W2D160-EA22-21

AC axial fan

straight blades (A series)

W2D160-EA22-21 ebmpapst Datasheet
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Nominal data

Type	**W2D160-EA22-21**
Motor	**M2D068-BF**

Phase		3~	3~
Nominal voltage	VAC	400	480
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		cs	cs
Valid for approval / standard		CE	CE
Speed	min^{-1}	2800	3350
Power input	W	40	52
Current draw	A	0.14	0.15
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	-	-

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

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Technical features

Mass	2.6 kg
Size	160 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Housing material	Die-cast aluminium, coated in black
Material of guard grille	Die-cast aluminium; steel, phosphated and coated in black plastic (RAL 9005)
Number of blades	5
Direction of air flow	"A"; BS-AS
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F2-2
Max. permissible ambient motor temp. (transp./ storage)	+ 60 °C
Min. permissible ambient motor temp. (transp./storage)	- 15 °C
Mounting position	Shaft horizontal
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Cable exit	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	UL 1004-1; CSA C22.2 Nr.100

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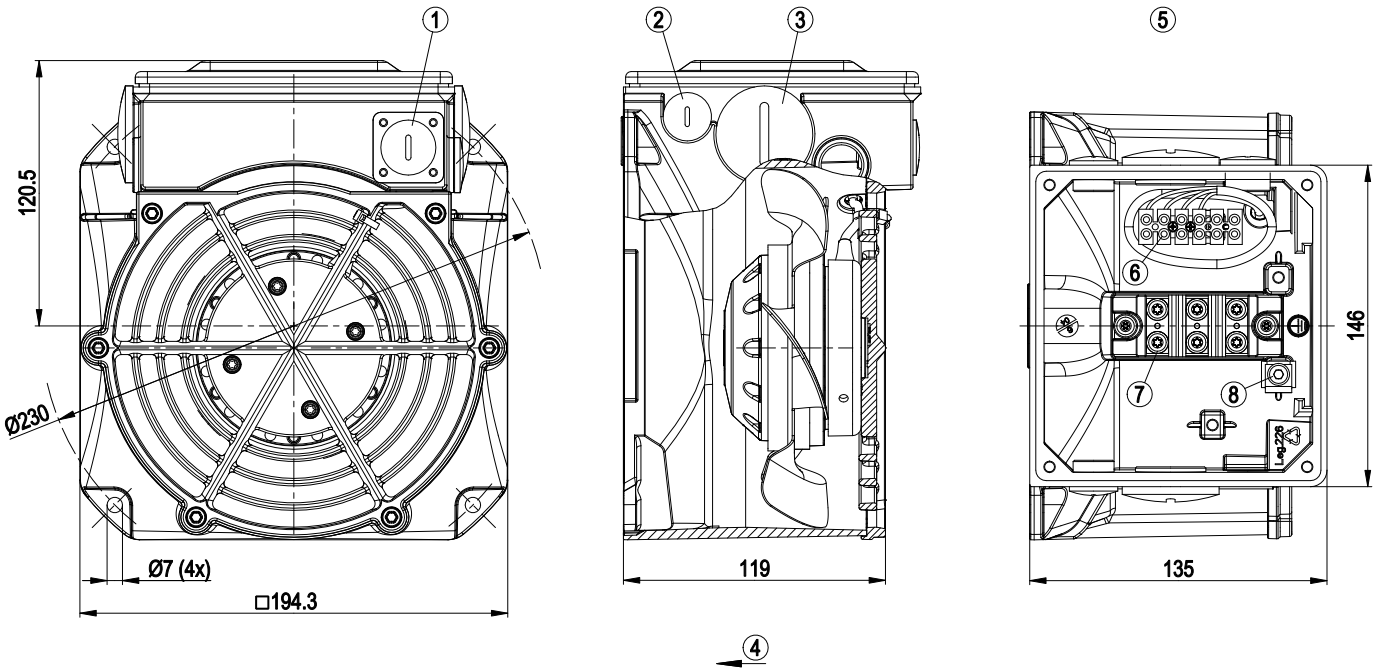
Product drawing



1	Screw plug PG 13.5 (3x); tightening torque 1.9 Nm
2	Screw plug PG 11 (2x); tightening torque 1.9 Nm
3	Screw plug PG 29 (2x); tightening torque 3.9 Nm
4	Direction of air flow "A", BS-AS
5	Shown without housing cover
6	Terminal strip
7	Customer terminal board
8	PE

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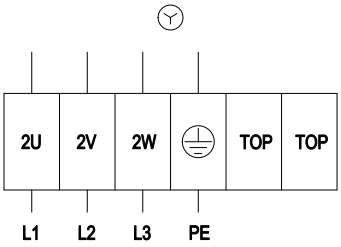
Connection screen



Y	Star connection, three-phase AC motor
L1	black
L2	blue
L3	brown
PE	green/yellow
TOP	not used

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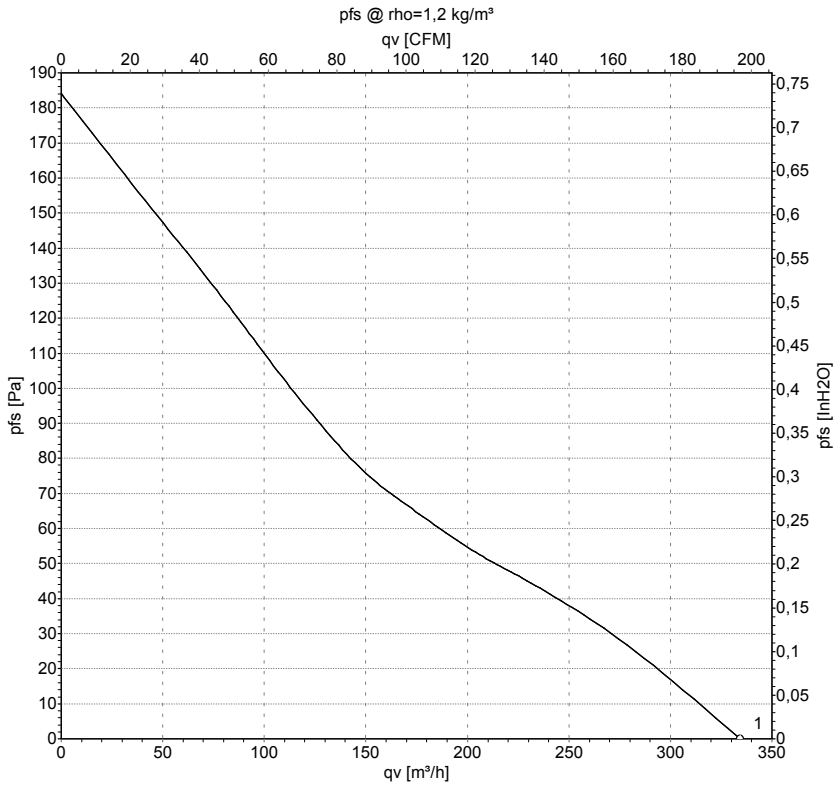
Charts: Air flow 50 Hz



Measurement: LU-43403

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_e	I	qv
	V	Hz	min^{-1}	W	A	m^3/h
1	400	50	2800	40	0.14	335

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow

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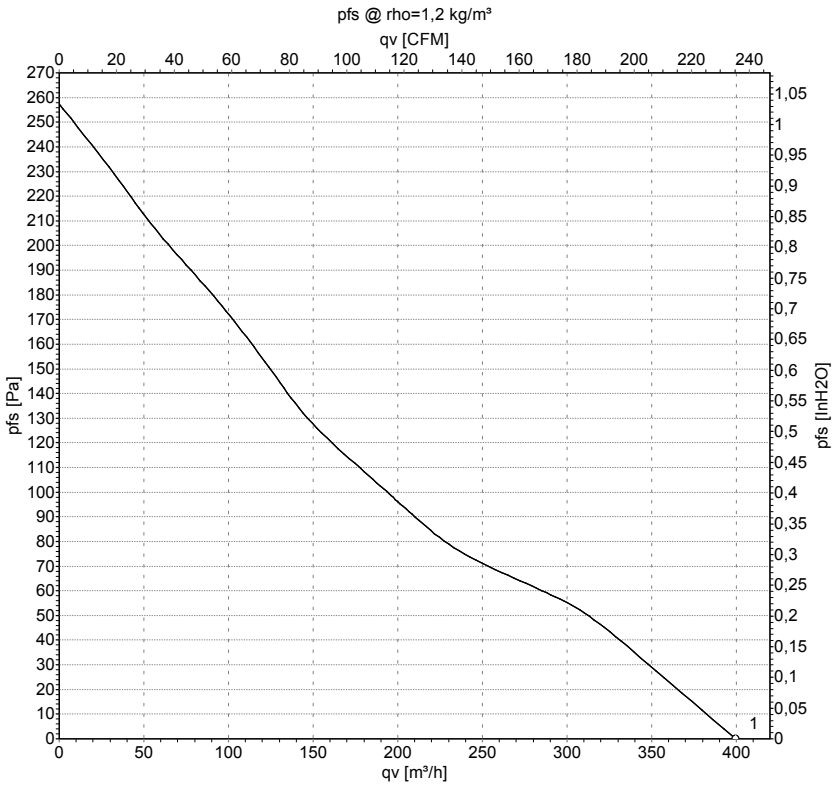
Charts: Air flow 60 Hz



Measurement: LU-43405

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_e	I	qv
	V	Hz	min^{-1}	W	A	m^3/h
1	480	60	3350	52	0.15	400

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow