D3G133-BF03-09

EC centrifugal fan

forward-curved, dual-intake

with housing (without 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-BF03-09**	
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. back pressure	Pa	50
Min. back pressure	inH2O	0.2
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	2.9 kg
Fan size	133 mm
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	IP42
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
Condensation drainage holes	On rotor side
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - 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	With plug
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

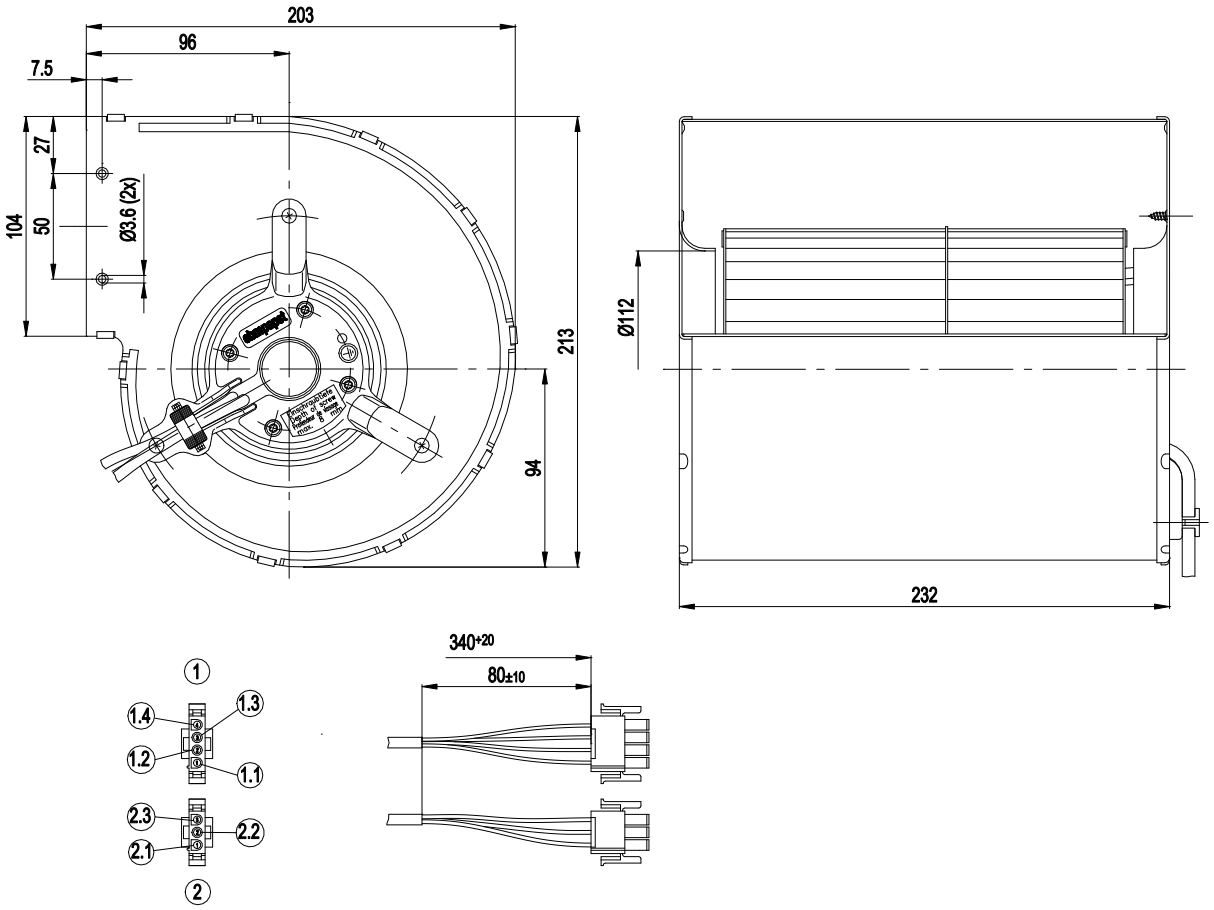
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Product drawing



1	Cable PVC 4 x 0.25 mm² with plug: AMP Mate-N-Lok-480702-0
1.1	red
1.2	yellow
1.3	light blue
1.4	white
2	Cable PVC 3G 0.5 mm² with plug: AMP Mate-N-Look-480702-0
2.1	brown
2.2	blue
2.3	green/yellow

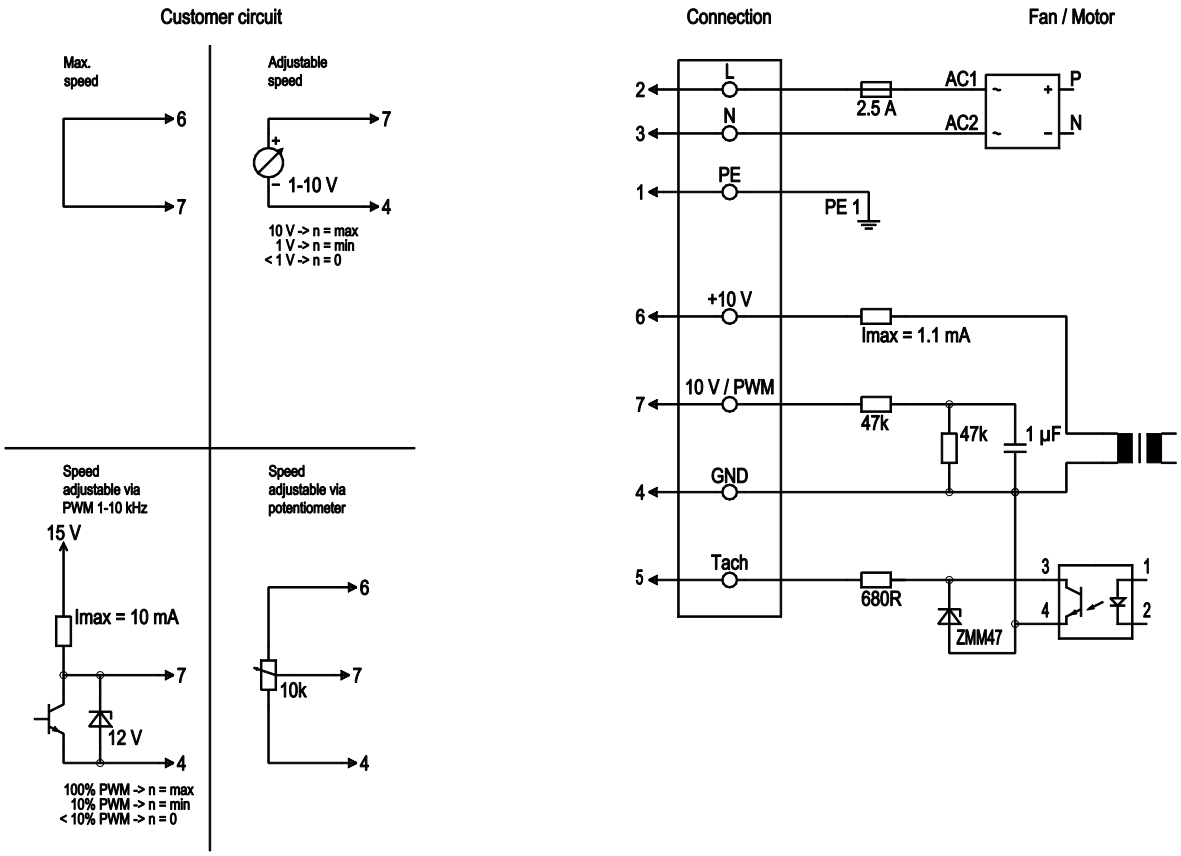
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Connection diagram



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

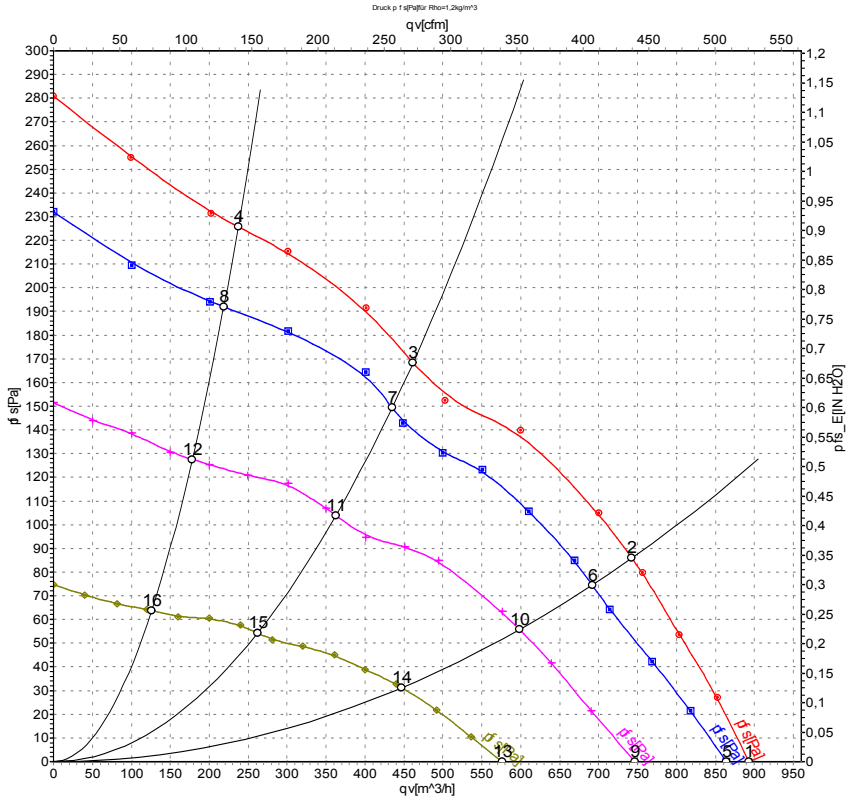
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Curves: Air performance 50 Hz



Measurement: LU-108839-1
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	qv	p_{fs}	qv	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 = 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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