D2E146-FW01-14

AC centrifugal fan

forward-curved

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	**D2E146-FW01-14**	
Motor	**M2E068-DF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1820
Power consumption	W	192
Current draw	A	0.84
Capacitor	µF	4
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	180
Min. back pressure	inH2O	0.72
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45
Starting current	A	1.1

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	3.3 kg
Fan size	146 mm
Impeller material	Sheet steel, galvanized
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP00
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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	None
Mode	S1
Motor bearing	Ball bearing
Speed levels	3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal strip, capacitor connected
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE

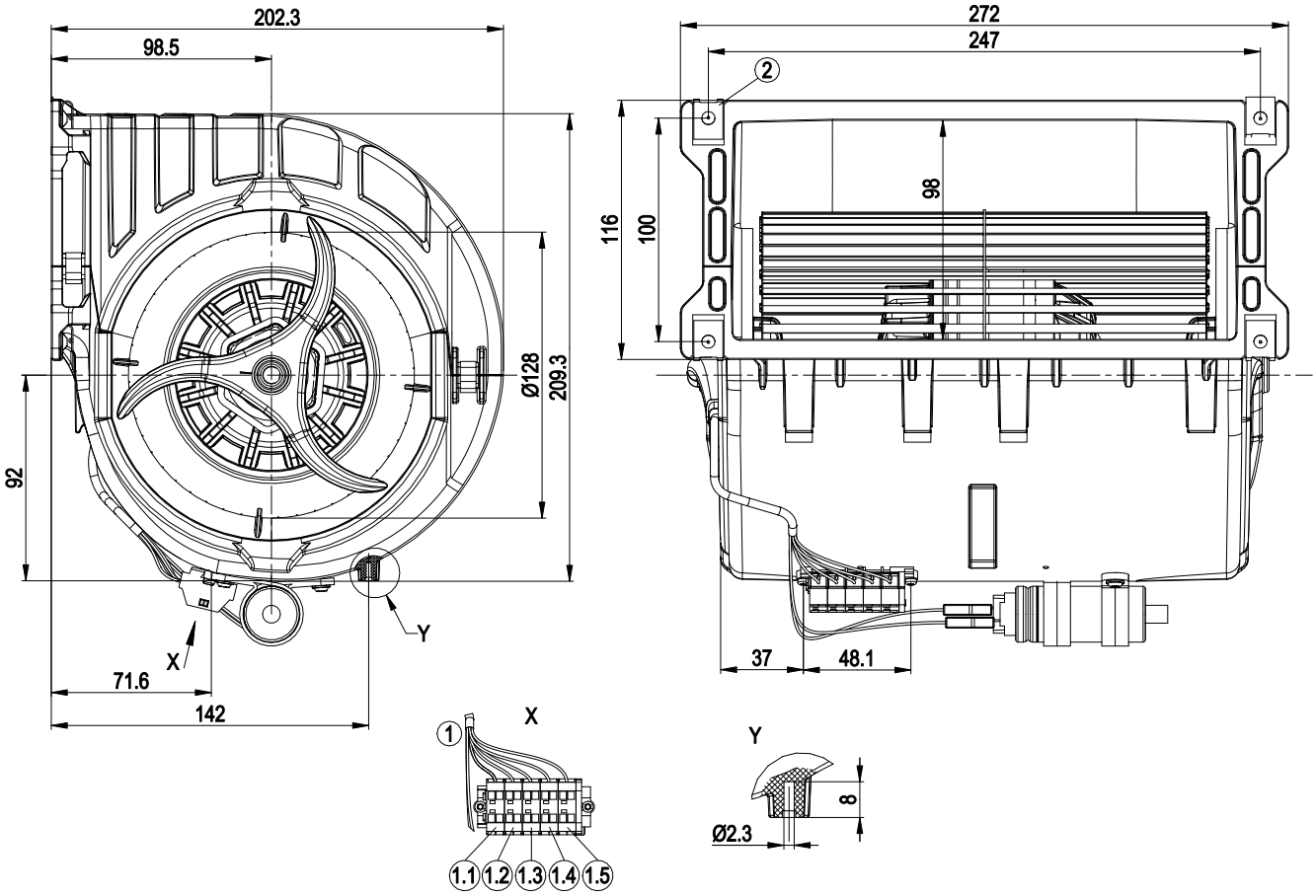
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Product drawing



1	Cable ETFE 1x AWG20 (PE) and 6x AWG22, Wago terminal strip Series 260
1.1	PE (green/yellow)
1.2	N (blue)
1.3	L = step 3 (black)
1.4	L = step 2 (gray)
1.5	L = step 1 (white)
2	4x sheet metal nut for thread EN ISO 1478-ST 4.8 (min. screw length 14.5 mm plus material thickness of attachment)

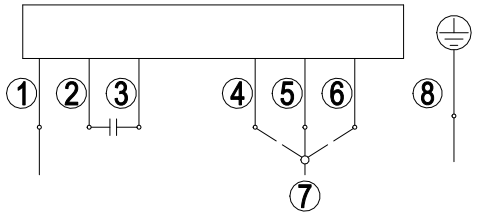
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Connection diagram



Note: High speed (step III); low speed (step I)

1	= N = blue	2	brown	3	yellow
4	Step I white	5	Step II gray	6	Step III black
7	L1	8	green/yellow (PE)		

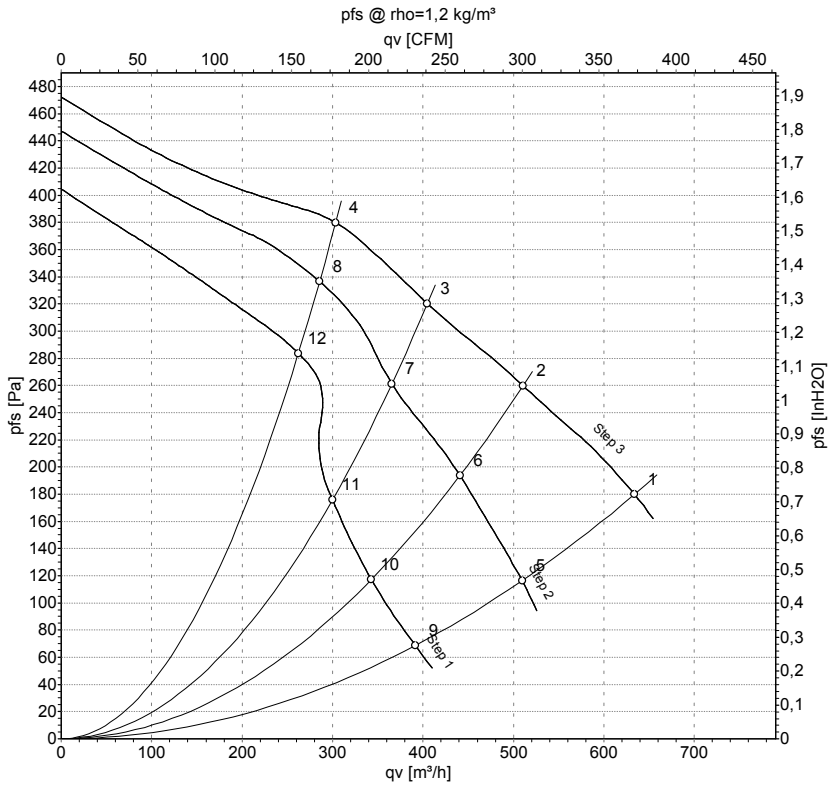
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Curves: Air performance 50 Hz



Measurement: LU-62288-1
Measurement: LU-62289-1
Measurement: LU-62290-1

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

	Stage	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	inH2O
1	3	230	50	1820	192	0.84	635	180	375	0.72
2	3	230	50	2140	173	0.75	510	260	300	1.04
3	3	230	50	2345	153	0.66	405	320	240	1.28
4	3	230	50	2585	122	0.53	305	380	180	1.53
5	2	230	50	1470	175	0.76	510	117	300	0.47
6	2	230	50	1850	160	0.70	440	194	260	0.78
7	2	230	50	2110	145	0.64	365	258	215	1.04
8	2	230	50	2390	120	0.54	285	336	170	1.35
9	1	230	50	1125	155	0.68	390	69	230	0.28
10	1	230	50	1430	148	0.65	345	117	200	0.47
11	1	230	50	1740	138	0.61	300	176	175	0.71
12	1	230	50	2230	111	0.51	260	284	155	1.14

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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