D3G200-CB22-71

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	**D3G200-CB22-71**
Motor	**M3G084-FA**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	207 .. 253
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1640
Power consumption	W	465
Current draw	A	3.0
Min. back pressure	Pa	225
Min. back pressure	inH2O	0.9
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

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	46.4	34.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		55.6	44
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.35
09 Air flow q_v	m^3/h	1510
09 Pressure increase p_{fs}	Pa	351
10 Speed (rpm) n	min^{-1}	1750
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-107744

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Technical description

Weight	9.4 kg
Fan size	200 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, 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 61000-6-3 (household 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
Approval	C22.2 No.77 + CAN/CSA-E60730-1; UL1004-3 +60730

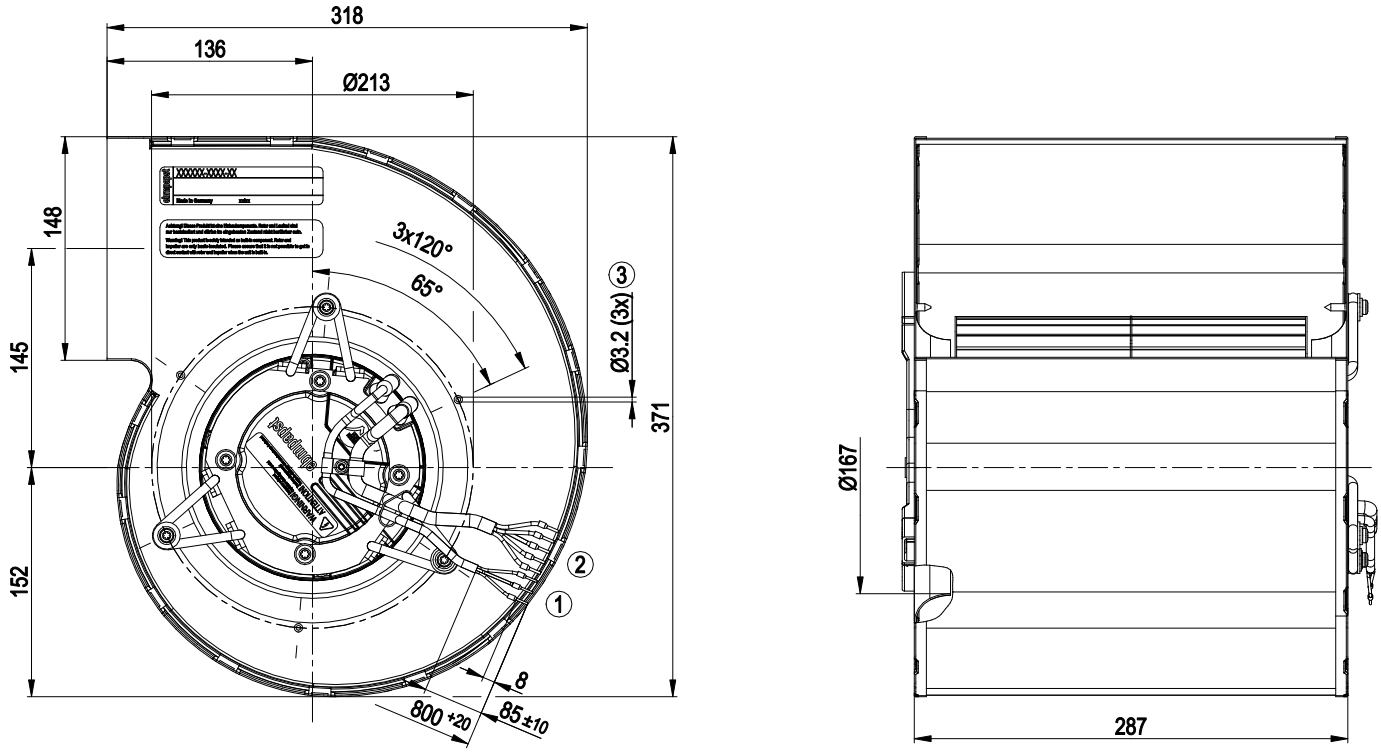
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Product drawing



1	Cable PVC AWG22, 3x crimped ferrules
2	Cable PVC AWG18, 5x crimped ferrules
3	Holes in both side parts

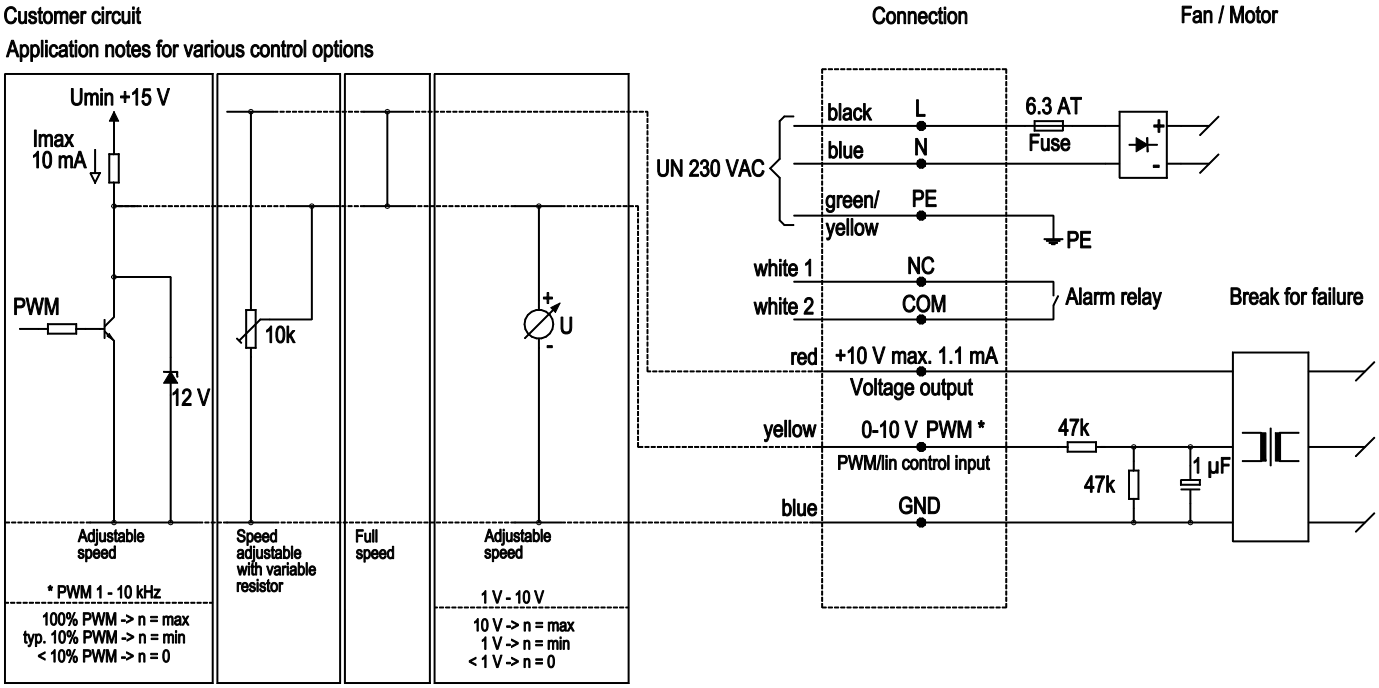
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Connection diagram



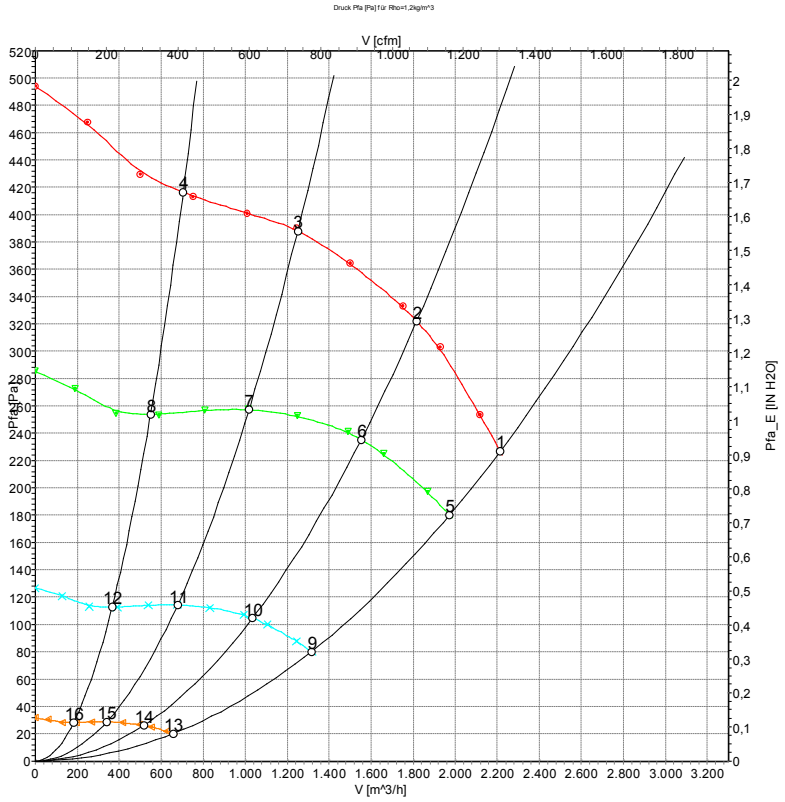
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

Curves: Air performance



Measurement: LU-75763-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	1640	465	3.00	70	2215	225	1305	0.90
2	230	50	1665	402	2.60	68	1815	320	1070	1.28
3	230	50	1750	308	1.98	66	1250	390	735	1.57
4	230	50	1825	225	1.48	66	705	415	415	1.67
5	230	50	1425	337	2.18	68	1975	180	1160	0.72
6	230	50	1425	251	1.62	65	1550	235	915	0.94
7	230	50	1425	166	1.07	61	1020	258	600	1.04
8	230	50	1425	107	0.70	61	550	254	325	1.02
9	230	50	950	100	0.65	56	1315	80	775	0.32
10	230	50	950	74	0.48	53	1035	105	610	0.42
11	230	50	950	49	0.32	50	680	115	400	0.46
12	230	50	950	32	0.21	50	365	113	215	0.45
13	230	50	475	12	0.08	37	660	20	385	0.08
14	230	50	475	9.3	0.06	34	520	26	305	0.10
15	230	50	475	6.2	0.04	32	340	29	200	0.12
16	230	50	475	4.0	0.03	32	185	28	110	0.11

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · 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