

A8D800-AD01-01

AC axial fan - HyBlade®

sickled blades (S series)



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Nominal data

Type	A8D800-AD01-01						
Motor	M8D138-LA						
Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	400	400	415	415	415	415
Connection		Δ	Y	Δ	Y	Δ	Y
Frequency	Hz	50	50	50	50	60	60
Type of data definition		ml	ml	ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE	CE	CE
Speed	min ⁻¹	660	485	665	500	710	435
Power input	W	990	580	1020	610	1370	610
Current draw	A	2.37	1.21	2.44	1.24	2.77	1.32
Max. back pressure	Pa	105	54	100	56	115	43
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	70	70	70	70	60	60
Starting current	A	6	2	6.4	1.8	5.55	1.68

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}	30.4	29.3	33.3
Efficiency grade N	37.1	36	40
Power input P_e	kW	0.87	
Air flow q_v	m ³ /h	11615	
Pressure increase p_{fs}	Pa	83	
Speed n	min ⁻¹	675	

Data established at point of optimum efficiency



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Technical features

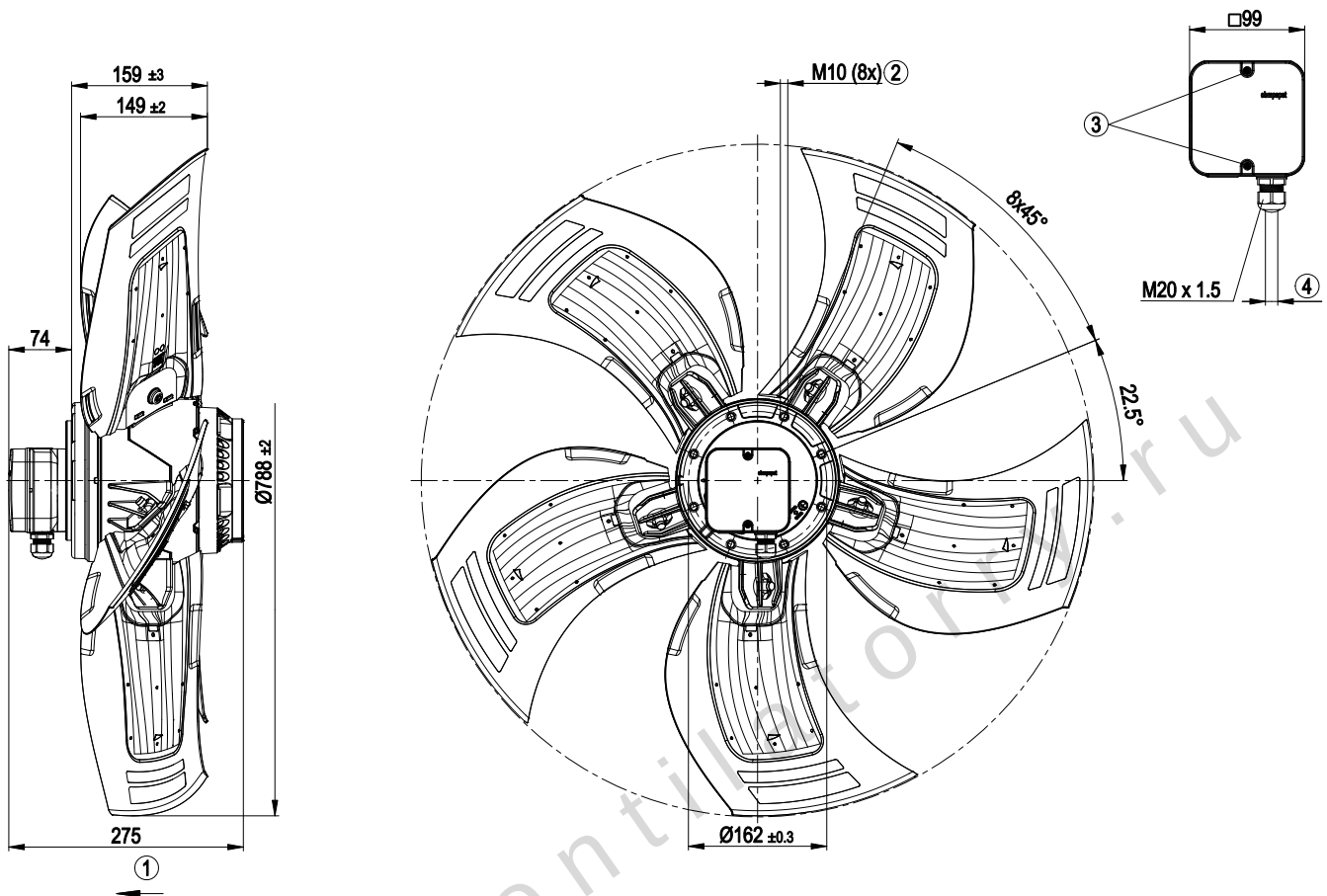
Mass	24 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Number of blades	5
Blade angle	0°
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation 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 61800-5-1; CE
Approval	VDE; CCC

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Product drawing



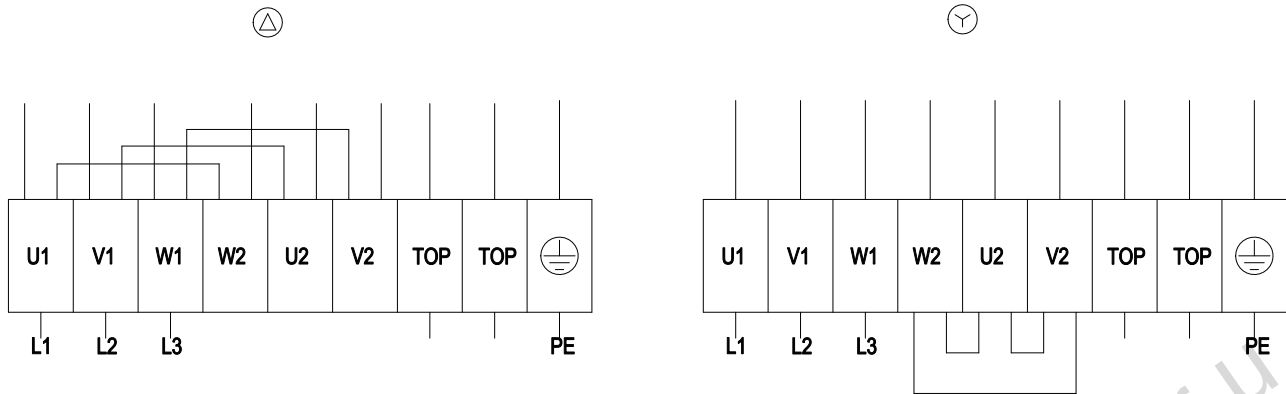
1	Direction of air flow "V"
2	Depth of screw max. 18 mm
3	Tightening torque 1.5±0.2 Nm
4	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

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Connection screen



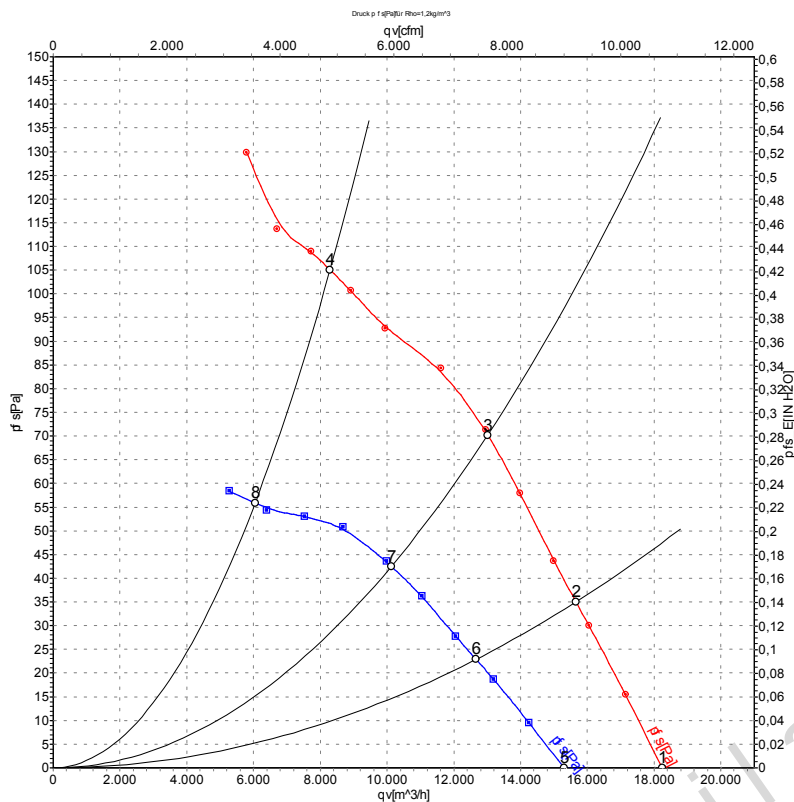
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-115898
 Measurement: LU-115925

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	700	684	2.05	59	65	65	18240	0
2	Δ	400	50	685	771	2.10	59	65	64	15660	35
3	Δ	400	50	680	846	2.20	60	66	65	13020	70
4	Δ	400	50	660	990	2.37	66	74	74	8295	105
5	Y	400	50	585	466	0.98	55	61	61	15300	0
6	Y	400	50	555	510	1.07	54	60	59	12660	23
7	Y	400	50	530	534	1.12	53	60	59	10130	43
8	Y	400	50	485	580	1.21	58	66	66	6045	56

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

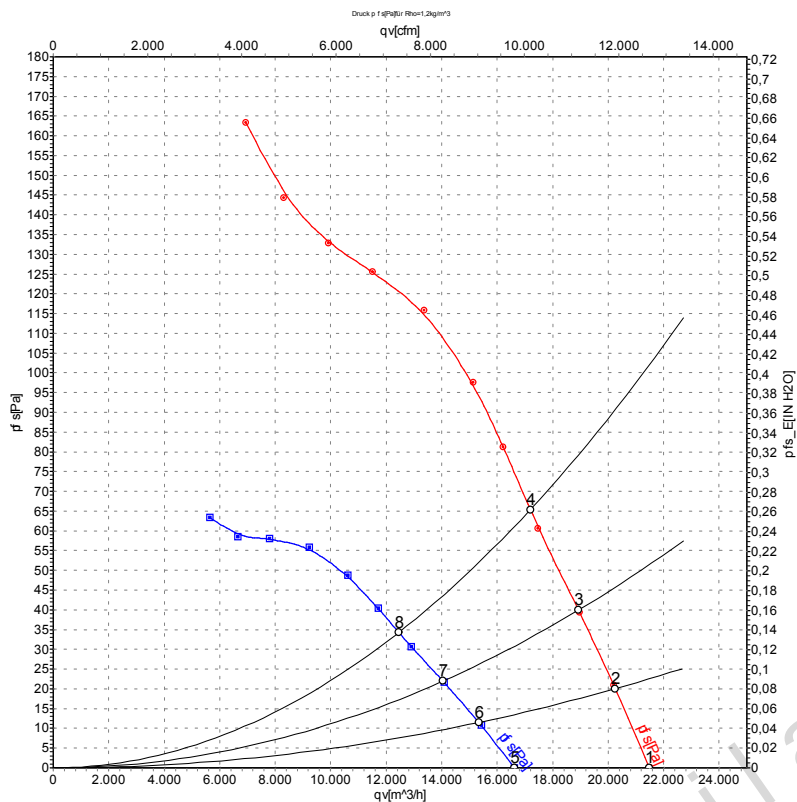


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Charts: Air flow 60 Hz



Measurement: LU-115907
Measurement: LU-115926

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	480	60	820	1067	2.29	62	69	69	21490	0
2	Δ	480	60	815	1139	2.36	62	68	68	20250	20
3	Δ	480	60	810	1195	2.42	62	69	68	18930	40
4	Δ	480	60	800	1270	2.52	63	69	68	17200	65
5	Y	480	60	640	688	1.22	57	63	62	16620	0
6	Y	480	60	615	709	1.26	56	62	61	15330	12
7	Y	480	60	600	728	1.29	55	62	61	14040	22
8	Y	480	60	575	740	1.33	55	62	61	12460	33

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

