D3G133-LT13-16

EC centrifugal fan

forward curved, single inlet

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
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**D3G133-LT13-16**
Motor	**M3G055-BI**

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}	1270
Power input	W	47
Current draw	A	0.45
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

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

EC centrifugal fan

forward curved, single inlet

with housing (flange)

Technical features

Mass	1.9 kg
Size	133 mm
Surface of rotor	Thick layer passivated
Material of impeller	PA plastic
Housing material	PP plastic
Motor suspension	Motor mounted vibration-free on both sides
Direction of rotation	Counter-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	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

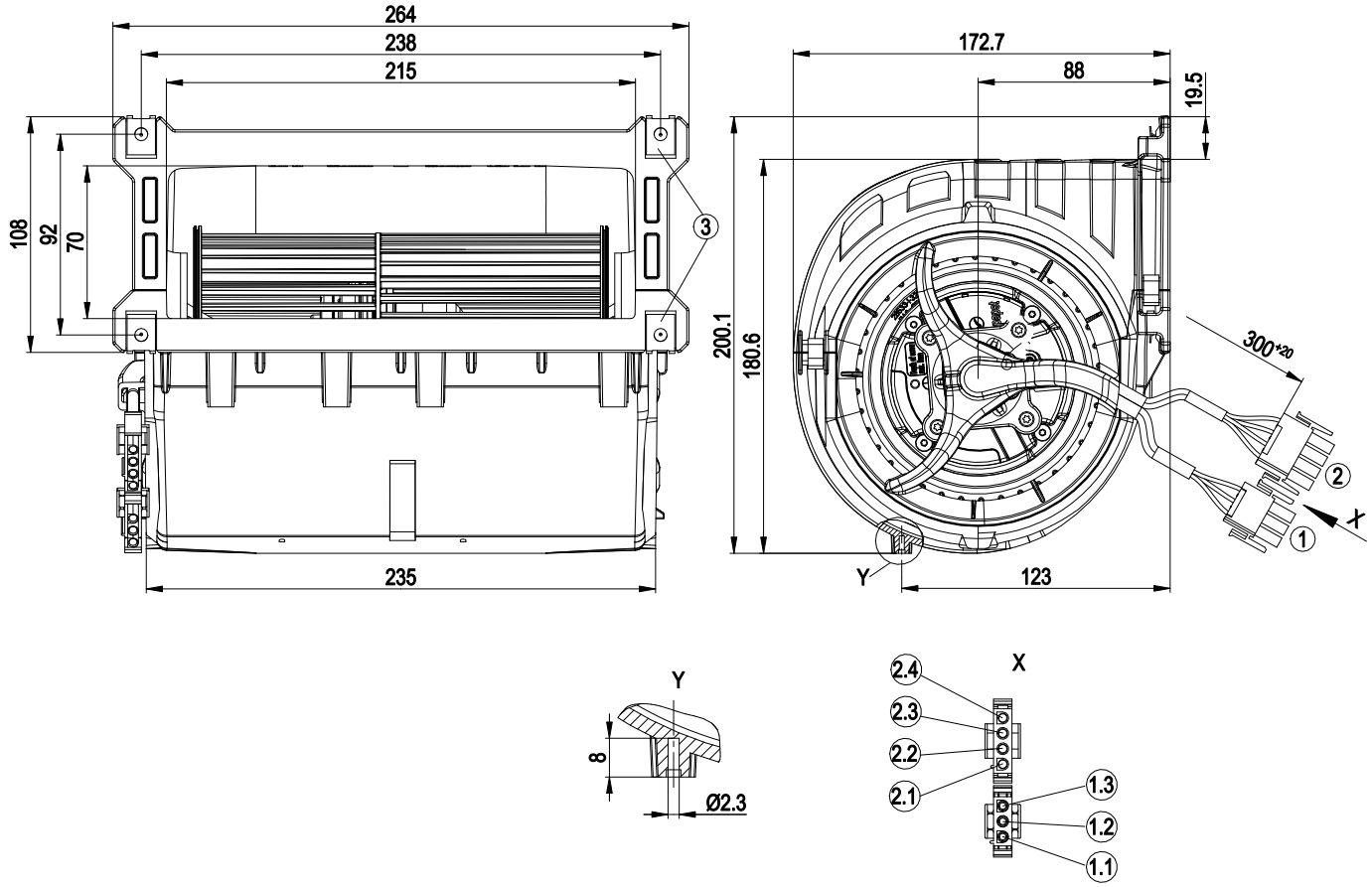
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward curved, single inlet

with housing (flange)

Product drawing



1	Connection line halogen-silicone-free 3G 0.5 mm², connector housing 3-pole Tyco 1241809-2, 3x plug pin Tyco 926885-1 crimped
1.1	N (blue)
1.2	PE (green/yellow)
1.3	L (brown)
2	Connection line halogen-silicone-free 4x 0.25 mm², connector housing 4-pole Tyco 926298-6, 4x plug pin Tyco 926885-1 crimped
2.1	GND (blue)
2.2	0-10 V PWM (yellow)
2.3	+10 V (red)
2.4	Tach (white)
3	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

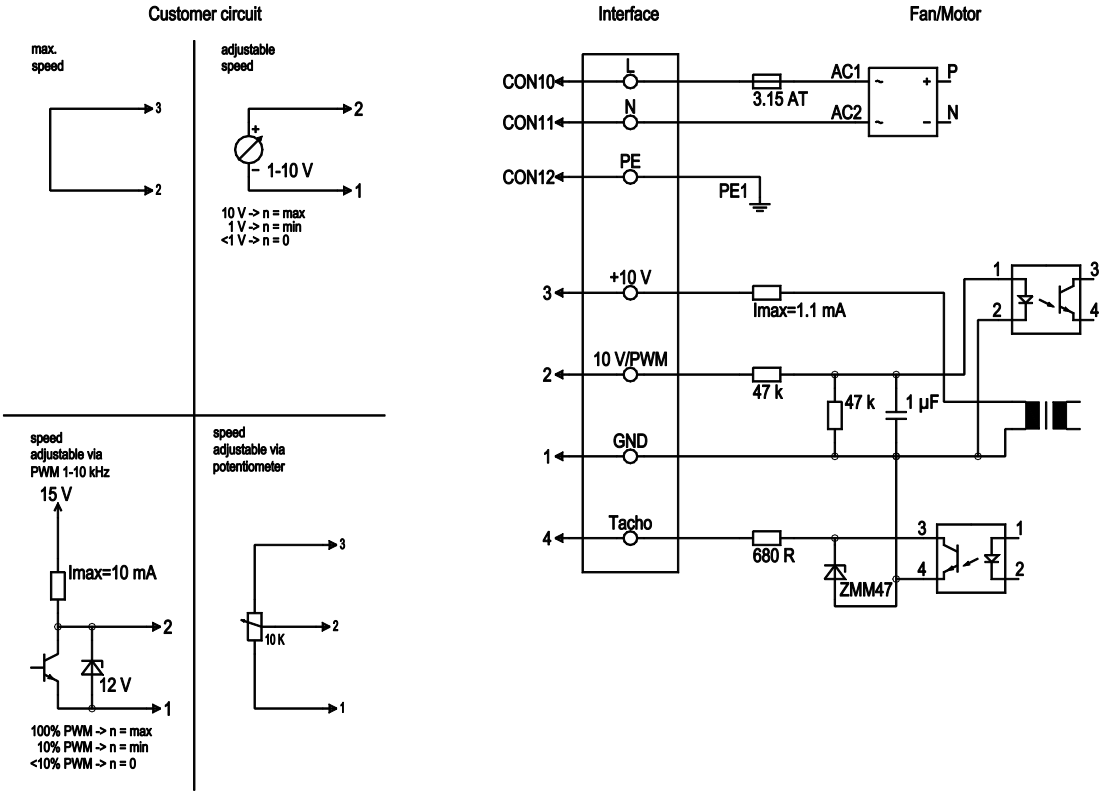
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward curved, single inlet

with housing (flange)

Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	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	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated

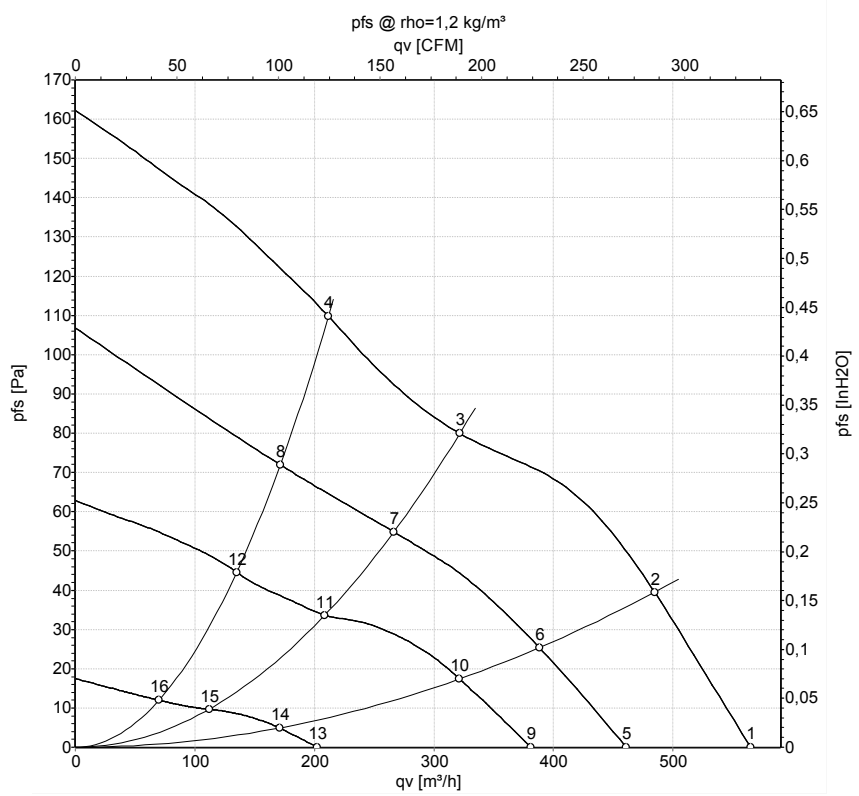
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward curved, single inlet

with housing (flange)

Charts: Air flow 50 Hz



Measurement: LU-164609-1
Measurement: LU-137453-1
Measurement: LU-134179-1
Measurement: LU-134181-1

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	1270	47	0.45	565	0	335	0.00
2	230	50	1360	42	0.41	485	40	285	0.16
3	230	50	1530	31	0.32	320	80	190	0.32
4	230	50	1660	25	0.26	210	110	125	0.44
5	230	50	1040	25	0.25	460	0	270	0.00
6	230	50	1105	22	0.25	390	27	230	0.11
7	230	50	1210	18	0.21	265	55	155	0.22
8	230	50	1330	14	0.17	170	72	100	0.29
9	230	50	885	16	0.20	380	0	225	0.00
10	230	50	930	14	0.17	320	17	190	0.07
11	230	50	1015	11	0.14	210	33	125	0.13
12	230	50	1075	10.0	0.13	135	45	80	0.18
13	230	50	490	5.0	0.07	200	0	120	0.00
14	230	50	515	4.0	0.07	170	5	100	0.02
15	230	50	550	4.0	0.06	110	10	65	0.04
16	230	50	575	4.0	0.06	70	12	40	0.05

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

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