

# EC centrifugal fan

forward-curved, single-intake

with housing (flange)

G3G120-CC25-01 ebmpapst Datasheet

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Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

<b>Type</b>	<b>G3G120-CC25-01</b>	
<b>Motor</b>	<b>M3G055-BD</b>	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min <sup>-1</sup>	2500
Power consumption	W	85
Current draw	A	0.7
Min. back pressure	Pa	0
Min. back pressure	inH <sub>2</sub> O	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

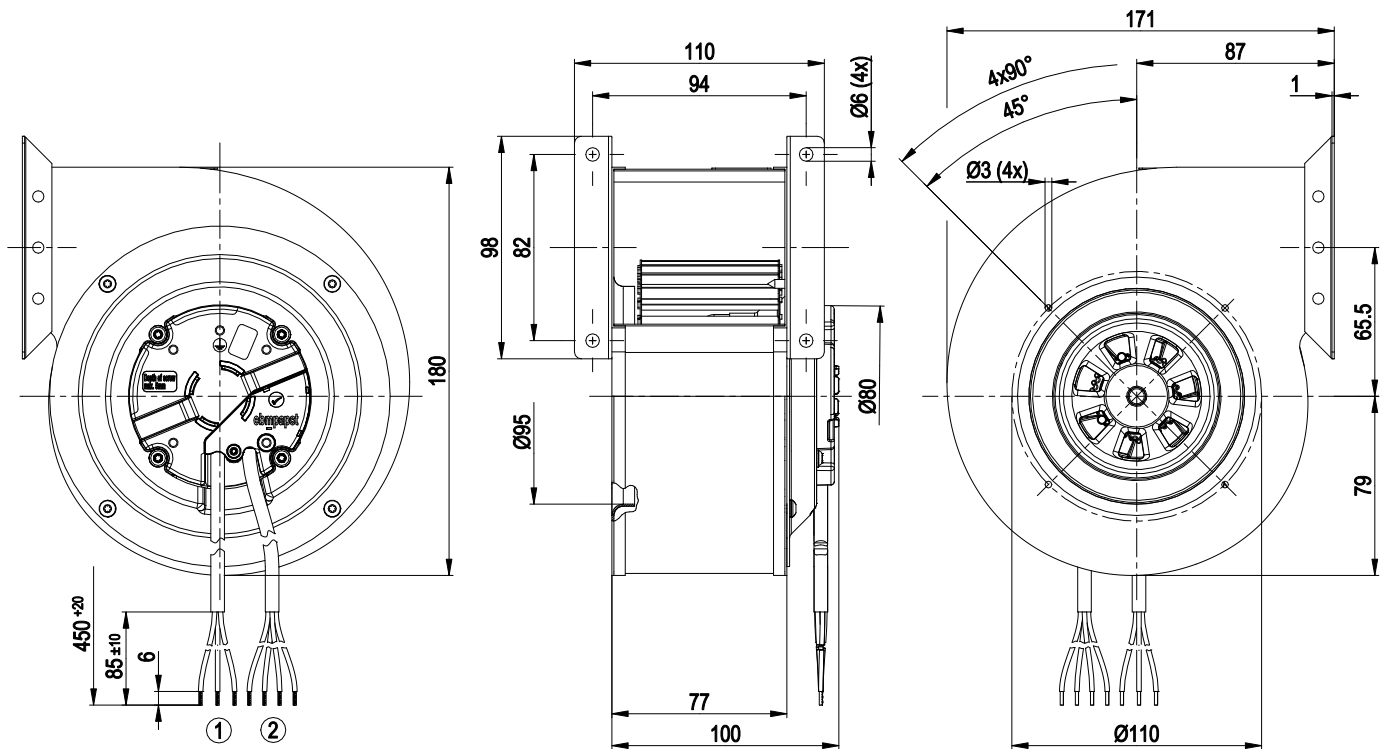
<b>Weight</b>	1.6 kg
<b>Fan size</b>	120 mm
<b>Rotor surface</b>	Thick-film passivated
<b>Impeller material</b>	Sheet steel, galvanized
<b>Housing material</b>	Sheet steel, galvanized
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP54
<b>Insulation class</b>	"B"
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	None, open rotor
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Output 10 VDC, max. 1.1 mA</li> <li>- Tach output</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> <li>- Thermal overload protection for electronics/motor</li> </ul>
<b>EMC immunity to interference</b>	According to EN 61000-6-2 (industrial environment)
<b>EMC circuit feedback</b>	According to EN 61000-3-2/3
<b>EMC interference emission</b>	According to EN 61000-6-4 (industrial environment)
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	<= 3.5 mA
<b>Motor protection</b>	Locked-rotor protection
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	CE
<b>Approval</b>	CCC



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## Product drawing



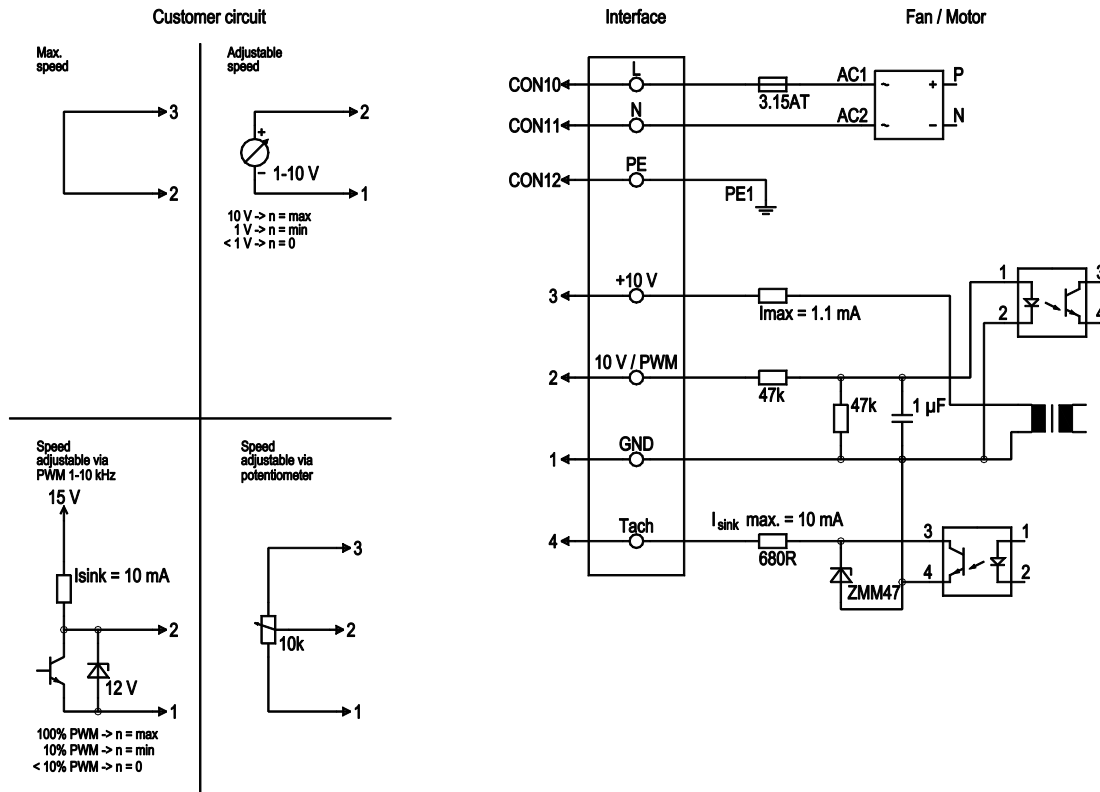
- |   |                                     |
|---|-------------------------------------|
| 1 | Cable PVC AWG20, 3x crimped splices |
| 2 | Cable PVC AWG22, 4x crimped splices |



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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	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
	4	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

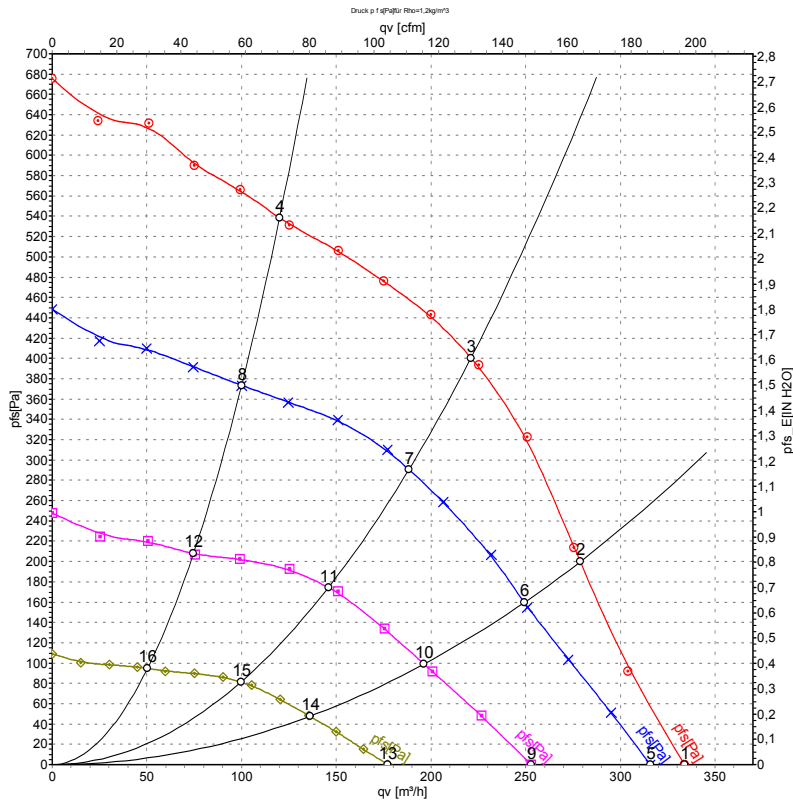


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## Curves: Air performance 50 Hz



Measurement: LU-136937-1  
 Measurement: LU-136938-1  
 Measurement: LU-136939-1  
 Measurement: LU-136940-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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 <sub>ed</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH2O
1	230	50	2500	85	0.70	66	72	335	0	195	0.00
2	230	50	2895	81	0.69	65	72	280	200	165	0.80
3	230	50	3280	76	0.65	65	72	220	400	130	1.61
4	230	50	3795	54	0.51	66	74	120	540	70	2.17
5	230	50	2355	71	0.64			315	0	185	0.00
6	230	50	2610	58	0.54			250	159	145	0.64
7	230	50	2840	48	0.45			190	291	110	1.17
8	230	50	3190	33	0.34			100	373	60	1.50
9	230	50	1910	37	0.36			255	0	150	0.00
10	230	50	2070	30	0.31			195	99	115	0.40
11	230	50	2220	23	0.25			145	175	85	0.70
12	230	50	2430	16	0.18			75	207	45	0.83
13	230	50	1365	15	0.18			175	0	105	0.00
14	230	50	1460	12	0.15			135	48	80	0.19
15	230	50	1530	10	0.13			100	81	60	0.33
16	230	50	1655	7.2	0.10			50	95	30	0.38

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
 qv = Air flow · p<sub>fs</sub> = Pressure increase

