G3G133-DK03-01

EC centrifugal fan

forward-curved, single-intake

with housing (without flange)

G3G133-DK03-01 ebmpapst Datasheet
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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Nominal data

Type	**G3G133-DK03-01**
Motor	**M3G055-BI**

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}	2620
Power consumption	W	82
Current draw	A	0.7
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
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	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
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	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
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 55022 (class B, household environment), the application may require ferritic damping in the cable due to the conditions of installation.
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE
Approval	CCC

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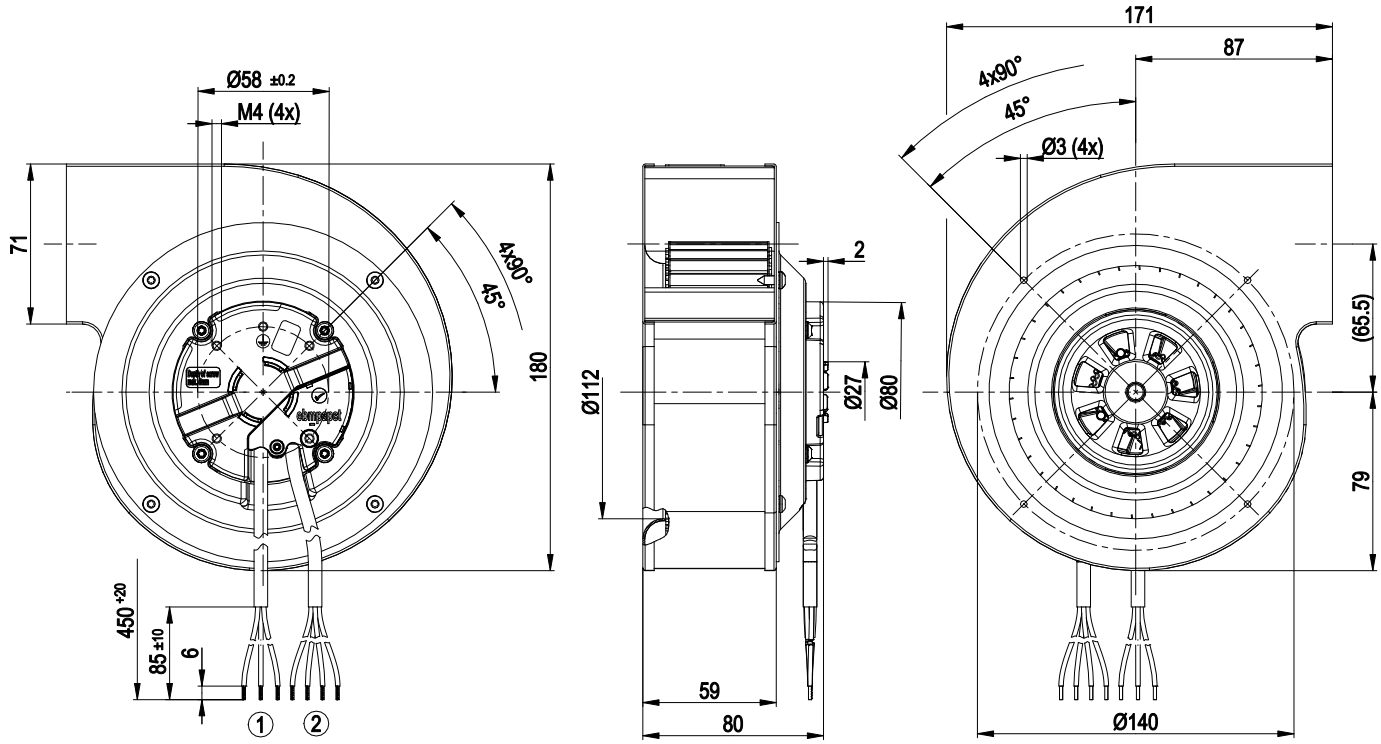
Product drawing



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

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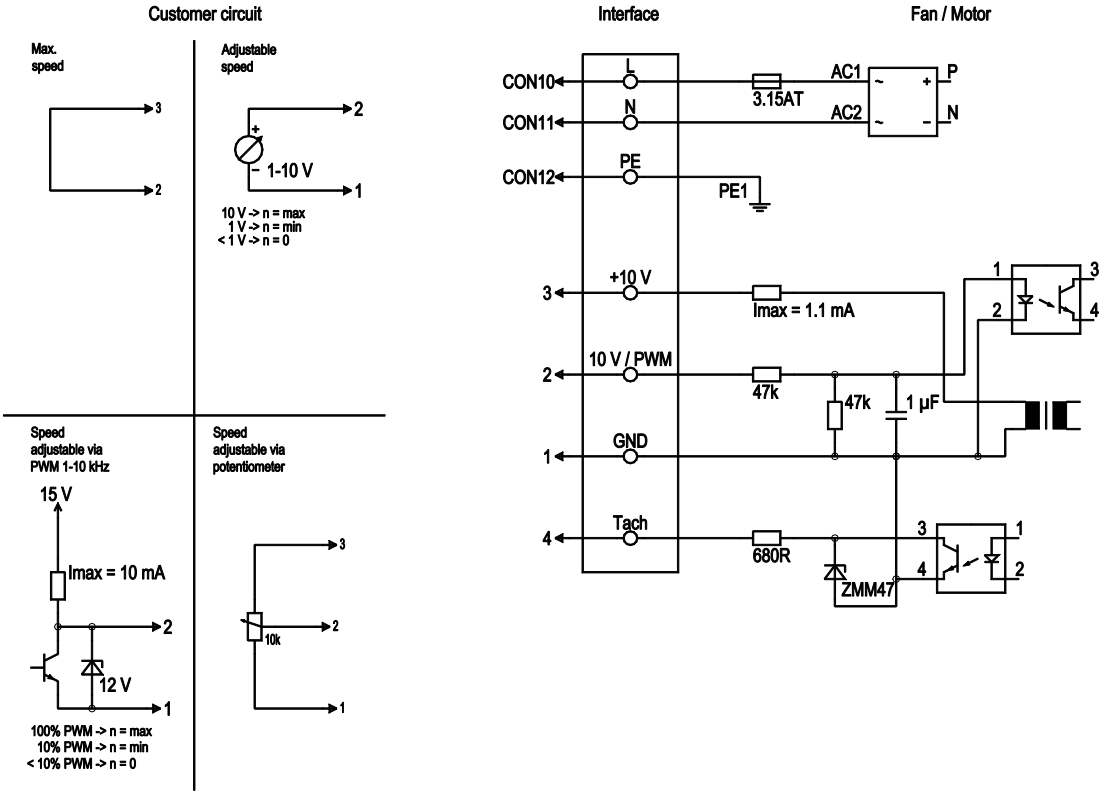
Connection diagram



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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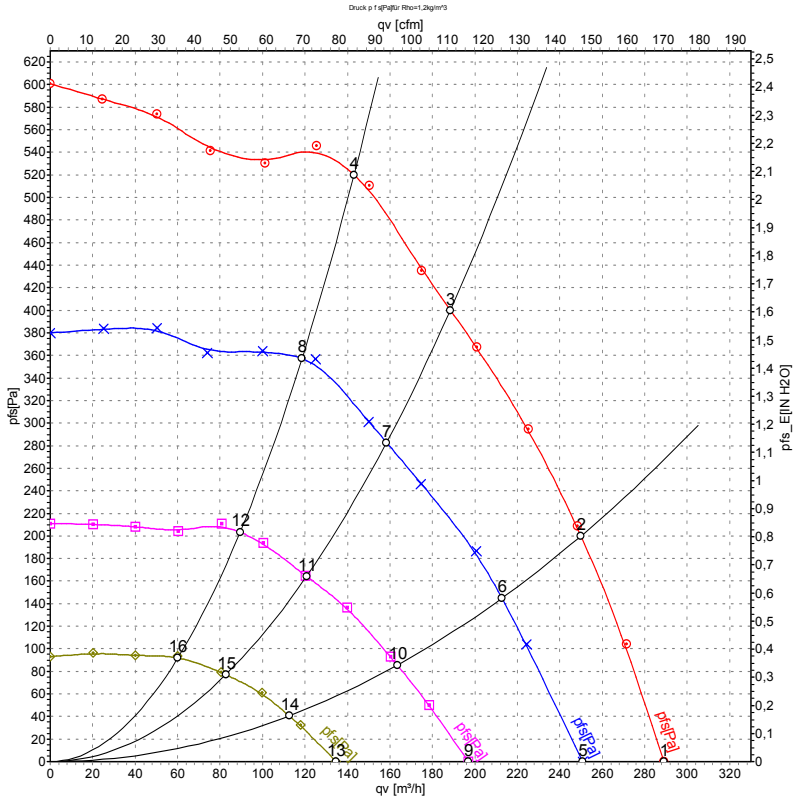
Curves: Air performance 50 Hz



Measurement: LU-136238-1
Measurement: LU-136239-1
Measurement: LU-136241-1
Measurement: LU-136243-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	2620	82	0.70	69	75	290	0	170	0.00
2	230	50	2810	78	0.66	69	75	250	200	145	0.80
3	230	50	3055	65	0.57	66	74	190	400	110	1.61
4	230	50	3240	55	0.49	66	72	145	520	85	2.09
5	230	50	2310	55	0.50			250	0	150	0.00
6	230	50	2415	49	0.44			215	145	125	0.58
7	230	50	2585	39	0.39			160	283	95	1.14
8	230	50	2715	33	0.34			120	359	70	1.44
9	230	50	1805	28	0.28			195	0	115	0.00
10	230	50	1885	24	0.24			165	86	95	0.35
11	230	50	1995	20	0.22			120	164	70	0.66
12	230	50	2060	17	0.19			90	203	50	0.81
13	230	50	1275	11	0.14			135	0	80	0.00
14	230	50	1315	10	0.13			115	41	65	0.16
15	230	50	1375	8.4	0.11			85	78	50	0.31
16	230	50	1410	7.9	0.11			60	93	35	0.37

U = Power supply · 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
qv = Air flow · p_{fs} = Pressure increase