G3G120-BC25-01

EC centrifugal fan

forward curved, single inlet

with housing (flange)

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Nominal data

Type	**G3G120-BC25-01**
Motor	**M3G055-BD**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	2770
Power input	W	84
Current draw	A	0.7
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	1.7 kg
Size	120 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, galvanised
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 55022 (Class B, household environment), on account of the installation conditions, ferritic damping in the connection line may be required for the application.
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	CE
Approval	CCC

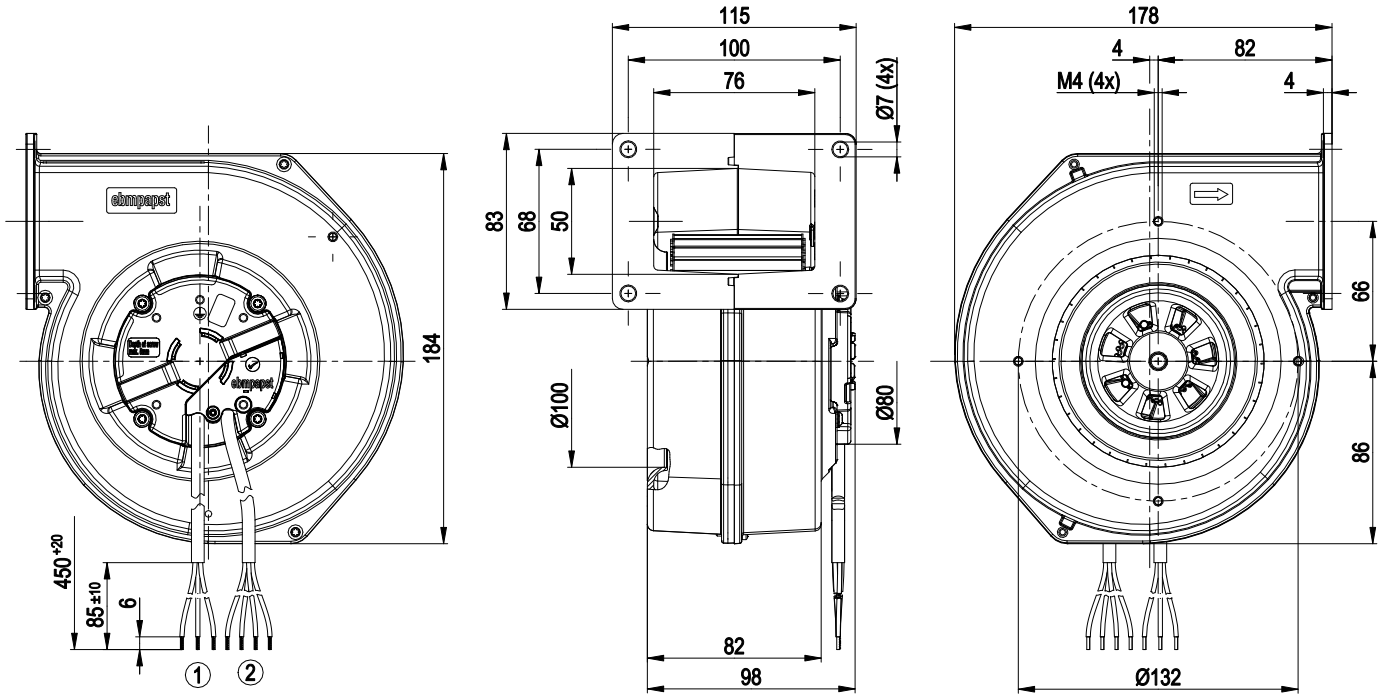
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Product drawing



1	Connection line PVC AWG20, 3x brass lead tips crimped
2	Connection line PVC AWG22, 4 x brass lead tips crimped

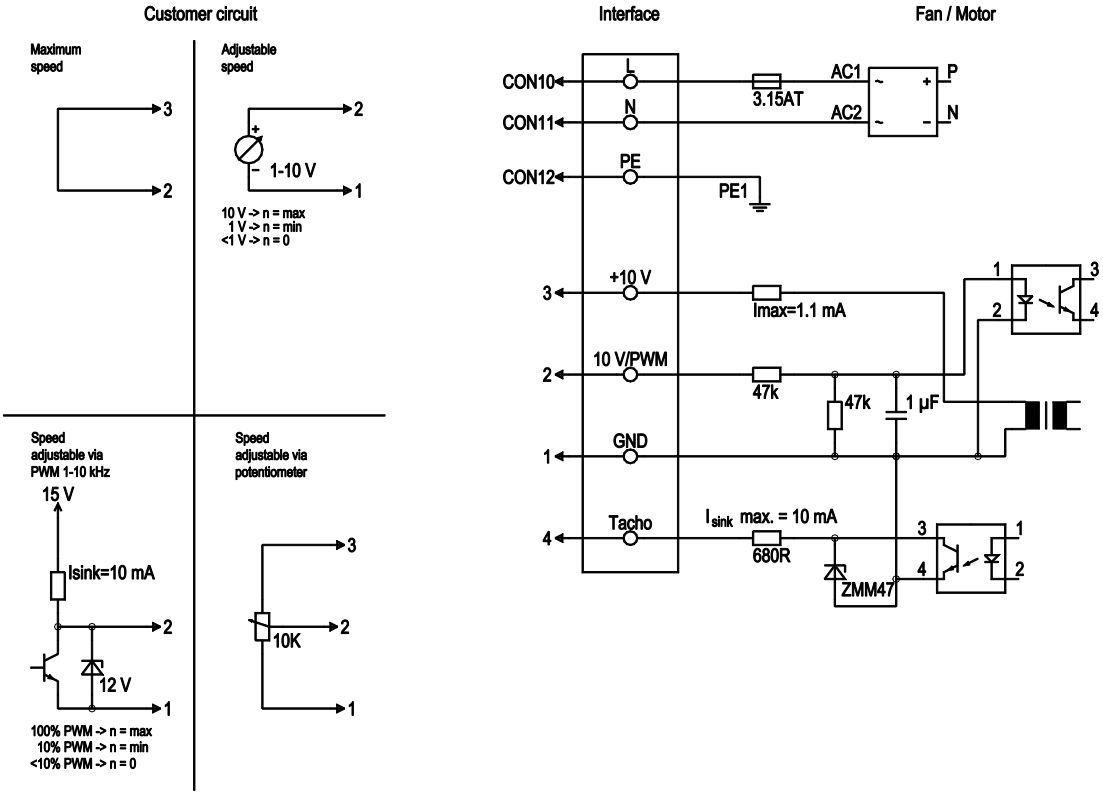
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	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

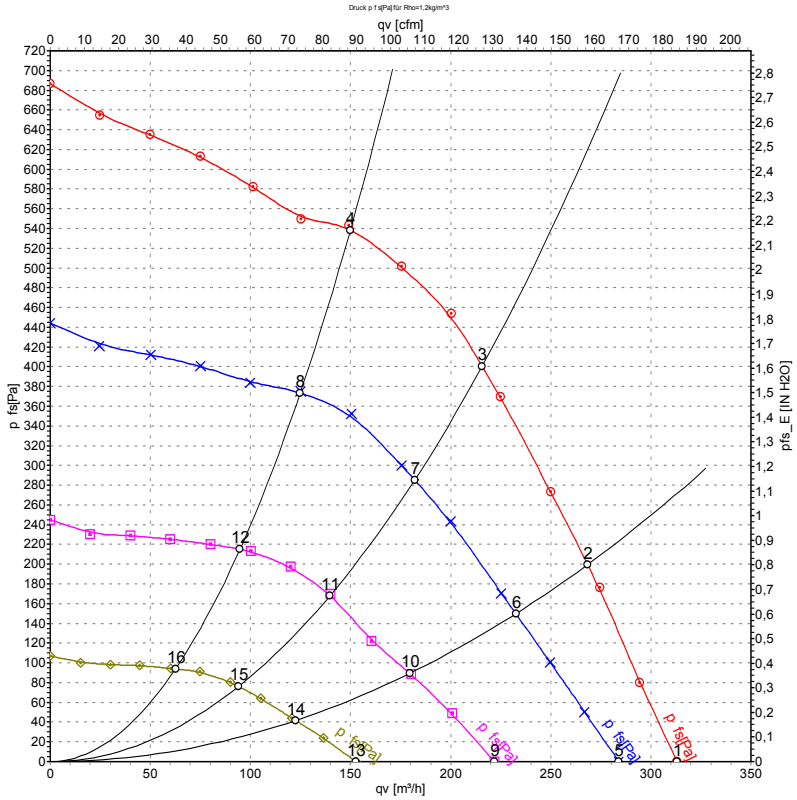
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Charts: Air flow 50 Hz



Measurement: LU-135394-1
Measurement: LU-135396-1
Measurement: LU-135397-1
Measurement: LU-135399-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	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	inH2O
1	230	50	2770	84	0.70	64	71	315	0	185	0.00
2	230	50	3120	81	0.68	64	72	270	200	160	0.80
3	230	50	3365	71	0.60	63	72	215	400	125	1.61
4	230	50	3665	58	0.52	65	73	150	540	90	2.17
5	230	50	2535	60	0.52			285	0	165	0.00
6	230	50	2705	52	0.47			235	150	135	0.60
7	230	50	2880	43	0.42			180	285	105	1.14
8	230	50	3070	34	0.35			125	375	75	1.51
9	230	50	2030	31	0.31			220	0	130	0.00
10	230	50	2140	26	0.27			180	90	105	0.36
11	230	50	2240	22	0.23			140	170	80	0.68
12	230	50	2370	17	0.19			95	215	55	0.86
13	230	50	1420	13	0.16			155	0	90	0.00
14	230	50	1485	11	0.13			125	42	70	0.17
15	230	50	1540	9.4	0.12			95	76	55	0.31
16	230	50	1605	7.8	0.11			65	94	35	0.38

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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