G3G133-RF15-03

EC centrifugal fan - RadiCal

backward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G133-RF15-03**
Motor	**M3G055-BD**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed (rpm)	min^{-1}	5750
Power consumption	W	85
Current draw	A	0.75
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Size	133 mm
Motor size	55
Impeller material	PP plastic
Housing material	PP plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

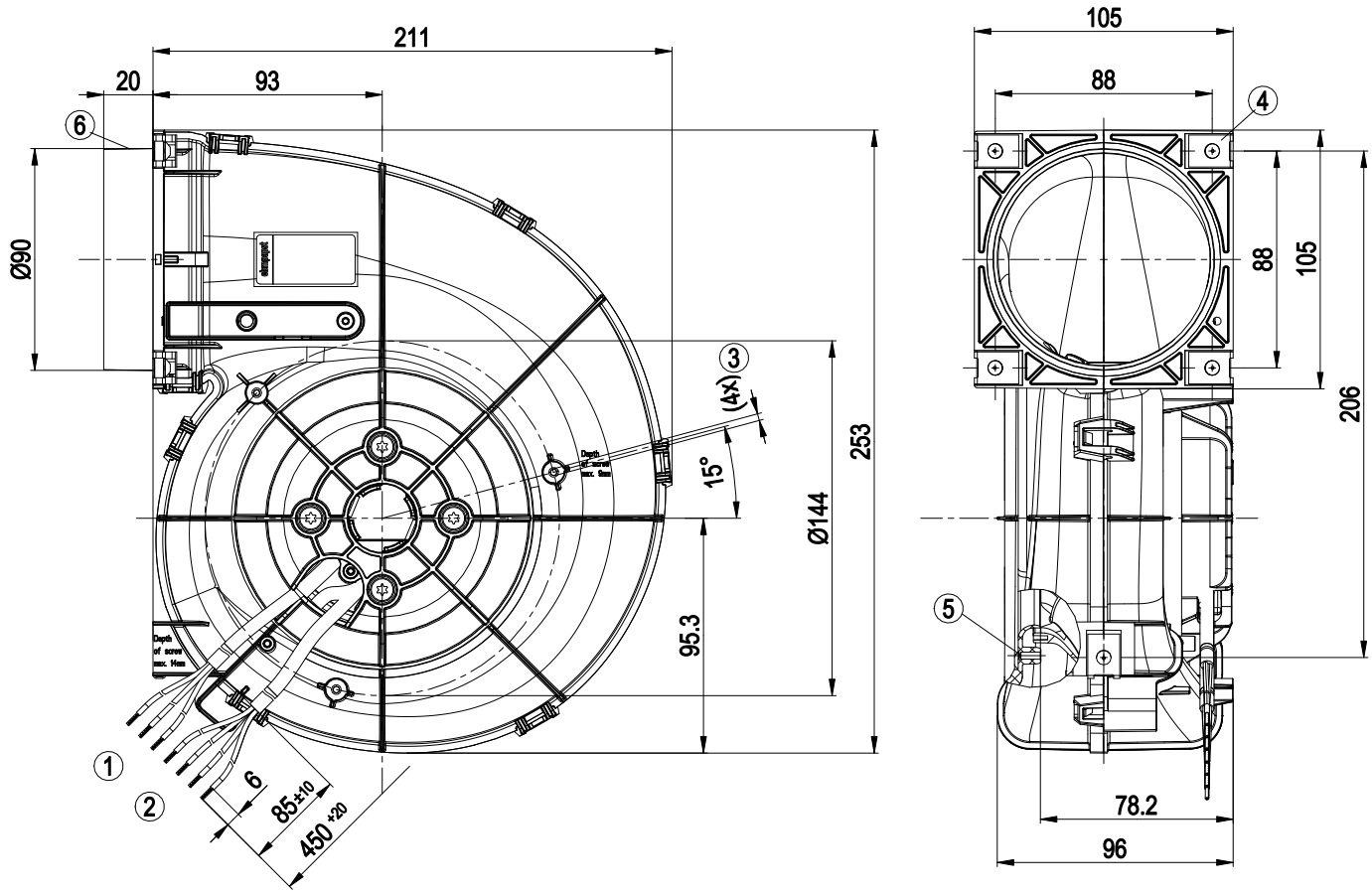
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Product drawing



1	Cable PVC AWG20
	3x splice
2	Cable PVC AWG22
	4x splice
3	Tapping hole prepared for dia. 4 mm self-tapping screw for fastening plastics, max. screw-in depth 9 mm
4	5x sheet metal nut for thread EN ISO 1478-ST4.8 (max. screw length 14 mm plus material thickness of mounting)
5	Screw-on domes are only permissible for Flowgrid!
6	Connecting sleeve not suitable for installation with pipe clamps

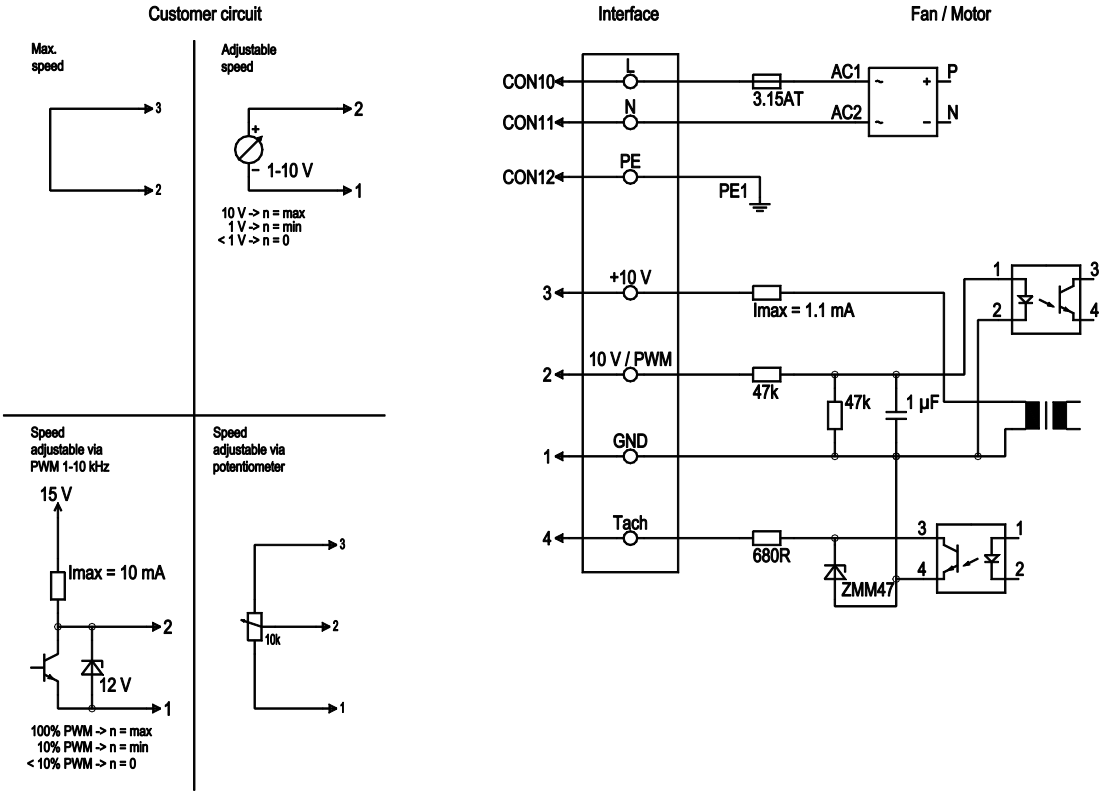
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate 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

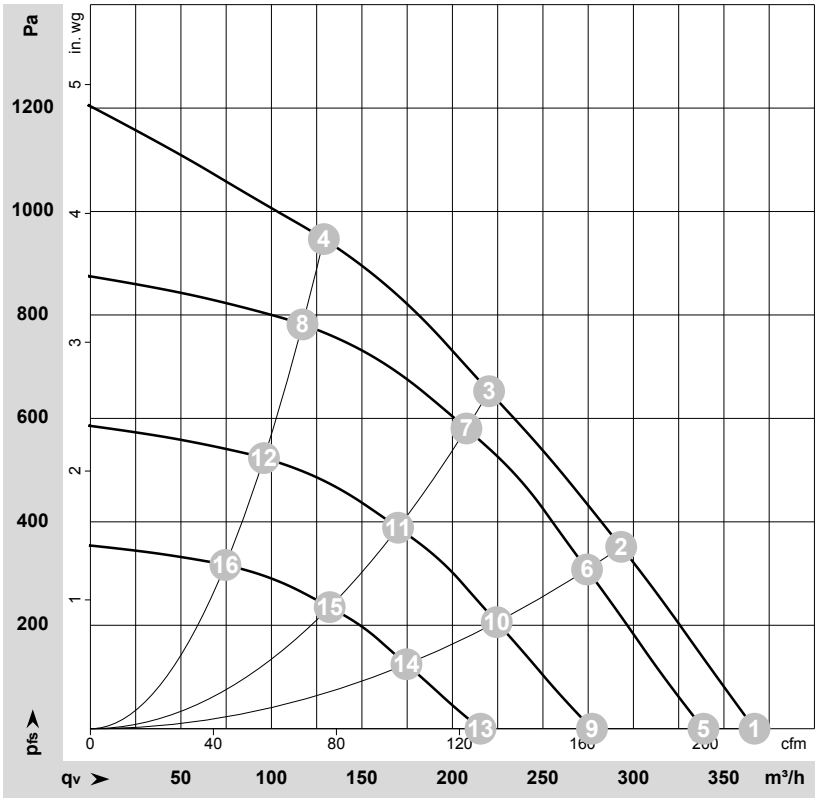
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-196752-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	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	in. wg
1	1~	230	50	5960	80	0.70	76	80	365	0	215	0.00
2	1~	230	50	5880	84	0.73	72	77	295	350	170	1.41
3	1~	230	50	5750	85	0.75	69	75	220	650	130	2.61
4	1~	230	50	6050	79	0.70	69	76	130	950	75	3.81
5	1~	230	50	5500	63	0.55	74	78	340	0	200	0.00
6	1~	230	50	5500	69	0.59	71	76	275	308	160	1.24
7	1~	230	50	5500	71	0.62	67	73	210	581	120	2.33
8	1~	230	50	5500	60	0.52	67	74	115	783	70	3.14
9	1~	230	50	4500	35	0.30	69	73	275	0	165	0.00
10	1~	230	50	4500	38	0.33	65	71	225	206	130	0.83
11	1~	230	50	4500	39	0.34	62	68	170	389	100	1.56
12	1~	230	50	4500	33	0.29	62	69	95	524	55	2.10
13	1~	230	50	3500	16	0.14	63	67	215	0	125	0.00
14	1~	230	50	3500	18	0.15	59	64	175	125	105	0.50
15	1~	230	50	3500	18	0.16	56	62	130	235	80	0.94
16	1~	230	50	3500	15	0.13	56	62	75	317	45	1.27

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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