D3G250-ED12-81

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	**D3G250-ED12-81**
Motor	**M3G084-GF**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1050
Power consumption	W	360
Current draw	A	4.1
Min. back pressure	Pa	130
Min. back pressure	in. wg	0.52
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

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

Technical description

Weight	12.9 kg
Size	250 mm
Motor size	84
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, hot-dip galvanized
Housing material	Sheet steel, hot-dip galvanized
Motor suspension	Motor mounted on brackets for one-sided vibration damping
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	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	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - 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 electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
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 61800-5-1; CE

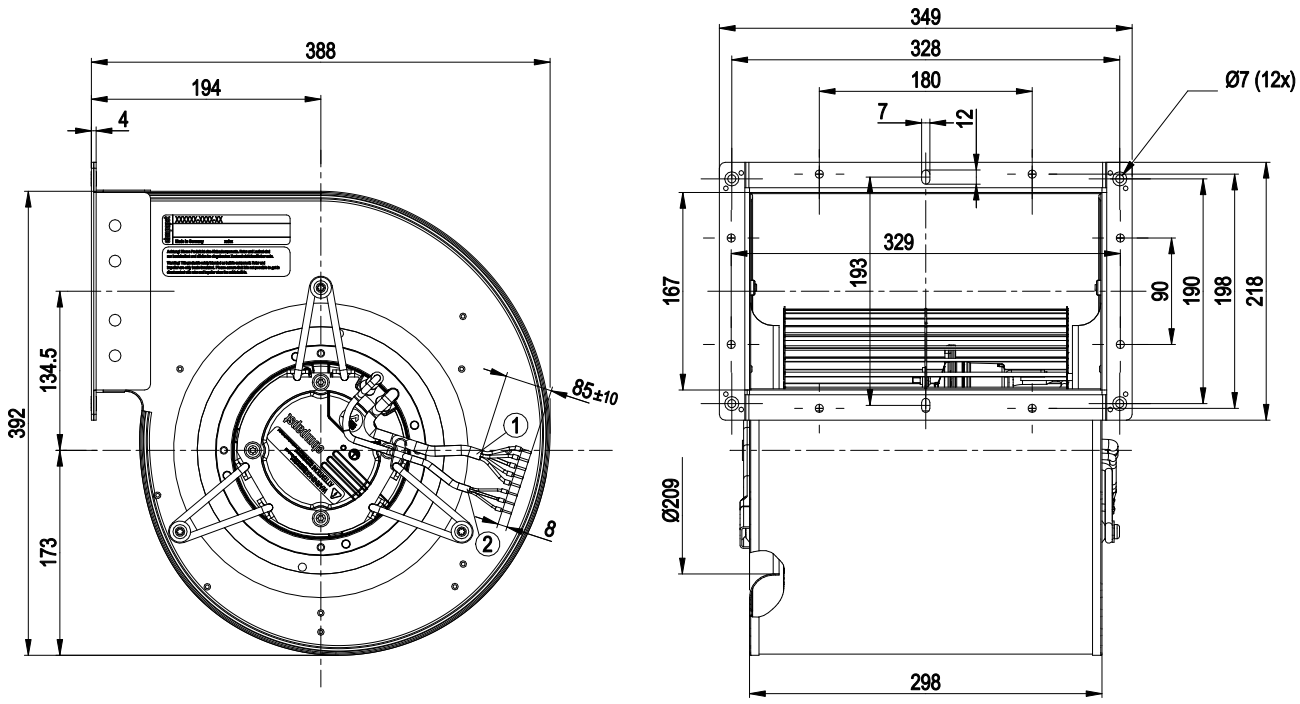
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

Product drawing



Cable length from electronics housing: 800+20 mm

1	Cable PVC AWG18, 5x crimped ferrules
2	Cable PVC AWG22, 3x crimped ferrules

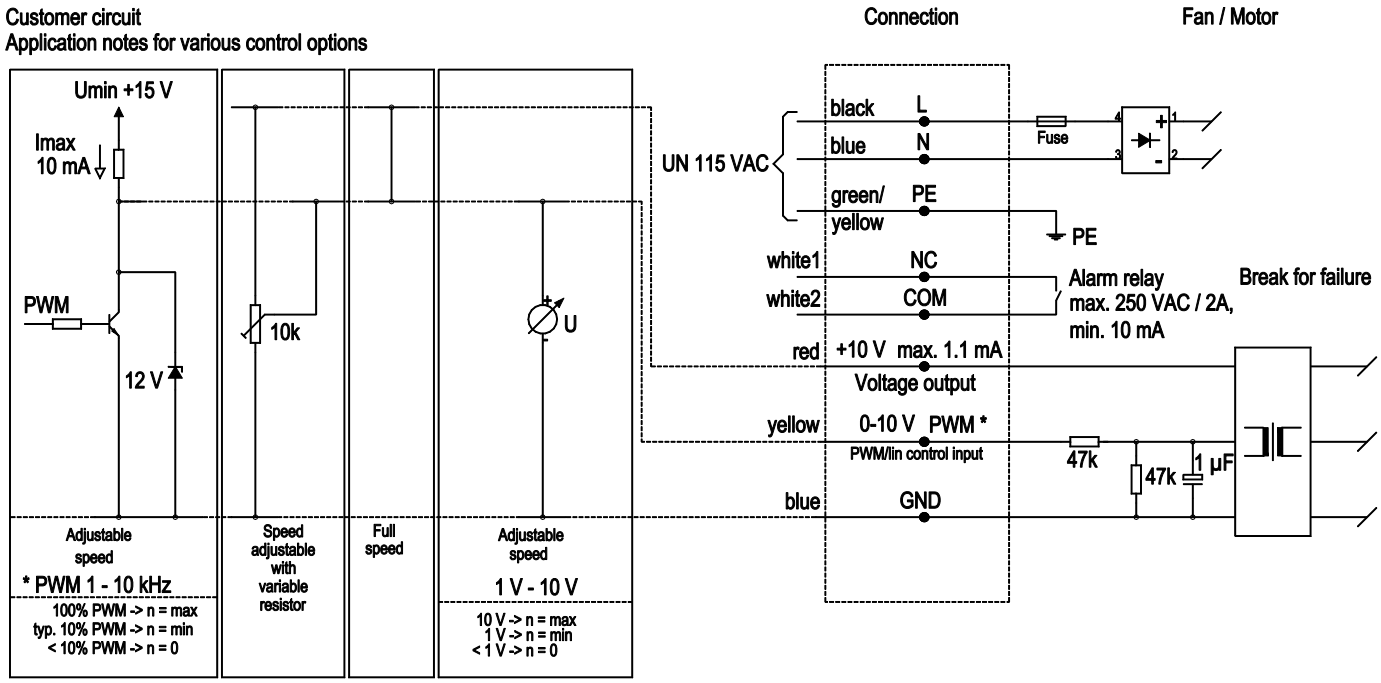
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

Connection diagram



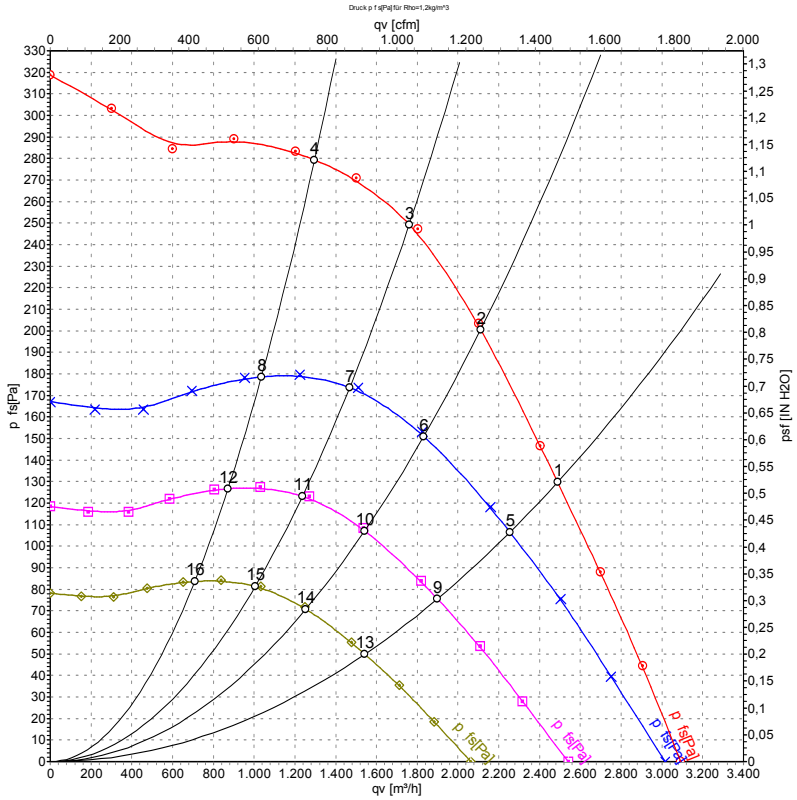
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

Curves: Air performance 50 Hz



Measurement: LU-137136-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	115	50	1050	360	4.15	2490	130	1465	0.52
2	115	50	1095	314	3.64	2110	200	1240	0.80
3	115	50	1140	270	3.16	1760	250	1035	1.00
4	115	50	1190	212	2.53	1295	280	760	1.12
5	115	50	950	269	3.09	2255	107	1325	0.43
6	115	50	950	206	2.38	1830	152	1080	0.61
7	115	50	950	157	1.84	1470	174	865	0.70
8	115	50	950	109	1.30	1035	179	610	0.72
9	115	50	800	160	1.85	1900	76	1120	0.31
10	115	50	800	123	1.42	1540	108	910	0.43
11	115	50	800	94	1.10	1235	124	730	0.50
12	115	50	800	65	0.78	870	127	515	0.51
13	115	50	650	86	0.99	1545	50	910	0.20
14	115	50	650	66	0.76	1255	71	735	0.29
15	115	50	650	50	0.59	1005	82	590	0.33
16	115	50	650	35	0.42	710	84	415	0.34

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · 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