A8E500-AJ03-01

AC axial fan - HyBlade

sickled blades (S series)



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Nominal data

Type	**A8E500-AJ03-01**
Motor	**M8E110-EF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed (rpm)	min^{-1}	665	740
Power input	W	130	170
Current draw	A	0.59	0.75
Motor capacitor	µF	3	3
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	35	45
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	65	65
Starting current	A	1.55	1.7

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

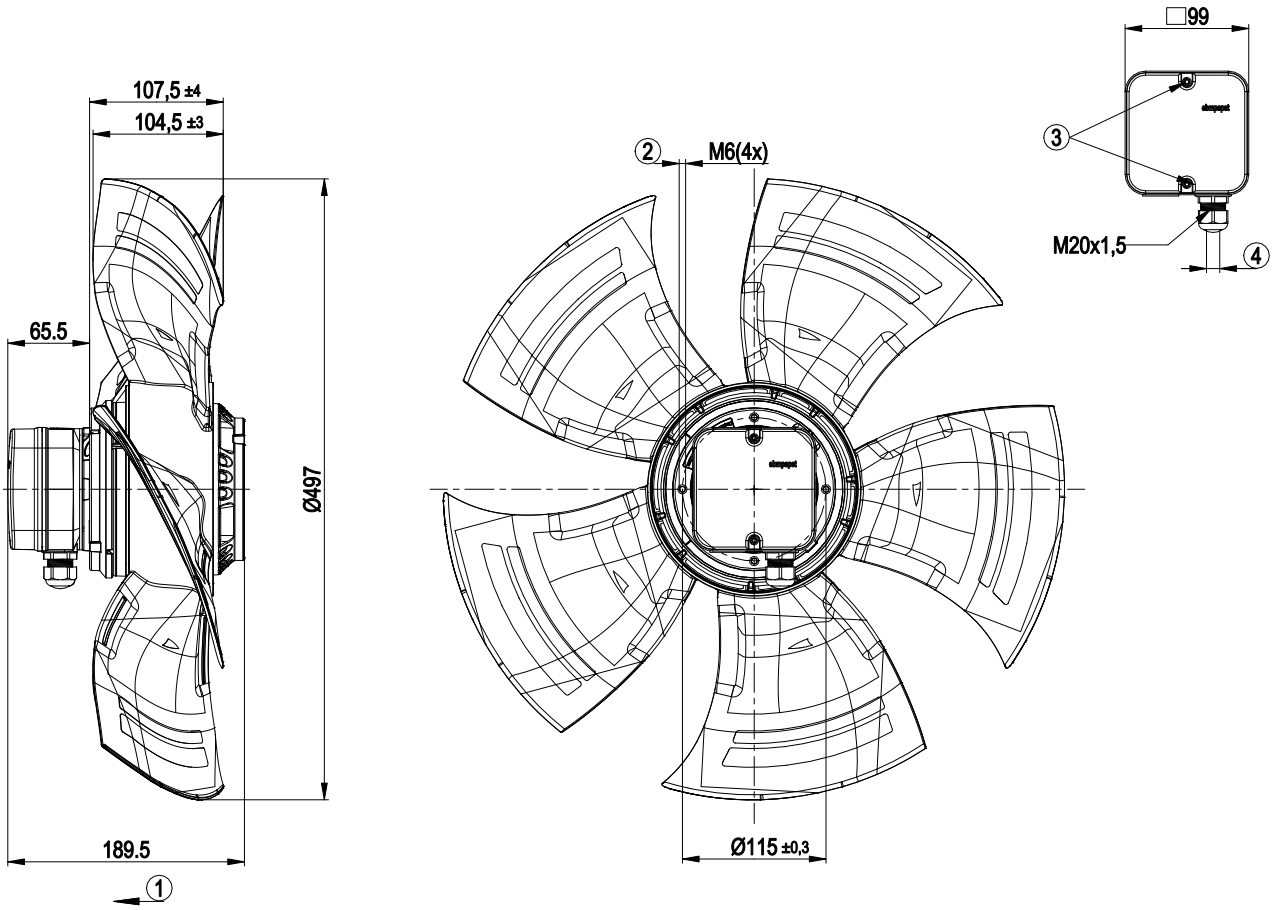
Mass	8.5 kg
Size	500 mm
Surface of rotor	Coated in black
Material of terminal box	PP plastic
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity (F)/environmental protection class (H)	F4-1
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	Rotor-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, integrated capacitor connected 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)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Product conforming to standard	EN 61800-5-1; CE
Approval	VDE; EAC; UL 1004-1; CSA C22.2 No.100; CCC

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Product drawing



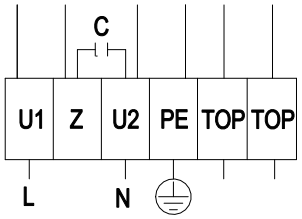
1	Direction of air flow "V"
2	Depth of screw max. 12 mm
3	Tightening torque 1.5Nm±0.2
4	Cable diameter: min. 6 mm, max. 12 mm, tightening torque: 2Nm±0.3

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Connection screen



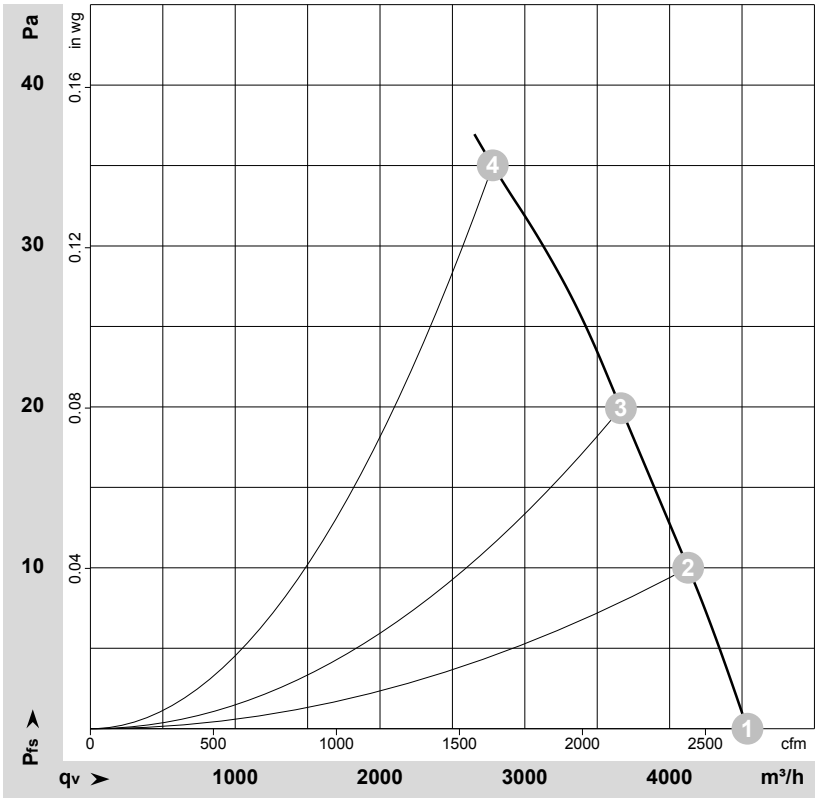
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green / yellow	TOP	grey		

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-106609-1

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

	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	230	50	695	106	0.52	55	61	61	4540	0	2670	0.00
2	230	50	690	111	0.54	53	59	59	4130	10	2430	0.04
3	230	50	680	116	0.56	50	56	56	3665	20	2155	0.08
4	230	50	665	130	0.59	47	54	54	2780	35	1635	0.14

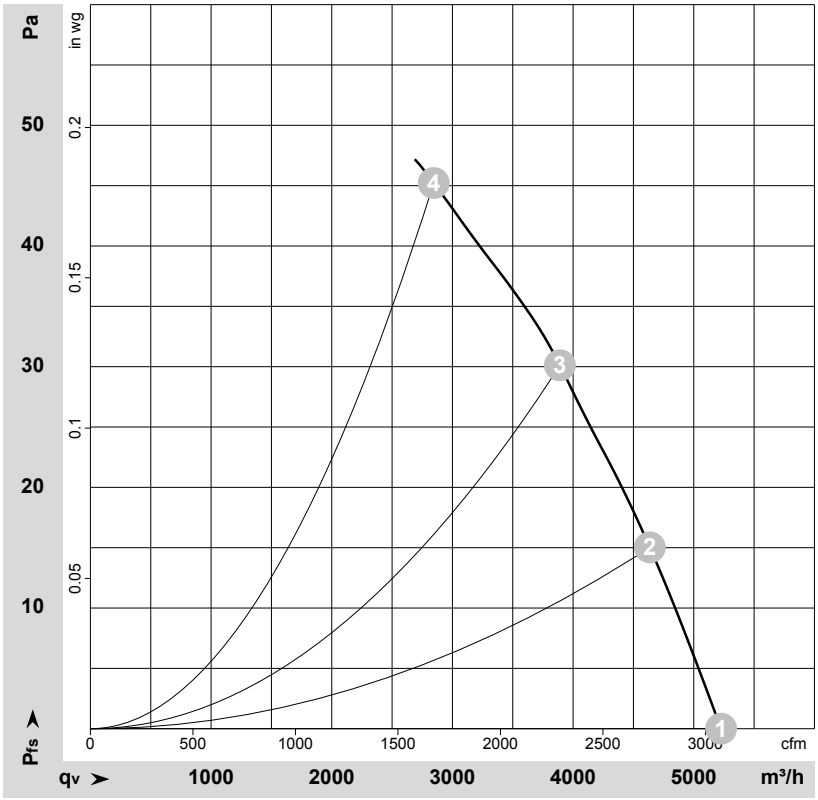
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · LwA_{out} = Sound power level outlet side
q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-106615-1

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

	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	230	60	800	145	0.64	58	64	64	5225	0	3075	0.00
2	230	60	780	153	0.68	54	60	60	4635	15	2730	0.06
3	230	60	760	160	0.71	52	58	57	3890	30	2290	0.12
4	230	60	740	170	0.75	50	57	56	2845	45	1675	0.18

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
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