A6D630-AN01-01 ebmpapst 400VAC 630mm AC Axial Fan

SKU: A6D630-AN01-01

Price: $465.00

Categories: Fans

Tags: ebmpapst

Product Link:
https://www.elecspares.com/product/a6d630-an01-01-ebmpapst-400vac-630mm-ac-axial-fan/

Product Description

The ebmpapst A6D630-AN01-01 is a high-performance 400VAC three-phase AC axial fan with an impeller size of 630 mm, specifically engineered for heavy-duty thermal management in commercial and industrial HVAC systems. Featuring a robust M6D110-GF motor and a 5-blade sickle-shaped HyBlade design (press-fitted sheet steel blank sprayed with PP plastic), it delivers optimized aerodynamic throughput and high durability. Operating at a nominal speed of 890 RPM under a 400V 50Hz Delta connection, it achieves an optimum ErP air flow of 4423.19 CFM (7515 m^3/h) and a maximum static pressure of 0.42 inAq (105 Pa). The fan integrates a terminal box for Δ/Y dual-speed motor connections and is built with an IP54 protection class, H2 moisture protection, and precision ball bearings for superior reliability. This model ensures stable cooling performance across demanding continuous-duty condenser, chiller, and large-scale ventilation applications.

A6D630-AN01-01 Fan Parameters
Manufacturer: ebmpapst
Model Number: A6D630-AN01-01
Type: AC Axial Fan
Motor Model: M6D110-GF
Impeller Size: Ø 630 mm
Weight: 9.9 kg
Blade Material: Press-fitted sheet steel blank, sprayed with PP plastic
Rotor Surface: Painted black
Terminal Box Material: PP plastic
Number of Blades: 5 (Sickle-shaped)
Direction of Rotation: Counterclockwise, viewed toward rotor

Direction of Airflow: "V" (Sucking over blades)
Installation Position: Shaft horizontal or rotor on bottom; rotor on top on request
Condensation Drainage Holes: On rotor side
Motor Bearing: Ball Bearing
Phase: 3~ (Three-Phase)
Data Sequence: (400V 50Hz Δ / 400V 50Hz Y / 400V 60Hz Δ / 400V 60Hz Y / 480V 60Hz Δ / 480V 60Hz Y)
Nominal Voltage: 400 / 400 / 400 / 400 / 480 / 480 VAC
Frequency: 50 / 50 / 60 / 60 / 60 / 60 Hz
Wiring: Δ / Y / Δ / Y / Δ / Y
Rated Speed: 890 / 690 / 1010 / 700 / 1070 / 820 RPM (min^{-1})
Max. Power Consumption: 600 / 400 / 730 / 430 / 810 / 550 W
Max. Current Draw: 1.20 / 0.68 / 1.29 / 0.80 / 1.35 / 0.80 A
Starting Current: 4.0 / 1.33 / 3.5 / 1.17 / - / - A
Max. Air Flow (ErP Optimum): 4423.19 CFM (7515 m^3/h / 125.25 m^3/min)
Max. Static Pressure: 10.71 / 5.71 / 5.10 / 2.65 / 5.61 / 3.57 mmH_2O (105 / 56 / 50 / 26 / 55 / 35 Pa / 0.42 / 0.22 / 0.20 / 0.10 / 0.22 / 0.14 inAq)
Overall Efficiency (Actual): 32.3 %
Measurement Category: A
Efficiency Category: Static
Efficiency Grade N: 40
Operating Mode: S1
Ingress Protection: IP54
Insulation Class: F
Moisture / Environmental Protection Class: H2
Motor Protection: Thermal overload protector (TOP) with basic insulation
Electrical Hookup: Terminal box (Axial cable entry)
Protection Class: I (with customer connection of protective earth)
Touch Current: <= 3.5 mA
Min. Ambient Temperature: -40 °C (Across all operations)
Max. Ambient Temperature: 65 / 65 / 60 / 60 / 55 / 55 °C
Conformity with Standards: EN 61800-5-1, CE
Safety Approvals: VDE, CCC, EAC

Application

The ebmpapst A6D630-AN01-01 AC axial fan is specifically designed for cooling commercial refrigeration condensers, evaporators, industrial fluid coolers, HVAC heat exchangers, livestock ventilation systems, and large electronic cabinet exhaust assemblies requiring heavy-duty continuous ventilation.

Product Images

Nominal data

Type	**A6D630-AN01-01**
Motor	**M6D110-GF**

Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	400	400	400	400	480	480
Wiring		Δ	Y	Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60	60	60
Method of obtaining data		ml	ml	ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE	CE	CE
Speed (rpm)	min^{-1}	890	690	1010	700	1070	820
Power consumption	W	600	400	730	430	810	550
Current draw	A	1.2	0.68	1.29	0.8	1.35	0.8
Max. back pressure	Pa	105	56	50	26	55	35
Max. back pressure	in. wg	0.42	0.22	0.2	0.1	0.22	0.14
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	65	65	60	60	55	55
Starting current	A	4	1.33	3.5	1.17		

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

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	32.3	32.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.6
09 Air flow q_v	m^3/h	7515
09 Pressure increase p_{fs}	Pa	92
10 Speed (rpm) n	min^{-1}	890
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-105365

A6D630-AN01-01

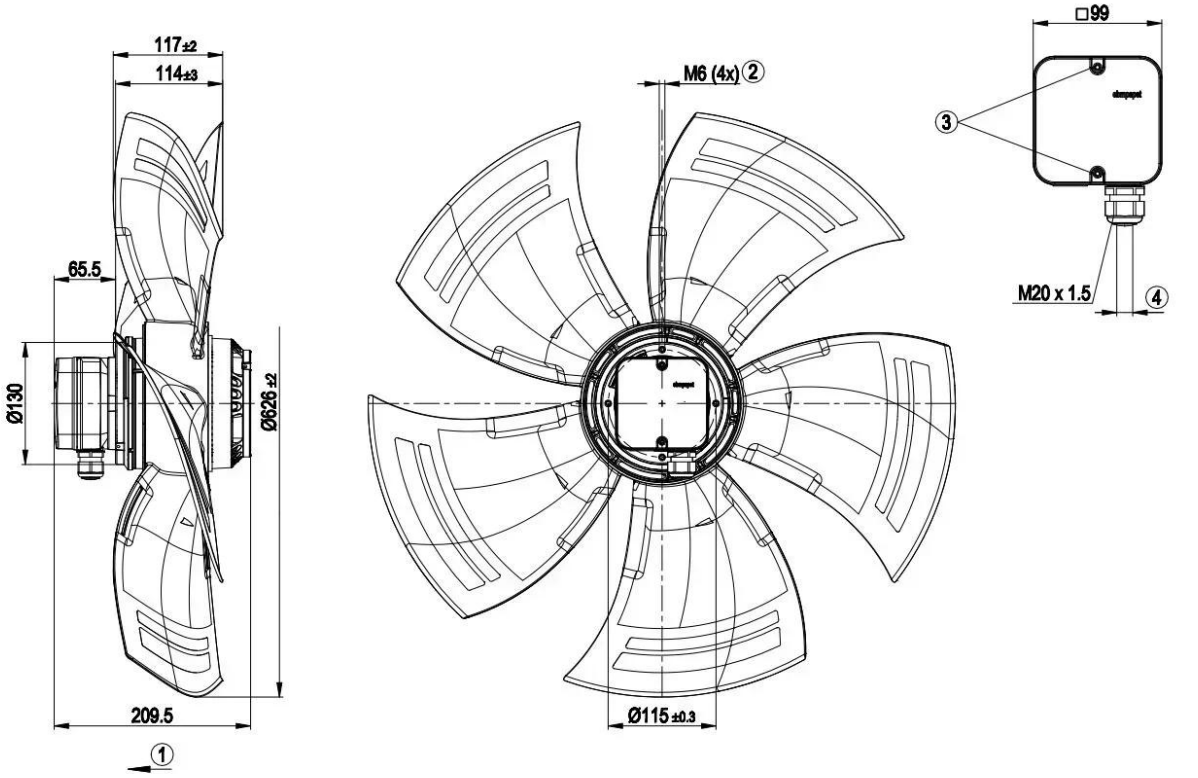
AC axial fan - HyBlade

sickle-shaped blades (S series)

Technical description

Weight	9.9 kg
Size	630 mm
Motor size	110
Rotor surface	Painted black
Terminal box material	PP plastic
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
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)	<= 3.5 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 61800-5-1; CE
Approval	VDE; CCC; EAC

Product drawing



1	Direction of air flow "V"
2	Max. clearance for screw 12 mm
3	Tightening torque 1.5 ± 0.2 Nm
4	Cable diameter: min. 6 mm, max. 12 mm; tightening torque 2 ± 0.3 Nm

Scan for product details: