G3G140-PV03-02

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G140-PV03-02**	
Motor	**M3G055-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1730
Power consumption	W	70
Current draw	A	0.52
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	2.3 kg
Fan size	140 mm
Rotor surface	Galvanized
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor
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	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1

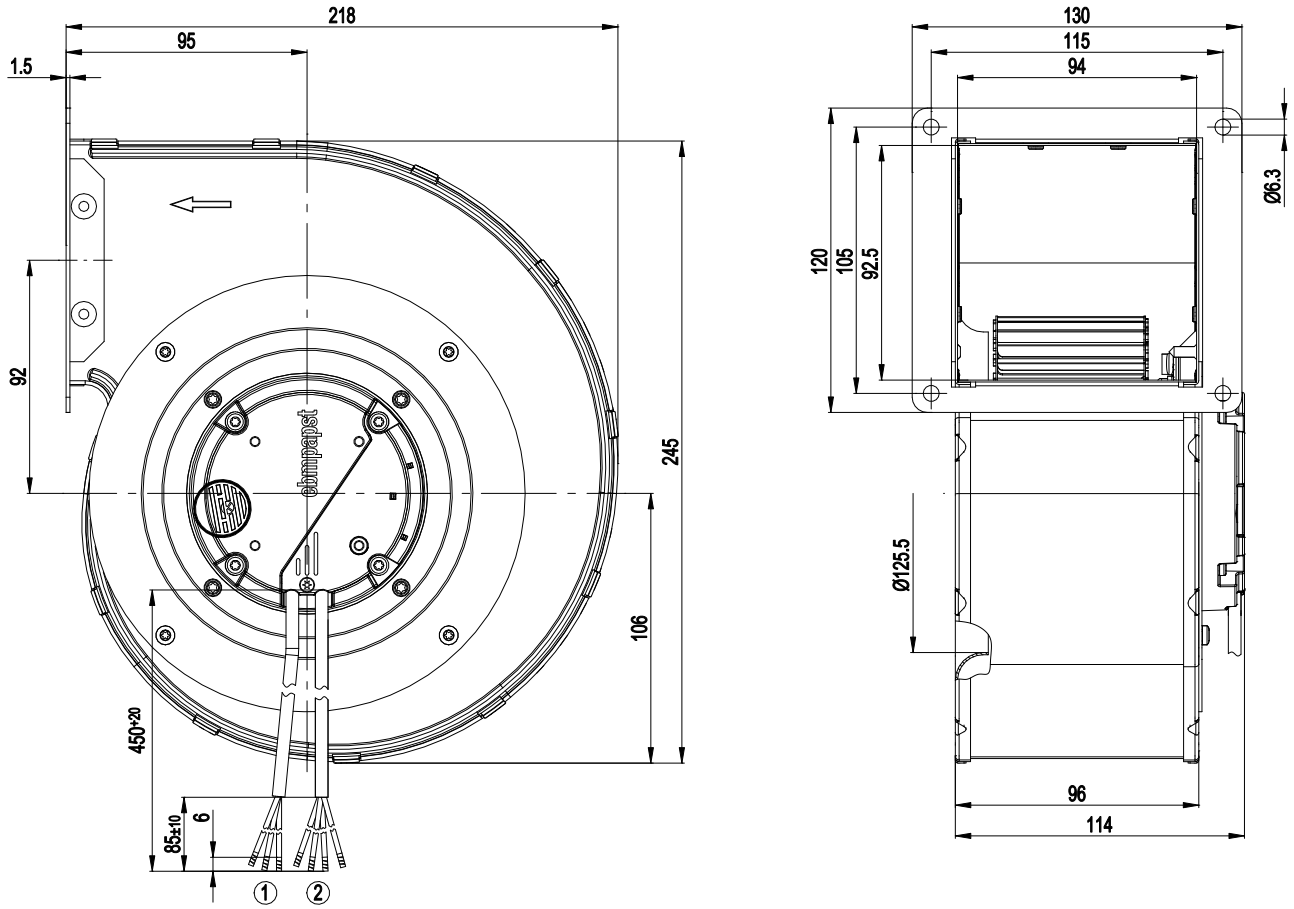
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Product drawing



1	Cable PVC 3G 0.5 mm², 3x crimped splices
2	Cable PVC 4 x 0.25 mm², 4x crimped splices

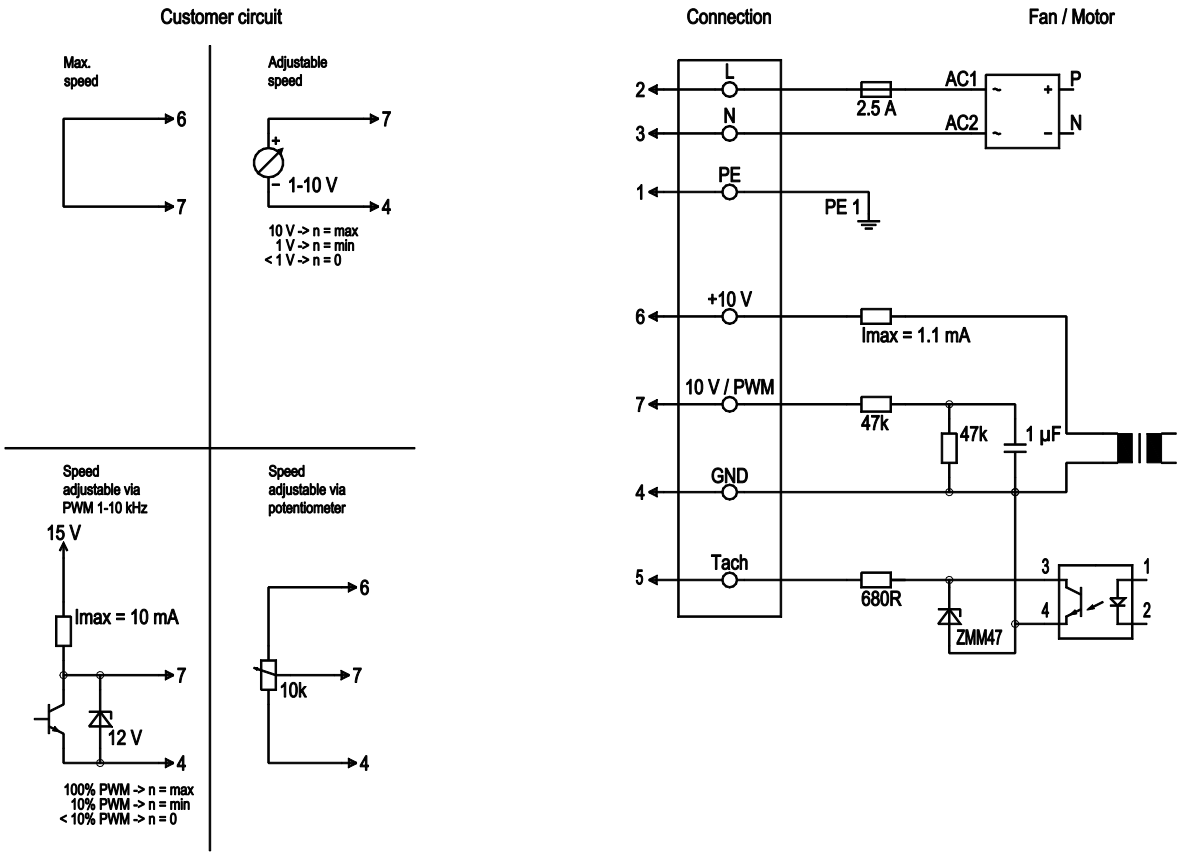
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	7	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	6	10V / max. 1.1 mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
	4	GND	blue	GND connection for control interface

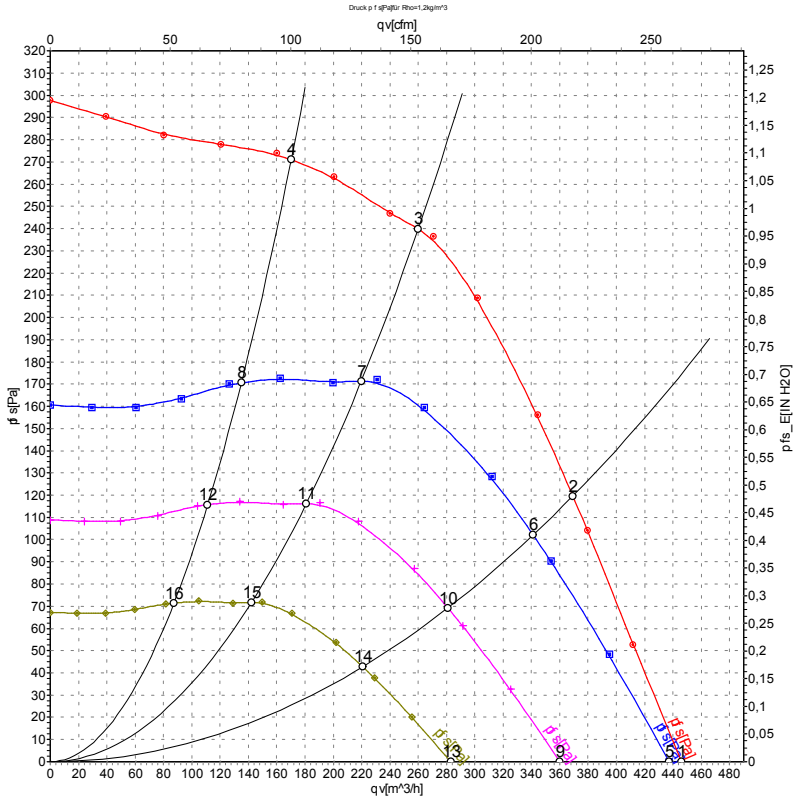
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Curves: Air performance 50 Hz



Measurement: LU-76259-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1730	70	0.52	445	0	265	0.00
2	230	50	1840	60	0.46	370	120	215	0.48
3	230	50	2010	47	0.36	260	240	155	0.96
4	230	50	2145	37	0.28	170	270	100	1.08
5	230	50	1700	65	0.49	440	0	260	0.00
6	230	50	1700	47	0.36	340	102	200	0.41
7	230	50	1700	29	0.22	220	171	130	0.69
8	230	50	1700	18	0.14	135	171	80	0.69
9	230	50	1400	36	0.27	360	0	210	0.00
10	230	50	1400	26	0.20	280	69	165	0.28
11	230	50	1400	16	0.12	180	116	105	0.47
12	230	50	1400	10	0.08	110	116	65	0.47
13	230	50	1100	18	0.13	285	0	165	0.00
14	230	50	1100	13	0.10	220	43	130	0.17
15	230	50	1100	7.7	0.06	140	72	85	0.29
16	230	50	1100	5.0	0.04	85	72	50	0.29

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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