A6D800-KD01-01

AC axial fan - AxiBlade

sickle-shaped blades (S series)

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Nominal data

Type	**A6D800-KD01-01**
Motor	**M6D138-LA**

Phase		3~	3~	3~
Nominal voltage	VAC	400	400	480
Wiring		Δ	Y	Δ
Frequency	Hz	50	50	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	CE	CE
Speed (rpm)	min^{-1}	925	760	1110
Power consumption	W	1450	1040	1900
Current draw	A	3.4	1.95	3.6
Max. back pressure	Pa	160	110	95
Max. back pressure	in. wg	0.64	0.44	0.38
Min. ambient temperature	°C	-40	-40	-40
Max. ambient temperature	°C	70	70	55
Starting current	A	14	4	15

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	41.7	34.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		47.1	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	1.39
09 Air flow q_v	m^3/h	15080
09 Pressure increase p_{fs}	Pa	139
10 Speed (rpm) n	min^{-1}	930
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-197805

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Technical description

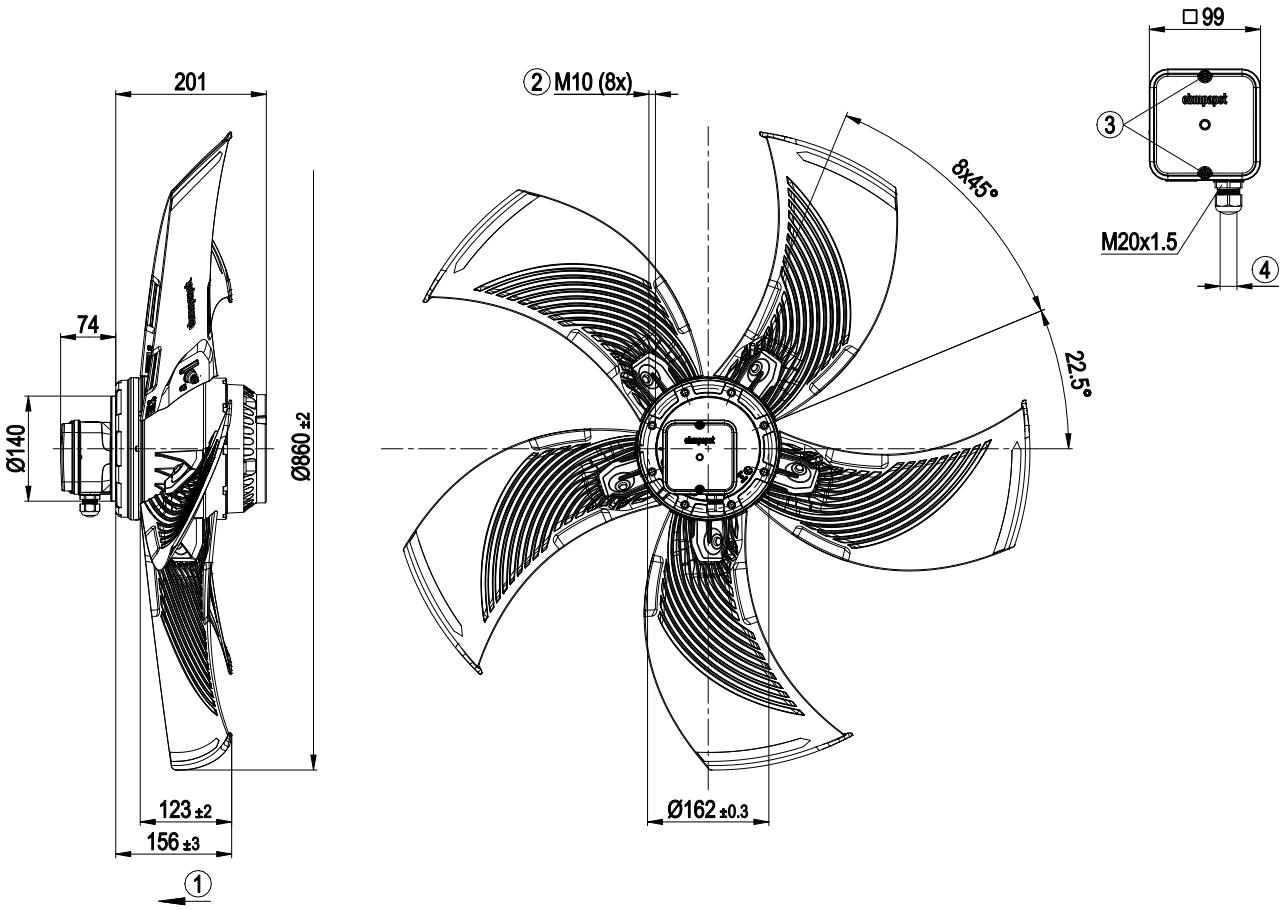
Weight	23 kg
Size	800 mm
Motor size	138
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Impeller material	PP plastic
Number of blades	5
Blade pitch	0°
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	On rotor and stator sides
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010); CE
Approval	VDE; EAC

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Product drawing



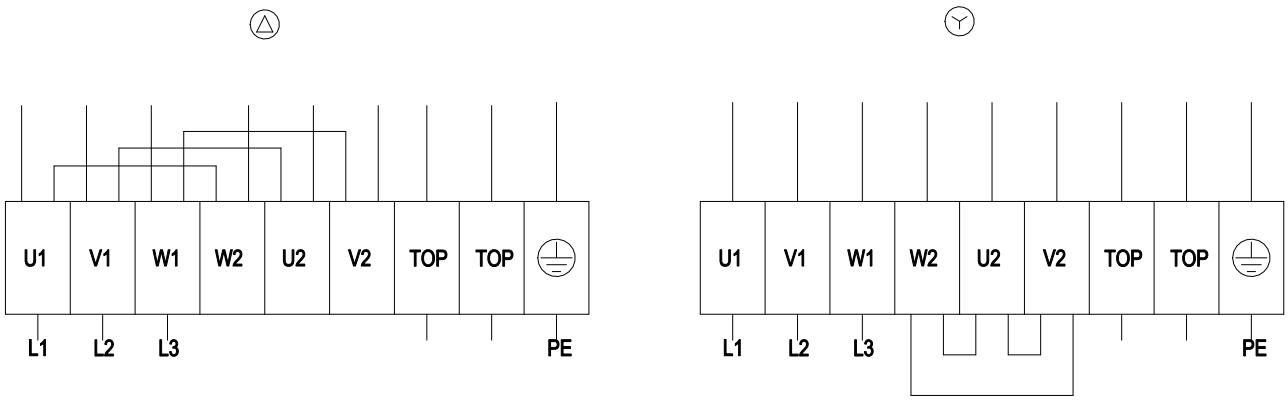
1	Airflow direction "V"
2	Max. clearance for screw 18 mm
3	Tightening torque 1.5 ± 0.2 Nm
4	Cable diameter min. 7 mm, max. 14 mm, tightening torque 2 ± 0.3 Nm

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Connection diagram



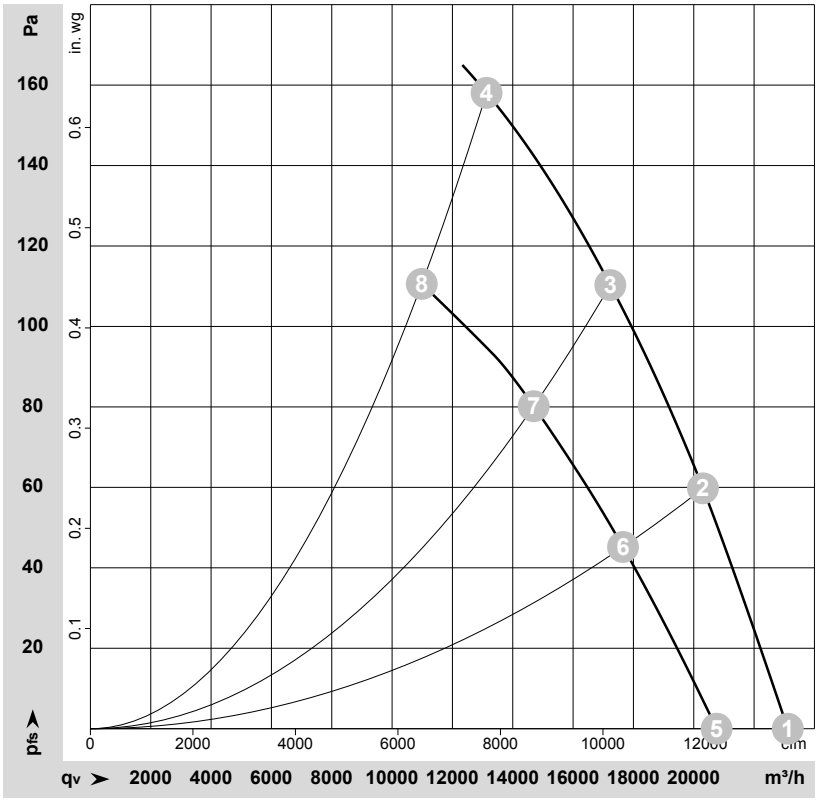
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-197805-1
Measurement: LU-205539-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	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	in. wg
1	Δ	400	50	955	966	2.83	69	75	75	23115	0	13605	0.00
2	Δ	400	50	945	1161	3.00	67	74	74	20305	60	11950	0.24
3	Δ	400	50	935	1314	3.15	68	75	74	17235	110	10145	0.44
4	Δ	400	50	925	1450	3.40	74	81	82	13130	160	7730	0.64
5	Y	400	50	855	751	1.38	66	72	72	20760	0	12220	0.00
6	Y	400	50	820	886	1.61	64	70	70	17655	46	10390	0.18
7	Y	400	50	790	972	1.77	63	70	70	14695	81	8650	0.33
8	Y	400	50	760	1040	1.95	67	74	75	10985	110	6465	0.44

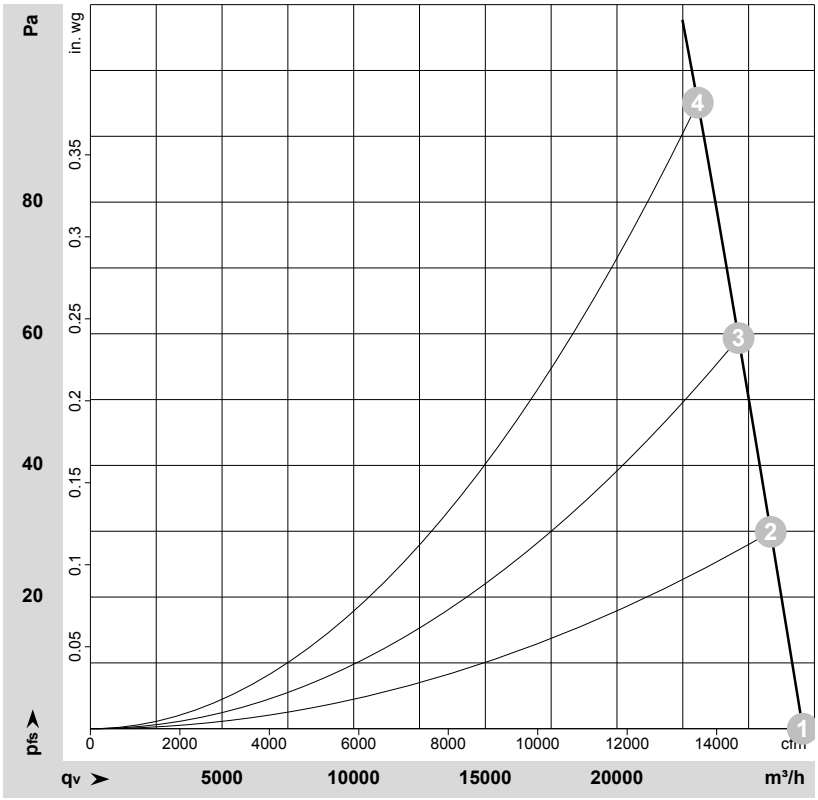
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-197809-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	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	in. wg
1	Δ	480	60	1135	1533	3.16	73	80	80	27060	0	15930	0.00
2	Δ	480	60	1130	1654	3.27	72	79	79	25840	30	15210	0.12
3	Δ	480	60	1125	1775	3.38	71	78	78	24620	60	14490	0.24
4	Δ	480	60	1110	1900	3.60	71	78	78	23070	95	13580	0.38

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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