G3G120-BB03-16

EC centrifugal fan

forward-curved

with housing (flange)

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Nominal data

Type	**G3G120-BB03-16**
Motor	**M3G055-BD**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2200
Power consumption	W	41
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	1.9 kg
Fan size	120 mm
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	IP44
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 - Power limiter - 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
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
Approval	EAC; UL 2111; CSA C22.2 No. 77

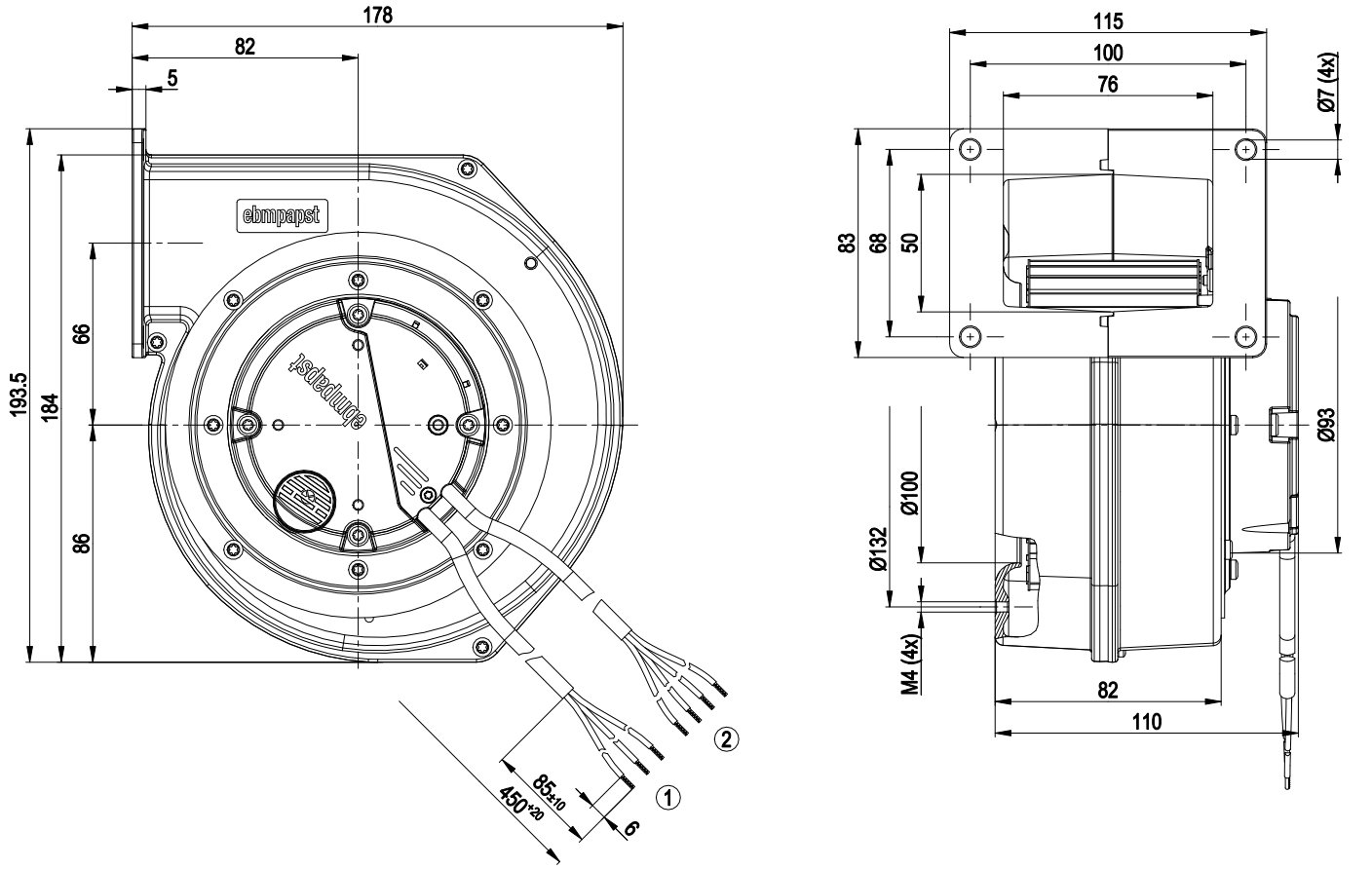
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Product drawing



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

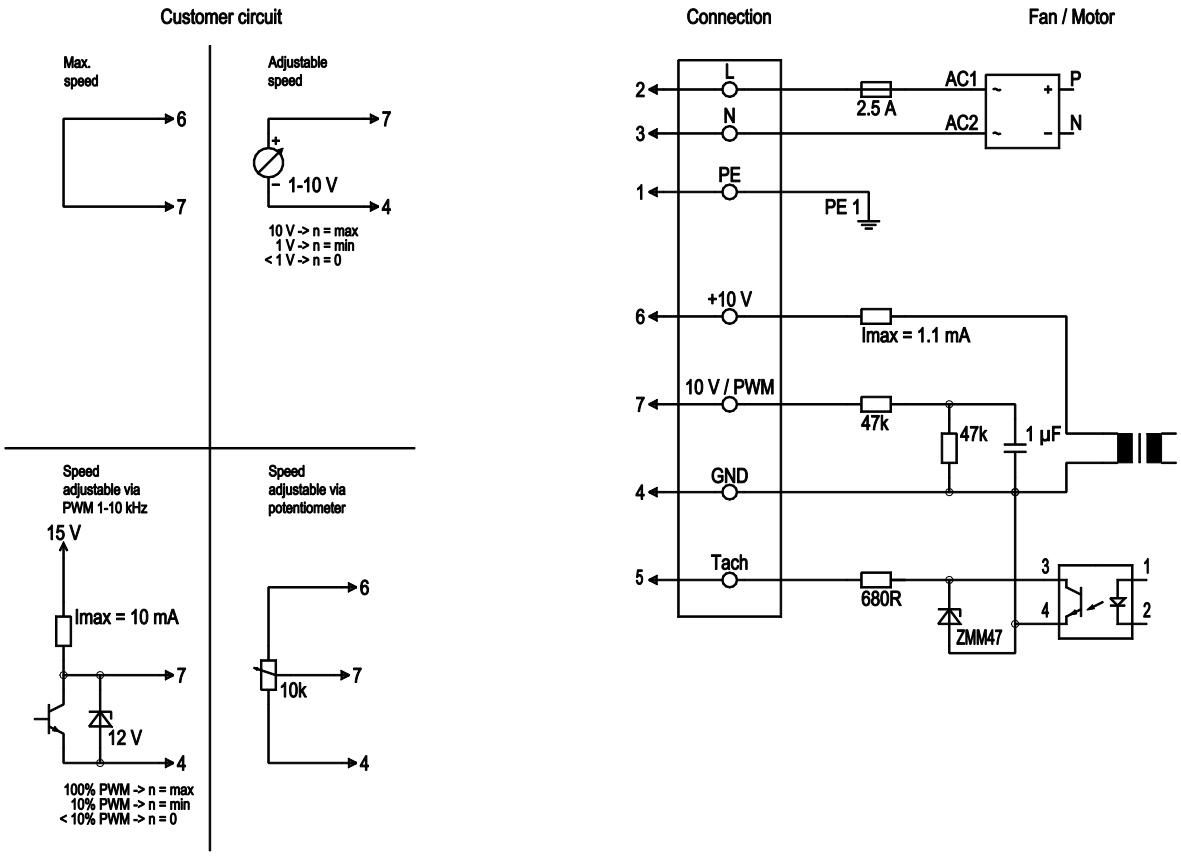
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	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

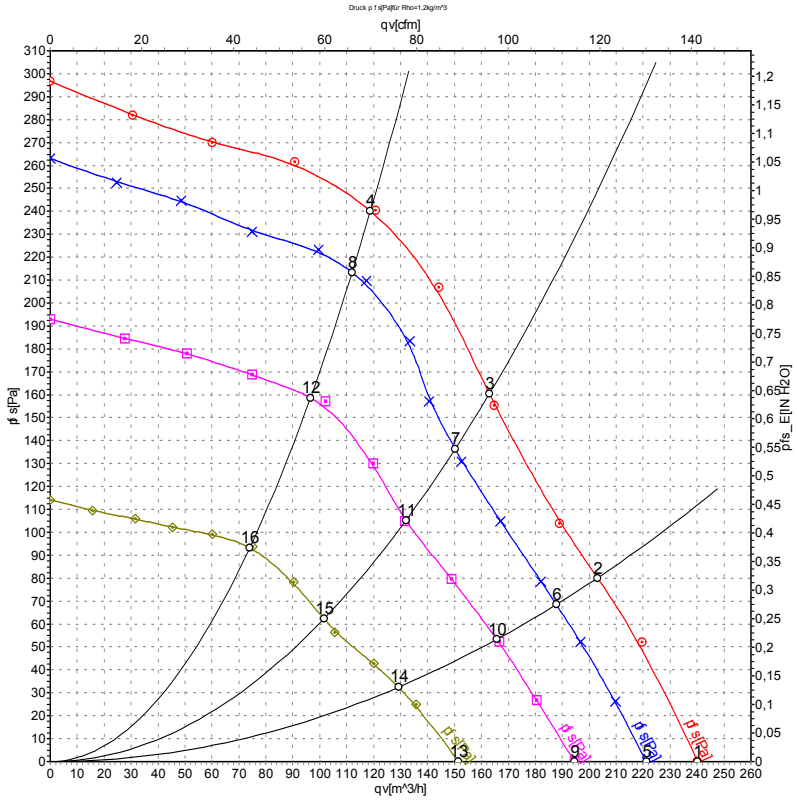
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Curves: Air performance 50 Hz



Measurement: LU-68573-1
Measurement: LU-63983-1
Measurement: LU-63984-1
Measurement: LU-63997-1

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	2200	41	0.30	240	0	140	0.00
2	230	50	2280	36	0.27	205	80	120	0.32
3	230	50	2410	30	0.23	165	160	95	0.64
4	230	50	2525	24	0.19	120	240	70	0.96
5	230	50	2060	34	0.26	220	0	130	0.00
6	230	50	2160	30	0.22	190	68	110	0.27
7	230	50	2250	25	0.20	150	136	90	0.55
8	230	50	2375	21	0.16	110	214	65	0.86
9	230	50	1830	24	0.19	195	0	115	0.00
10	230	50	1905	21	0.16	165	54	100	0.22
11	230	50	1990	18	0.14	130	104	80	0.42
12	230	50	2065	15	0.12	95	160	55	0.64
13	230	50	1435	13	0.11	150	0	90	0.00
14	230	50	1485	12	0.10	130	32	75	0.13
15	230	50	1545	11	0.09	100	62	60	0.25
16	230	50	1595	9.3	0.08	75	94	45	0.38

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

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