G3G140-AV05-36

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G140-AV05-36**
Motor	**M3G055-CF**

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}	1800
Power consumption	W	66
Current draw	A	0.6
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	2.65 kg
Size	140 mm
Motor size	55
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	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	On rotor side
Mode	S1
Motor bearing	Hybrid bearing
Technical features	- Output 10 VDC, max. 10 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
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 assignment	I; If a protective earth is connected. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 60335-1; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	EAC; CCC

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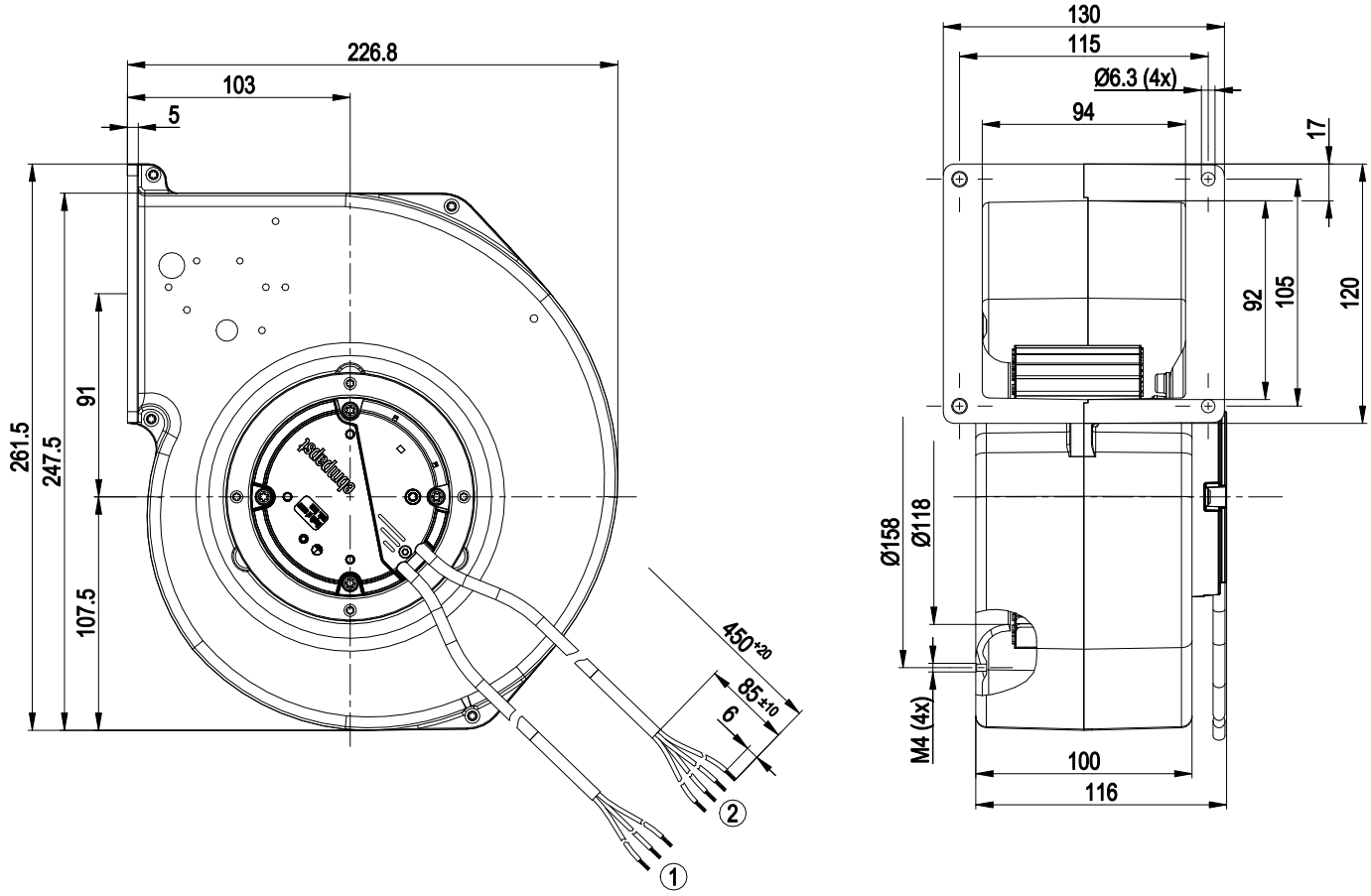
Product drawing



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

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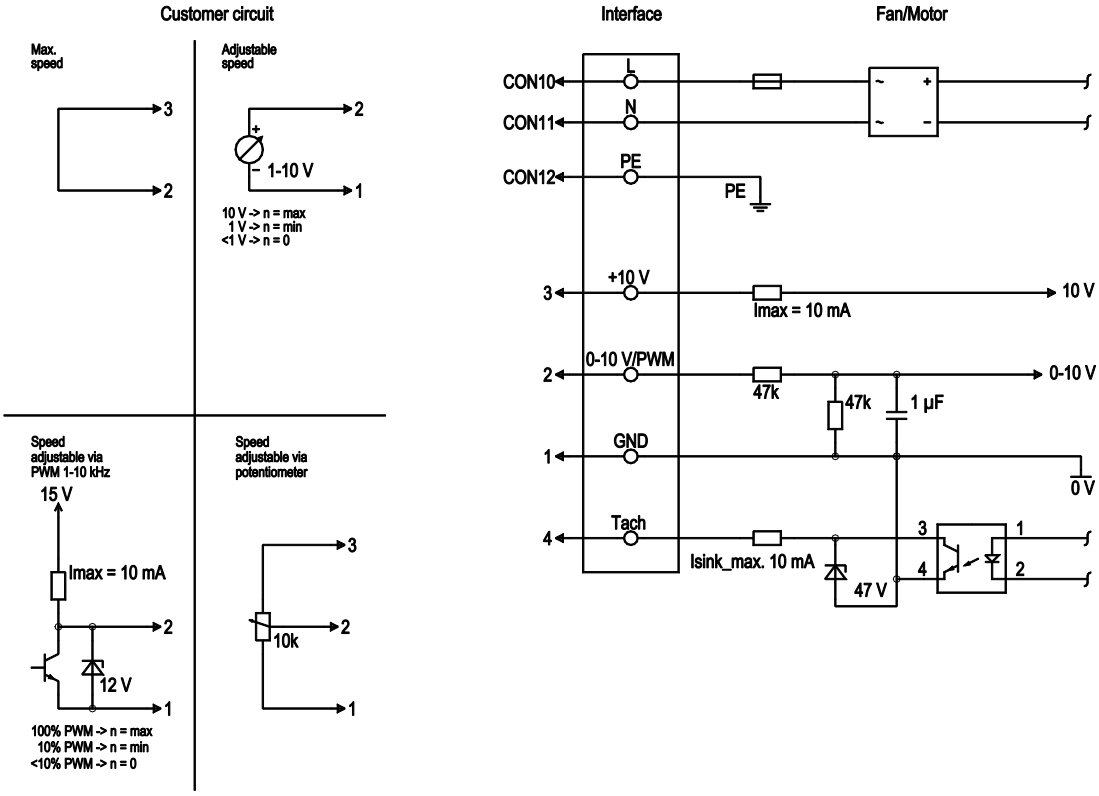
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	brown	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

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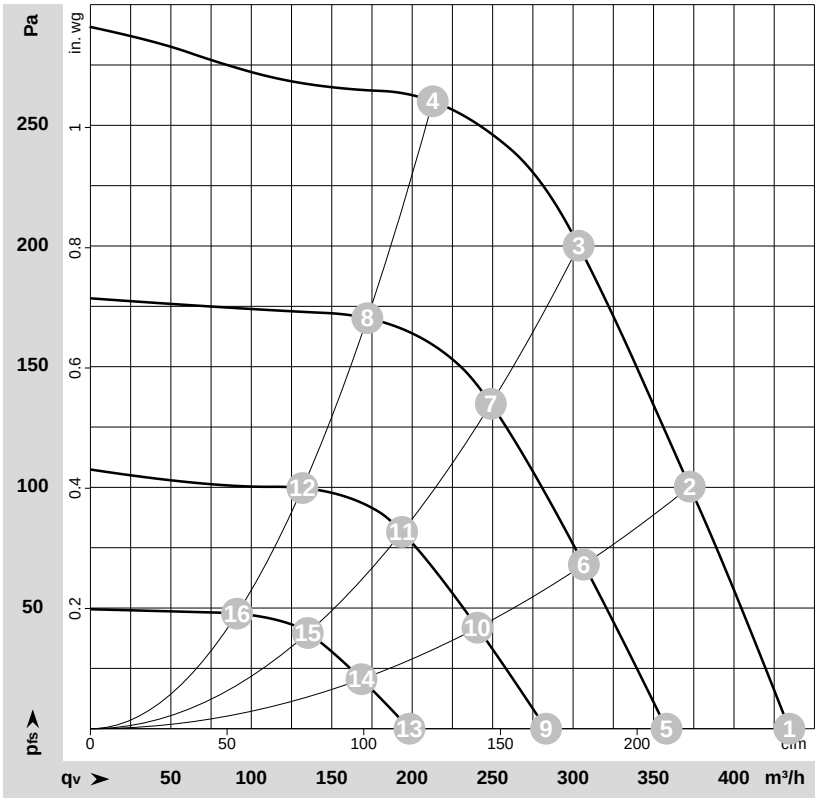
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-155591-1
Date: 2013-05-23
Nozzle: 03452-2-2517

Measurement: LU-156457-1
Date: 2013-05-23

Measurement: LU-156459-1
Date: 2013-05-23

Measurement: LU-156461-1
Date: 2013-05-23

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	1800	66	0.60	62	68	435	0	255	0.00
2	1~	230	50	1850	60	0.59	60	66	370	100	220	0.40
3	1~	230	50	1965	51	0.51	59	65	305	200	180	0.80
4	1~	230	50	2095	41	0.42	58	64	215	260	125	1.04
5	1~	230	50	1445	38	0.39	58	64	360	0	210	0.00
6	1~	230	50	1530	34	0.36	56	62	305	70	180	0.28
7	1~	230	50	1620	29	0.33	54	60	250	138	145	0.55
8	1~	230	50	1720	22	0.25	52	59	170	171	100	0.69
9	1~	230	50	1140	19	0.23	51	57	285	0	165	0.00
10	1~	230	50	1195	18	0.21	49	56	240	43	140	0.17
11	1~	230	50	1255	16	0.19	47	54	195	84	115	0.34
12	1~	230	50	1330	12	0.16	46	53	130	100	80	0.40
13	1~	230	50	800	8.0	0.13	42	48	200	0	115	0.00
14	1~	230	50	840	8.0	0.11	40	47	170	21	100	0.08
15	1~	230	50	885	7.0	0.10	38	45	135	41	80	0.16
16	1~	230	50	930	6.0	0.10	36	44	90	48	55	0.19

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