

8317081750
W6D800-KD01-XA/F01

Sample

AC axial fan - AxiBlade

sickle-shaped blades (S series)
with square full nozzle

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W6D800-KD01-XA/F01 ebmpapst Datasheet
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Nominal data

Type	W6D800-KD01-XA/F01
Motor	M6D138-LA

Phase		3~	3~
Nominal voltage	VAC	380	380
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	950	835
Power consumption	W	1306	1020
Current draw	A	4.2	2.1
Max. back pressure	Pa	160	117
Max. back pressure	in. wg	0.64	0.46
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	55
Starting current	A	14.5	4.1

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	50 kg
Size	800 mm
Motor size	138
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	PP plastic
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 7030)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	0°
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2+
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
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	On rotor and stator sides
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	≤ 3.5 mA
Electrical hookup	Terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
Protection class	I (with customer connection of protective earth)

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Technical drawing of a double-deck ceiling-mounted fan unit. The drawing includes a top view and a side view. Key dimensions and features are as follows:

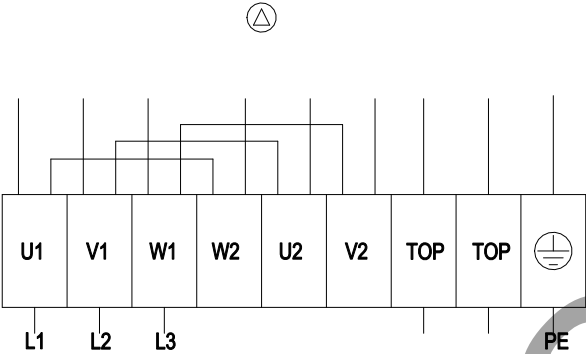
- Top View Dimensions:**
 - Overall width: 1175
 - Overall height: 1142.5
 - Distance between fan centers: 480
 - Distance from top edge to fan center: 57.5
 - Distance from bottom edge to fan center: 583.5
 - Distance from left edge to fan center: 347.5
 - Distance from right edge to fan center: 347.5
 - Distance from top edge to fan center: 275
 - Distance from bottom edge to fan center: 443.5
 - Distance from left edge to fan center: 43.0
 - Distance from right edge to fan center: 43.0
 - Distance from top edge to fan center: 492.5
 - Distance from bottom edge to fan center: 632.5
 - Distance from left edge to fan center: 190+2
 - Distance from right edge to fan center: 190+2
 - Distance from top edge to fan center: 316+5
 - Distance from bottom edge to fan center: 316+5
 - Distance from left edge to fan center: 320 x 3
 - Distance from right edge to fan center: 320 x 3
 - Distance from top edge to fan center: 1055
 - Distance from bottom edge to fan center: 1055
 - Distance from left edge to fan center: 1055
 - Distance from right edge to fan center: 1055
- Side View Dimensions:**
 - Overall height: 397.8 x 5
 - Distance from top edge to fan center: 2236+1
 - Distance from bottom edge to fan center: 2236+1
 - Distance from left edge to fan center: 316+5
 - Distance from right edge to fan center: 316+5
 - Distance from top edge to fan center: 190+2
 - Distance from bottom edge to fan center: 190+2
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- Callouts and Notes:**
 - 4xØ40
 - 12xØ7.3
 - 14xØ7.3
 - Ø99
 - M20x1.5
 - 2
 - 3

1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter min. 7 mm, max. 14 mm, tightening torque 2 ± 0.3 Nm



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Connection diagram



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

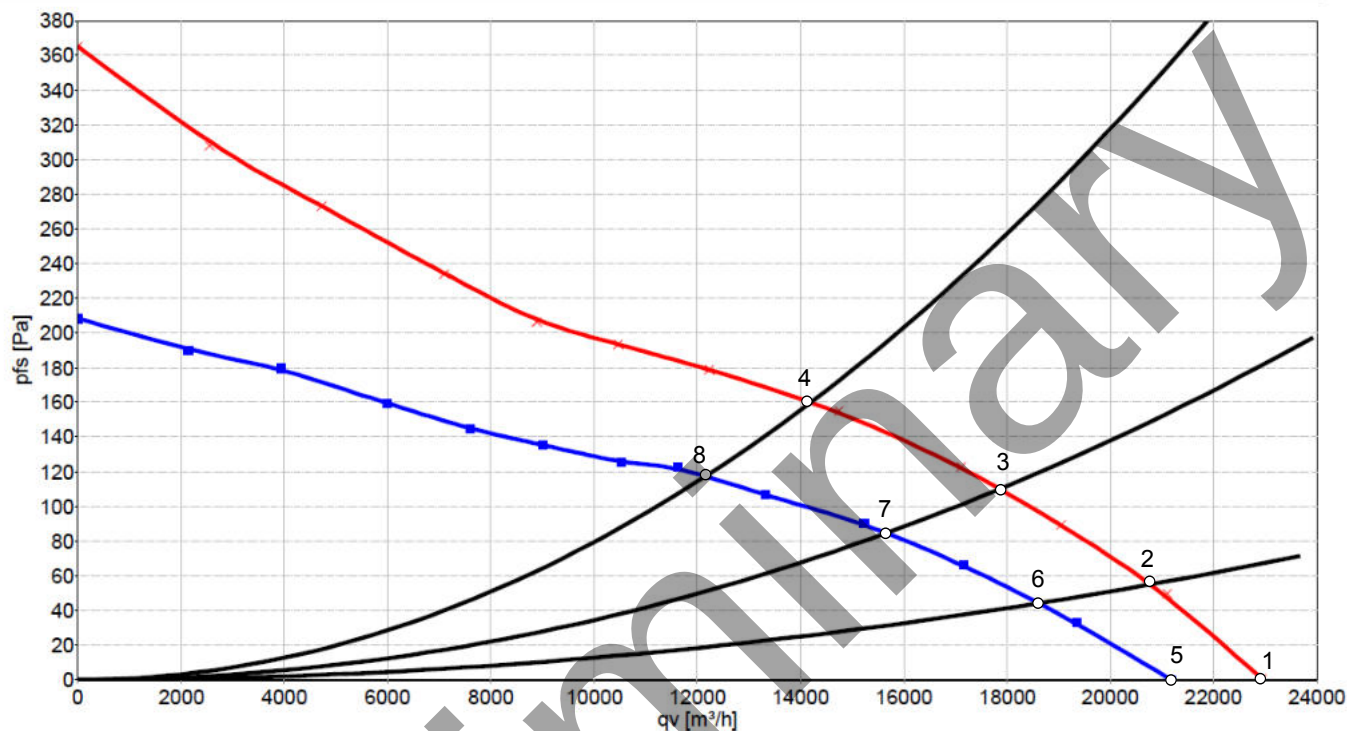


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Curves: Air performance 50 Hz

Line	Idno	Type	Measur.	Idx	U [V]	f [Hz]	C [uF]	PWM [%]	Layout	p amb	Laufrad Breite	Remark
9743	W6D800KD01XA	1	01B	380	50				Δ	1010.85		
9938	W6D800KD01XA	1	01C	380	50				Y	1006.64		



Fan performance

	Wired	U	f	n	P _e	I	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa
1	Δ	380	50	962	1062	4.07	22932	0
2	Δ	380	50	953	1249	4.22	20773	55
3	Δ	380	50	945	1423	4.36	17844	110
4	Δ	380	50	937	1559	4.49	14195	160
5	Y	380	50	882	809	1.68	21189	0
6	Y	380	50	853	943	1.9	18611	44
7	Y	380	50	826	1053	2.13	15659	85
8	Y	380	50	804	1130	2.28	12158	117

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

$\rho = 1.2 \text{ kg/m}^3 \pm 2\%$

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: 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.