A6D800-AE05-03

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	**A6D800-AE05-03**
Motor	**M6D138-LA**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	277	400	480
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE
Speed (rpm)	min^{-1}	905	1080	905	1080
Power input	W	1570	2180	1570	2180
Current draw	A	5.92	6.6	3.42	3.8
Max. back pressure	Pa	170	150	170	150
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	65	60	65	60
Starting current	A	22	24	13	14

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

		Actual	Request 2015
01 Overall efficiency η_{es}	%	37.4	34.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		42.8	40
05 Variable speed drive		No	

09 Power input P_e	kW	1.38
09 Air flow q_v	m^3/h	14570
09 Pressure increase p_{fs}	Pa	128
10 Speed (rpm) n	min^{-1}	920
11 Specific ratio*		1.00

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

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-114552

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Technical features

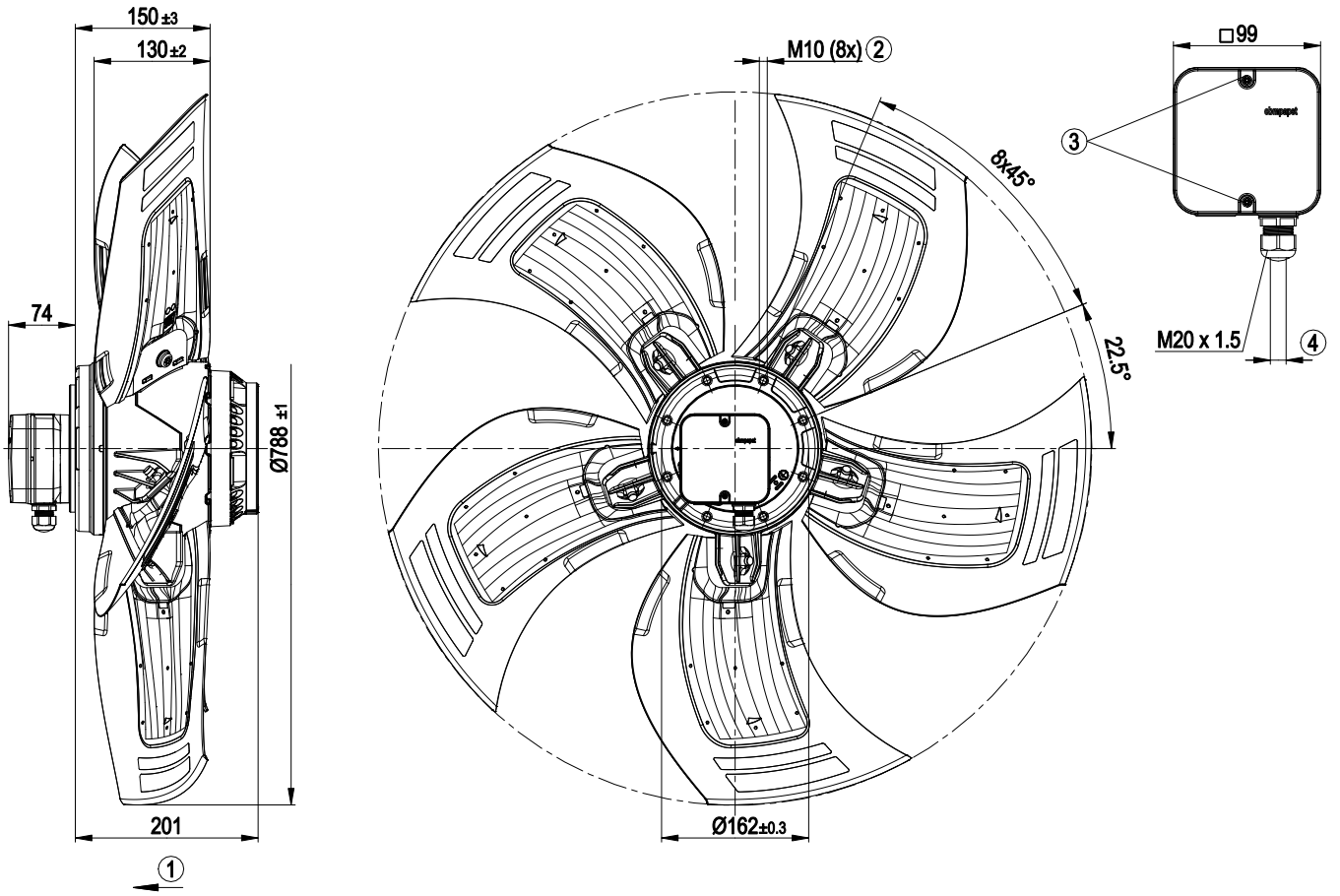
Mass	24.2 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PC / ABS plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Number of blades	5
Blade angle	-5°
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity (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 60034-1 (2010); EN 61800-5-1; CE
Approval	CSA C22.2 No.100; UL 1004-1; EAC

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Product drawing



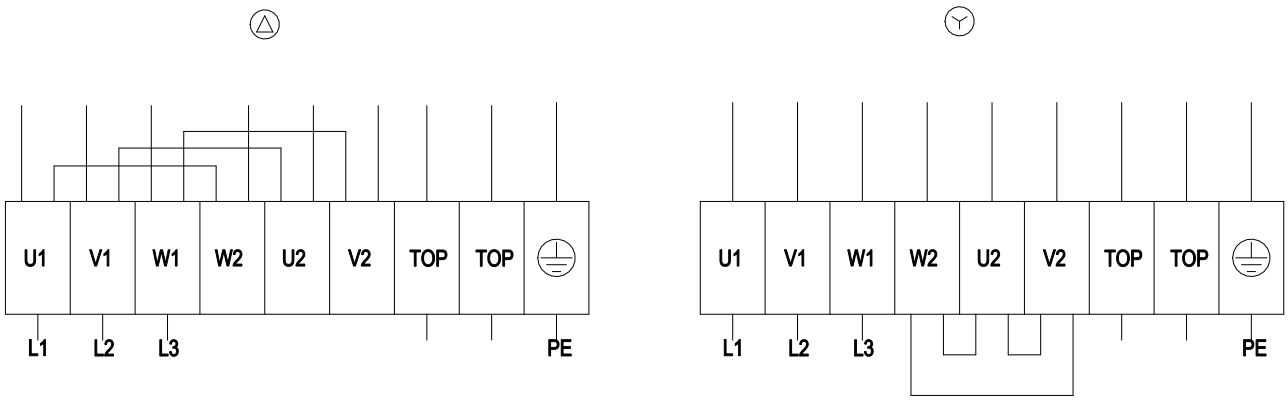
1	Direction of air flow "V"
2	Depth of screw max. 18 mm
3	Tightening torque 1.5±0.2 Nm
4	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

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Connection screen



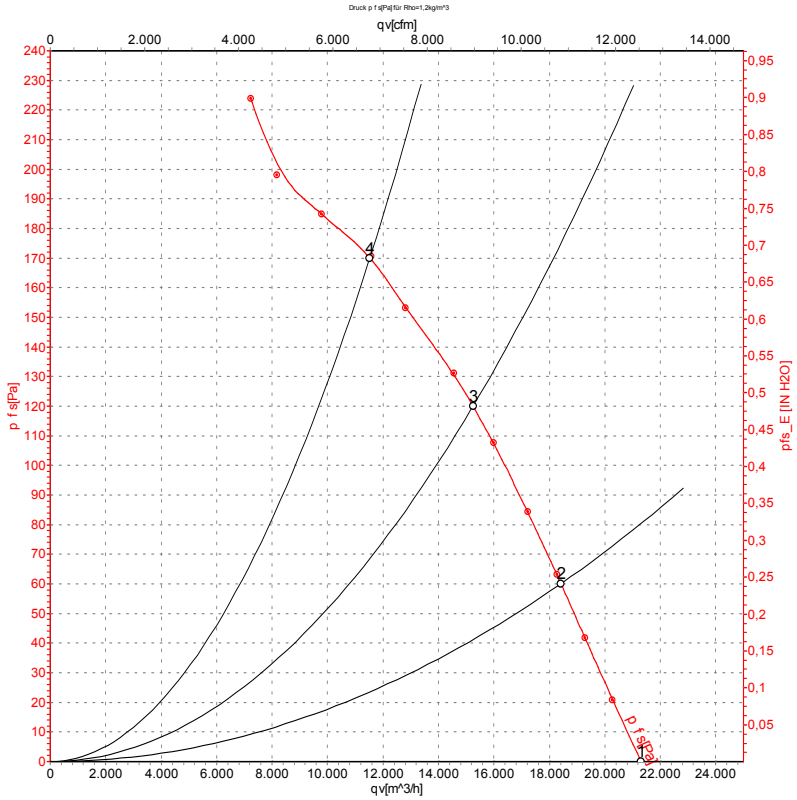
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-114552-1

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	Y	400	50	950	992	2.81	67	73	73	21310	0	12545	0.00
2	Y	400	50	935	1199	2.99	63	70	69	18420	60	10840	0.24
3	Y	400	50	925	1358	3.20	67	73	72	15250	120	8975	0.48
4	Y	400	50	905	1570	3.42	71	78	77	11530	170	6785	0.68

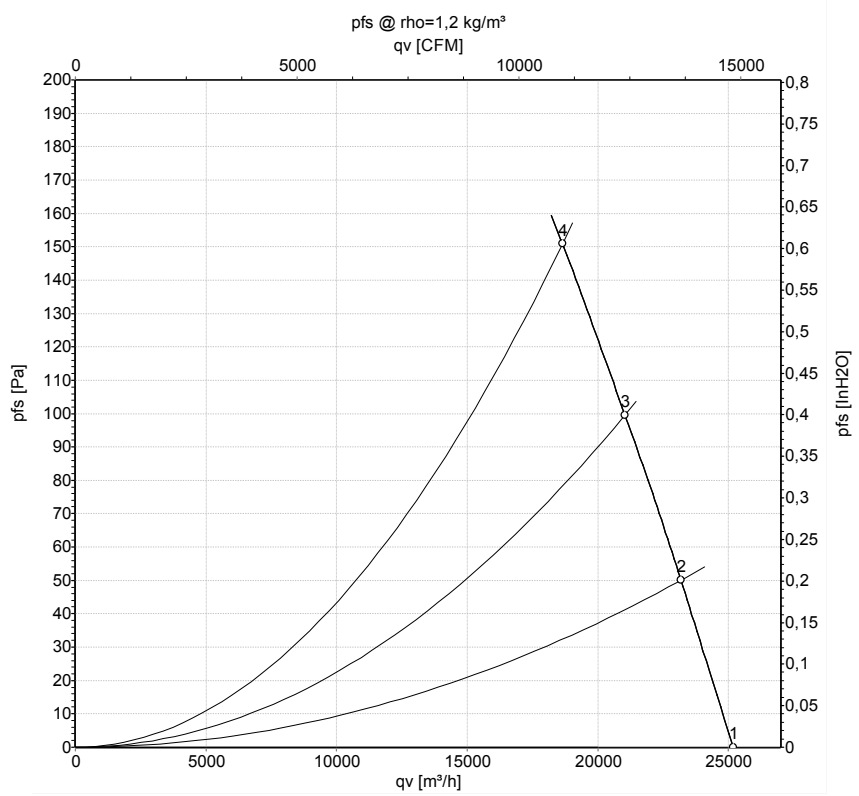
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-114632-1

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	Y	480	60	1125	1619	3.22	71	78	78	25190	0	14825	0.00
2	Y	480	60	1110	1817	3.44	68	75	75	23185	50	13645	0.20
3	Y	480	60	1100	2009	3.66	68	75	74	21045	100	12385	0.40
4	Y	480	60	1080	2180	3.80	70	77	75	18655	150	10980	0.60

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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