EC centrifugal fan - RadiCal

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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Nominal data

Type	**G3G133-RO15-11**
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
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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

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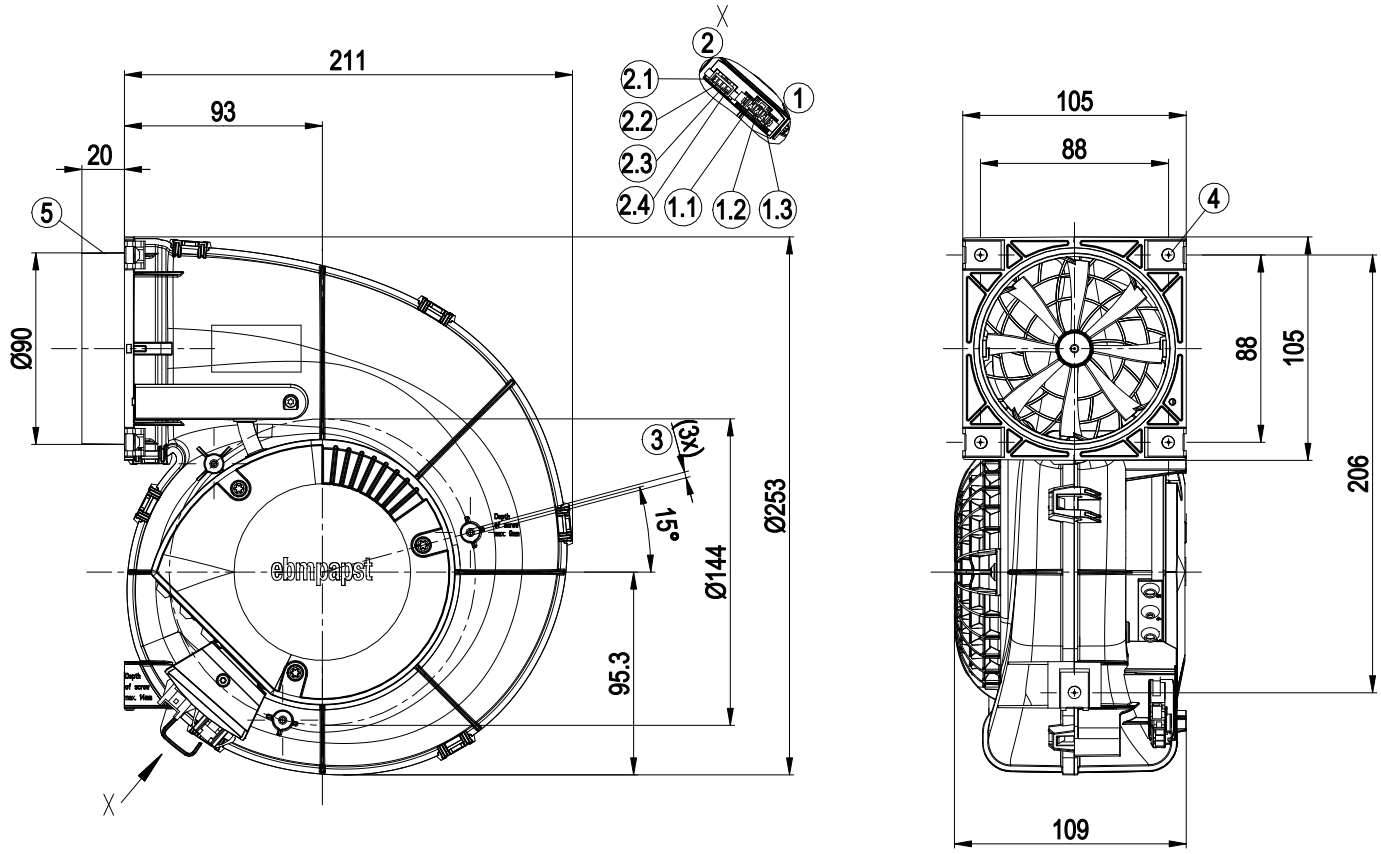
Technical description

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	Motor IP54, electronics IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
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. 10 mA - Tach output - Power limiter - Motor current limitation - RS-485 MODBUS-RTU - 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
Electrical hookup	Plug
Motor protection	Electronic motor protection
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

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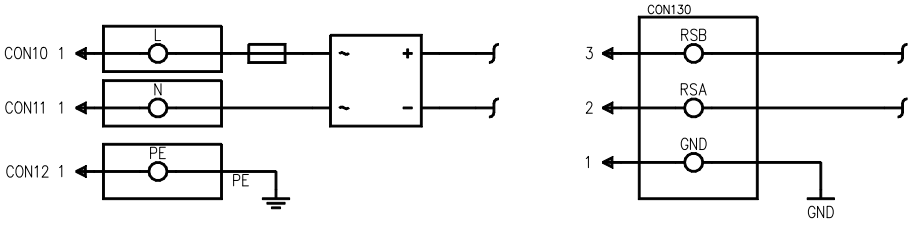
Product drawing



1	3-pole connector housing TE 2005250-1
	3x plug pin TE 177917-1
1.1	green/yellow
1.2	blue
1.3	black
2	4-pole connector housing JST XARR-04V
	3x plug pin JST SXAM-01T-P0.6
2.1	blue
2.2	white
2.3	brown
2.4	not used
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	Connecting sleeve not suitable for installation with pipe clamps

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Connection diagram

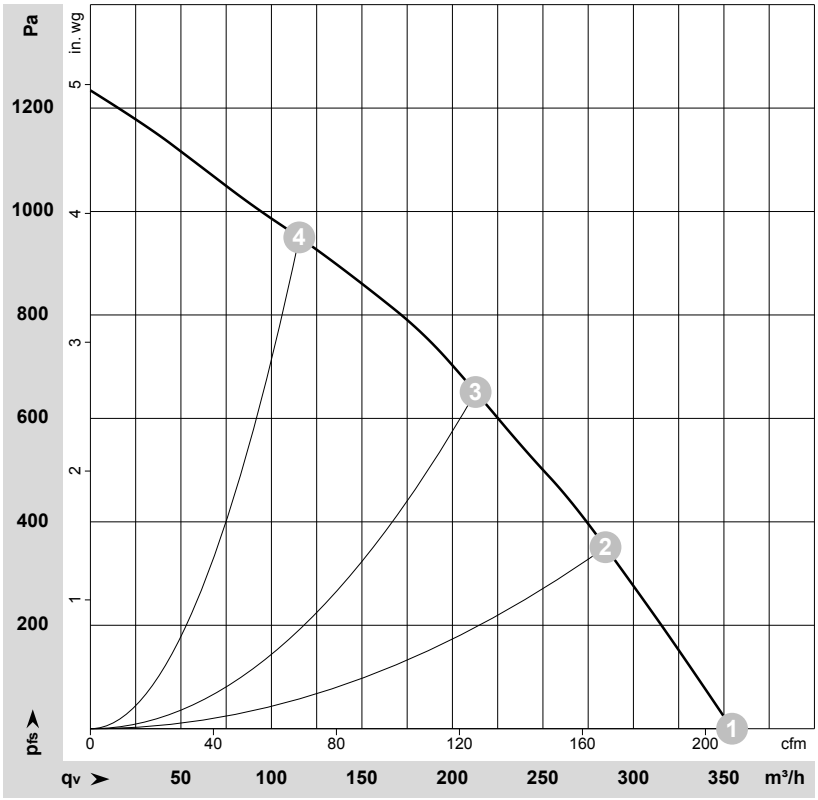


No.	Conn.	Designation	Color	Function/assignment
CON10	1	L	black	Power supply, phase, see nameplate for voltage range
CON11	1	N	blue	Power supply, neutral conductor, see nameplate for voltage range
CON12	1	PE	green/yellow	Protective earth
CON130	3	RSB	brown	RS485 interface for MODBUS, RSB; SELV
CON130	2	RSA	white	RS485 interface for MODBUS, RSA; SELV
CON130	1	GND	blue	Reference ground for control interface, SELV

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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-196714-1

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

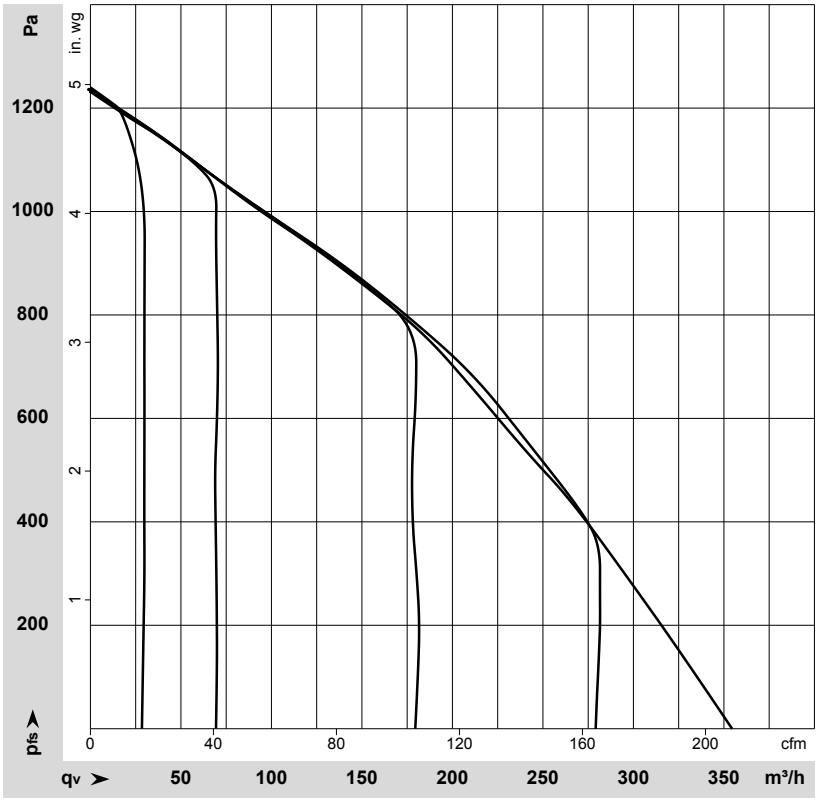
	Wired	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	1~	230	50	5805	83	0.73	75	79	82	355	0	210	0.00
2	1~	230	50	5755	85	0.75	70	75	78	285	350	170	1.41
3	1~	230	50	5750	85	0.75	68	74	75	215	650	125	2.61
4	1~	230	50	6010	77	0.69	69	76	81	115	950	70	3.81

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
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-196714-1

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.

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