AC axial fan - HyBlade®

sickled blades (S series)

A8D910-AE07-03 ebmpapst Datasheet
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www.fansco.com

Nominal data

Type	**A8D910-AE07-03**
Motor	**M8D138-LA**

Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	277	400	400	480
Connection		Δ	Δ	Δ	Y	Y	Y
Frequency	Hz	50	60	60	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}	675	740	795	675	740	795
Power input	W	920	1250	1420	920	1250	1420
Current draw	A	4.15	4.65	4.75	2.4	2.68	2.75
Max. back pressure	Pa	90	95	110	90	95	110
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	65	60	60	65	60	60
Starting current	A	19	15	20	11	8.5	11.5

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_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		33.8	29.3	33.3
Efficiency grade N		40.5	36	40
Power input P_e	kW	0.88		
Air flow q_v	m^3/h	13735		
Pressure increase p_{fs}	Pa	79		
Speed n	min^{-1}	680		

Data established at point of optimum efficiency

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Technical features

Mass	24.8 kg
Size	910 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PC / ABS 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; EN 61800-5-1; CE
Approval	UL 1004-1; CSA C22.2 Nr.100

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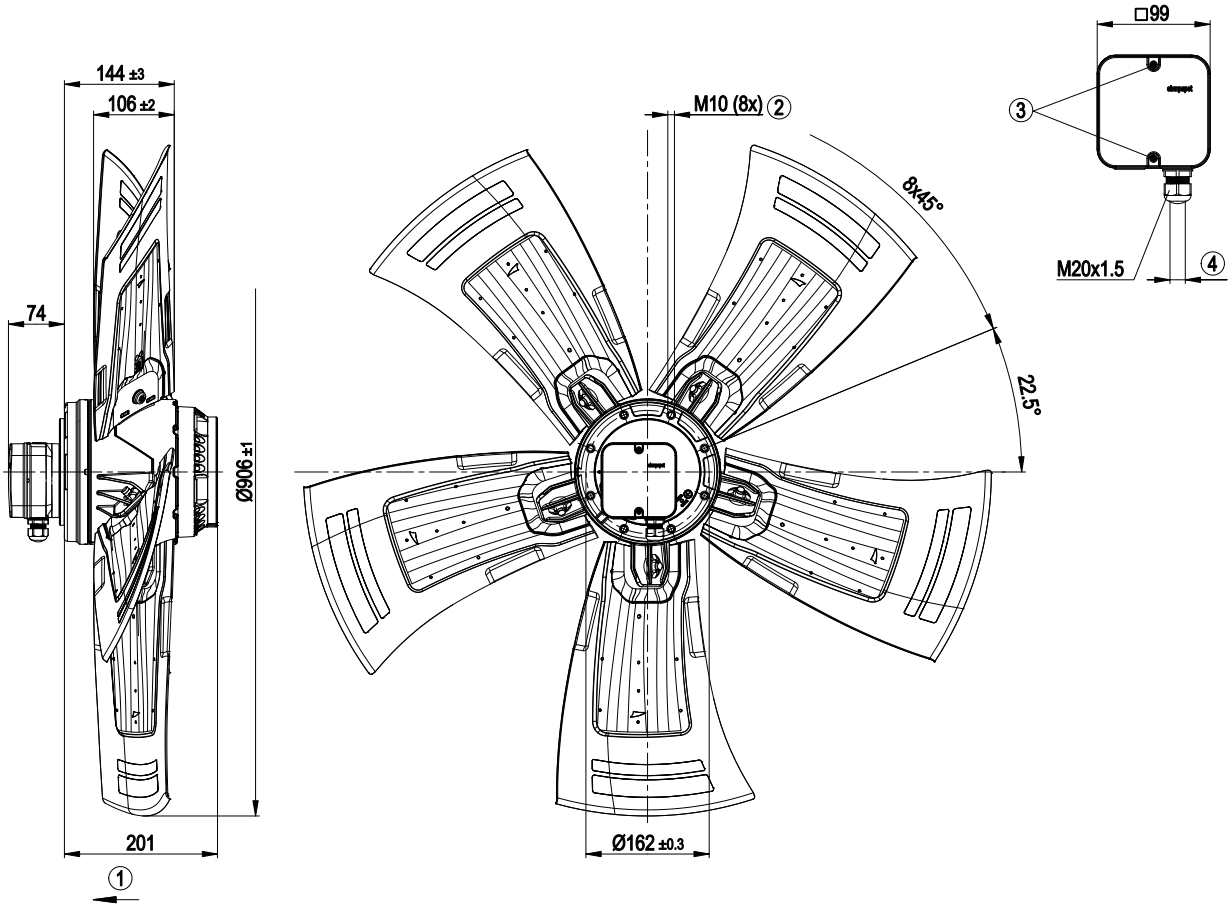
Product drawing



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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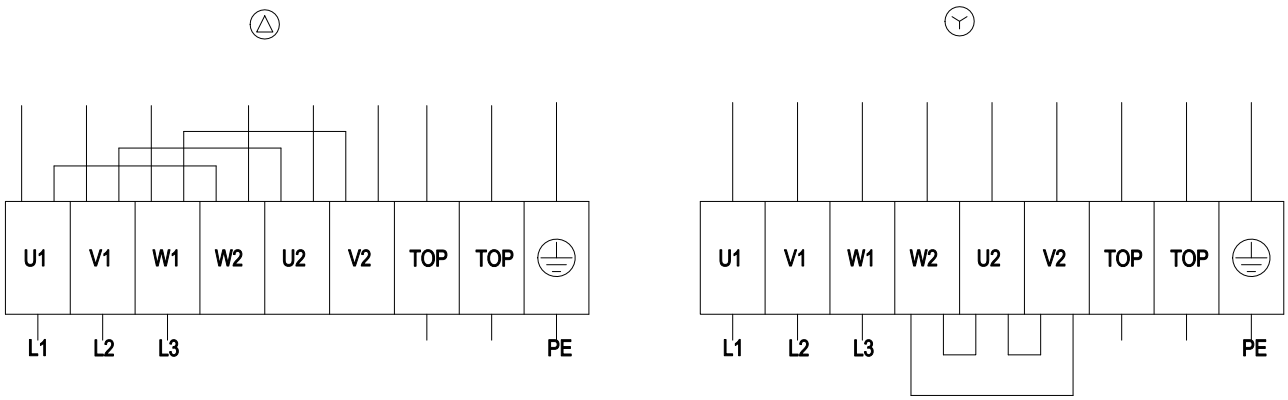
Connection screen



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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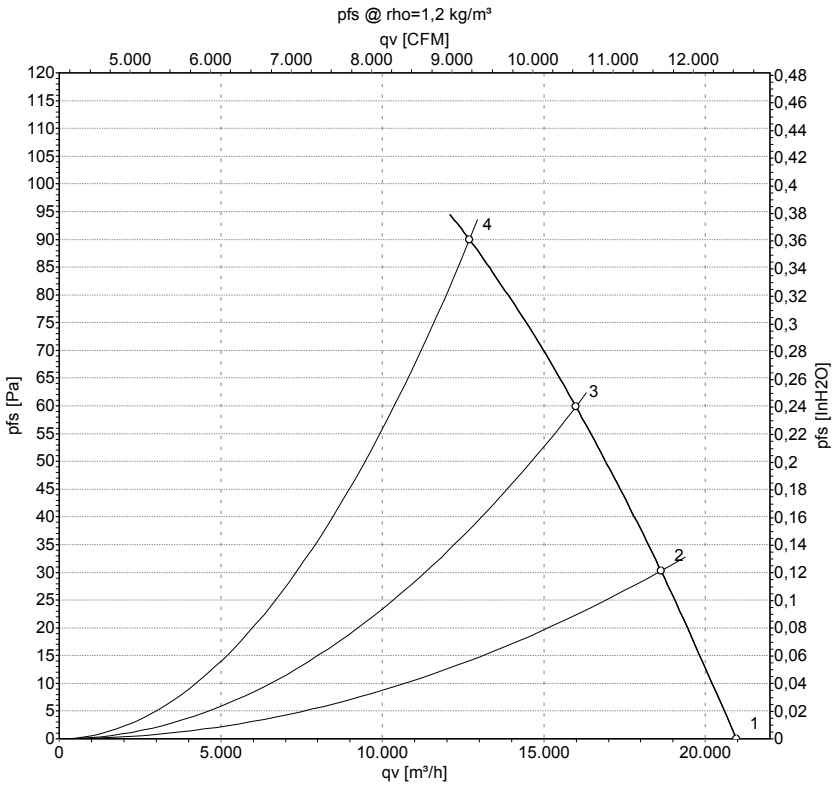
Charts: Air flow 50 Hz



Measurement: LU-118434

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)	m^3/h	Pa
1	Y	400	50	710	618	2.15	64	71	71	20965	0
2	Y	400	50	700	727	2.22	62	69	69	18625	30
3	Y	400	50	690	818	2.30	61	68	67	15995	60
4	Y	400	50	675	920	2.40	64	71	70	12700	90

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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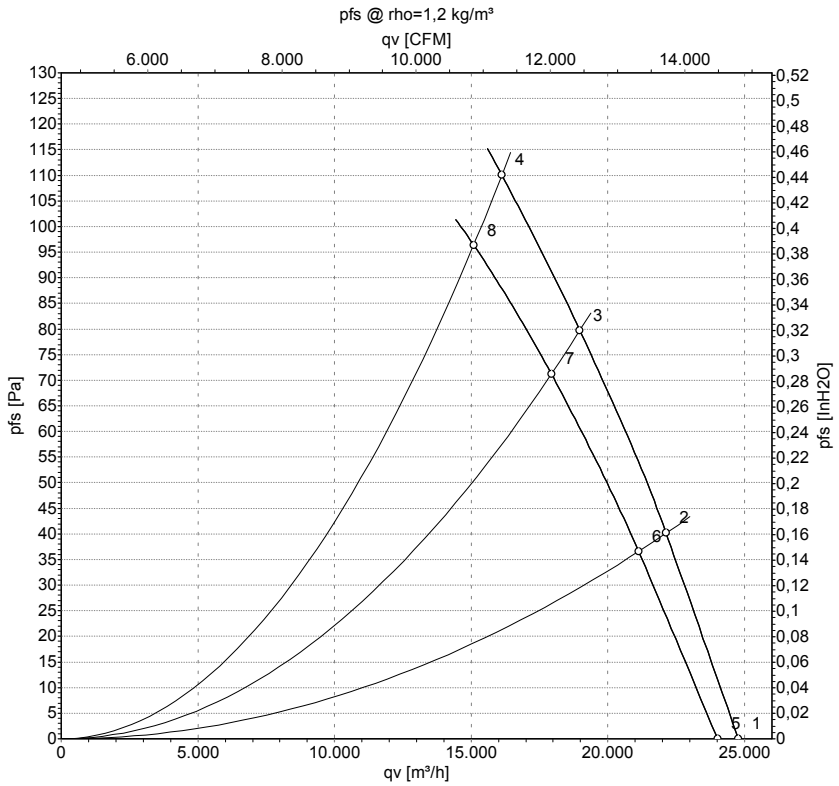
Charts: Air flow 60 Hz



Measurement: LU-118441
Measurement: LU-118440

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)	m^3/h	Pa
1	Y	480	60	840	959	2.28	68	75	75	24780	0
2	Y	480	60	820	1134	2.44	66	73	73	22130	40
3	Y	480	60	810	1288	2.61	64	72	71	18975	80
4	Y	480	60	795	1420	2.75	66	73	73	16120	110
5	Y	400	60	810	864	2.05	67	74	74	24010	0
6	Y	400	60	785	1023	2.29	64	72	72	21120	37
7	Y	400	60	765	1156	2.50	63	70	70	17935	71
8	Y	400	60	740	1250	2.68	64	72	71	15090	97

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