G3G140-RF23-11

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G140-RF23-11**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	2030
Power consumption	W	83
Current draw	A	0.8
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	50

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	2.7 kg
Fan size	140 mm
Rotor surface	Thick-film passivated
Impeller material	PP plastic
Housing material	Sheet steel, galvanized
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
Approval	EAC

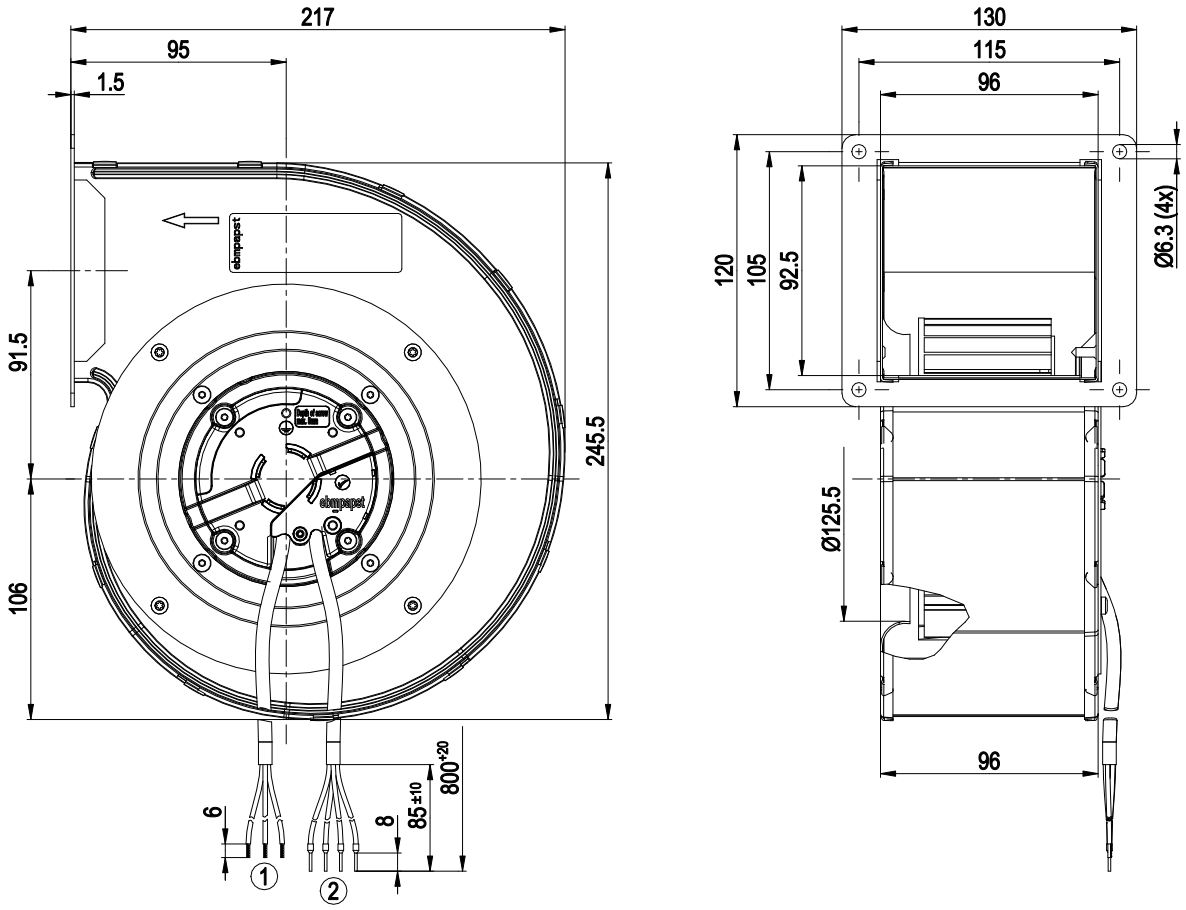
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Product drawing



1	Cable PVC AWG20, 3x crimped splices
2	Cable PVC AWG22, 4x crimped ferrules

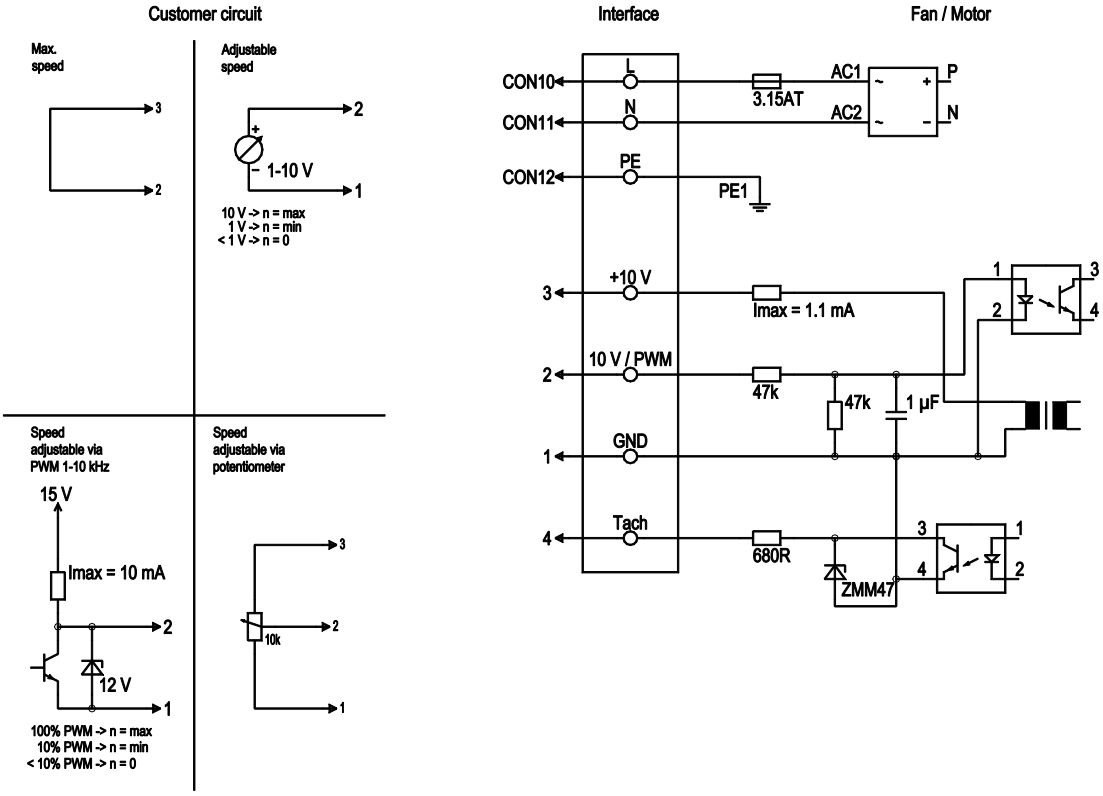
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Connection diagram



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

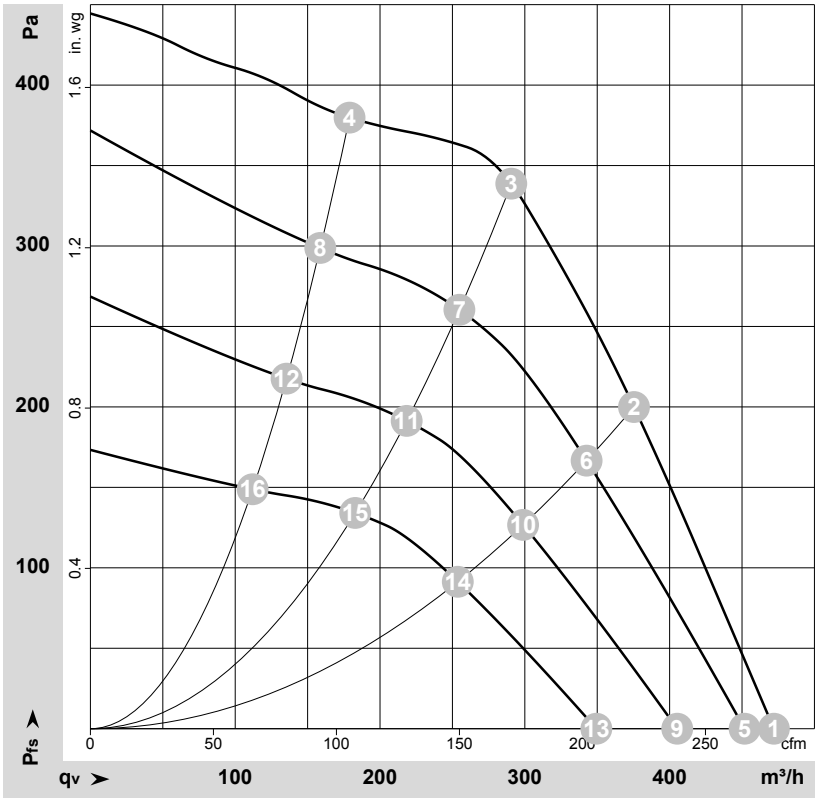
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-182445-1
Measurement: LU-186209-1
Measurement: LU-186211-1
Measurement: LU-186213-1

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

	U	f	n	P_{ed}	I	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	m^3/h	Pa	cfm	in. wg
1	230	50	2030	83	0.80	71	470	0	280	0.00
2	230	50	2360	83	0.80	69	375	200	220	0.80
3	230	50	2715	83	0.80	69	290	340	170	1.36
4	230	50	2840	64	0.59	70	180	380	105	1.53
5	230	50	1920	75	0.68	70	450	0	265	0.00
6	230	50	2155	65	0.61	66	345	175	200	0.70
7	230	50	2360	56	0.54	65	255	264	150	1.06
8	230	50	2430	43	0.43	66	160	297	95	1.19
9	230	50	1725	56	0.53	67	405	0	240	0.00
10	230	50	1855	45	0.45	63	300	134	175	0.54
11	230	50	1970	35	0.36	61	220	193	130	0.77
12	230	50	2065	28	0.30	62	135	216	80	0.87
13	230	50	1485	35	0.36	63	350	0	205	0.00
14	230	50	1590	27	0.29	59	255	97	150	0.39
15	230	50	1665	22	0.25	57	185	135	110	0.54
16	230	50	1735	17	0.19	58	110	148	65	0.59

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

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