A6D800-AE01-07

AC axial fan - HyBlade

sickled blades (S series)

Transformator fan

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Nominal data

Type	**A6D800-AE01-07**
Motor	**M6D138-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		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE
Speed (rpm)	min^{-1}	950	845	1120	940
Power input	W	1000	770	1580	1160
Current draw	A	2.8	1.4	3.3	1.9
Max. back pressure	Pa	170	105	120	70
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	75	75	55	55
Starting current	A	12.5	3.8	13	4.2

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}	%	37.3	34.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		42.7	40
05 Variable speed drive		No	

09 Power input P_e	kW	1.4
09 Air flow q_v	m^3/h	14480
09 Pressure increase p_{fs}	Pa	131
10 Speed (rpm) n	min^{-1}	925
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-113300

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Technical features

Mass	24.4 kg
Size	800 mm
Surface of rotor	Coated in black
Material of terminal box	Die-cast aluminium, coated in black
Material of blades	Aluminium sheet insert (coated in black), 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 55
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H2+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	On the stator side
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	VDE; EAC

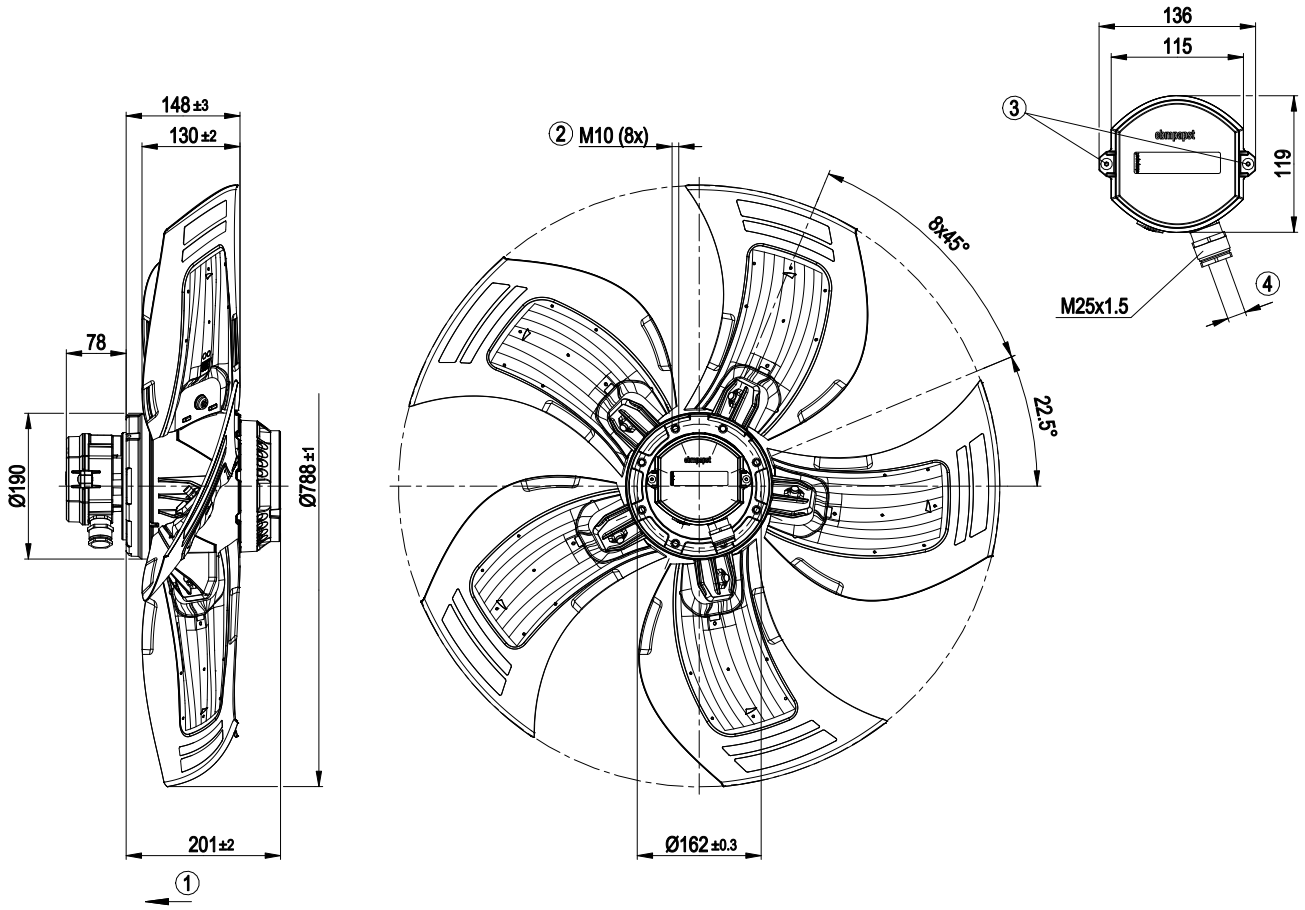
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Product drawing



1	Direction of air flow "V"
2	Thread reach max. 18 mm
3	Tightening torque 2.5±0.4 Nm
4	Cable diameter: min. 15 mm, max. 17 mm, tightening torque 4±0.6 Nm

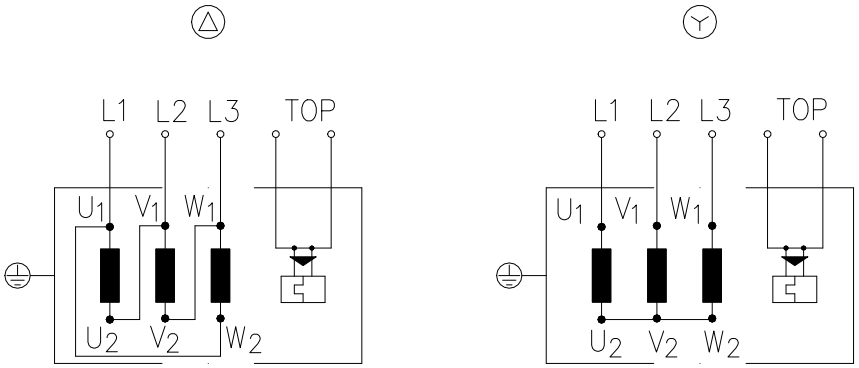
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Connection screen



Changing the direction of rotation by reversing the two phases

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				

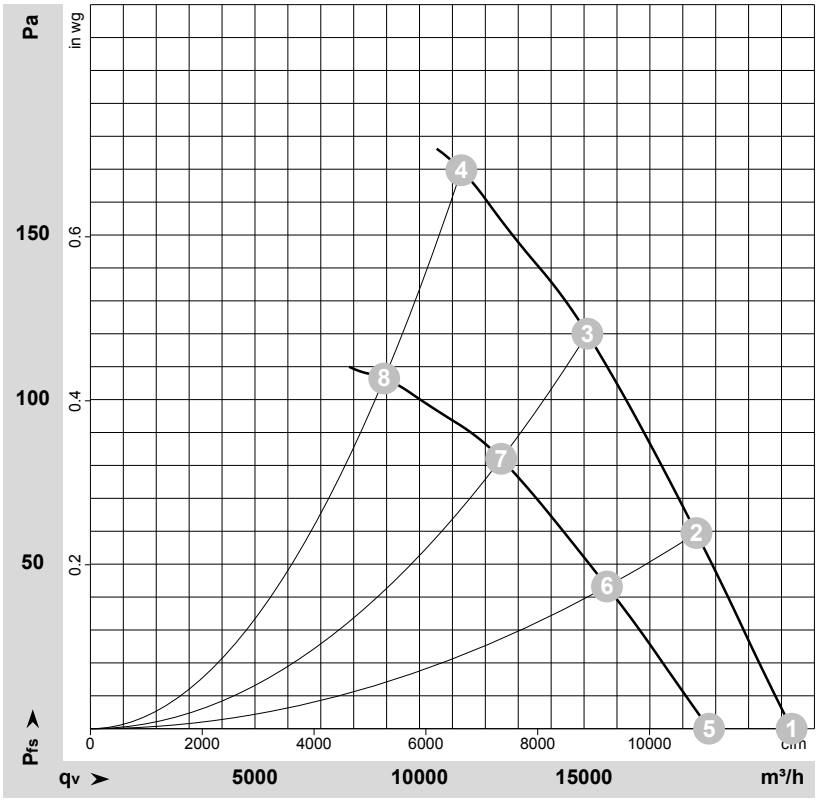
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-113300-1
Measurement: LU-113303-1

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	950	1000	2.80	67	73	73	21310	0	12540	0.00
2	Δ	400	50	940	1208	2.98	64	70	70	18415	60	10840	0.24
3	Δ	400	50	925	1381	3.17	67	73	72	15100	120	8890	0.48
4	Δ	400	50	910	1570	3.42	72	79	78	11275	170	6635	0.68
5	Y	400	50	845	770	1.40	64	70	70	18800	0	11065	0.00
6	Y	400	50	800	898	1.70	60	66	65	15695	43	9240	0.17
7	Y	400	50	765	982	1.87	62	68	67	12485	82	7345	0.33
8	Y	400	50	730	1060	1.98	65	72	72	8925	105	5255	0.42

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

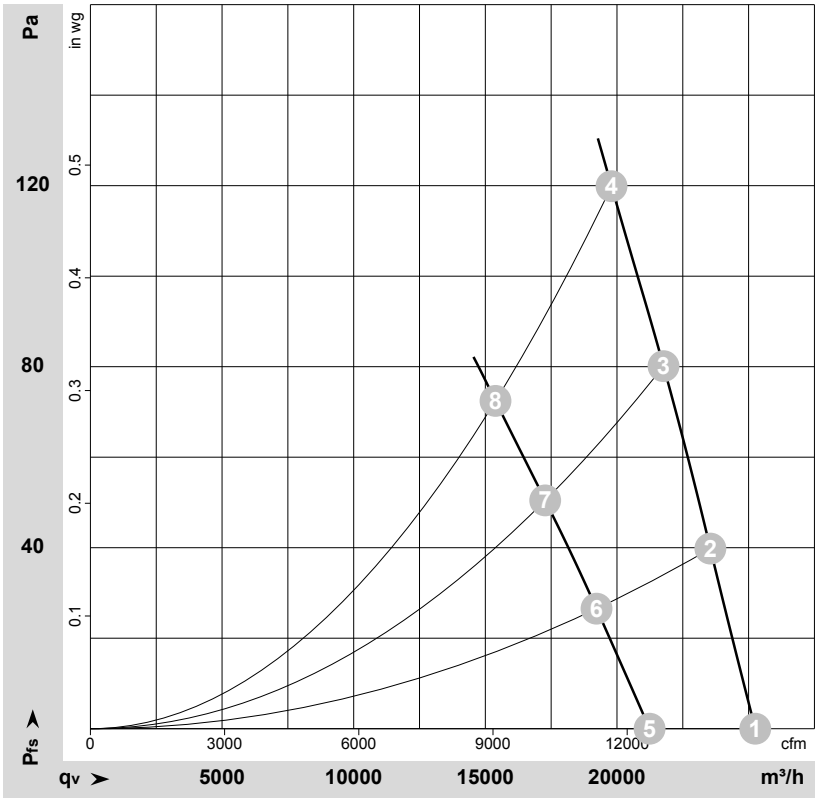
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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-115634-1
Measurement: LU-115635-1

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	1120	1580	3.30	71	78	78	25255	0	14865	0.00
2	Δ	480	60	1110	1752	3.39	69	76	75	23550	40	13860	0.16
3	Δ	480	60	1100	1925	3.58	68	75	74	21770	80	12810	0.32
4	Δ	480	60	1090	2060	3.75	69	76	75	19795	120	11650	0.48
5	Y	480	60	940	1160	1.90	66	73	73	21240	0	12500	0.00
6	Y	480	60	910	1240	2.03	64	70	70	19225	27	11315	0.11
7	Y	480	60	875	1302	2.15	62	69	68	17275	50	10165	0.20
8	Y	480	60	850	1350	2.20	62	69	68	15385	70	9055	0.28

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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