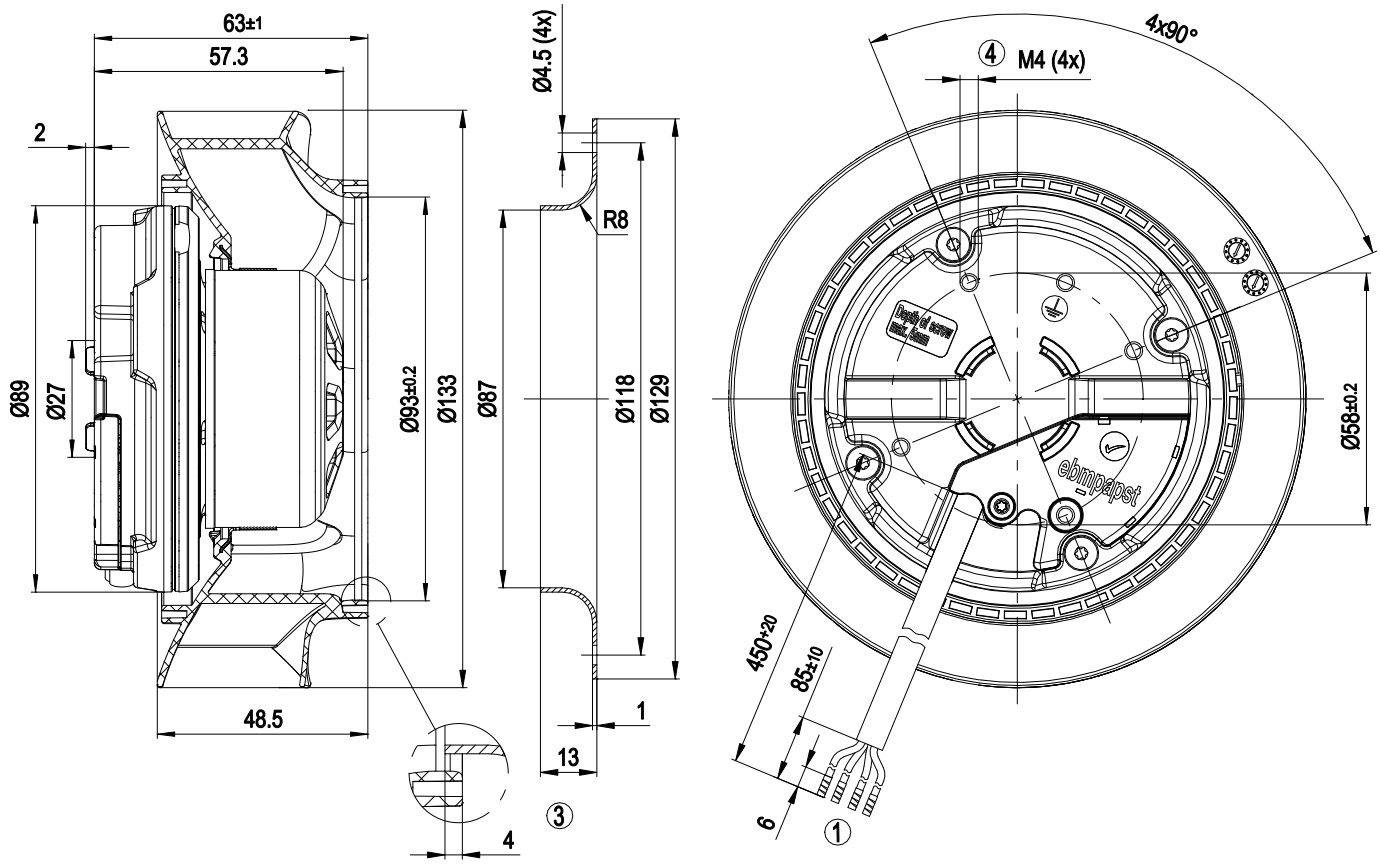
Mass	0.5 kg
Size	133 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	Plastic PA6, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental 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	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Speed adjustment input (230 V) - Soft start - Over-temperature protected electronics / motor
Speed steps	2
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
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

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Product drawing



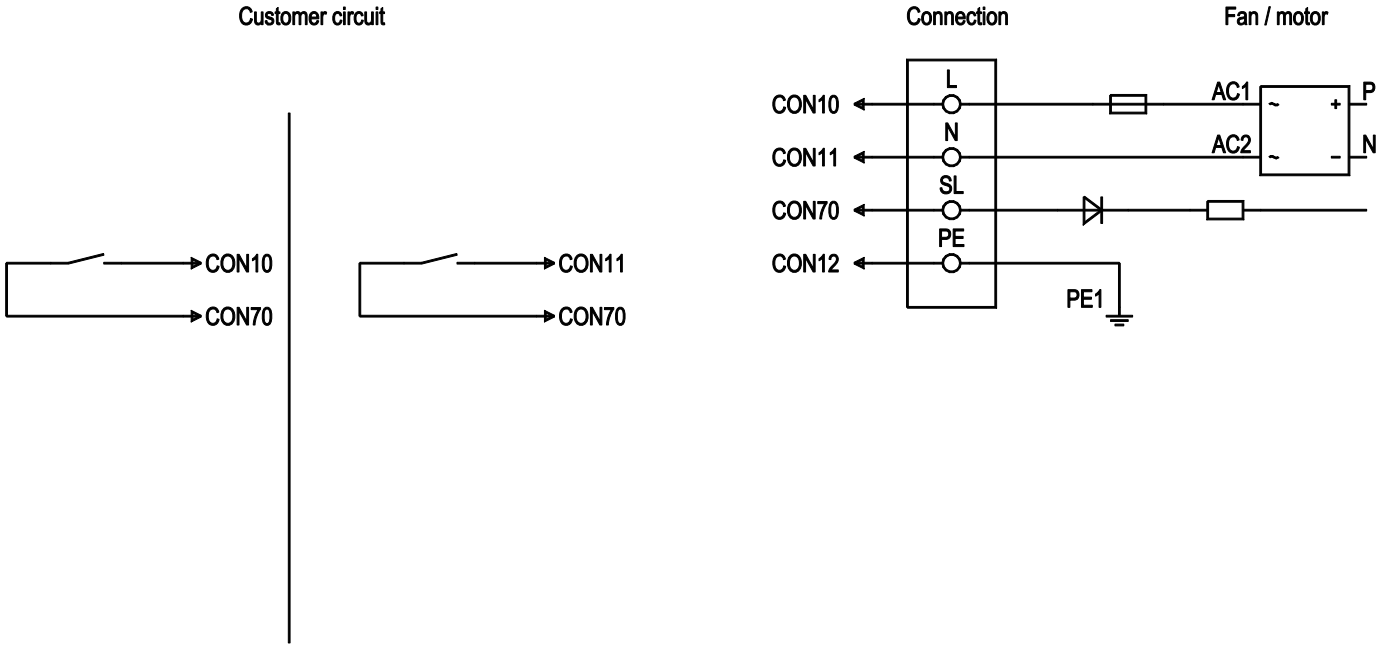
1	Connection line PVC 4G AWG20, 4x brass lead tips crimped
2	Accessory part: Inlet nozzle 09566-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 5 mm

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Connection screen



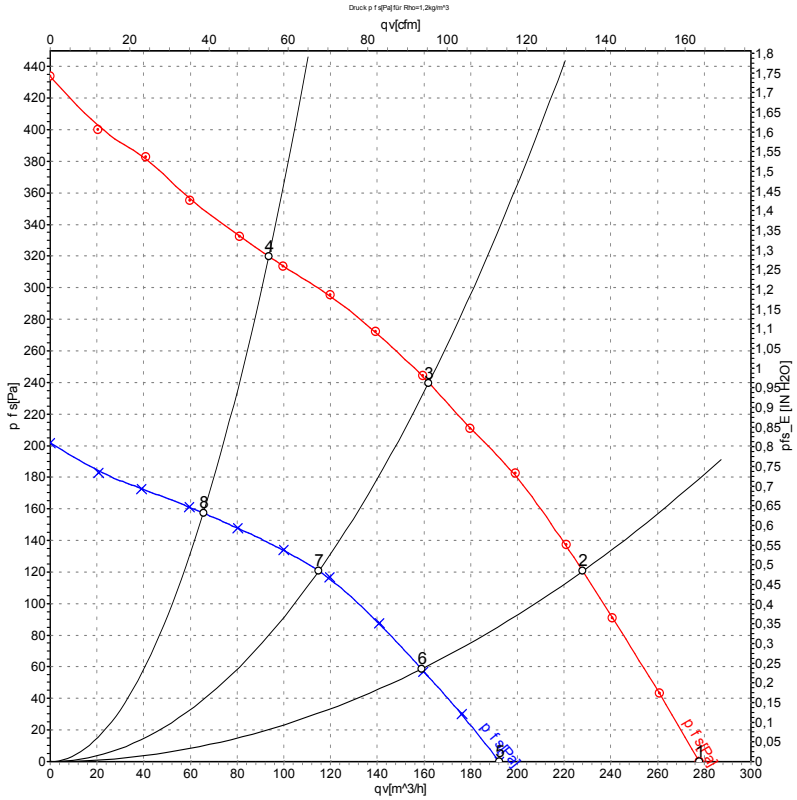
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50/60 Hz
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	CON70	SL	brown	Speed selection: switch open = speed step 1, switch closed = speed step 2

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Charts: Air flow 50 Hz



Measurement: LU-131806-1
Measurement: LU-131809-1

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	3930	24	0.23	58	66	280	0	165	0.00
2	230	50	3800	26	0.26	54	63	230	120	135	0.48
3	230	50	3770	27	0.27	52	61	160	240	95	0.96
4	230	50	3835	26	0.25	56	65	95	320	55	1.28
5	230	50	2755	9.6	0.11	49	58	190	0	115	0.00
6	230	50	2690	10	0.12	47	56	160	59	95	0.24
7	230	50	2655	11	0.13	44	53	115	121	70	0.49
8	230	50	2705	10	0.12	48	57	65	157	40	0.63

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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