G3G133-DD05-02

EC centrifugal fan

forward-curved, single-intake

with housing (without flange)

G3G133-DD05-02 ebmpapst Datasheet
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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**G3G133-DD05-02**
Motor	**M3G055-BD**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1925
Power consumption	W	38
Current draw	A	0.3
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	1.6 kg
Fan size	133 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	Shaft horizontal or rotor on bottom; rotor on top on request
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

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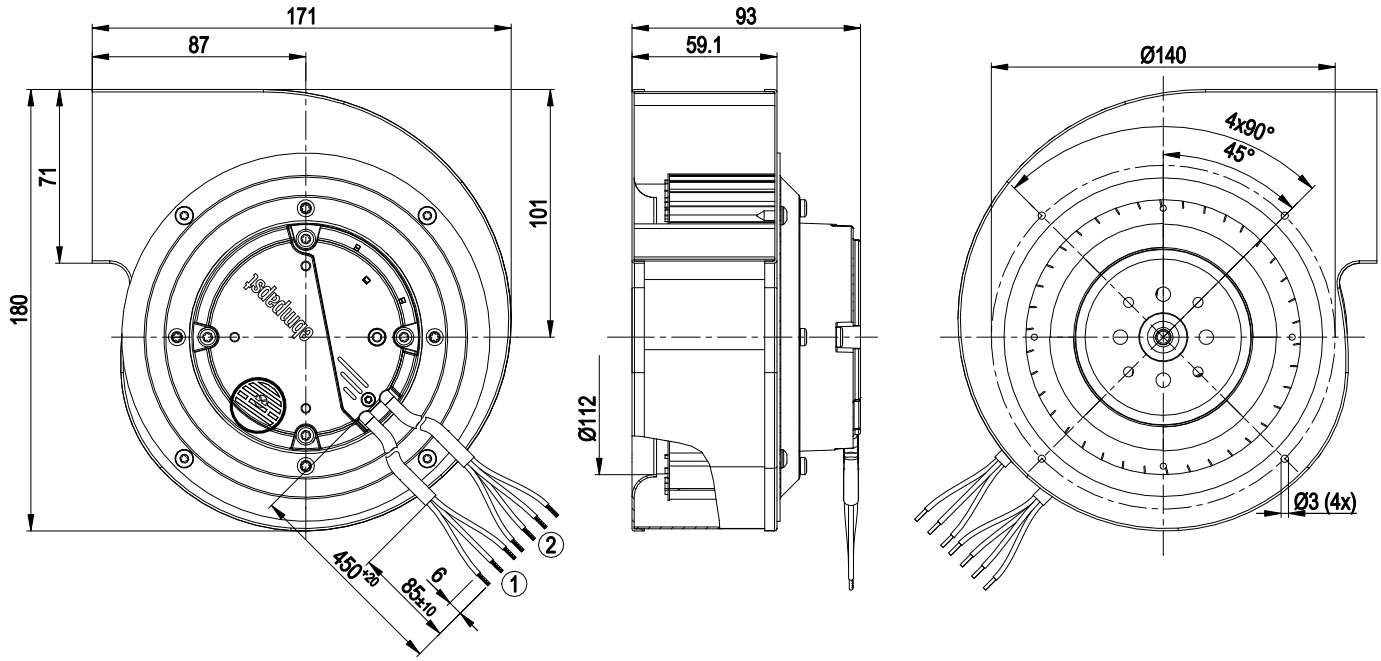
Product drawing



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

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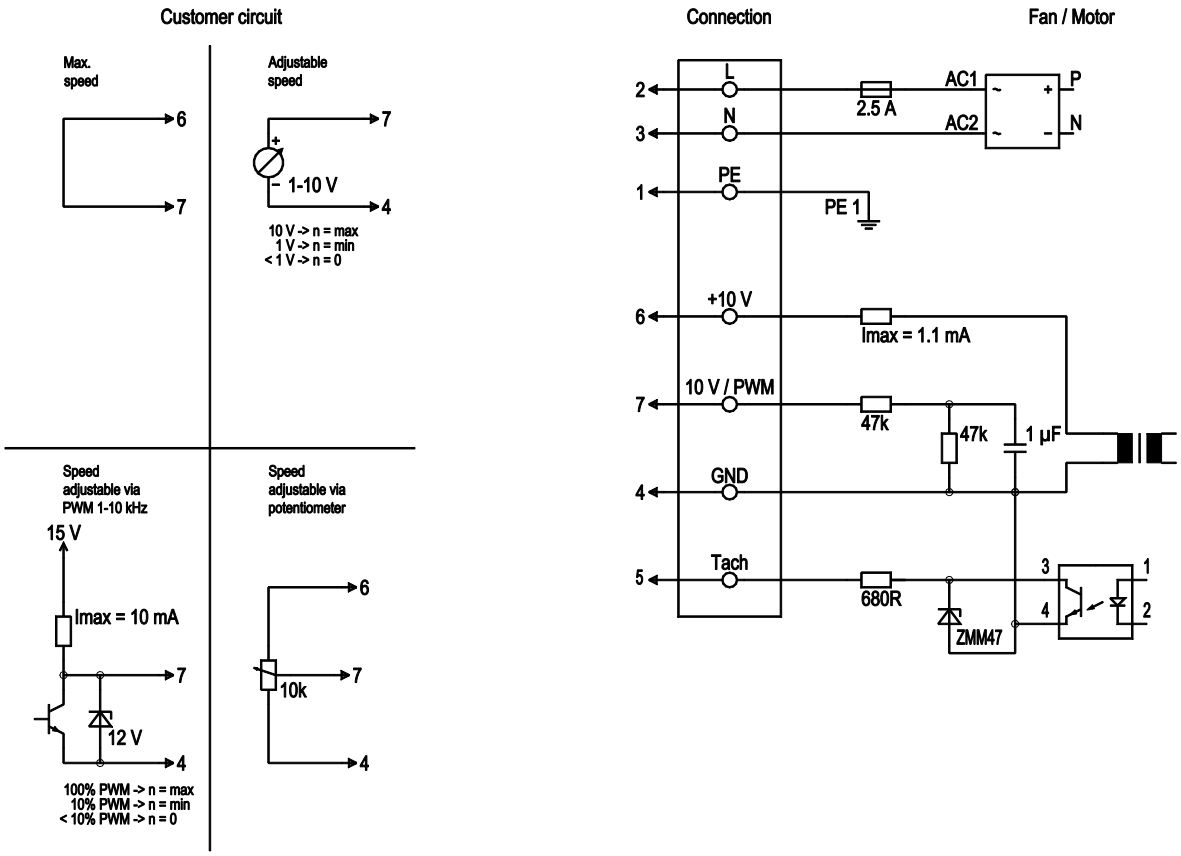
Connection diagram



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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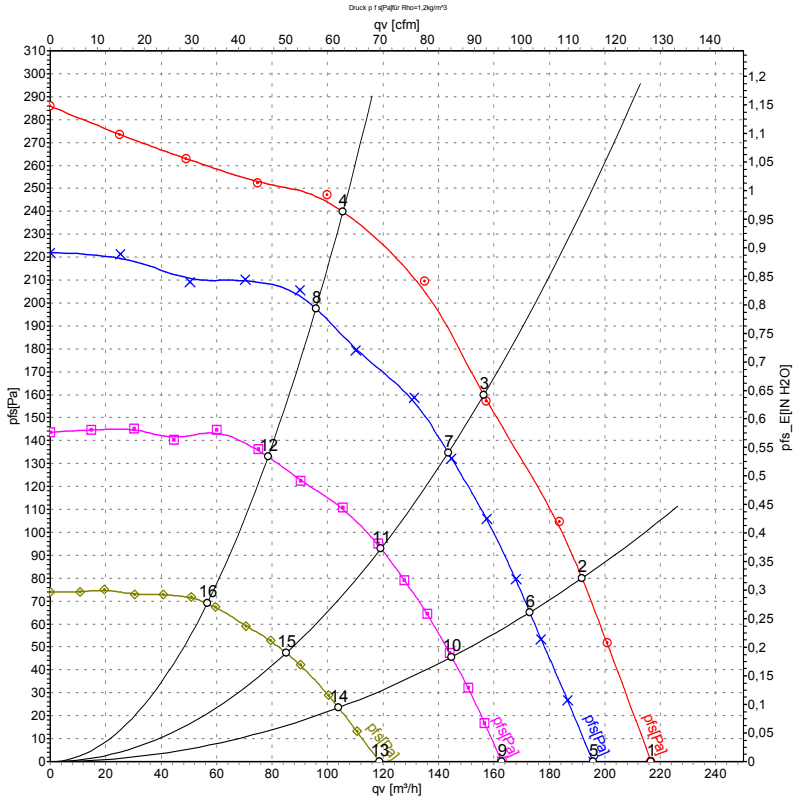
Curves: Air performance 50 Hz



Measurement: LU-69544-1
Measurement: LU-64013-1
Measurement: LU-64016-1
Measurement: LU-64017-1

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	1925	38	0.30	215	0	130	0.00
2	230	50	2035	35	0.26	190	80	115	0.32
3	230	50	2130	29	0.22	155	160	90	0.64
4	230	50	2305	22	0.18	105	240	60	0.96
5	230	50	1780	30	0.23	195	0	115	0.00
6	230	50	1840	26	0.20	175	65	100	0.26
7	230	50	1925	23	0.17	145	135	85	0.54
8	230	50	2095	17	0.14	95	198	55	0.79
9	230	50	1495	18	0.14	165	0	95	0.00
10	230	50	1545	17	0.13	145	46	85	0.18
11	230	50	1610	14	0.12	120	93	70	0.37
12	230	50	1720	11	0.10	80	133	45	0.53
13	230	50	1100	9.1	0.08	120	0	70	0.00
14	230	50	1130	8.3	0.07	105	24	60	0.10
15	230	50	1170	7.4	0.07	85	47	50	0.19
16	230	50	1240	6.4	0.06	55	69	35	0.28

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