G3G225-RE07-22

EC centrifugal fan - RadiCal

backward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G225-RE07-22**
Motor	**M3G055-DF**

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}	2850
Power consumption	W	165
Current draw	A	1.4
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
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

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	66.5	42.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		85.2	61
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.16
09 Air flow q_v	m^3/h	605
09 Pressure increase p_{fs}	Pa	581
10 Speed (rpm) n	min^{-1}	2920
11 Specific ratio*		1.01

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-199562

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Technical description

Weight	2.94 kg
Size	225 mm
Motor size	55
Rotor surface	Thick-film passivated
Impeller material	PA 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	- Auto-addressing can be activated by BUS - 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 60335-1; CE
Approval	UL 1004-7 + 60730-1; CSA C22.2 No. 77 + CAN/CSA-E60730-1

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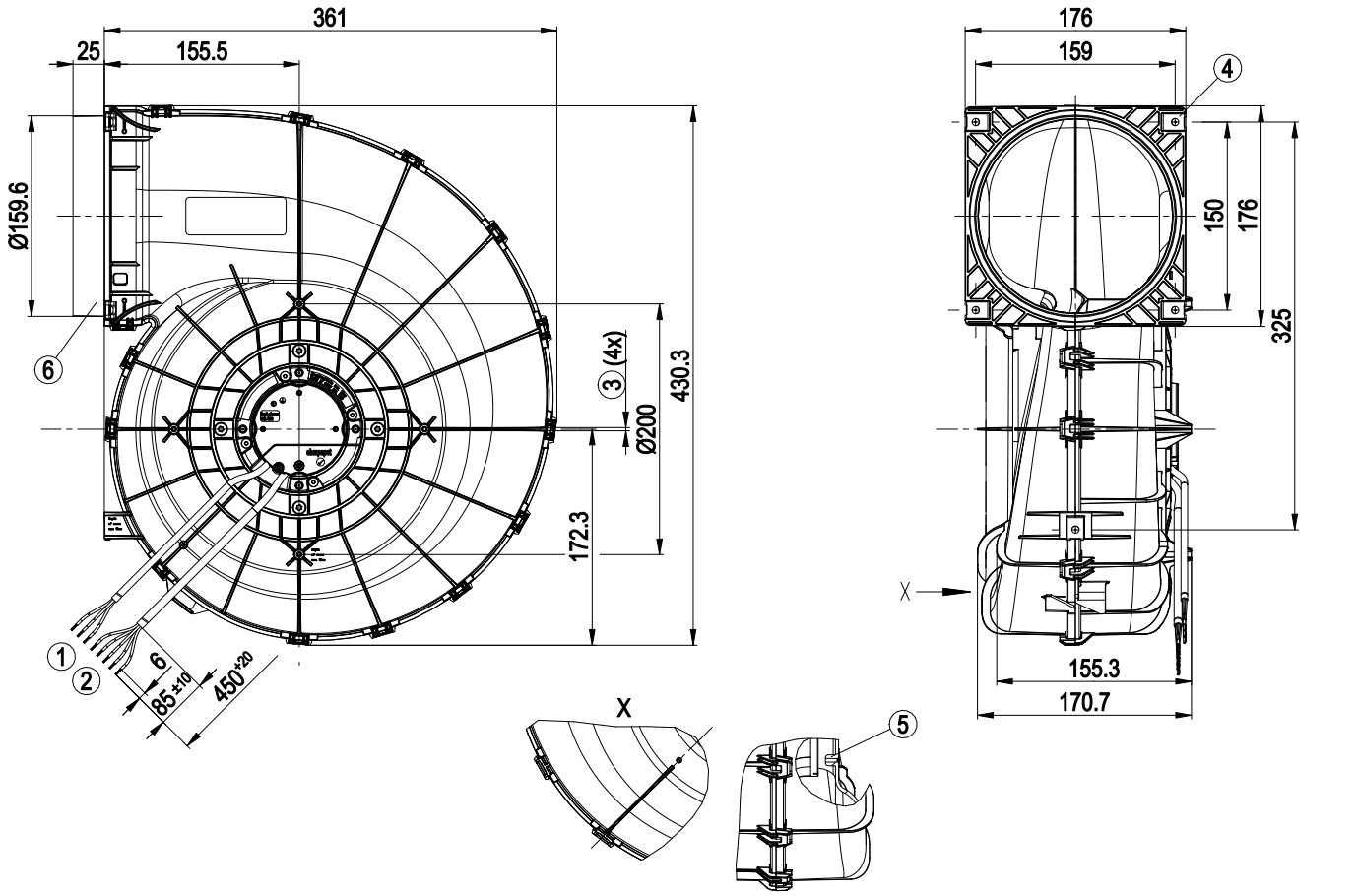
Product drawing



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

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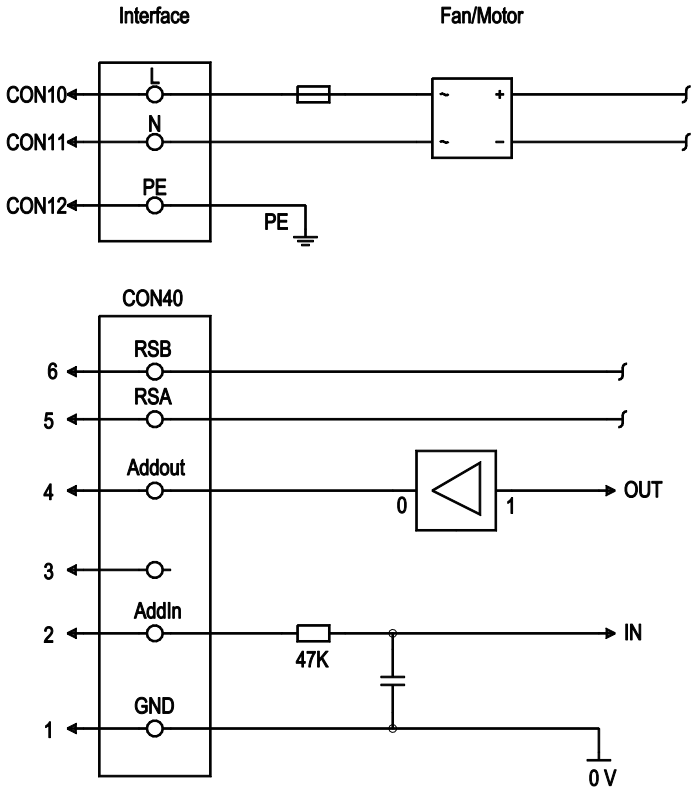
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply, phase, see nameplate for voltage range
	CON11	N	blue	Power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Protective earth
CON40	6	RSB	brown	RS-485 interface for MODBUS, RSB; SELV
CON40	5	RSA	white	RS485 interface for MODBUS, RSA; SELV
CON40	4	AddOut /max. 10 mA	gray	Addressing output 10 V, SELV
CON40	3			not used
CON40	2	AddIn	yellow	Addressing input Umax = 48 VDC, SELV
CON40	1	GND	blue	Reference ground for interface, SELV

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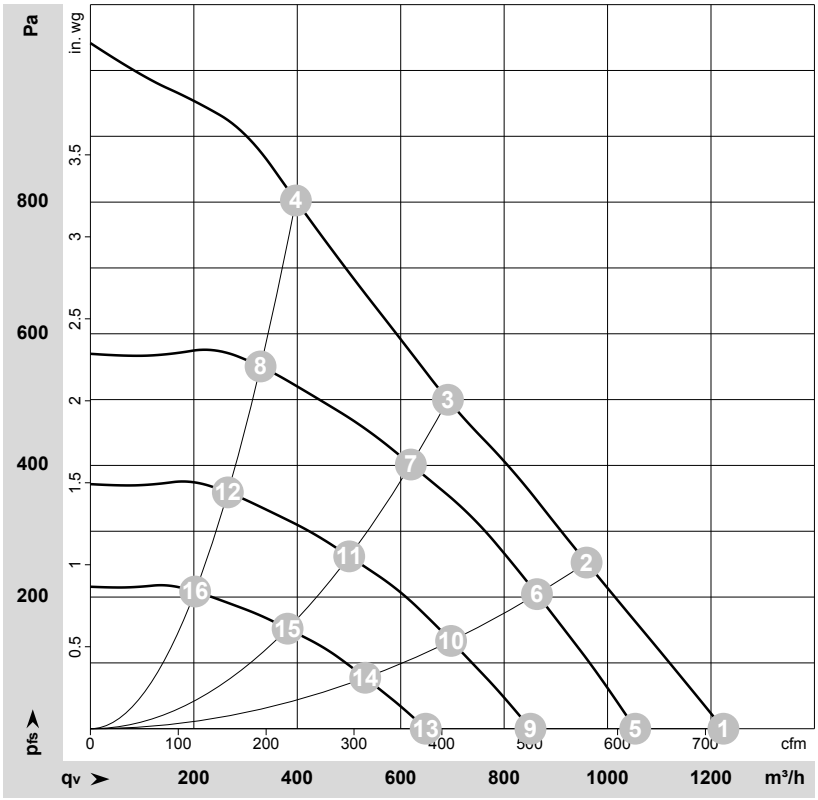
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-202715-1

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	3020	165	1.40	72	77	1225	0	720	0.00
2	1~	230	50	2890	165	1.40	67	73	960	250	565	1.00
3	1~	230	50	2850	165	1.40	64	70	690	500	405	2.01
4	1~	230	50	3135	165	1.40	69	75	395	800	235	3.21
5	1~	230	50	2600	107	0.86	68	73	1055	0	620	0.00
6	1~	230	50	2600	122	0.98	64	70	865	204	510	0.82
7	1~	230	50	2600	121	0.97	61	67	620	401	365	1.61
8	1~	230	50	2600	96	0.76	64	71	330	552	195	2.22
9	1~	230	50	2100	57	0.45	63	68	850	0	500	0.00
10	1~	230	50	2100	64	0.51	59	65	695	133	410	0.53
11	1~	230	50	2100	64	0.51	56	62	500	262	295	1.05
12	1~	230	50	2100	50	0.40	59	65	265	360	155	1.45
13	1~	230	50	1600	25	0.20	56	61	650	0	380	0.00
14	1~	230	50	1600	28	0.23	52	58	530	77	315	0.31
15	1~	230	50	1600	28	0.23	49	55	380	152	225	0.61
16	1~	230	50	1600	22	0.18	52	59	200	209	120	0.84

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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