R3G133-AK03-01

EC centrifugal fan

forward curved, single inlet

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Nominal data

Type	**R3G133-AK03-01**
Motor	**M3G055-BI**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	2620
Power input	W	82
Current draw	A	0.7
Min. back pressure	Pa	0
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

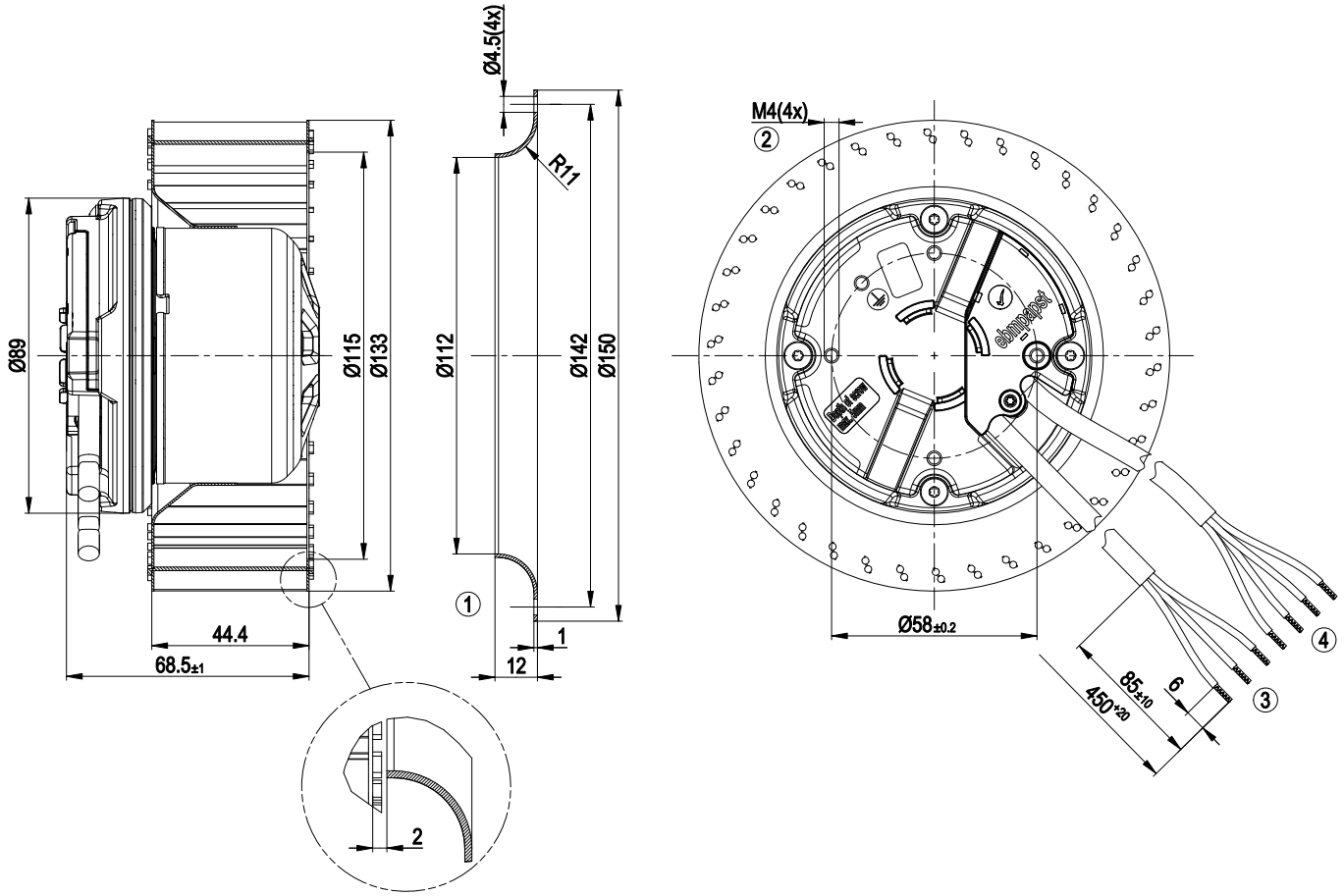
Mass	1.1 kg
Size	133 mm
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	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 - 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
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 55022 (Class B, household environment), on account of the installation conditions, ferritic damping in the connection line may be required for the application.
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
Approval	GOST

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Product drawing



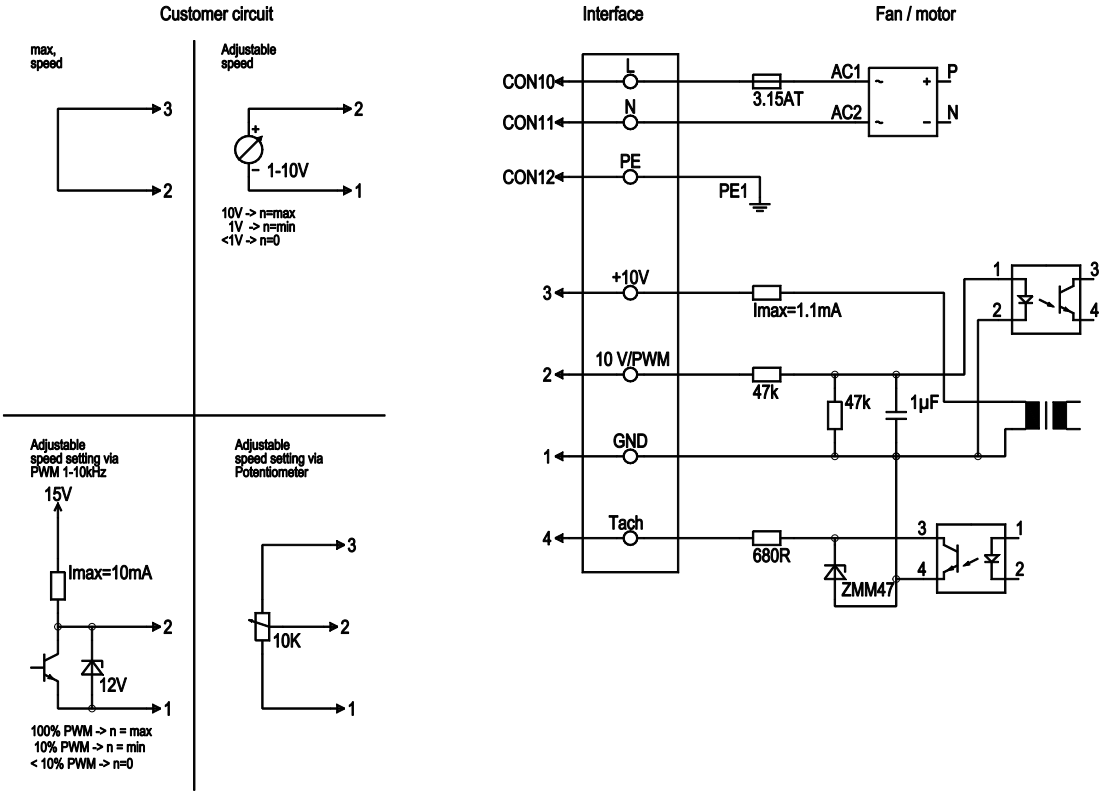
1	Accessory part: Inlet nozzle 09572-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 5 mm
3	Connection line PVC 3X AWG20, 3x brass lead tips crimped
4	Connection line PVC 4X AWG22, 4x brass lead tips crimped

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Connection screen



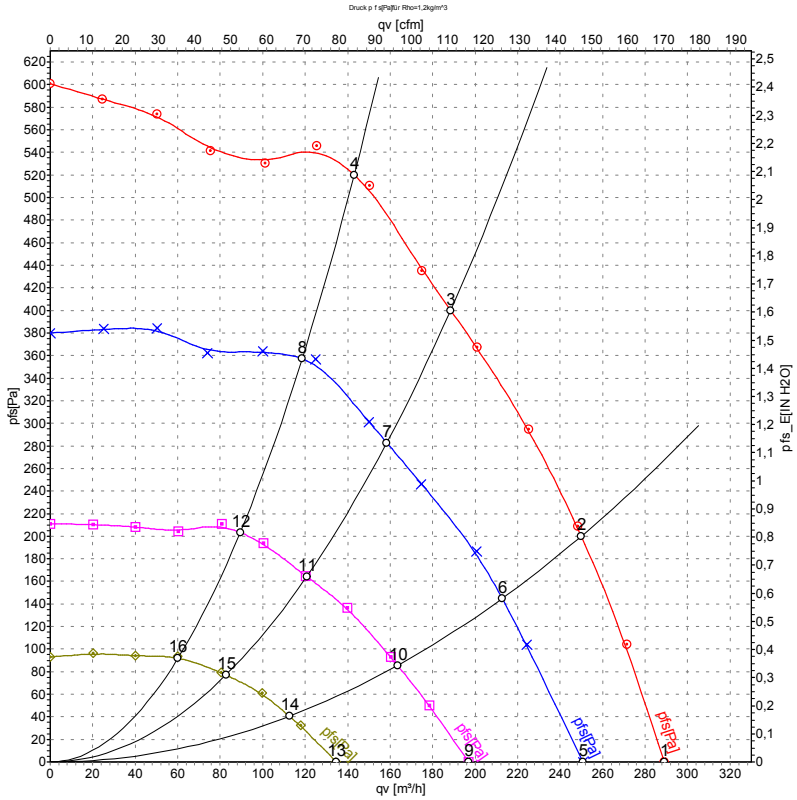
Line	No.	Signal	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND - Connection for control interface
	2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof.
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

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Charts: Air flow 50 Hz



Measurement: LU-136238
Measurement: LU-136239
Measurement: LU-136241
Measurement: LU-136243

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}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	2620	82	0.70	69	75	290	0
2	230	50	2810	78	0.66	69	75	250	200
3	230	50	3055	65	0.57	66	74	190	400
4	230	50	3240	55	0.49	66	72	145	520
5	230	50	2310	55	0.50			250	0
6	230	50	2415	49	0.44			215	145
7	230	50	2585	39	0.39			160	283
8	230	50	2715	33	0.34			120	359
9	230	50	1805	28	0.28			195	0
10	230	50	1885	24	0.24			165	86
11	230	50	1995	20	0.22			120	164
12	230	50	2060	17	0.19			90	203
13	230	50	1275	11	0.14			135	0
14	230	50	1315	10	0.13			115	41
15	230	50	1375	8.4	0.11			85	78
16	230	50	1410	7.9	0.11			60	93

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

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