

AC axial fan - HyBlade

sickled blades (S series)

with full square nozzle

W4D630-DD01-02 ebmpapst Datasheet

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Nominal data

Type	W4D630-DD01-02		
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		-	-
Speed	min ⁻¹	1320	1050
Power input	W	2630	1750
Current draw	A	4.78	2.95
Max. back pressure	Pa	220	140
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	60
Starting current	A	19	6.5

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



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Technical features

Mass	39.8 kg
Size	630 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert (coated in black), sprayed with PP plastic
Material of wall ring	Sheet steel, galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
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	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
Approval	EAC; VDE

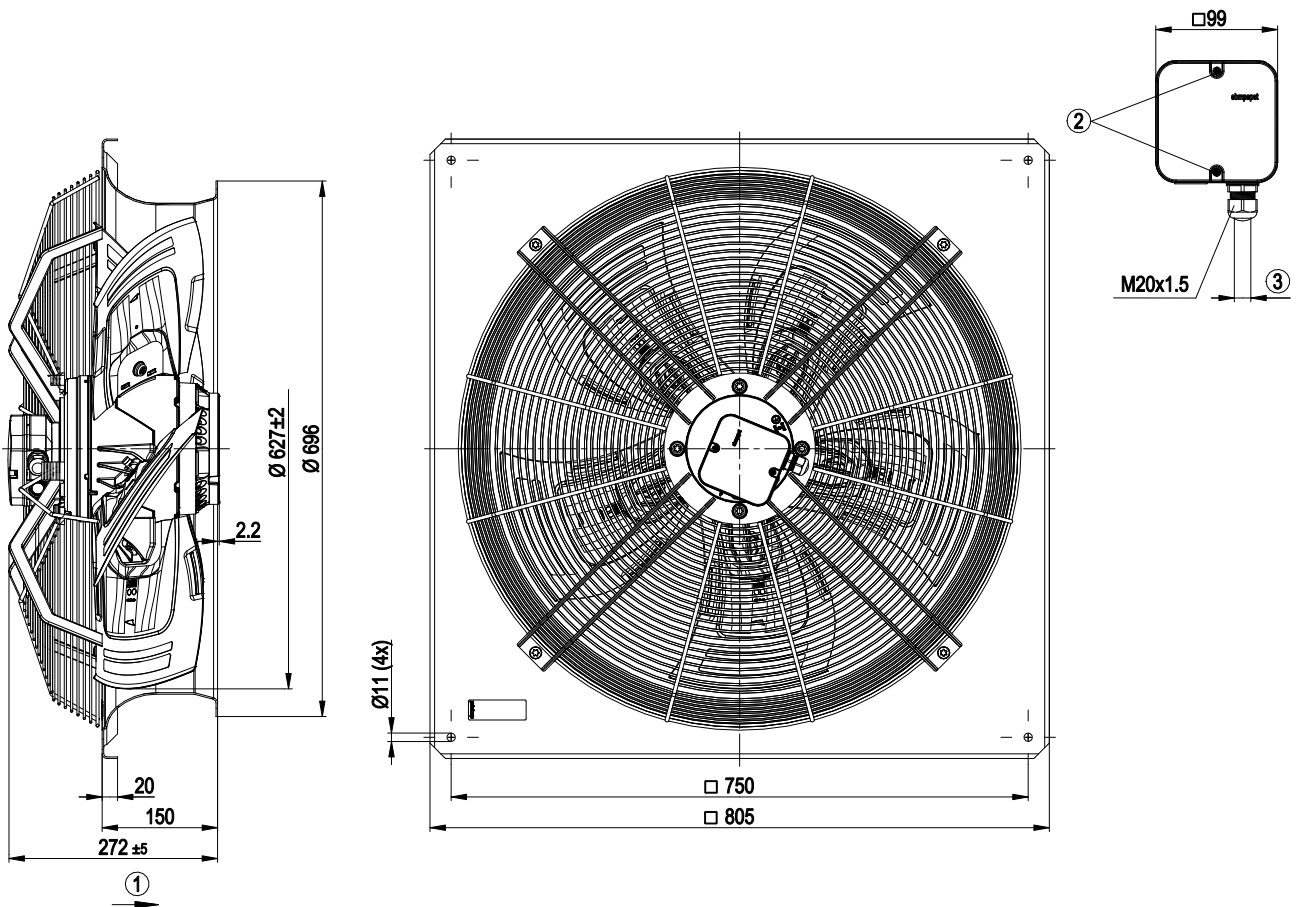


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Product drawing

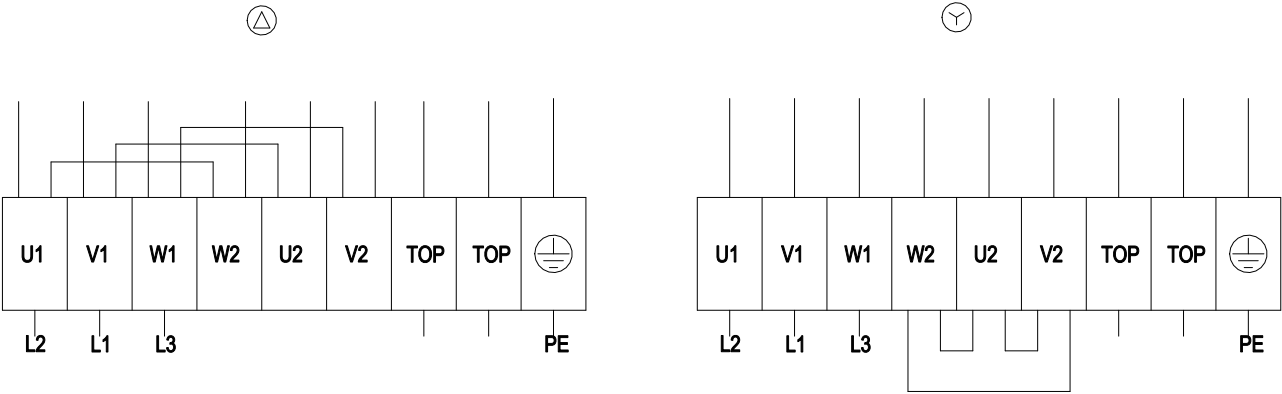


1	Direction of air flow "A"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter: min. 7 mm, max. 14 mm; tightening torque: 2 ± 0.3 Nm

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Connection screen



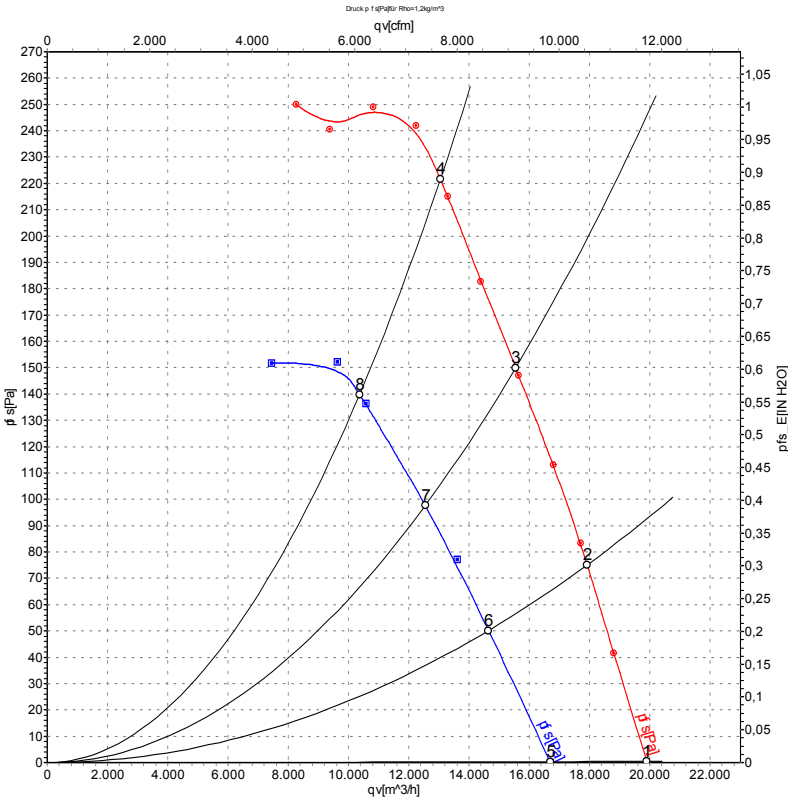
Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				



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Charts: Air flow 50 Hz



Measurement: LU-115597
Measurement: LU-115637

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: L_{WA} measured as per ISO 13347 /
L_{pA} 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	1375	2116	4.07	71	79	80	19890	0
2	Δ	400	50	1360	2299	4.29	71	78	79	17910	75
3	Δ	400	50	1345	2465	4.56	71	77	78	15540	150
4	Δ	400	50	1320	2630	4.78	73	80	80	13040	220
5	Y	400	50	1150	1536	2.58	66	74	75	16680	0
6	Y	400	50	1115	1615	2.71	65	72	73	14640	51
7	Y	400	50	1080	1684	2.83	65	72	73	12540	98
8	Y	400	50	1050	1750	2.95	67	74	73	10360	140

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

