

R3G133-AE07-02

EC centrifugal fan

backward curved, single inlet



ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2

D-74673 Mulfingen

Phone: +49(0)7938/81-0

Fax: +49(0)7938/81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Nominal data

Type	R3G133-AE07-02	
Motor	M3G055-BD	
Phase		1~
Nominal voltage	[VAC]	230
Nominal voltage range	[VAC]	195 .. 253
Frequency	[Hz]	50/60
Type of data definition		rfa
Speed	[min ⁻¹]	4480
Power input	[W]	43
Current draw	[A]	0.32
Min. ambient temperature	[°C]	-25
Max. ambient temperature	[°C]	60

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

R3G133-AE07-02

EC centrifugal fan

backward curved, single inlet

Technical features

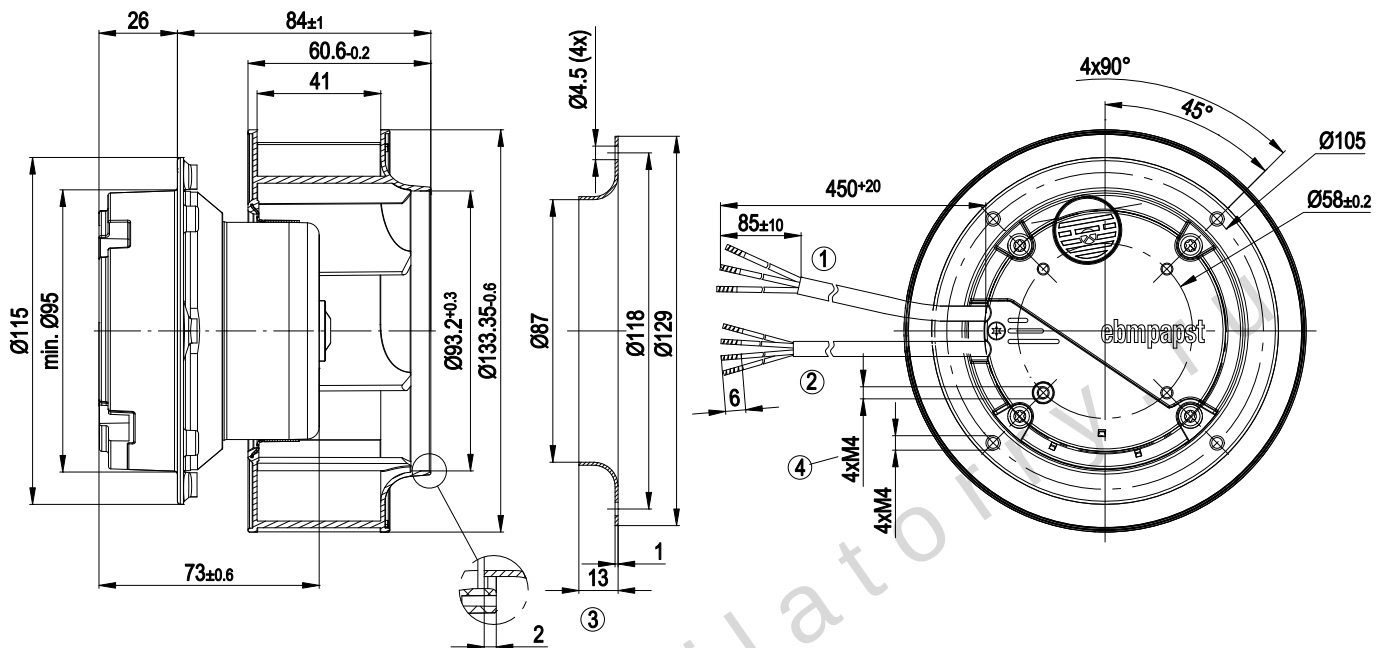
Leakage current	<= 3.5 mA
General description	Integrated electronics
Size	133 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-1
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	1.0 kg
Material of electronics housing	Die-cast aluminium
Material of impeller	Plastic PA66, fibreglass-reinforced, red-brown
Motor protection	Thermal overload protector (TOP) wired internally
Product conforming to standard	EN 60335-1
Surface of rotor	Thick layer passivated
Number of blades	7
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Protection class	I
Technical features	- Output 10 VDC, max. 1.1 mA - Locked-rotor protection - Tach output - Control input 0-10 VDC / PWM
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	GOST

R3G133-AE07-02

EC centrifugal fan

backward curved, single inlet

Product drawing



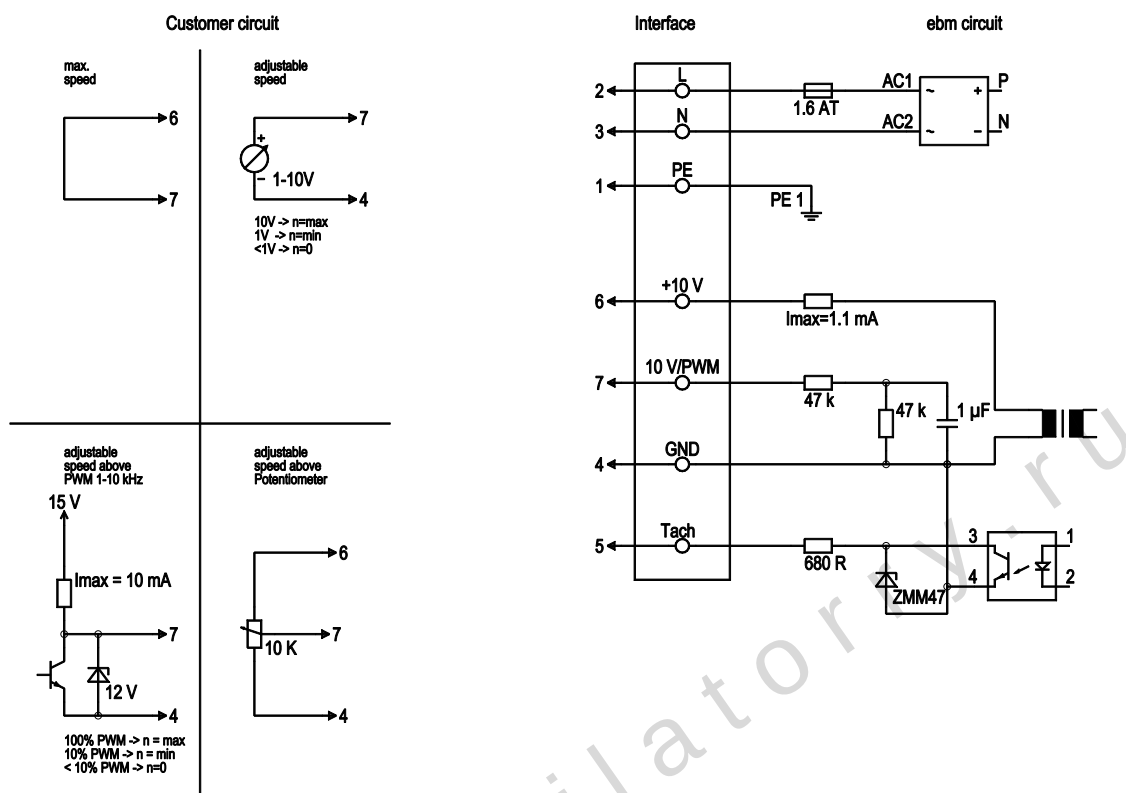
1	Connection line PVC 3 x 0.5 mm ² ; 3 x brass lead tips crimped
2	Control line PVC 4 x 0.25 mm ² , 4x brass lead tips crimped
3	Accessory part: Inlet nozzle 09566-2-4013, not included in the standard scope of delivery
4	Depth of screw max. 6 mm

R3G133-AE07-02

EC centrifugal fan

backward curved, single inlet

Connection screen



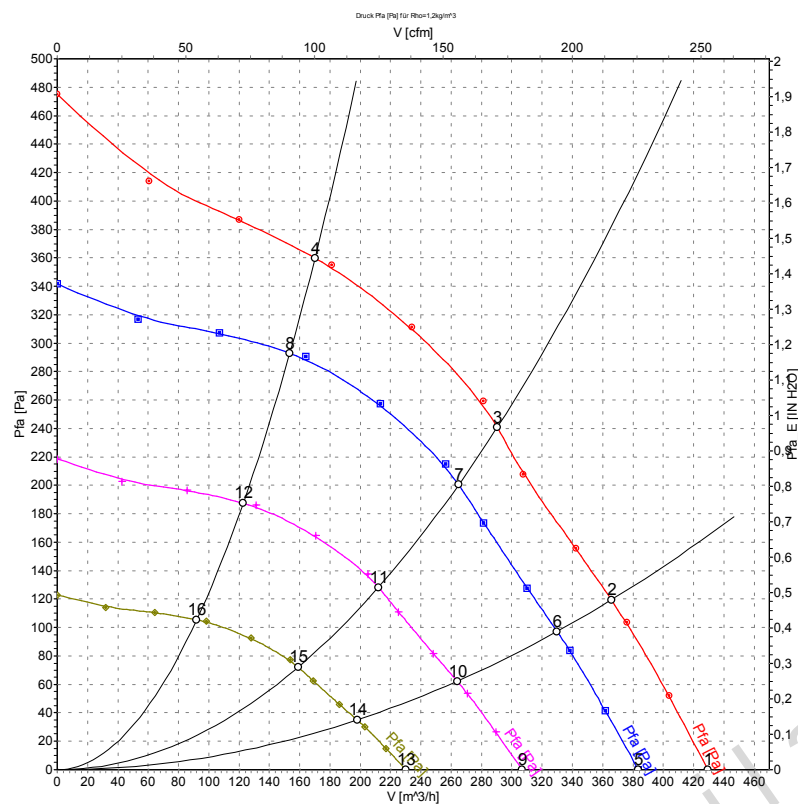
Line	No.	Signal	Colour	Function / assignment
1	1	PE	green/yellow	Protective earth
1	2	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
1	3	N	blue	Neutral conductor
2	4	GND	blue	GND - Connection for control interface
2	5	Tacho	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
2	6	10V	red	max. 1.1 mA, voltage output 10 V/1.1 mA, electrically isolated, not short-circuit-proof
2	7	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated

R3G133-AE07-02

EC centrifugal fan

backward curved, single inlet

Charts: Air flow 50 Hz



Measurement: LU-68538

Measured values

	U	f	n	P ₁	I	V̇	P _{fa}
	[V]	[Hz]	[min ⁻¹]	[W]	[A]	[m³/h]	[Pa]
1	230	50	4480	43	0.32	430	0
2	230	50	4435	47	0.35	365	120
3	230	50	4385	49	0.38	290	240
4	230	50	4430	47	0.36	170	360
5	230	50	4000	31	0.23	385	0
6	230	50	4000	35	0.26	330	97
7	230	50	4000	38	0.29	265	201
8	230	50	4000	34	0.26	155	294
9	230	50	3200	16	0.12	305	0
10	230	50	3200	18	0.13	265	62
11	230	50	3200	19	0.15	210	128
12	230	50	3200	18	0.14	125	188
13	230	50	2400	6.61	0.05	230	0
14	230	50	2400	7.48	0.06	200	35
15	230	50	2400	8.11	0.06	160	72
16	230	50	2400	7.42	0.06	90	106