A4D630-AJ01-02

AC axial fan

sickled blades (S series)



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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**A4D630-AJ01-02**		
Motor	**M4D138-LA**		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	1340	1045
Power input	W	2530	1640
Current draw	A	4.95	2.88
Max. back pressure	Pa	240	145
Max. ambient temperature	°C	60	60
Starting current	A	19	11.5

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}		32.8	32.1	36.1
Efficiency grade N		36.7	36	40
Power input P_e	kW	2.47		
Air flow q_v	m^3/h	12550		
Pressure increase p_{fs}	Pa	234		
Speed n	min^{-1}	1340		

Data established at point of optimum efficiency

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Technical features

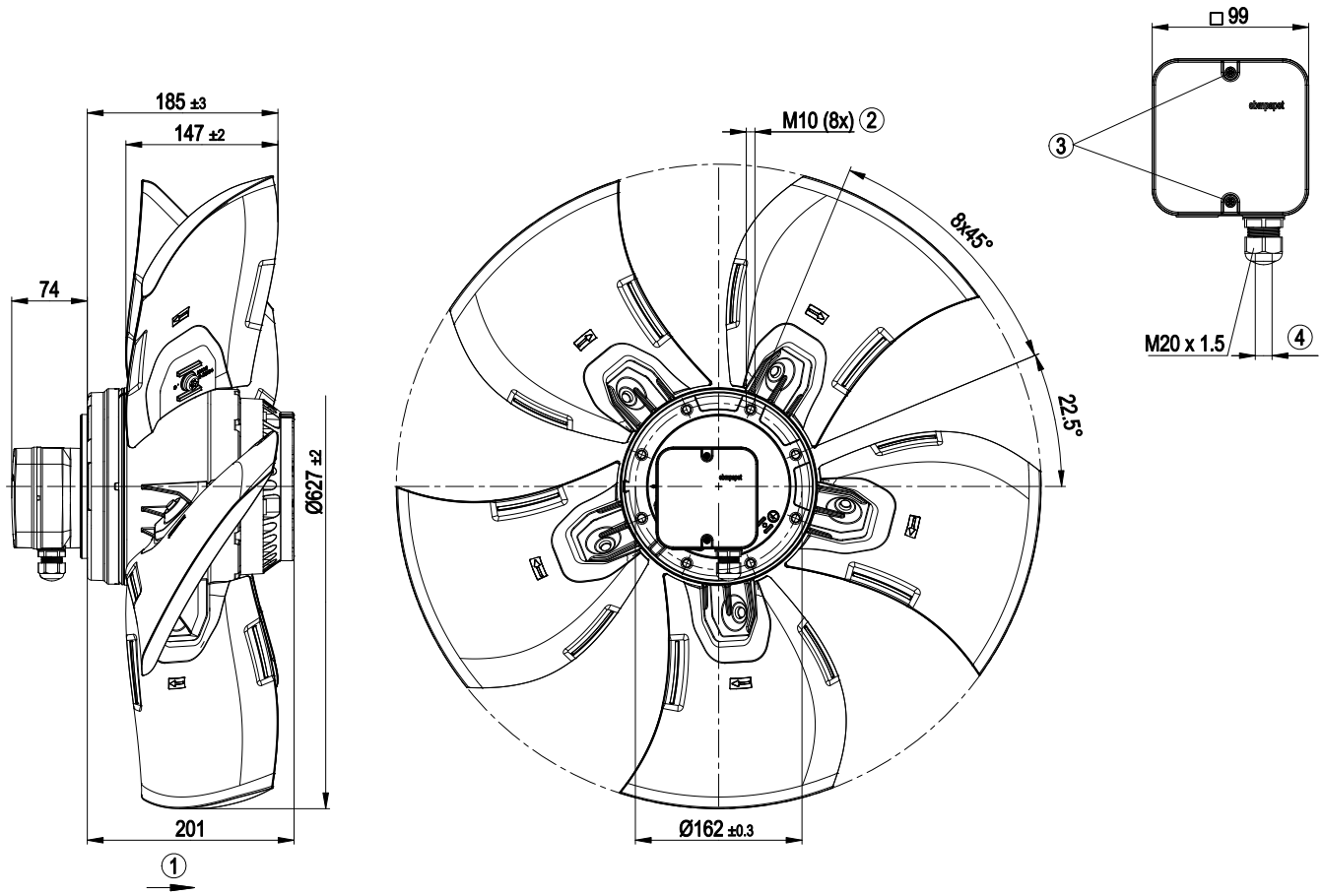
Mass	25.5 kg
Size	630 mm
Surface of rotor	Cast in aluminium
Material of terminal box	ABS plastic, black
Material of blades	Die-cast aluminum
Number of blades	5
Blade angle	0°
Direction of air flow	"A"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
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
Operation mode	S1
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
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034; EN 61800-5-1; CE
Approval	VDE

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Product drawing



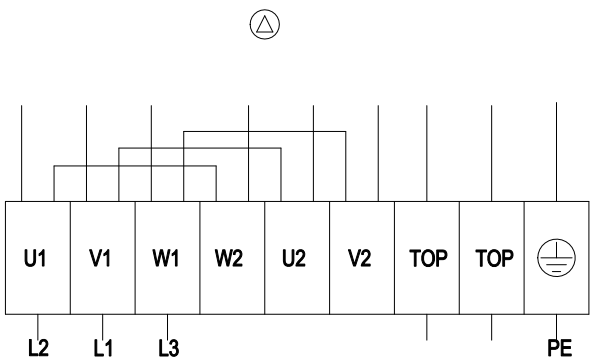
1	Direction of air flow "A"
2	Screw depth max. 18 mm
3	Tightening torque 1.5±0.2 Nm
4	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

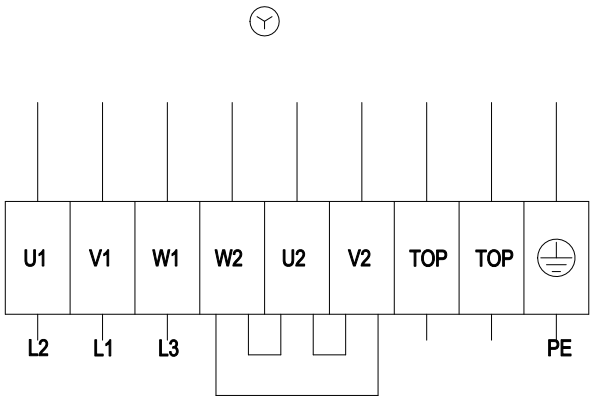
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Connection screen





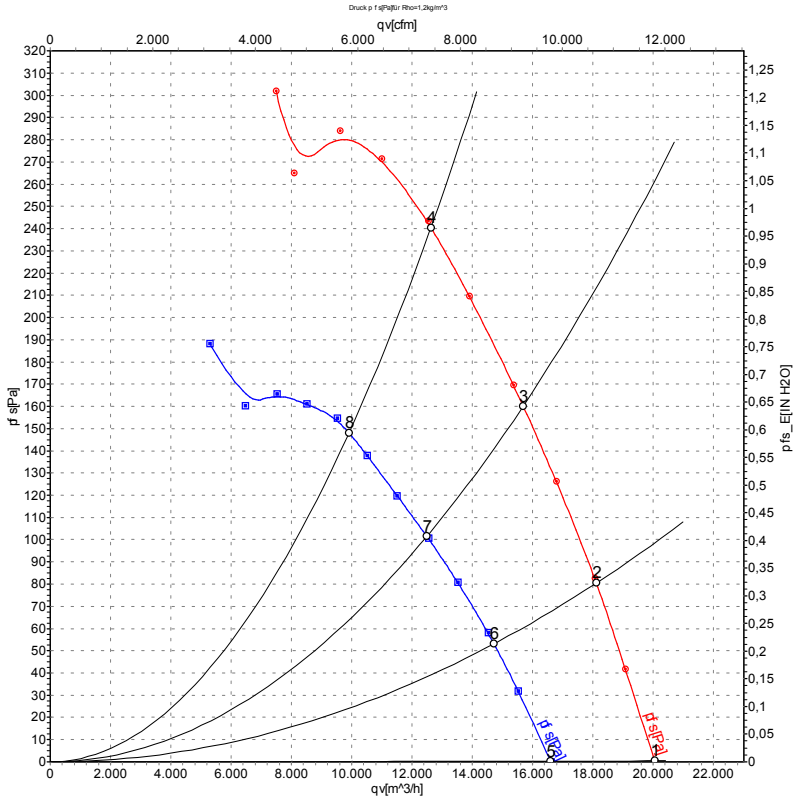
Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-101073
Measurement: LU-101075

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	LpA_{in}	LwA_{in}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	Δ	400	50	1380	1994	4.12	74	81	20040	0
2	Δ	400	50	1365	2178	4.36	72	79	18110	81
3	Δ	400	50	1350	2343	4.55	72	78	15680	160
4	Δ	400	50	1340	2530	4.95	74	81	12620	240
5	Y	400	50	1145	1429	2.51	70	76	16600	0
6	Y	400	50	1110	1517	2.66	68	74	14710	53
7	Y	400	50	1075	1583	2.79	67	73	12490	102
8	Y	400	50	1045	1640	2.88	68	74	9905	145

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
qv = Air flow · p_{fs} = Pressure increase

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