D3G133-BF03-10

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

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

Type	**D3G133-BF03-10**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1260
Power consumption	W	86
Current draw	A	0.64
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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	3.3 kg
Size	133 mm
Motor size	55
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1; H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal
Condensation drainage holes	On rotor side
Cooling hole/opening	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 the mains - Thermal overload protection for motor
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 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Connector with cable
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

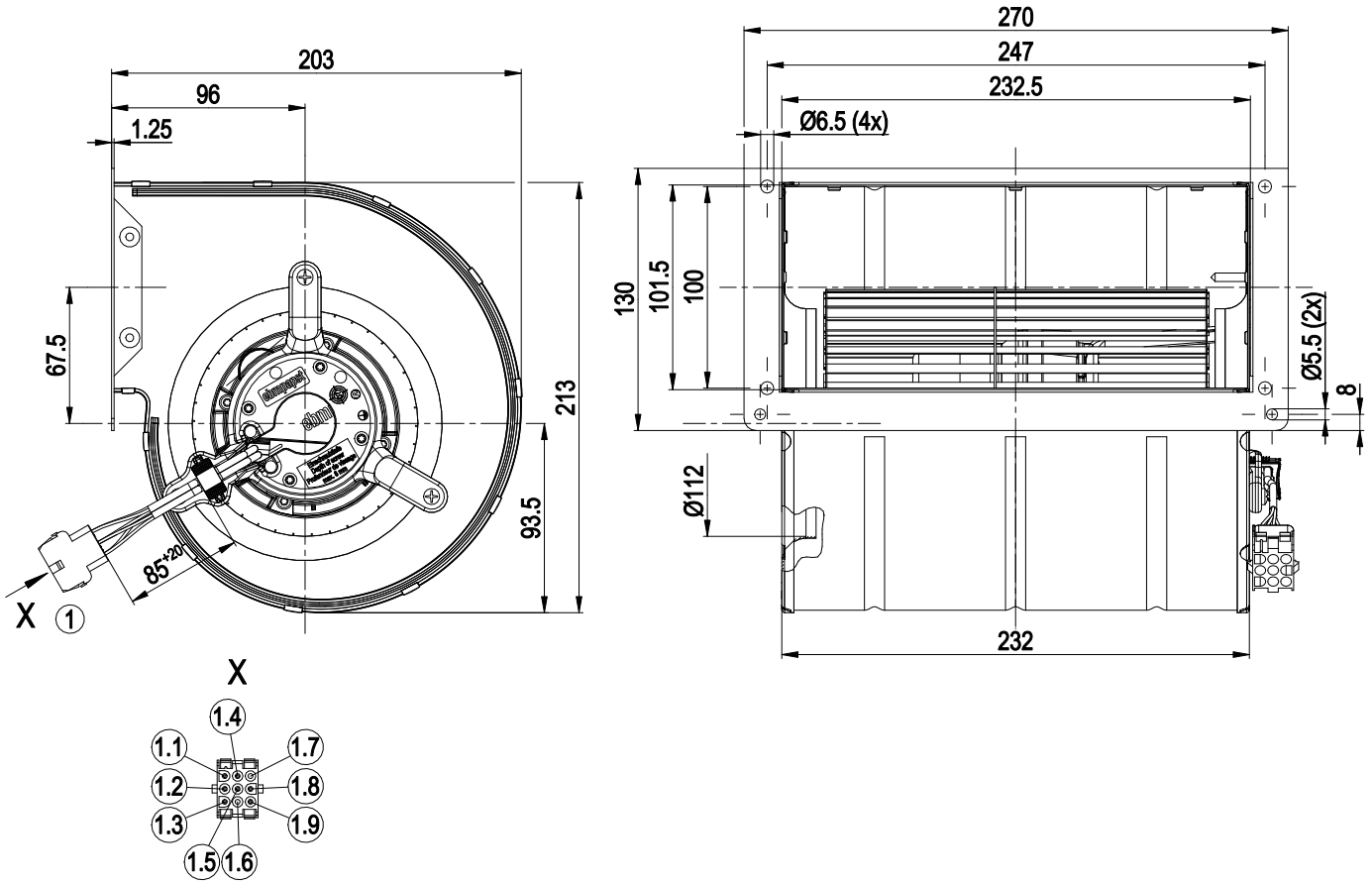
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Product drawing



1	Cable PVC 3G 0.5 mm², cable PVC 4x 0.25 mm², 9-pole connector housing tyco 927231-7, 7x plug pin tyco 926886-1
1.1	Tach (white)
1.2	+10 V (red)
1.3	GND (blue)
1.4	0-10 V PWM (yellow)
1.5	L (black)
1.6	not used
1.7	not used
1.8	N (blue)
1.9	PE (green/yellow)

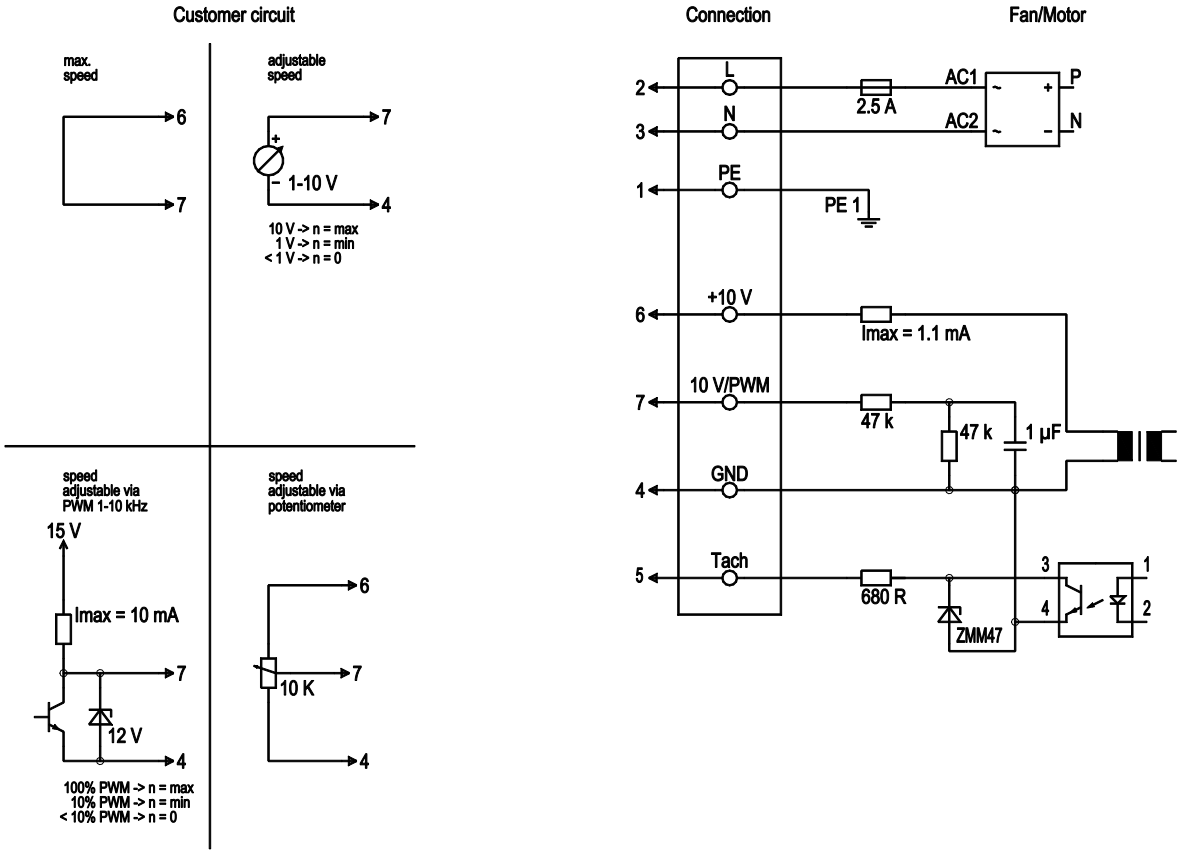
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	2	L	black	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

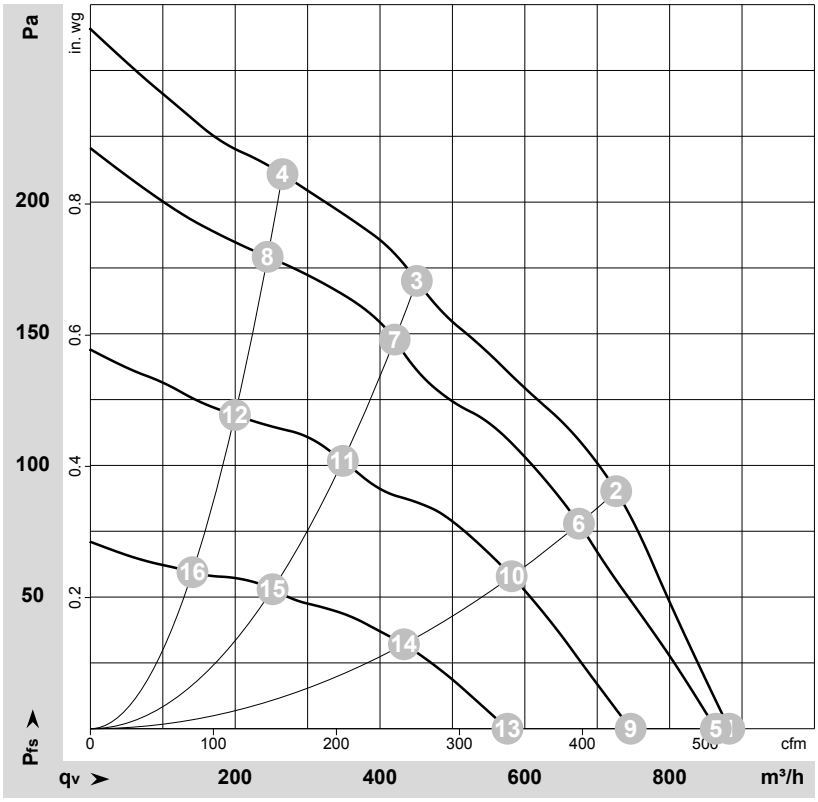
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-138840-1
Measurement: LU-108841-1
Measurement: LU-108842-1
Measurement: LU-108844-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	230	50	1260	86	0.64	54	67	880	0	520	0.00
2	230	50	1565	81	0.64	53	65	725	90	425	0.36
3	230	50	1840	60	0.51	52	64	450	170	265	0.68
4	230	50	2015	47	0.40	53	65	265	210	155	0.84
5	230	50	1270	83	0.63			865	0	510	0.00
6	230	50	1480	68	0.54			675	78	395	0.31
7	230	50	1735	50	0.38			420	148	245	0.59
8	230	50	1905	40	0.31			245	179	145	0.72
9	230	50	1110	53	0.41			745	0	440	0.00
10	230	50	1290	43	0.33			580	58	345	0.23
11	230	50	1450	30	0.23			350	102	205	0.41
12	230	50	1550	22	0.18			200	119	120	0.48
13	230	50	855	25	0.19			575	0	340	0.00
14	230	50	965	21	0.16			435	32	255	0.13
15	230	50	1080	14	0.12			250	53	150	0.21
16	230	50	1105	10.0	0.09			140	59	85	0.24

U = Voltage · 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
q_V = Air flow · p_{fs} = Pressure increase

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