

W4D400-DP12-40

AC axial fan

sickle-shaped blades (S series)

Fan housing with guard grille

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	W4D400-DP12-40				
Motor	M4D074-EI				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	200	220	230	230
Wiring		Δ	Δ	Δ	Δ
Frequency	Hz	50	60	50	60
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		-	-	-	-
Speed (rpm)	min ⁻¹	1400	1630	1430	1640
Power consumption	W	150	220	175	225
Current draw	A	0.72	0.78	0.92	0.80
Max. back pressure	Pa	100	125	105	125
Max. back pressure	in. wg	0.4	0.5	0.42	0.5
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	65	60	65	60
Starting current	A	2.8	2.8	3.0	3.0

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	9.15 kg
Size	400 mm
Motor size	74
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
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	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
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Comment on CE	Commissioning not permitted in the European Economic Area
Approval	CSA C22.2 No. 100; CCC; UL 1004-1



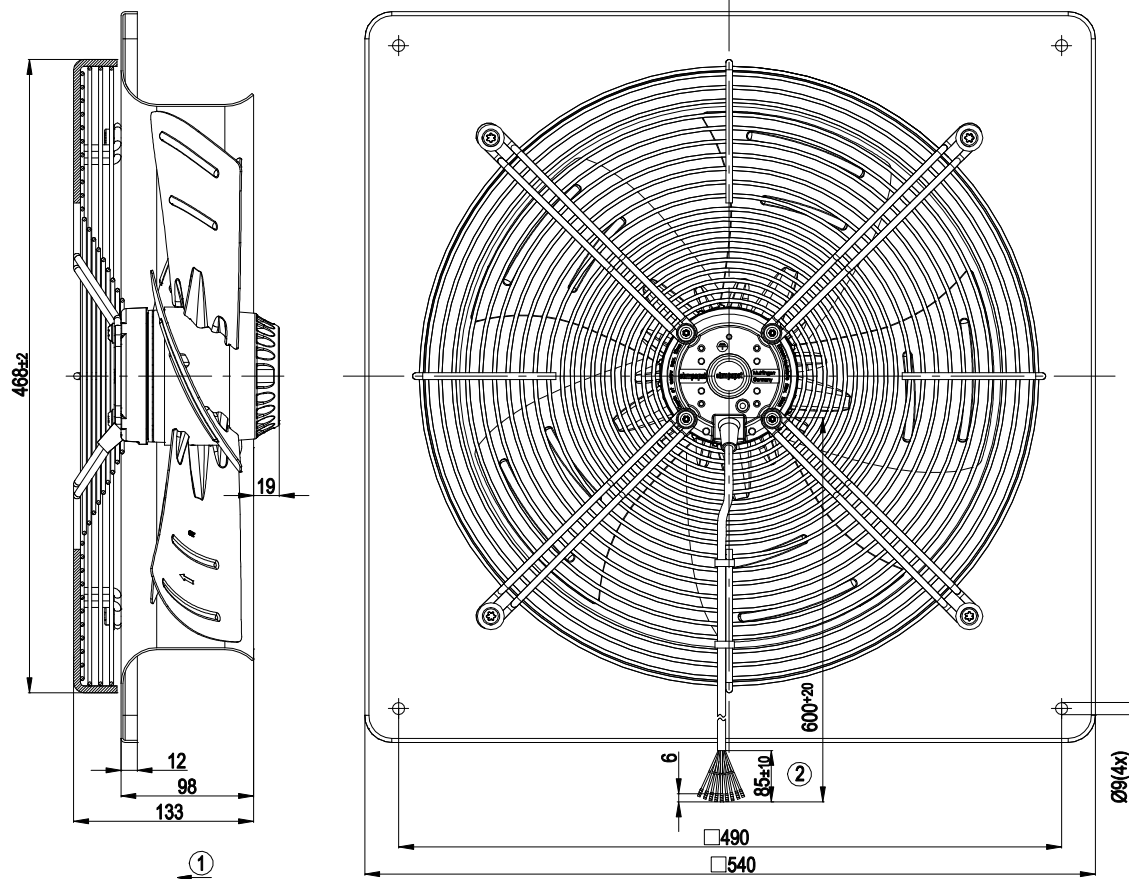
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Product drawing



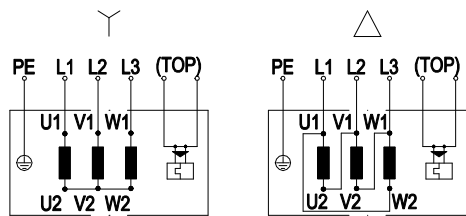
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|---|---|
| 1 | Direction of air flow "V" |
| 2 | Cable PFA 9G 0.5 mm ² , 9x crimped splices |



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Connection diagram



Y	Star connection	Δ	Delta connection	L1	= U1 = black
U2	green	L2	= V1 = blue	V2	white
L3	= W1 = brown	W2	yellow	TOP	2x gray
PE	green/yellow				



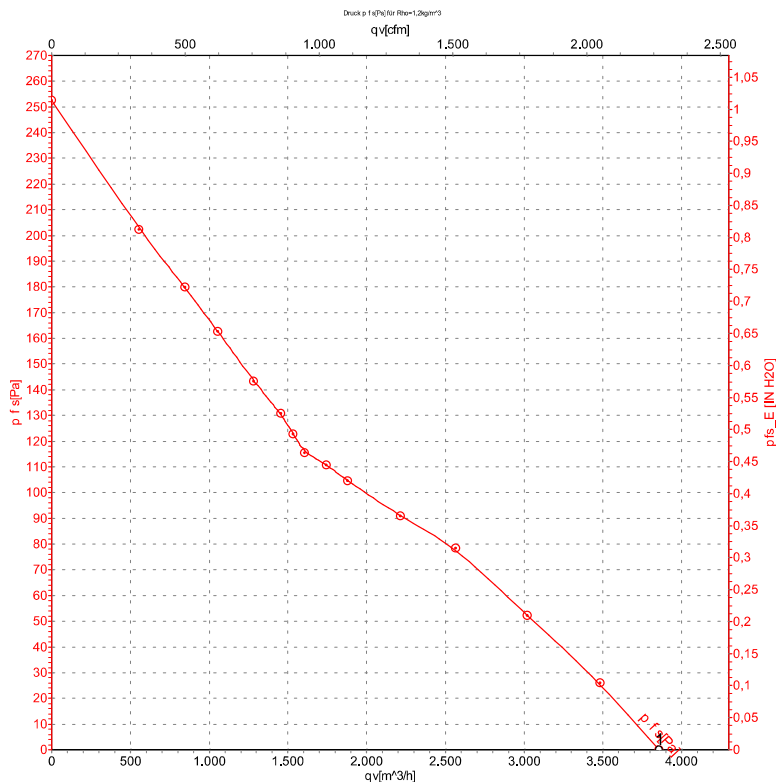
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Curves: Air performance 50 Hz Δ



Measurement: LU-50712-1

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

	Wired	U	f	n	P _e	I	q _v	q _v	P _{ts}
		V	Hz	min ⁻¹	W	A	m³/h	cfm	in. wg
1	Δ	230	50	1430	175	0.92	3855	2270	0.00

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



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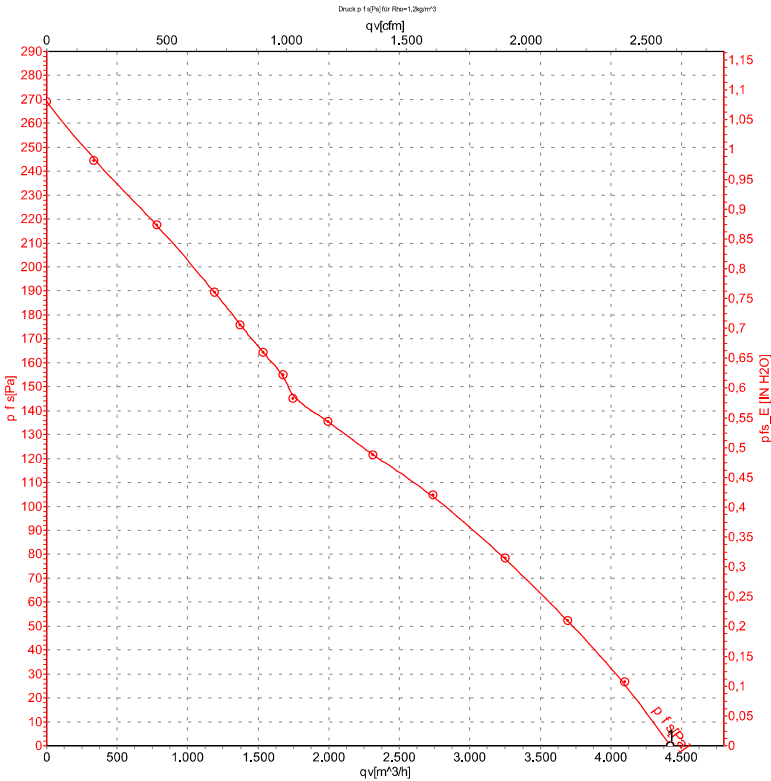
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Curves: Air performance 60 Hz Δ



Measurement: LU-50713-1

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

	Wired	U	f	n	P _e	I	q _v	q _v	p _{ts}
		V	Hz	min ⁻¹	W	A	m³/h	cfm	in. wg
1	Δ	230	60	1640	225	0.80	4420	2605	0.00

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



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