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~
Nominal voltage	VAC	400	400	480	480
Connection		Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		-	-	-	-
Speed (rpm)	min^{-1}	660	485	800	575
Power input	W	990	580	1270	740
Current draw	A	2.37	1.21	2.52	1.33
Max. back pressure	Pa	105	54	65	33
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	70	70	65	65
Starting current	A	6	2	6.6	2.2

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

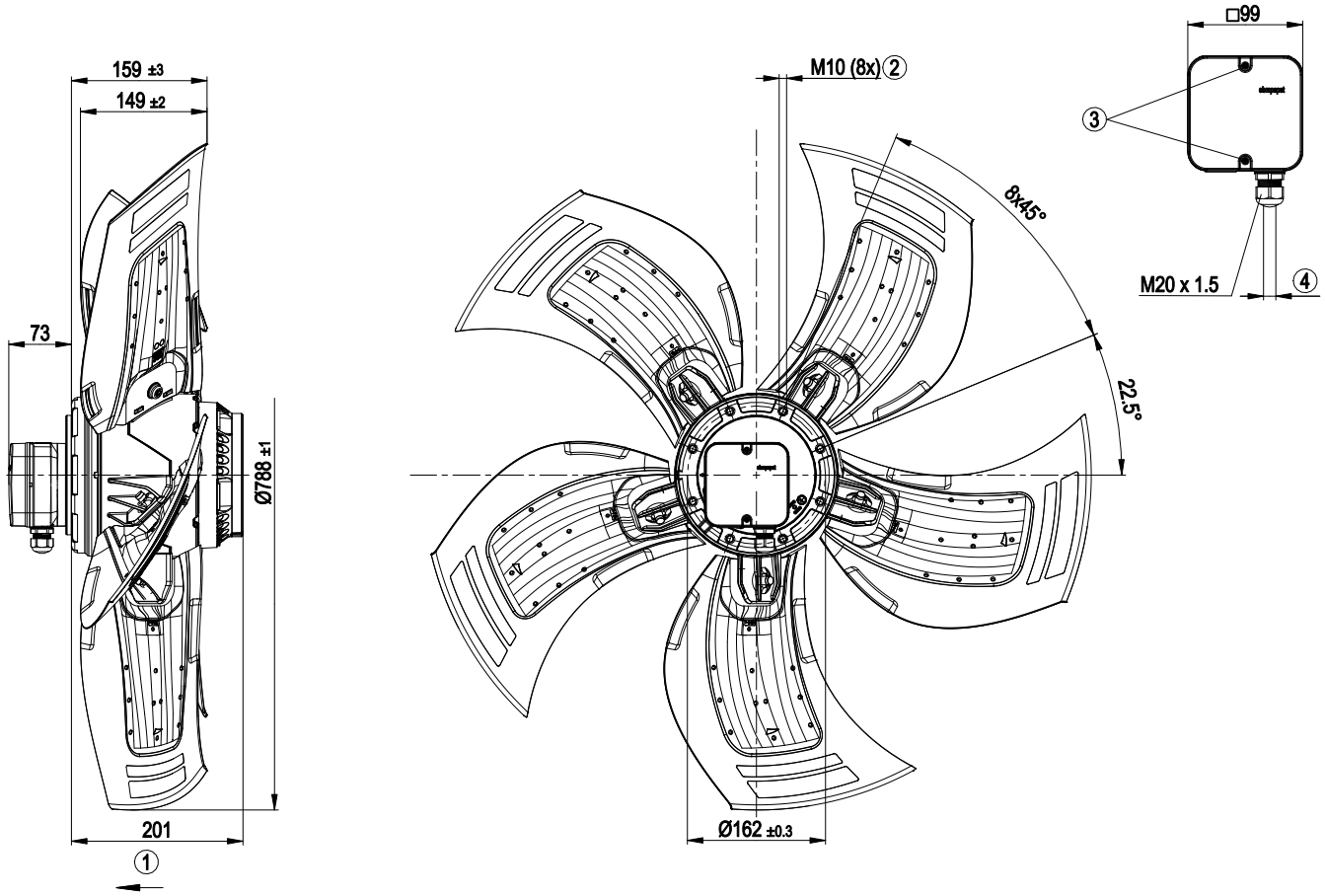
Mass	24 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Number of blades	5
Blade angle	0°
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity (F)/environmental protection class (H)	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, basic insulation
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1; EN 60034-1 (2010)
Approval	VDE; EAC; CCC

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Product drawing



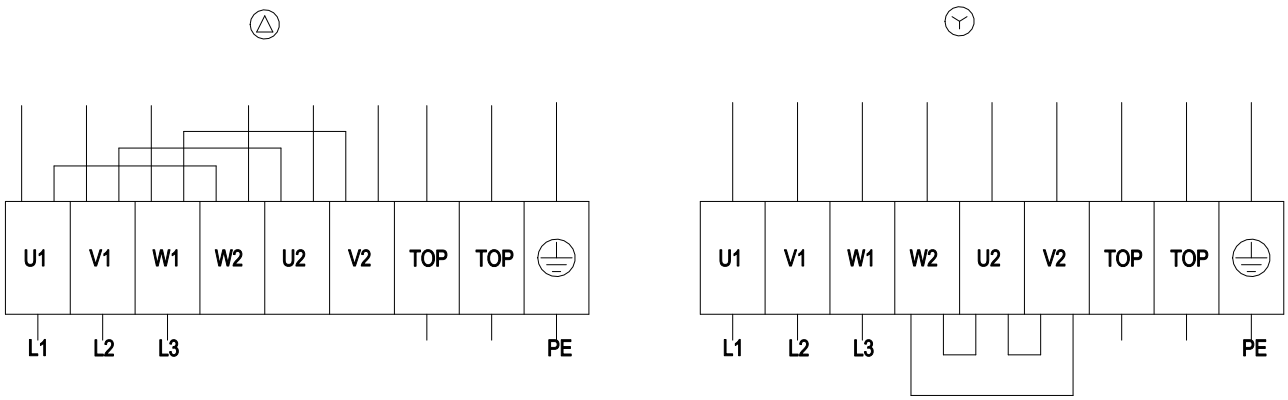
1	Direction of air flow "V"
2	Depth of screw max. 18 mm
3	Tightening torque 1.5±0.2 Nm
4	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

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Connection screen



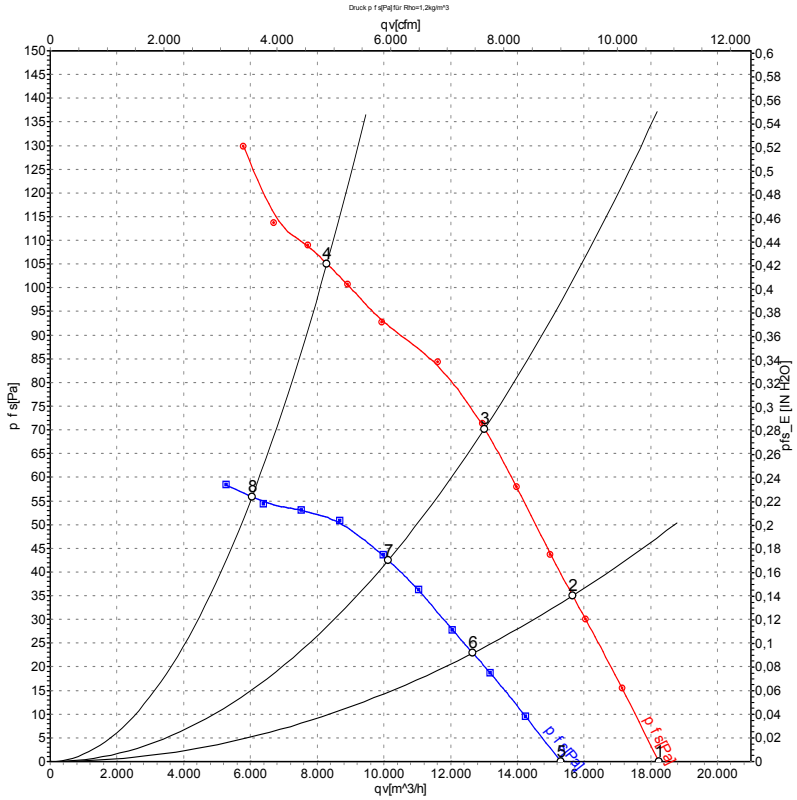
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-115898-1
Measurement: LU-115925-1

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}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	Δ	400	50	700	684	2.05	59	65	65	18240	0	10735	0.00
2	Δ	400	50	685	771	2.10	59	65	64	15660	35	9215	0.14
3	Δ	400	50	680	846	2.20	60	66	65	13020	70	7665	0.28
4	Δ	400	50	660	990	2.37	66	74	74	8295	105	4880	0.42
5	Y	400	50	585	466	0.98	55	61	61	15300	0	9005	0.00
6	Y	400	50	555	510	1.07	54	60	59	12660	23	7450	0.09
7	Y	400	50	530	534	1.12	53	60	59	10130	43	5960	0.17
8	Y	400	50	485	580	1.21	58	66	66	6045	56	3560	0.22

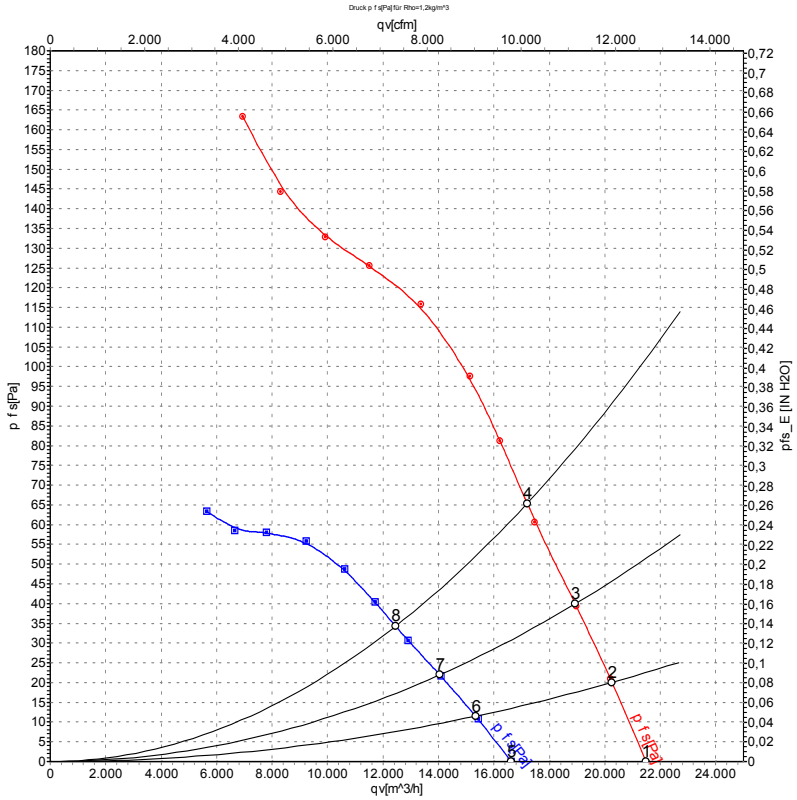
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-115907-1
Measurement: LU-115926-1

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}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	Δ	480	60	820	1067	2.29	62	69	69	21490	0	12650	0.00
2	Δ	480	60	815	1139	2.36	62	68	68	20250	20	11920	0.08
3	Δ	480	60	810	1195	2.42	62	69	68	18930	40	11140	0.16
4	Δ	480	60	800	1270	2.52	63	69	68	17200	65	10125	0.26
5	Y	480	60	640	688	1.22	57	63	62	16620	0	9780	0.00
6	Y	480	60	615	709	1.26	56	62	61	15330	12	9025	0.05
7	Y	480	60	600	728	1.29	55	62	61	14040	22	8265	0.09
8	Y	480	60	575	740	1.33	55	62	61	12460	33	7335	0.13

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · 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

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