W2D160-EB22-12

AC axial fan

sickle-shaped blades (S series)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W2D160-EB22-12**
Motor	**M2D068-BC**

Phase		3~	3~
Nominal voltage	VAC	400	480
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		cs	cs
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2800	3350
Power consumption	W	44	58
Current draw	A	0.15	0.16
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	-	-

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

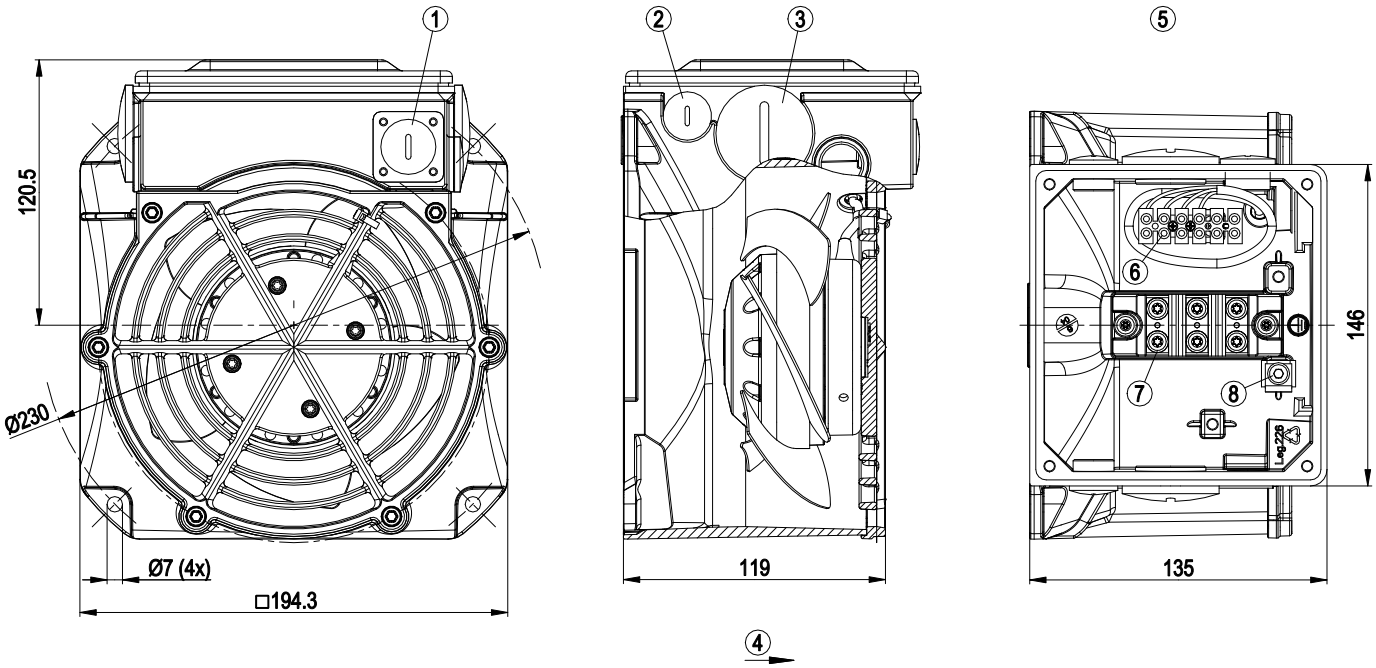
Weight	3.4 kg
Size	160 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Housing material	Die-cast aluminum, painted black
Guard grille material	Die-cast aluminum; steel, phosphated and coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V; AS-BS
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2; H1+
Max. permitted ambient temp. for motor (transport/storage)	+ 60 °C
Min. permitted ambient temp. for motor (transport/storage)	- 15 °C
Installation position	Shaft horizontal
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-1; CSA C22.2 No. 100

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Product drawing



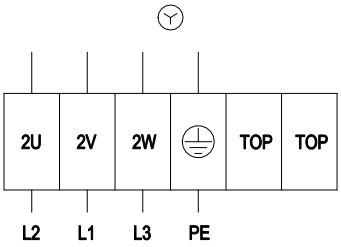
1	Screw plug PG 13.5 (3x), tightening torque 1.9 Nm
2	Screw plug PG 11 (2x), tightening torque 1.9 Nm
3	Screw plug PG 29 (2x), tightening torque 3.9 Nm
4	Airflow direction"V", AS-BS
5	Depicted without housing cover
6	Terminal strip
7	Connection board for customer
8	PE

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Connection diagram



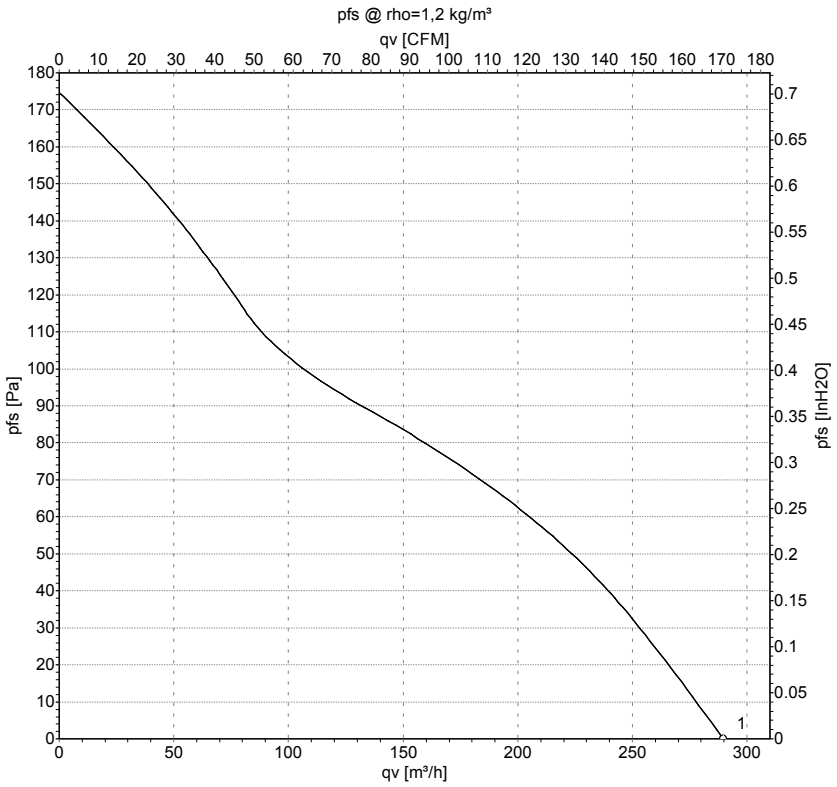
Y	Star connection, three-phase motor
L1	black
L2	blue
L3	brown
PE	Green/yellow
TOP	not used

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Curves: Air performance 50 Hz



Measurement: LU-43400-1

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	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	cfm	in. wg
1	400	50	2800	44	0.15	290	170	0.00

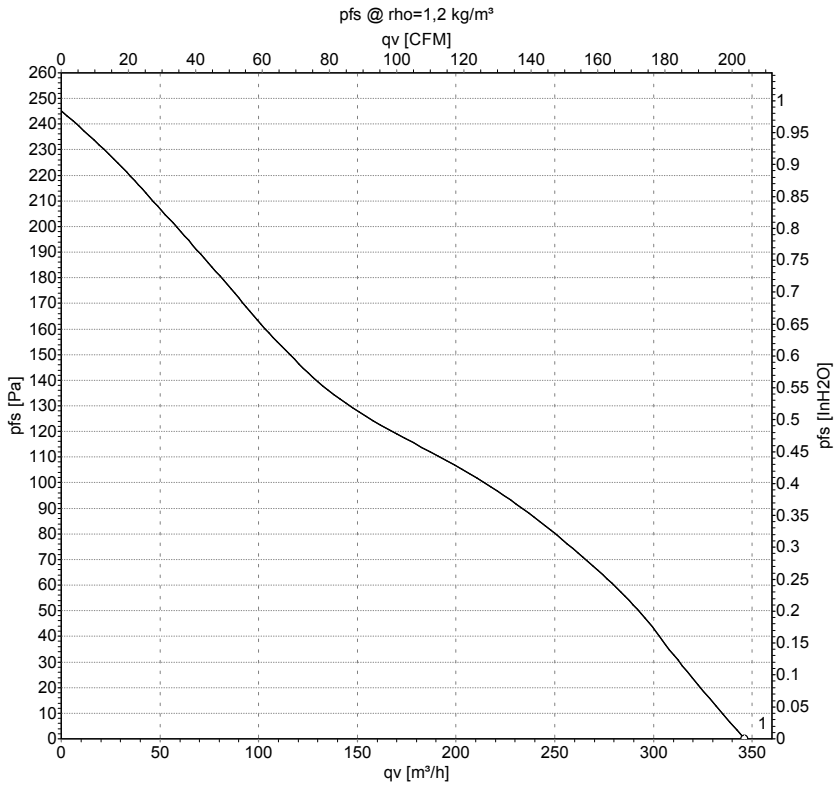
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow

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AC axial fan

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Curves: Air performance 60 Hz



Measurement: LU-43402-1

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	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	cfm	in. wg
1	480	60	3350	58	0.16	345	205	0.00

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow

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