D3G133-BF03-02

EC centrifugal fan

forward curved, dual inlet

with housing (flange)

D3G133-BF03-02 ebmpapst Datasheet
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County court Stuttgart · HRA 590344

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Nominal data

Type	**D3G133-BF03-02**	
Motor	**M3G055-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		fa
Speed (rpm)	min^{-1}	1260
Power input	W	86
Current draw	A	0.64
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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	3 kg
Size	133 mm
Surface of rotor	Galvanized
Material of electronics housing	Die-cast aluminum
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor mounted via brackets on one side
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	Rotor-side
Cooling bore / aperture	Rotor-side
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 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC

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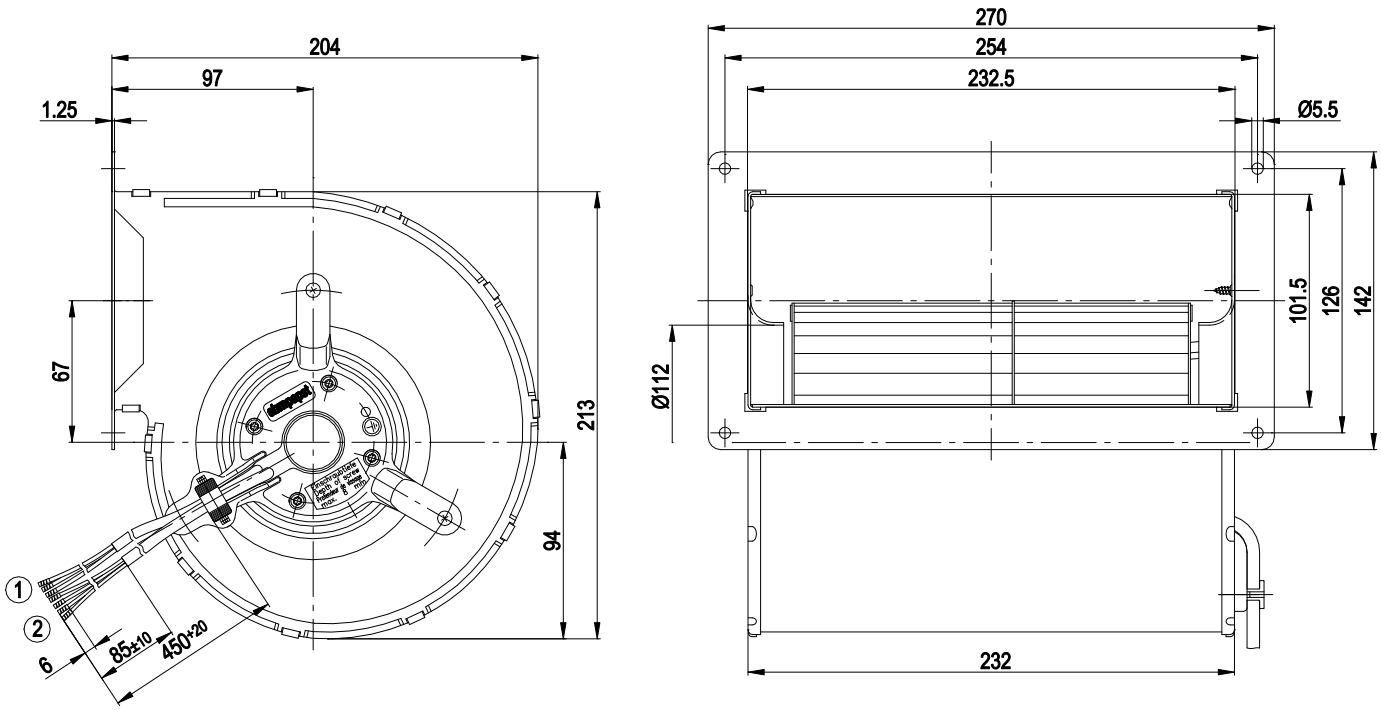
Product drawing



1	Connection line PVC 3G 0.5 mm², 3x brass lead tips crimped
2	Connection line PVC 4G 0.25 mm², 4x brass lead tips crimped

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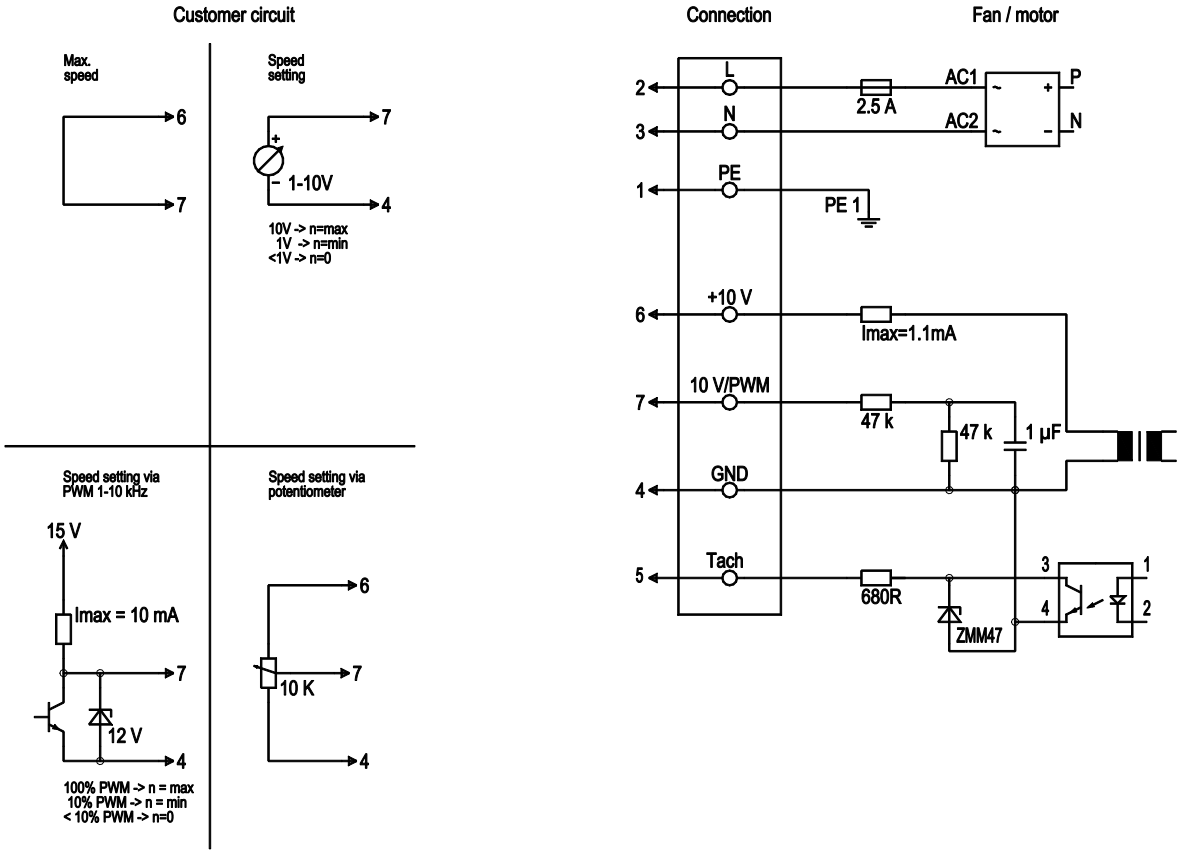
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate 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 10V / 1.1mA, electrically isolated, not short-circuit-proof
	4	GND	blue	GND - Connection for control interface

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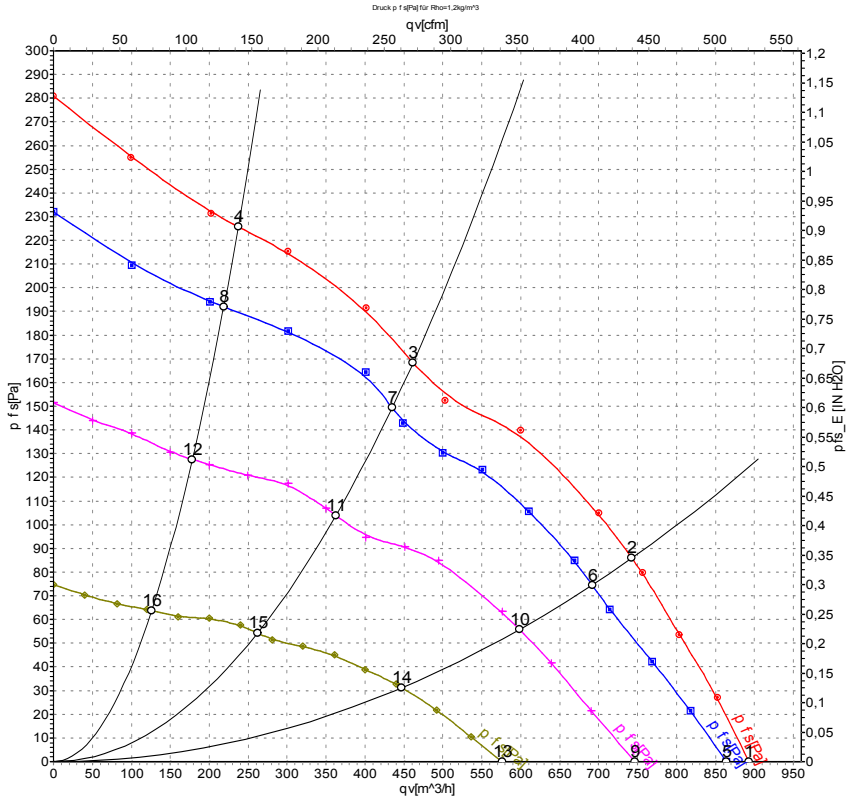
Charts: Air flow 50 Hz



Measurement: LU-108839-1
Measurement: LU-108841-1
Measurement: LU-108842-1
Measurement: LU-108844-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1260	86	0.64	890	0	525	0.00
2	230	50	1550	82	0.63	740	85	435	0.34
3	230	50	1825	62	0.48	460	165	270	0.66
4	230	50	2055	47	0.36	235	225	140	0.90
5	230	50	1270	83	0.63	865	0	510	0.00
6	230	50	1460	69	0.54	690	75	405	0.30
7	230	50	1720	51	0.39	435	149	255	0.60
8	230	50	1930	39	0.30	220	192	130	0.77
9	230	50	1110	53	0.41	745	0	440	0.00
10	230	50	1270	44	0.34	600	56	350	0.22
11	230	50	1440	30	0.23	365	104	215	0.42
12	230	50	1570	22	0.17	180	128	105	0.51
13	230	50	855	25	0.19	575	0	340	0.00
14	230	50	960	21	0.16	445	31	265	0.12
15	230	50	1070	15	0.12	260	54	155	0.22
16	230	50	1110	10	0.09	125	64	75	0.26

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase