

A4D630-AR01-01

AC axial fan - HyBlade®

sickled blades (S series)



ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

County court Stuttgart · HRB 590142



Nominal data

Type	A4D630-AR01-01		
Motor	M4D110-IA		
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	1330	1070
Power input	W	1250	840
Current draw	A	2.48	1.42
Max. back pressure	Pa	150	100
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	55
Starting current	A	10	

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	37.9	30.5	34.5
Efficiency grade N		43.4	36	40
Power input P_e	kW	1.35		
Air flow q_v	m ³ /h	8830		
Pressure increase p_{fs}	Pa	210		
Speed n	min ⁻¹	1310		

Data definition with optimum efficiency. LU-107579
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



A4D630-AR01-01

AC axial fan - HyBlade®

sickled blades (S series)

Technical features

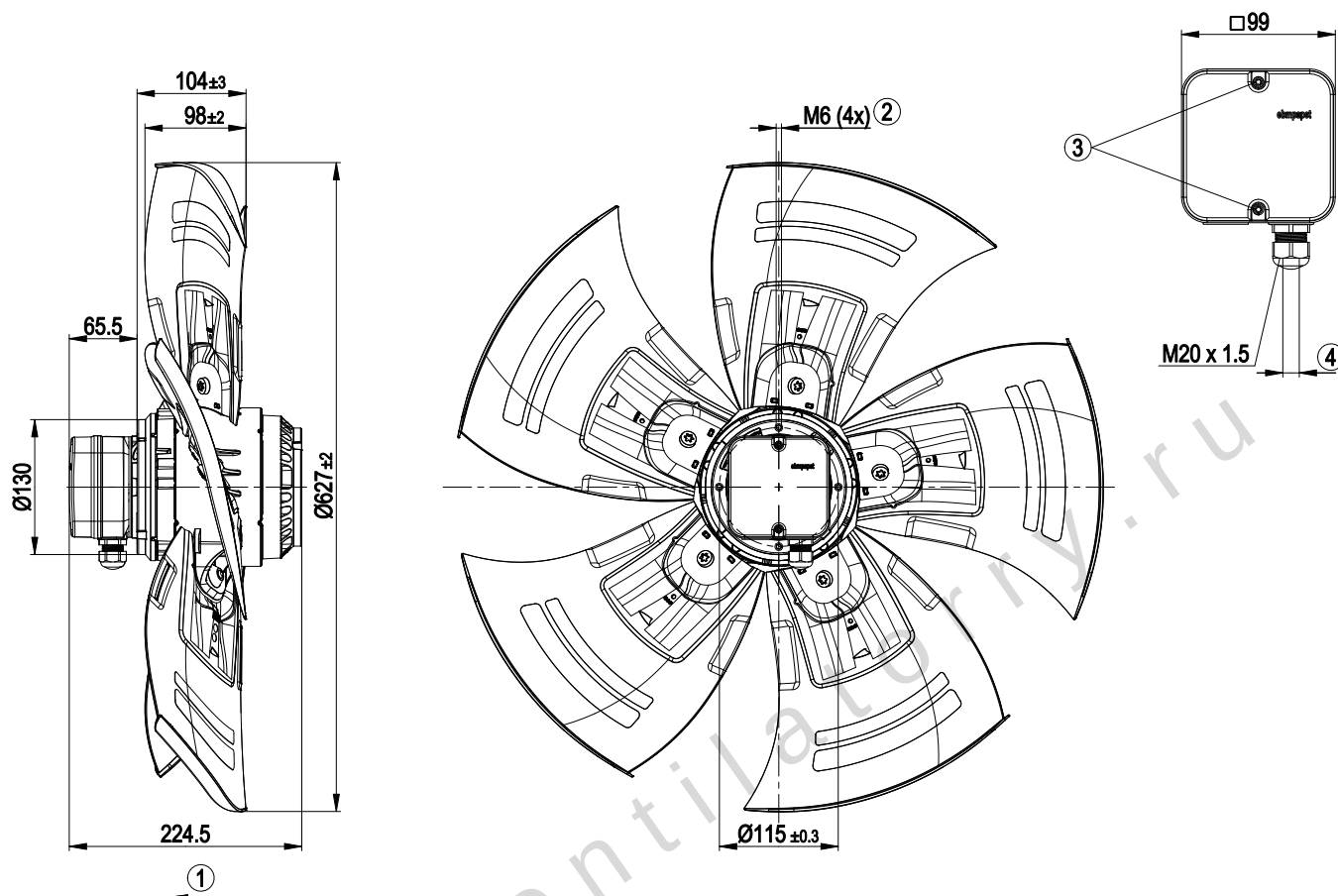
Mass	12.2 kg
Size	630 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Number of blades	5
Blade angle	-10°
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 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
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 61800-5-1; CE
Approval	CCC; EAC; VDE

A4D630-AR01-01

AC axial fan - HyBlade®

sickled blades (S series)

Product drawing



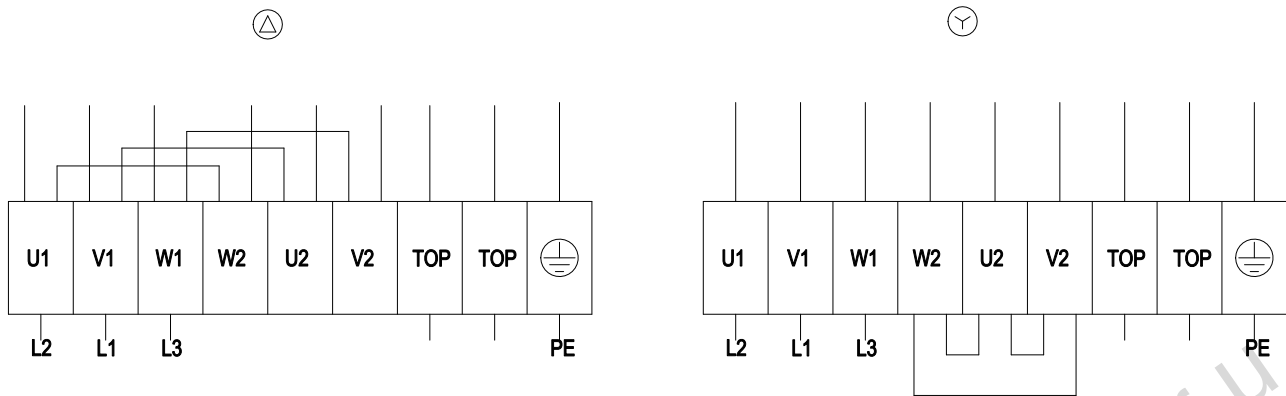
1	Direction of air flow "V"
2	Screw depth max. 12 mm
3	Tightening torque 1.5±0.2 Nm
4	Cable diameter: min. 6 mm, max. 12 mm; tightening torque: 2±0.3 Nm

A4D630-AR01-01

AC axial fan - HyBlade®

sickled blades (S series)

Connection screen



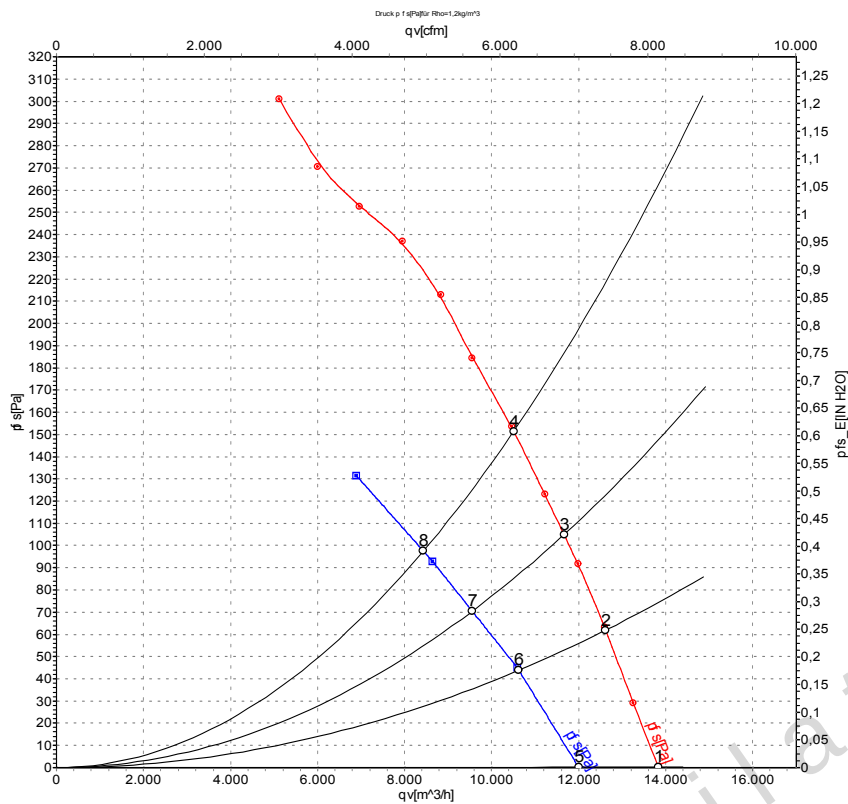
Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

A4D630-AR01-01

AC axial fan - HyBlade®

sickled blades (S series)

Charts: Air flow 50 Hz



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}	LwA _{out}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa
1	Δ	400	50	1395	882	2.06	73	79	79	13830	0
2	Δ	400	50	1370	1031	2.21	70	77	76	12620	62
3	Δ	400	50	1355	1136	2.32	68	75	75	11660	105
4	Δ	400	50	1330	1250	2.48	69	75	75	10500	150
5	Y	400	50	1205	660	1.12	69	76	75	12000	0
6	Y	400	50	1140	735	1.23	66	72	72	10620	44
7	Y	400	50	1105	780	1.31	64	71	70	9555	70
8	Y	400	50	1070	840	1.42	63	70	69	8430	100

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 · qv = Air flow · p_{fs} = Pressure increase