A6D800-AH13-05

Emerson

AC axial fan

sickled blades (S series)

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A6D800-AH13-05**
Motor	**M6D138-HF**

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		CE	CE
Speed	min^{-1}	880	665
Power input	W	1400	890
Current draw	A	2.9	1.67
Max. back pressure	Pa	140	80
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	60
Starting current	A	9.2	3.1

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}	%	36.3	30.4	34.4
Efficiency grade N		41.9	36	40
Power input P_e	kW	1.31		
Air flow q_v	m^3/h	14025		
Pressure increase p_{fs}	Pa	123		
Speed n	min^{-1}	890		

Data definition with optimum efficiency. LU-136943
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

Technical features

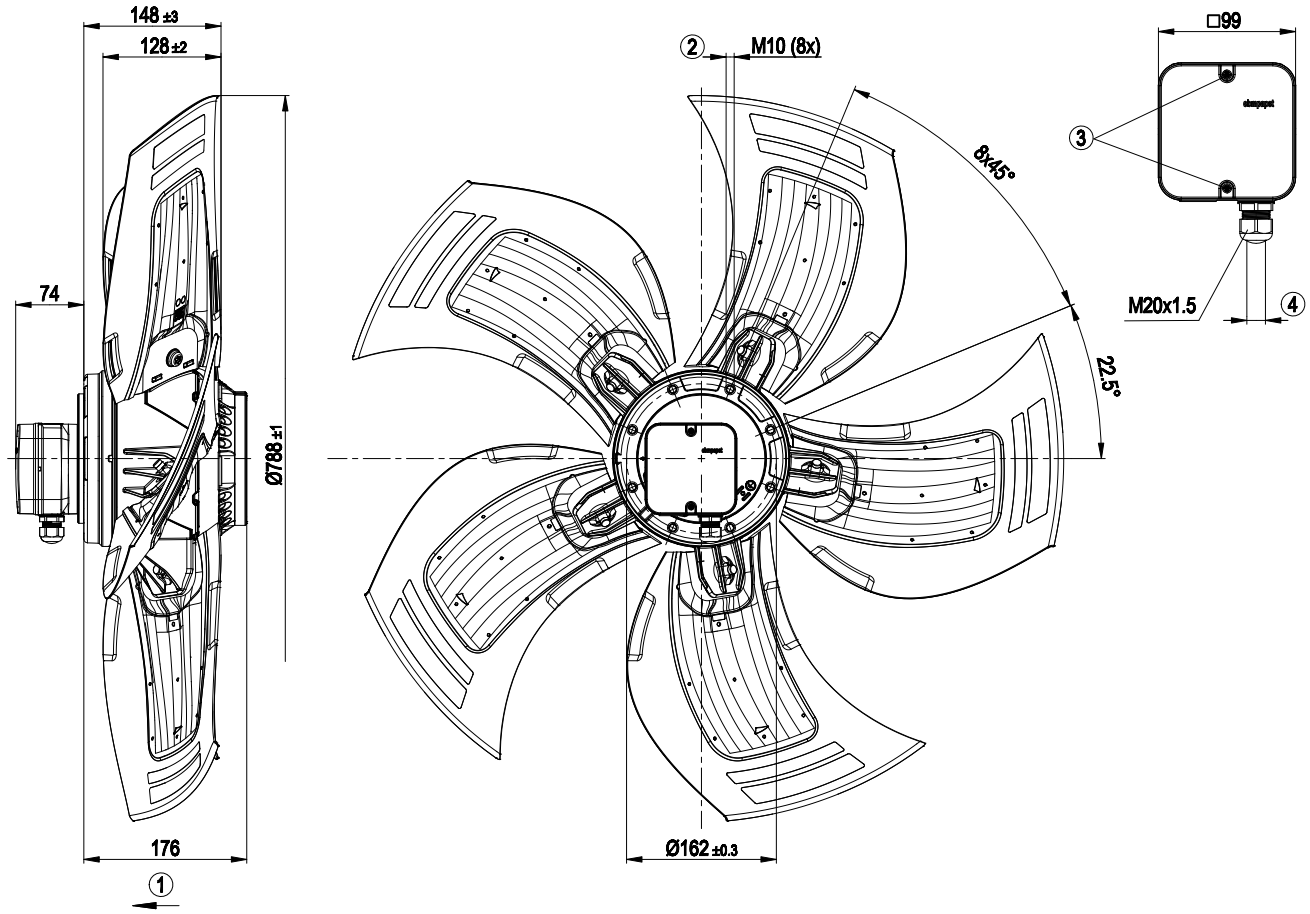
Mass	20.4 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Number of blades	5
Blade angle	-5°
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation 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
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 Nr.100; EAC; UL 1004-1

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Product drawing



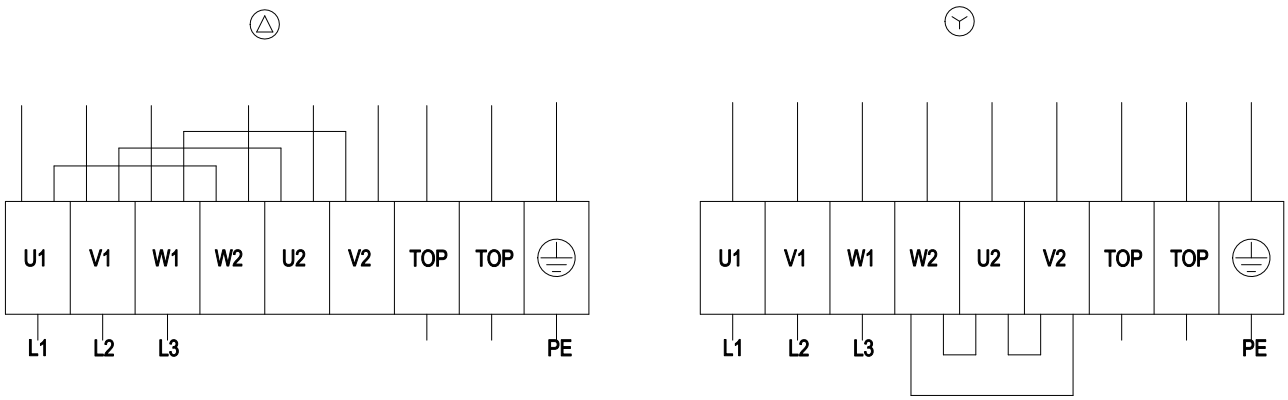
1	Direction of air flow "V"
2	Depth of screw max. 18 mm
3	Tightening torque 1.5±0.2 Nm
4	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

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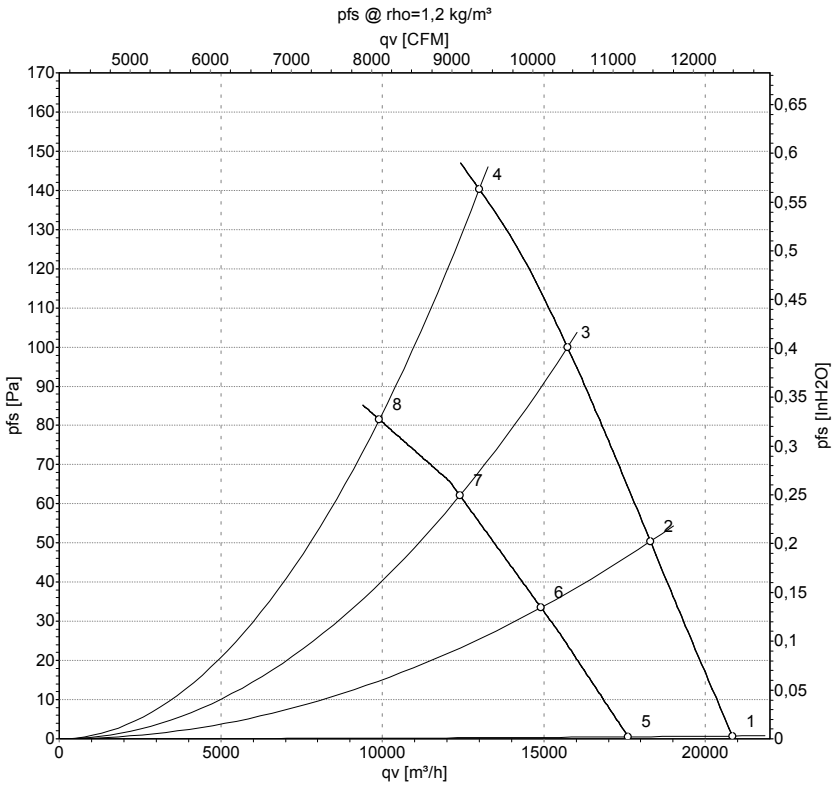
Connection screen



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-136943
Measurement: LU-136973

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	Δ	400	50	930	947	2.36	68	75	75	20845	0
2	Δ	400	50	915	1119	2.53	64	71	70	18300	50
3	Δ	400	50	900	1254	2.69	65	71	70	15735	100
4	Δ	400	50	880	1400	2.90	67	74	73	13000	140
5	Y	400	50	785	695	1.29	64	71	71	17610	0
6	Y	400	50	740	776	1.45	60	66	66	14915	33
7	Y	400	50	705	831	1.55	59	66	64	12405	62
8	Y	400	50	665	890	1.67	60	67	66	9910	80

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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