G3G190-RP03-14

EC centrifugal fan - RadiCal

backward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G190-RP03-14**
Motor	**M3G055-BI**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	3050
Power consumption	W	72
Current draw	A	0.7
Min. ambient temperature	°C	-25
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

Weight	2.1 kg
Size	190 mm
Motor size	55
Rotor surface	Thick-film passivated
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; (sealed, without air gap)
Technical features	- Tach output - Power limiter - Motor current limitation - RS-485 MODBUS-RTU - Soft start - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
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 60034-1; EN 60204-1; EN 60335-1; CE

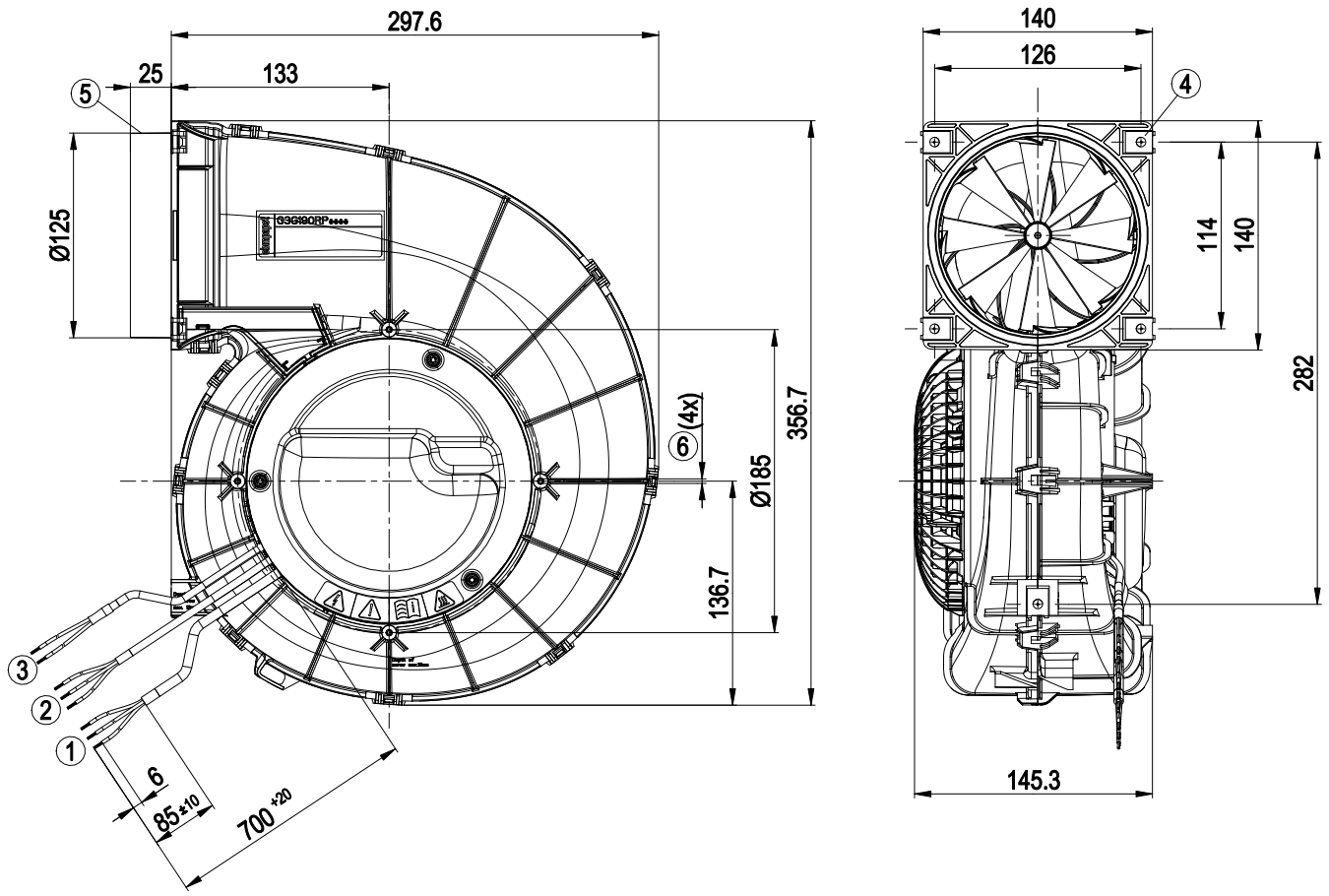
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Product drawing



1	Cable PVC AWG20
	3x splice
2	Cable PVC AWG22
	3x splice
3	Cable PVC AWG22
	2x splice
4	5x sheet metal nut for thread EN ISO 1478-ST4.8 (max. screw length 16 mm plus thickness of mounting material)
5	Connecting sleeve not suitable for installation with pipe clamps
6	Tapping hole prepared for self-tapping screw for fastening plastics (Remform) dia. 4 mm, clearance for screw max. 15 mm. The torque is to be determined on the basis of the screw.

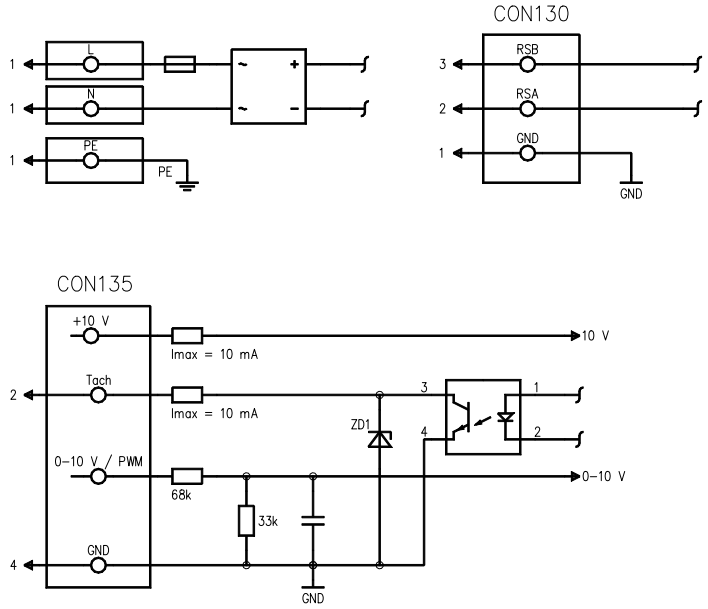
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1	L	black	Power supply, phase, see nameplate for voltage range
	1	N	blue	Power supply, neutral conductor, see nameplate for voltage range
	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
CON135	-	-		not brought out via wire
CON135	2	Tacho	white	Tach output: open collector, 1 pulse per revolution, SELV
CON135	-	-		not brought out via wire
CON135	4	GND	blue	Reference ground for control interface, SELV
				* Note: the total permissible load for all +3.3 V/max. 10 mA is max. 10 mA

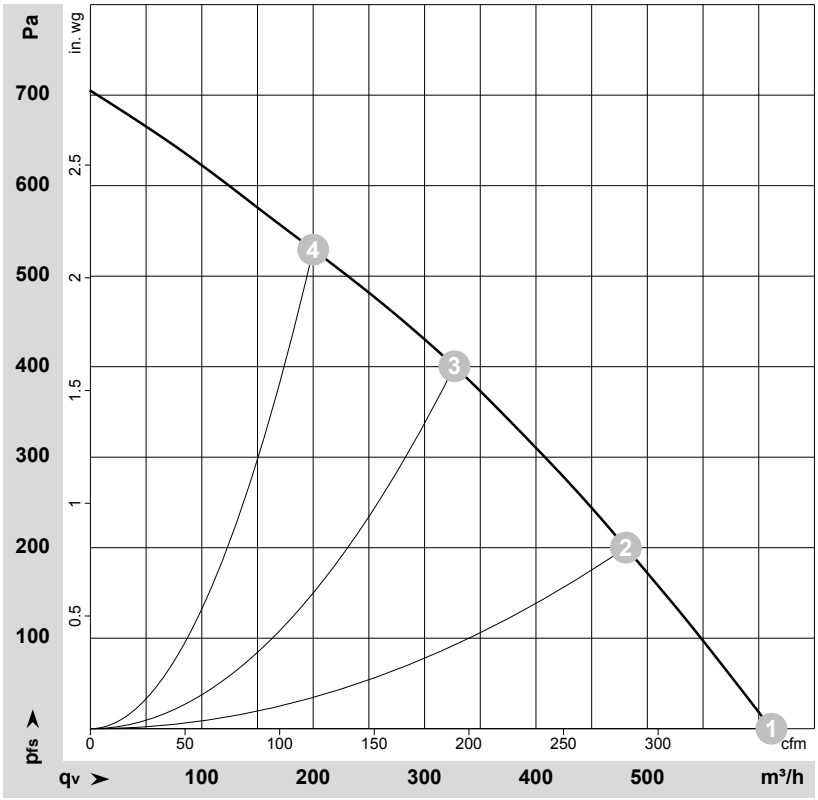
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-190562-1

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	3125	70	0.66	68	74	610	0	360	0.00
2	1~	230	50	3050	72	0.70	63	69	480	200	285	0.80
3	1~	230	50	3095	71	0.67	60	66	325	400	190	1.61
4	1~	230	50	3200	65	0.61	63	70	200	530	120	2.13

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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