G3G140-AV03-02

EC centrifugal fan

forward-curved, single-intake

with housing (flange)



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Nominal data

Type	**G3G140-AV03-02**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1800
Power consumption	W	66
Current draw	A	0.5
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	2.7 kg
Fan size	140 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
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 supply - 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; CE
Approval	EAC; CCC

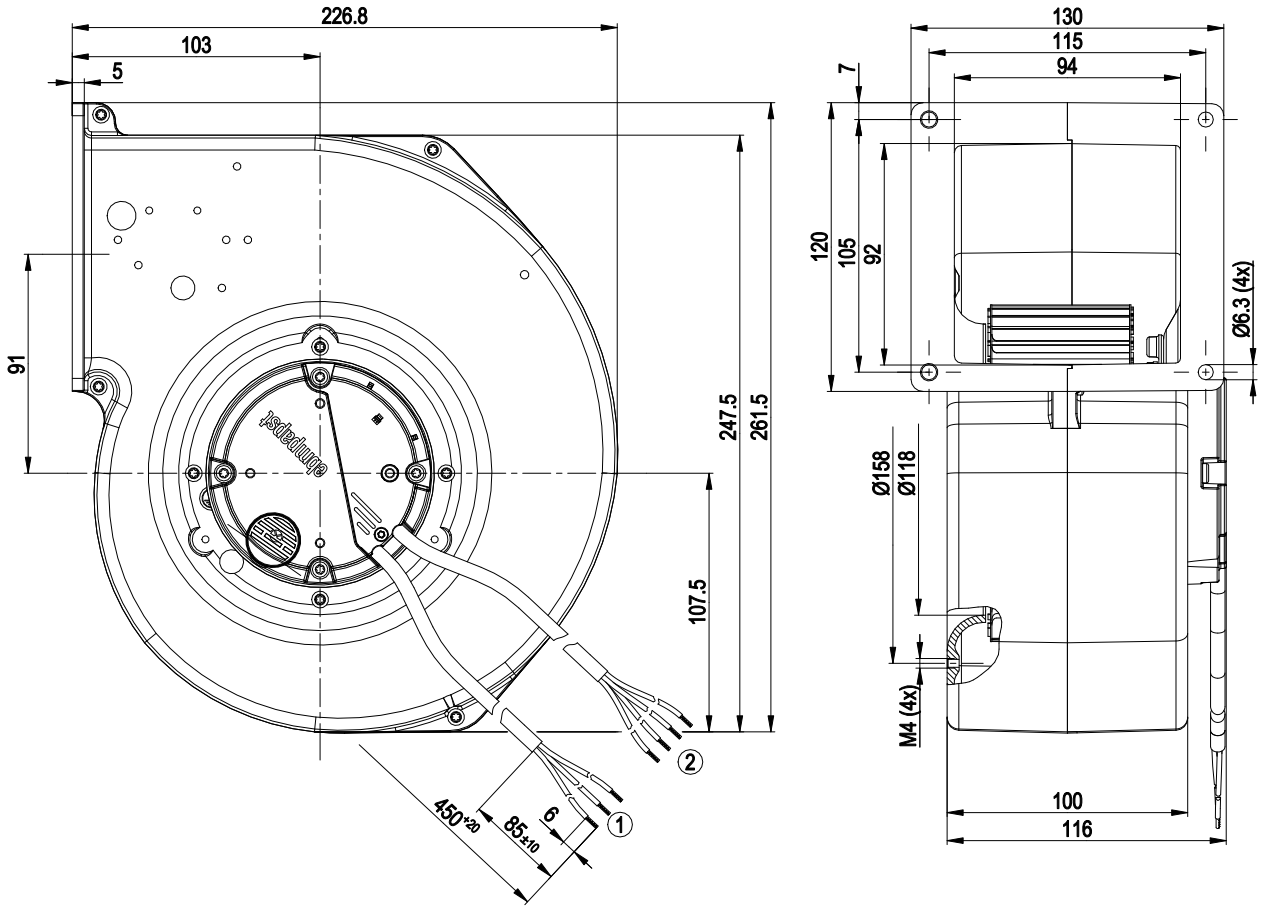
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Product drawing



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

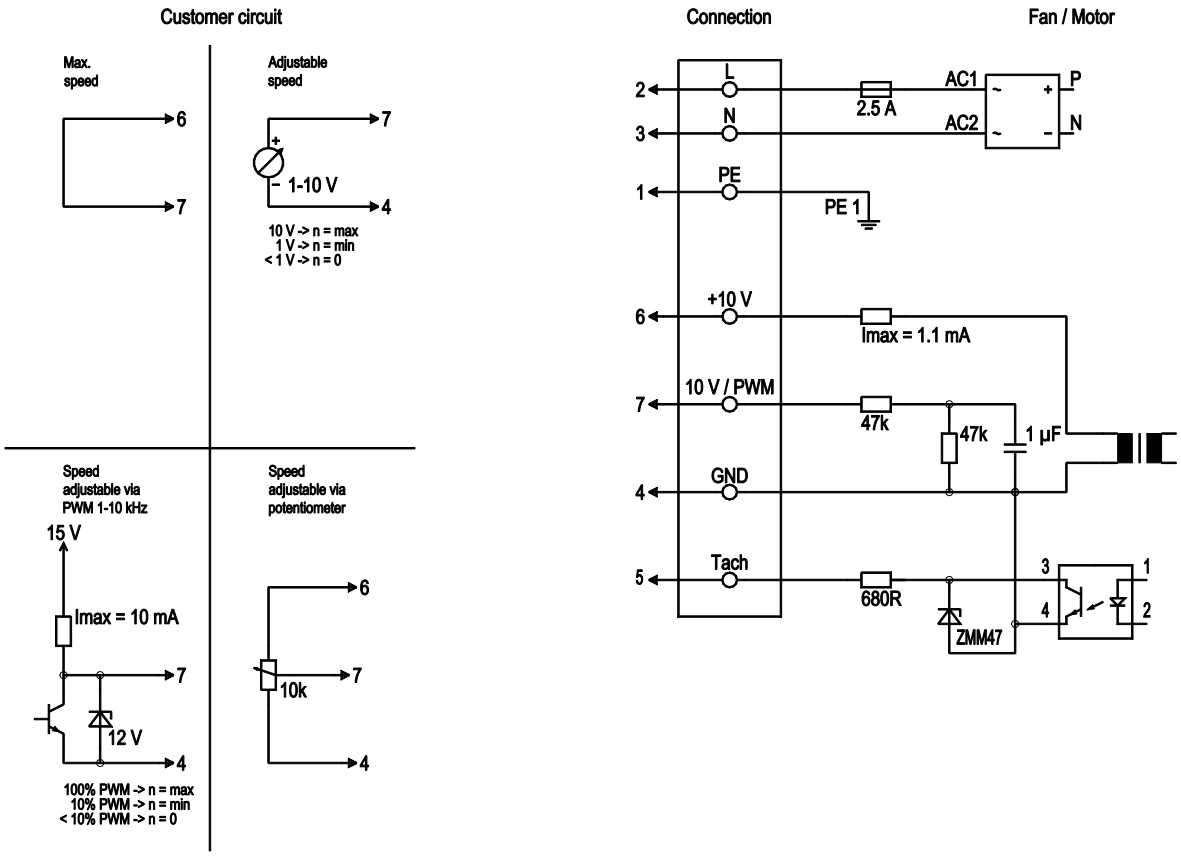
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Connection diagram



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

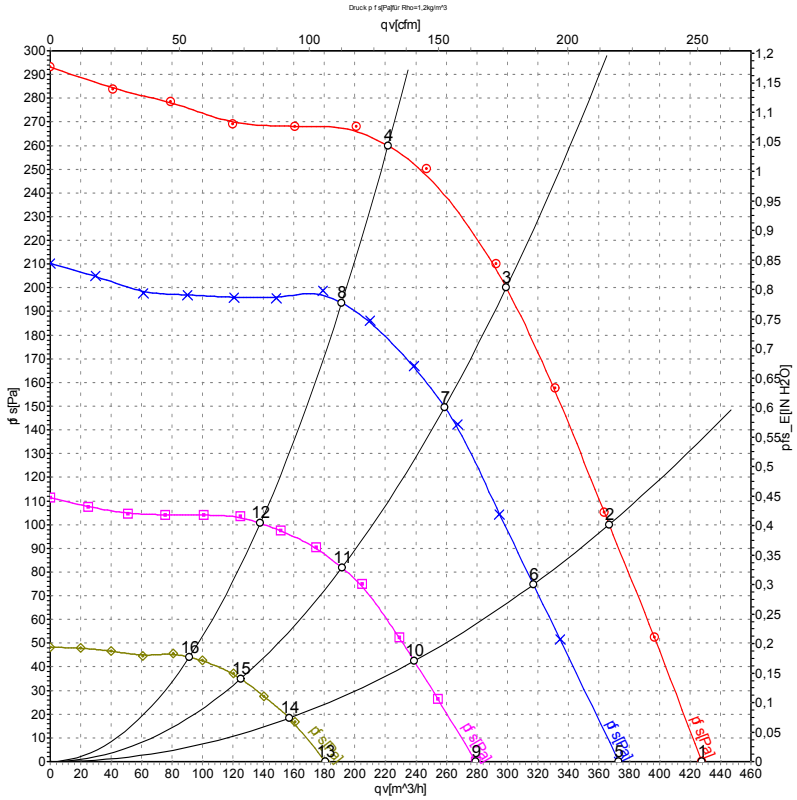
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Curves: Air performance 50 Hz



Measurement: LU-65700-1
Measurement: LU-117046-1
Measurement: LU-117047-1
Measurement: LU-117050-1

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	1800	66	0.50	430	0	250	0.00
2	230	50	1855	59	0.43	365	100	215	0.40
3	230	50	1960	50	0.36	300	200	175	0.80
4	230	50	2075	42	0.31	220	260	130	1.04
5	230	50	1580	46	0.35	375	0	220	0.00
6	230	50	1630	40	0.30	315	75	185	0.30
7	230	50	1710	34	0.26	260	150	150	0.60
8	230	50	1780	27	0.21	190	194	110	0.78
9	230	50	1195	22	0.17	280	0	165	0.00
10	230	50	1220	18	0.14	240	42	140	0.17
11	230	50	1265	16	0.13	190	82	115	0.33
12	230	50	1305	13	0.11	140	101	80	0.41
13	230	50	810	9.0	0.08	180	0	105	0.00
14	230	50	830	8.1	0.07	155	19	90	0.08
15	230	50	845	6.9	0.07	125	35	75	0.14
16	230	50	890	6.4	0.06	90	44	55	0.18

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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