W2D300-CP08-43

AC axial fan

sickle-shaped blades (S series), single-intake

Fan housing with guard grille, for rail applications

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Nominal data

Type	**W2D300-CP08-43**		
Motor	**M2D074-DF**		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2500	2650
Power consumption	W	225	325
Current draw	A	0.37	0.51
Max. back pressure	Pa	100	100
Max. back pressure	in. wg	0.4	0.4
Max. ambient temperature	°C	85	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	5.44 kg
Size	300 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	Die-cast aluminum
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, pre-galvanized and coated with black plastic
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, 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	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 or rotor on bottom; rotor on top on request
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
Electrical hookup	Terminal box
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
Approval	EAC

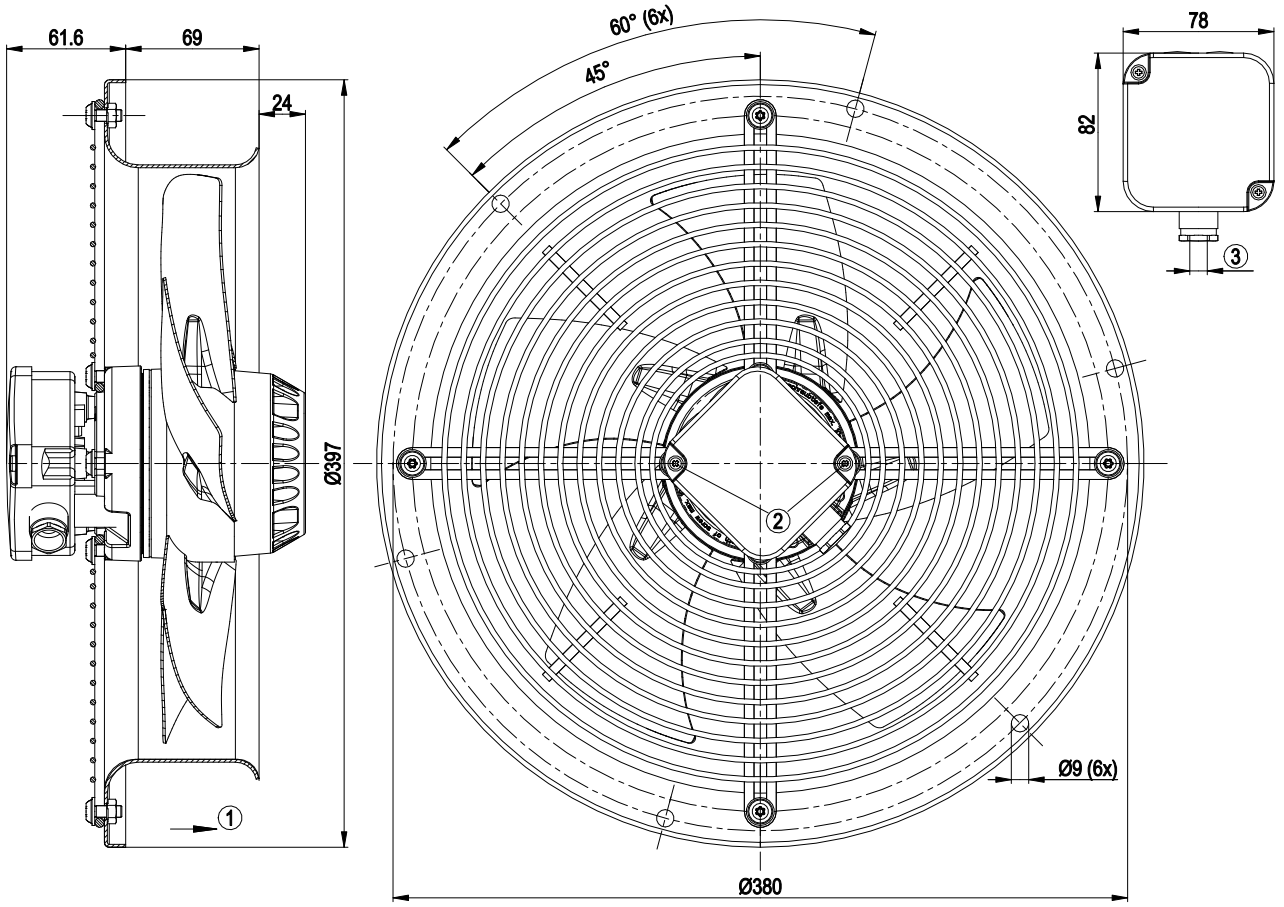
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Product drawing



1	Direction of air flow "A"
2	Tightening torque 0.7 Nm
3	Cable diameter: min. 6 mm, max. 9 mm, tightening torque 1.3 Nm

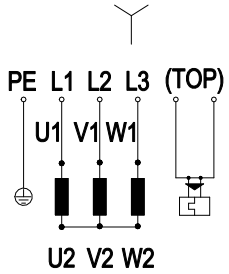
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Connection diagram



Y	Star connection	L1	= U1 = black	L2	= V1 = blue
L3	= W1 = brown	TOP	2x yellow	PE	green/yellow

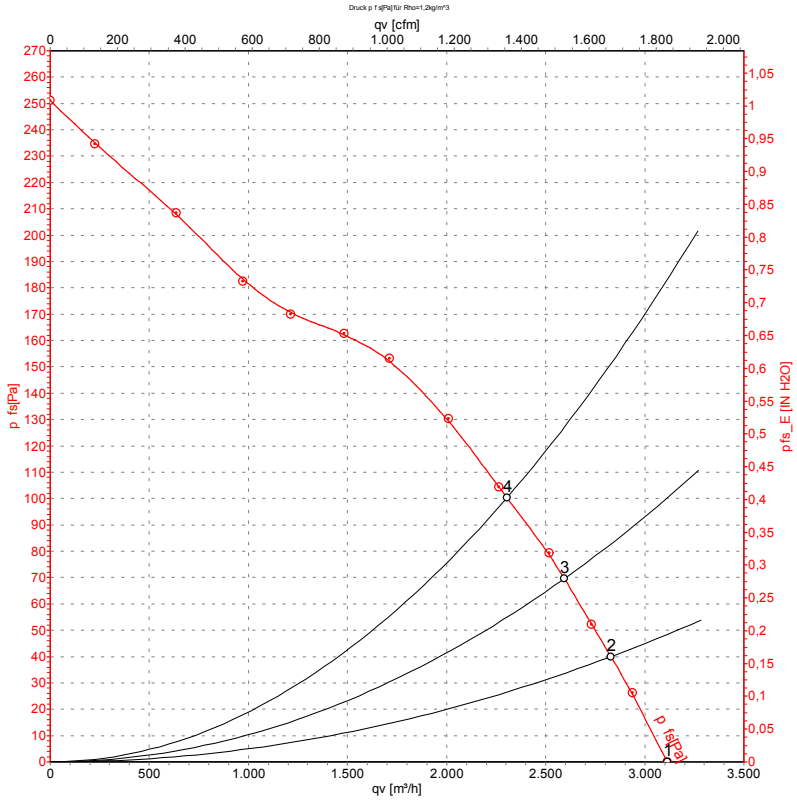
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Curves: Air performance 50 Hz



Measurement: LU-42146-1

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	2500	225	0.37	3115	0	1830	0.00
2	400	50	2485	237	0.40	2830	40	1665	0.16
3	400	50	2460	246	0.41	2595	70	1525	0.28
4	400	50	2430	257	0.42	2305	100	1355	0.40

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

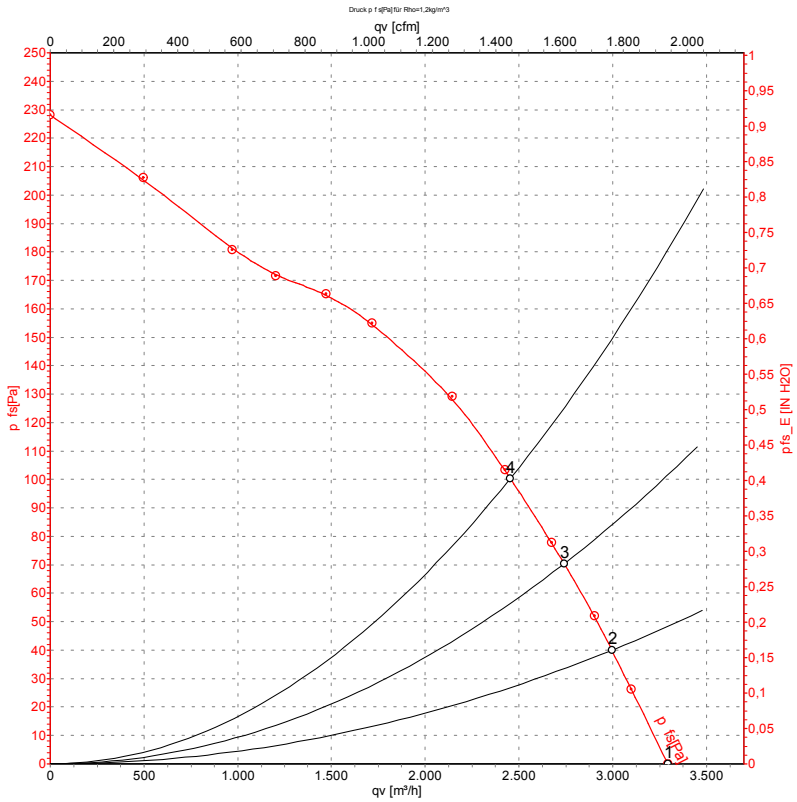
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Curves: Air performance 60 Hz



Measurement: LU-42169-1

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	2650	325	0.51	3295	0	1940	0.00
2	400	60	2595	334	0.54	2995	40	1765	0.16
3	400	60	2545	344	0.55	2740	70	1615	0.28
4	400	60	2500	353	0.57	2455	100	1445	0.40

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

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