D2D133-AB02-22

AC 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	**D2D133-AB02-22**		
Motor	**M2D068-DF**		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2170	2640
Power consumption	W	225	215
Current draw	A	0.37	0.34
Min. back pressure	Pa	100	250
Min. back pressure	in. wg	0.4	1
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	55

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	3.4 kg
Size	133 mm
Motor size	68
Rotor surface	Painted black
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	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	On rotor side
Mode	S2
Motor mounting	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

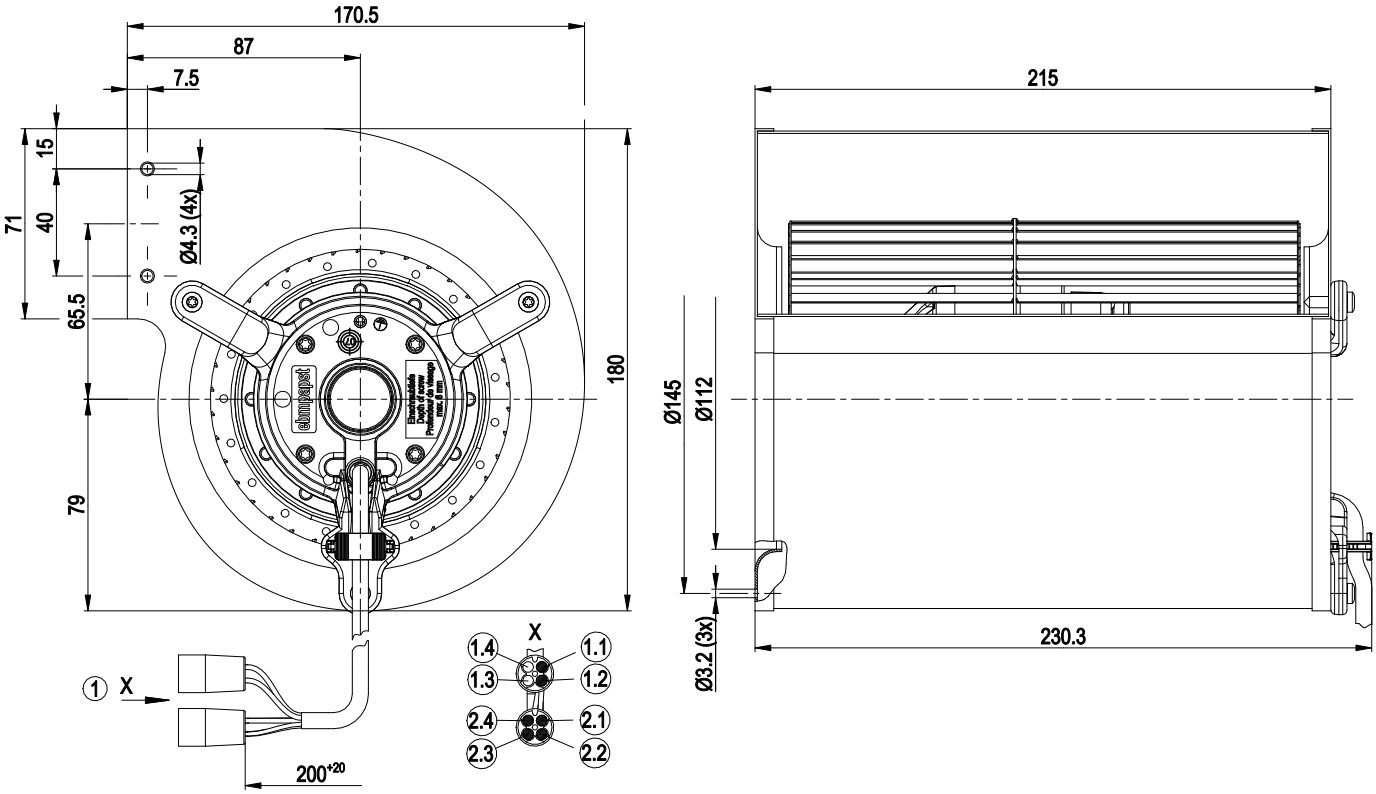
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Product drawing



1	Cable PVC AWG20, 2x 4-pole connector housing tyco 925075-7, 6x plug pin tyco 163555-6
1.1	TW (yellow)
1.2	TW (yellow)
1.3	not used
1.4	not used
2.1	L1 (black1)
2.2	L2 (black2)
2.3	L3 (black3)
2.4	PE (green/yellow)

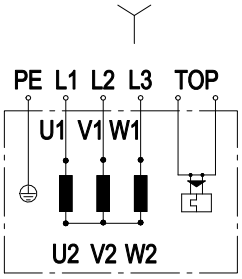
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Connection diagram



	Three-phase motor
Y	Star connection
L1	= U1 = black 2
L2	= V1 = black 1
L3	= W1 = black 3
TOP	(thermal overload protector) 2x yellow
PE	green/yellow

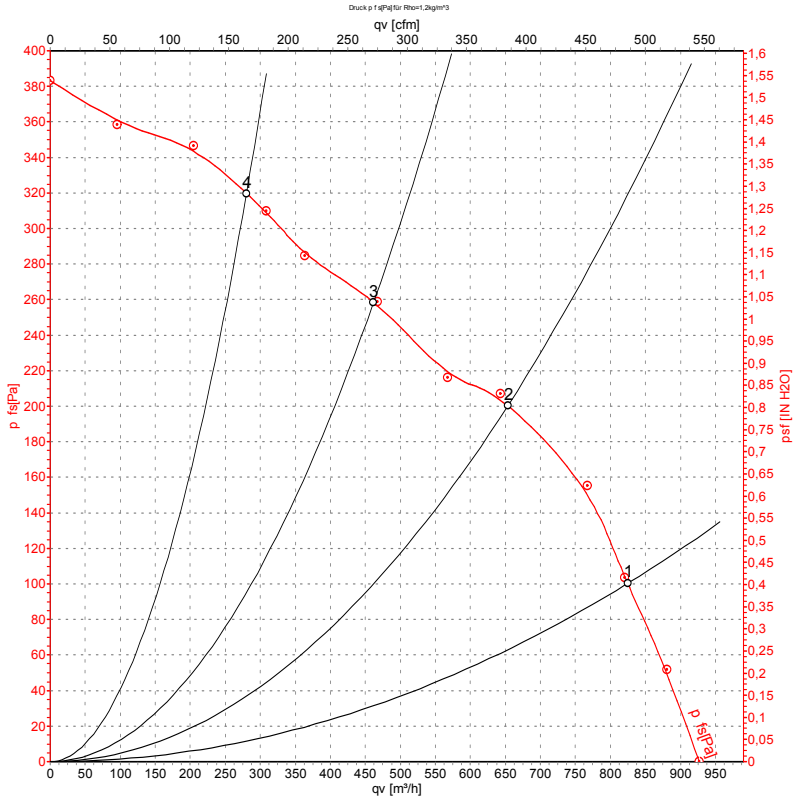
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Curves: Air performance 50 Hz



Measurement: LU-41101-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	400	50	2170	225	0.37	825	100	485	0.40
2	400	50	2395	179	0.30	655	200	385	0.80
3	400	50	2580	136	0.25	460	260	270	1.04
4	400	50	2745	92	0.21	280	320	165	1.28

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

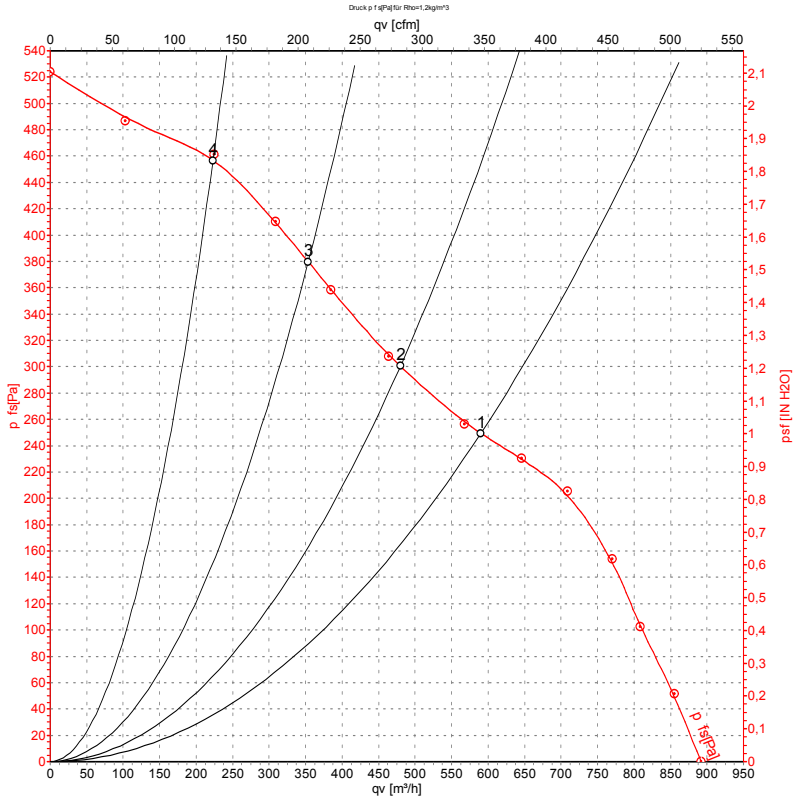
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Curves: Air performance 60 Hz



Measurement: LU-41103-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	400	60	2640	215	0.34	590	250	345	1.00
2	400	60	2810	185	0.30	480	300	285	1.20
3	400	60	3020	147	0.24	355	380	210	1.53
4	400	60	3235	101	0.19	225	460	130	1.85

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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