

A4D630-AH01-01

AC axial fan - HyBlade®

sickled blades (S series), single inlet



A4D630-AH01-01 ebmpapst Datasheet

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Nominal data

Type	A4D630-AH01-01			
Motor	M4D138-HF			
Phase		3~	3~	3~
Nominal voltage	VAC	400	400	400
Connection		Δ	Y	Δ
Frequency	Hz	50	50	60
Type of data definition		ml	ml	ml
State				prelim.
Valid for approval / standard		CE	CE	CE
Speed	min ⁻¹	1310	1000	1500
Power input	W	1970	1290	2600
Current draw	A	3.4	2.1	4.31
Max. back pressure	Pa	200	115	100
Min. ambient temperature	°C	-40	-40	-40
Max. ambient temperature	°C	60	60	40
Starting current	A	14	4.5	

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 = $1 + p_g / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	35.4	31.4	35.4
Efficiency grade N		40	36	40
Power input P_e	kW	1.89		
Air flow q_v	m ³ /h	12645		
Pressure increase p_{fs}	Pa	188		
Speed n	min ⁻¹	1335		

Data definition with optimum efficiency.

LU-124971

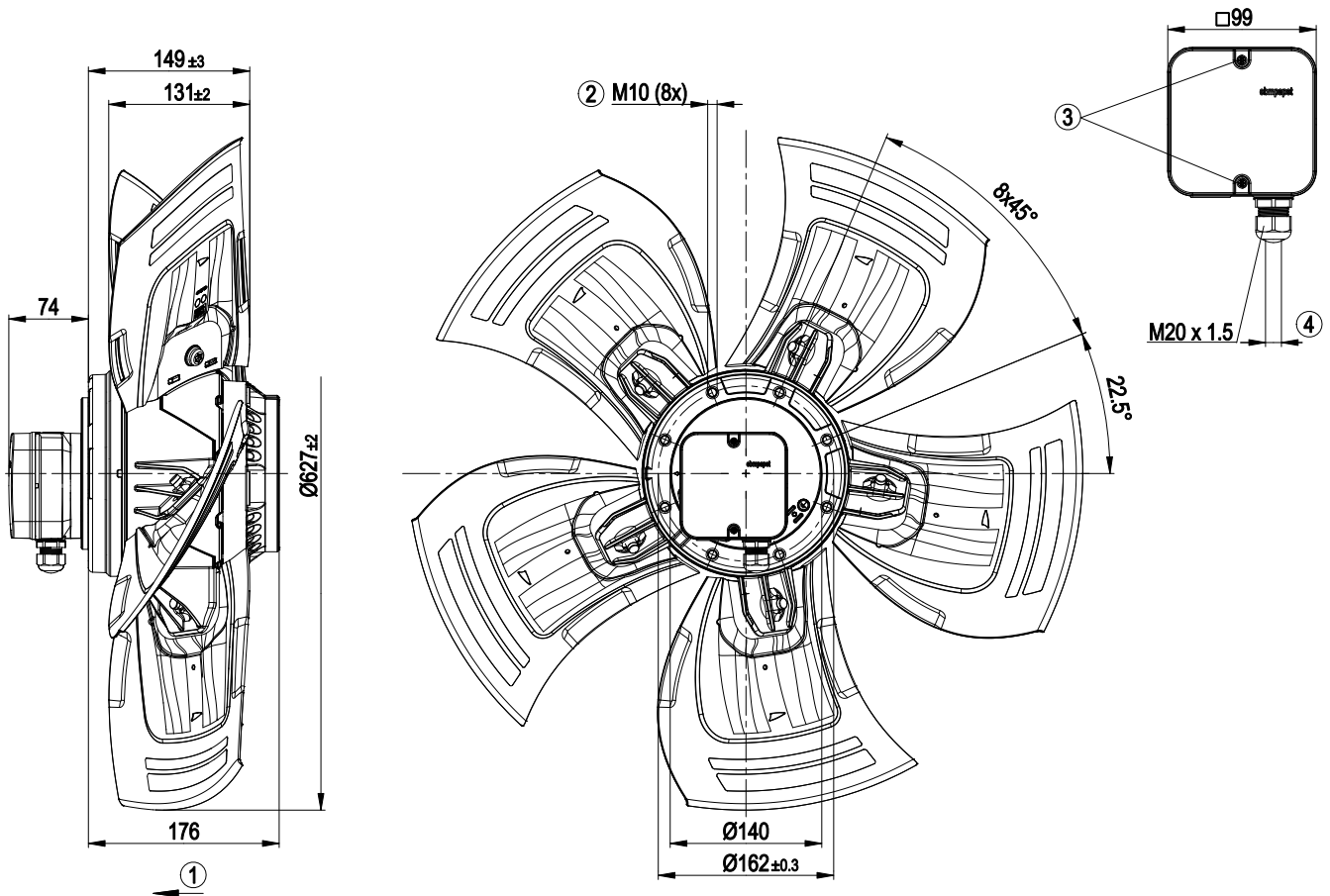
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



Technical features

Mass	19.5 kg
Size	630 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Number of blades	5
Blade angle	-5°
Direction of air flow	"V"
Direction of rotation	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	Any
Condensate discharge holes	On rotor and stator sides
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 60034-1 (2010); EN 61800-5-1; CE
Approval	VDE; EAC; CCC

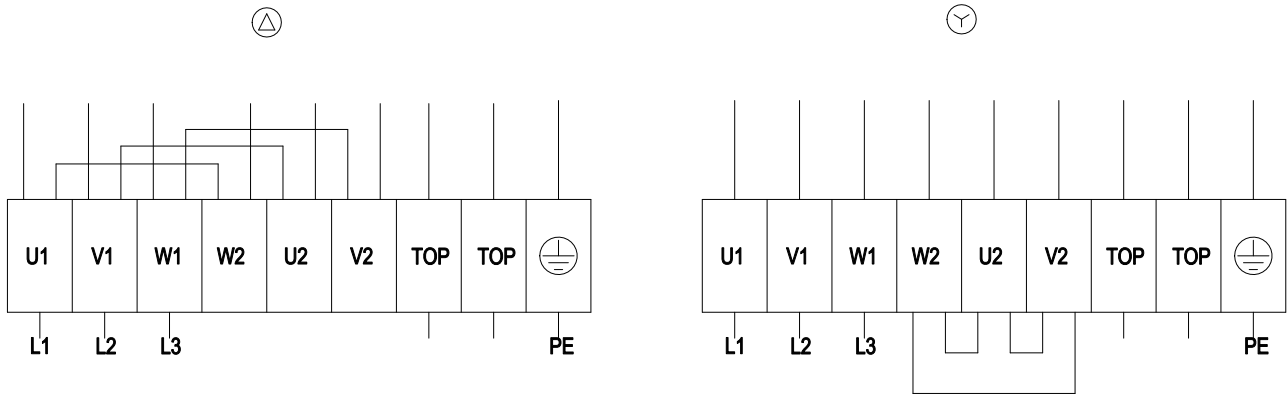
Product drawing



1	Direction of air flow "V"
2	Depth of screw 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

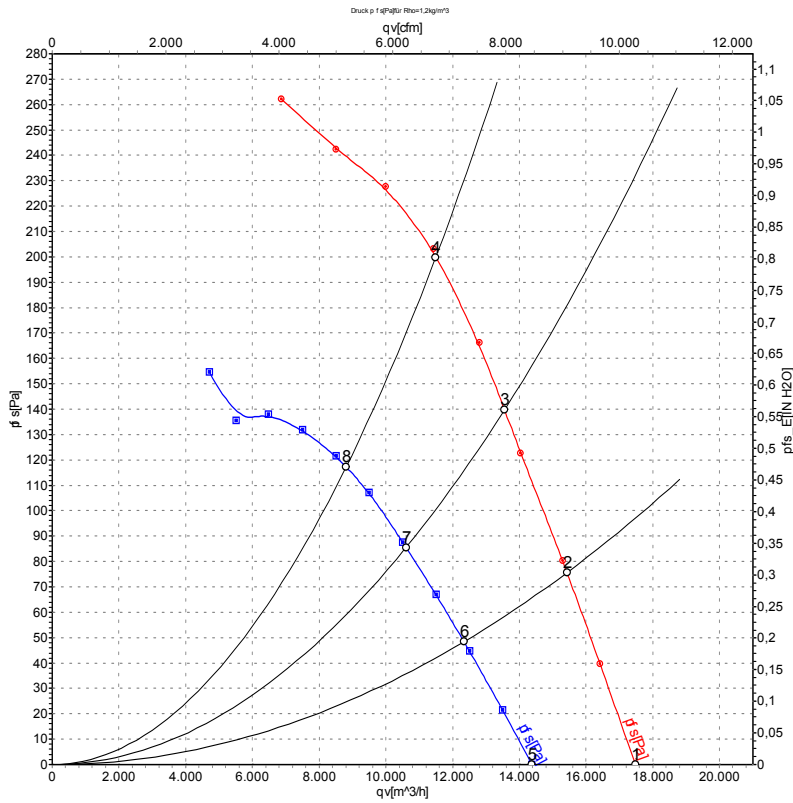


Connection screen



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

Charts: Air flow 50 Hz



Measurement: LU-109476
Measurement: LU-109489

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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}	LwA_{out}	q_v	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa
1	Δ	400	50	1370	1482	2.72	70	77	78	17480	0
2	Δ	400	50	1345	1680	2.94	69	75	76	15430	75
3	Δ	400	50	1325	1830	3.18	69	75	76	13560	140
4	Δ	400	50	1310	1970	3.40	71	78	77	11500	200
5	Y	400	50	1125	1079	1.80	65	72	72	14380	0
6	Y	400	50	1075	1178	1.97	63	70	70	12340	48
7	Y	400	50	1035	1235	2.08	62	68	69	10600	86
8	Y	400	50	1000	1290	2.10	63	70	70	8805	115

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 · LwA_{out} = Sound power level outlet side · q_v = Air flow · p_{fs} = Pressure increase

