A4D500-AD01-11

AC axial fan

sickled blades (S series)

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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**A4D500-AD01-11**
Motor	**M4D110-GF**

Phase		3~	3~
Nominal voltage	VAC	200	200
Connection		Δ	Δ
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	1280	1380
Power input	W	750	990
Current draw	A	2.6	3.3
Max. back pressure	Pa	145	120
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	80	55

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	30.7	29	33
Efficiency grade N		37.7	36	40
Power input P_e	kW	0.77		
Air flow q_v	m^3/h	6000		
Pressure increase p_{fs}	Pa	144		
Speed n	min^{-1}	1340		

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

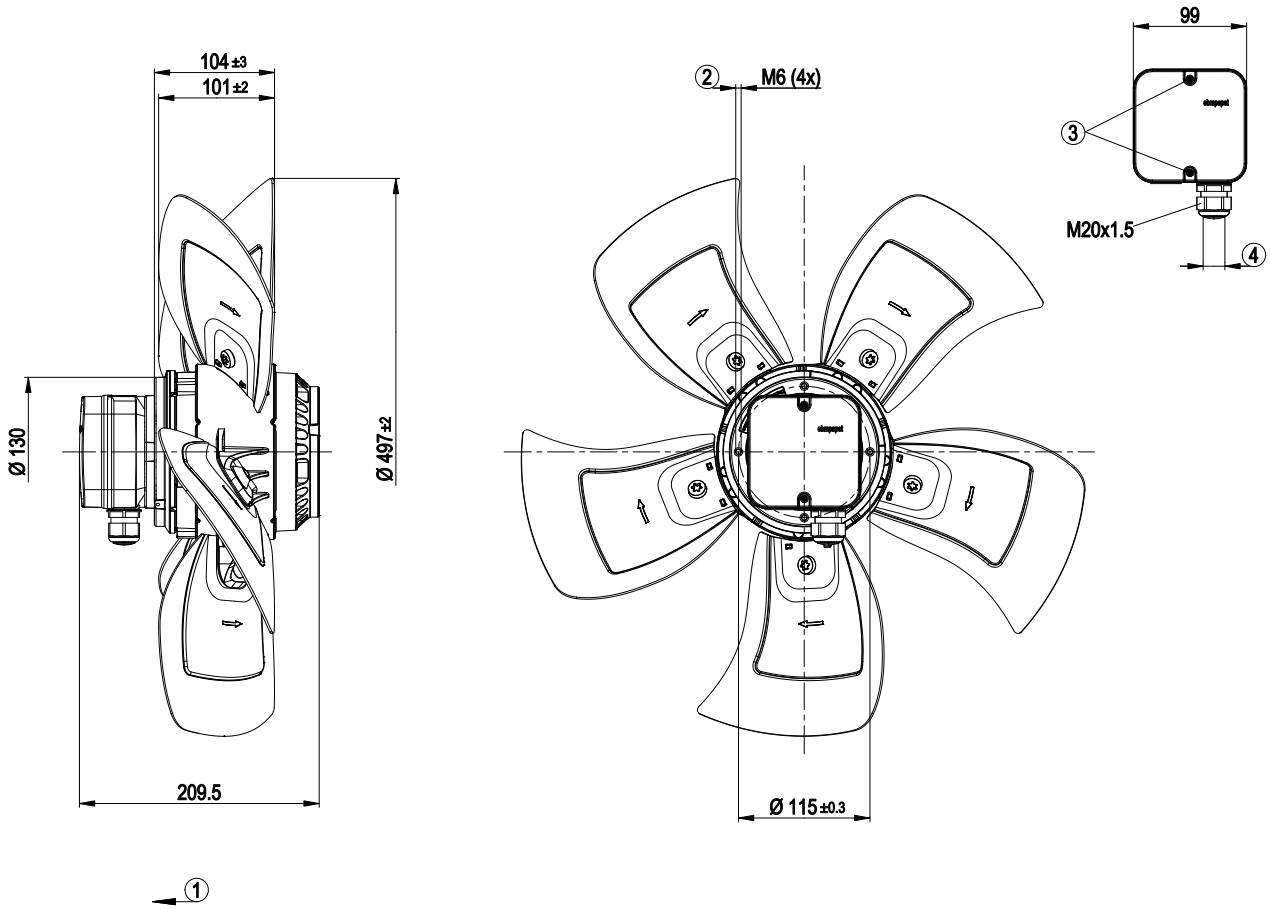
Mass	10.2 kg
Size	500 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet
Number of blades	5
Blade angle	0°
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	Thermal overload protector (TOP) brought out
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034; CE
Approval	VDE

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Product drawing



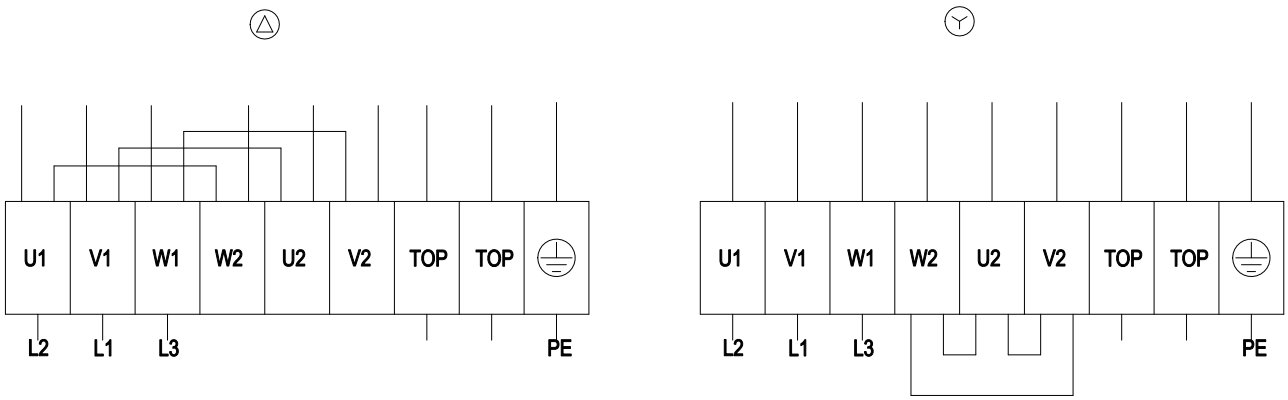
1	Direction of air flow "V"
2	Depth of screw max. 12 mm
3	Tightening torque 0.8±0.15 Nm
4	Cable diameter: min. 6 mm, max. 12 mm, tightening torque 2±0.3 Nm

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Connection screen



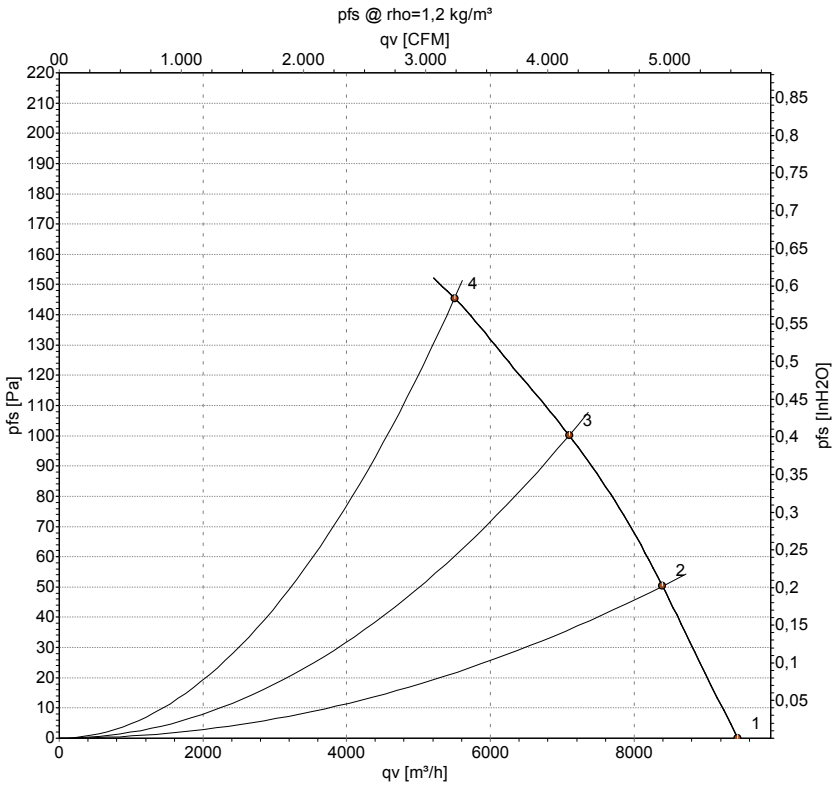
Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-156384

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Δ	200	50	1340	577	2.10	9440	0
2	Δ	200	50	1320	638	2.30	8395	50
3	Δ	200	50	1305	685	2.40	7095	100
4	Δ	200	50	1280	750	2.60	5500	145

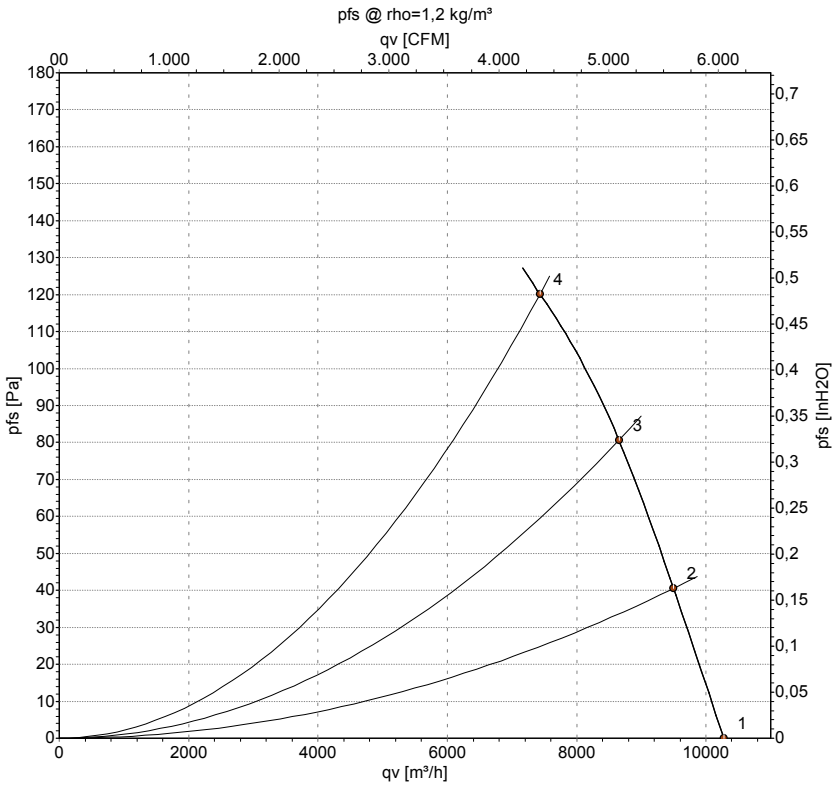
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-156385

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Δ	200	60	1465	855	2.90	10275	0
2	Δ	200	60	1440	897	3.00	9495	40
3	Δ	200	60	1415	946	3.20	8655	80
4	Δ	200	60	1380	990	3.30	7430	120

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