S4E300-AT16-43

AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S4E300-AT16-43**
Motor	**M4E068-DF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	UL 2111	CE
Speed (rpm)	min^{-1}	1390	1590	1590
Power consumption	W	72	102	97
Current draw	A	0.33	0.43	0.43
Capacitor	µF	2.5	2.5	2.5
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	UL	S0 (CE)
Max. back pressure	Pa	55	75	75
Max. back pressure	in. wg	0.22	0.3	0.3
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	70	70
Starting current	A	0.93	0.88	0.88

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

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Technical description

Weight	2.9 kg
Size	300 mm
Motor size	68
Rotor surface	Painted black
Terminal box material	ABS plastic
Blade material	PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor mounting	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-3; EAC; CSA C22.2 No. 77

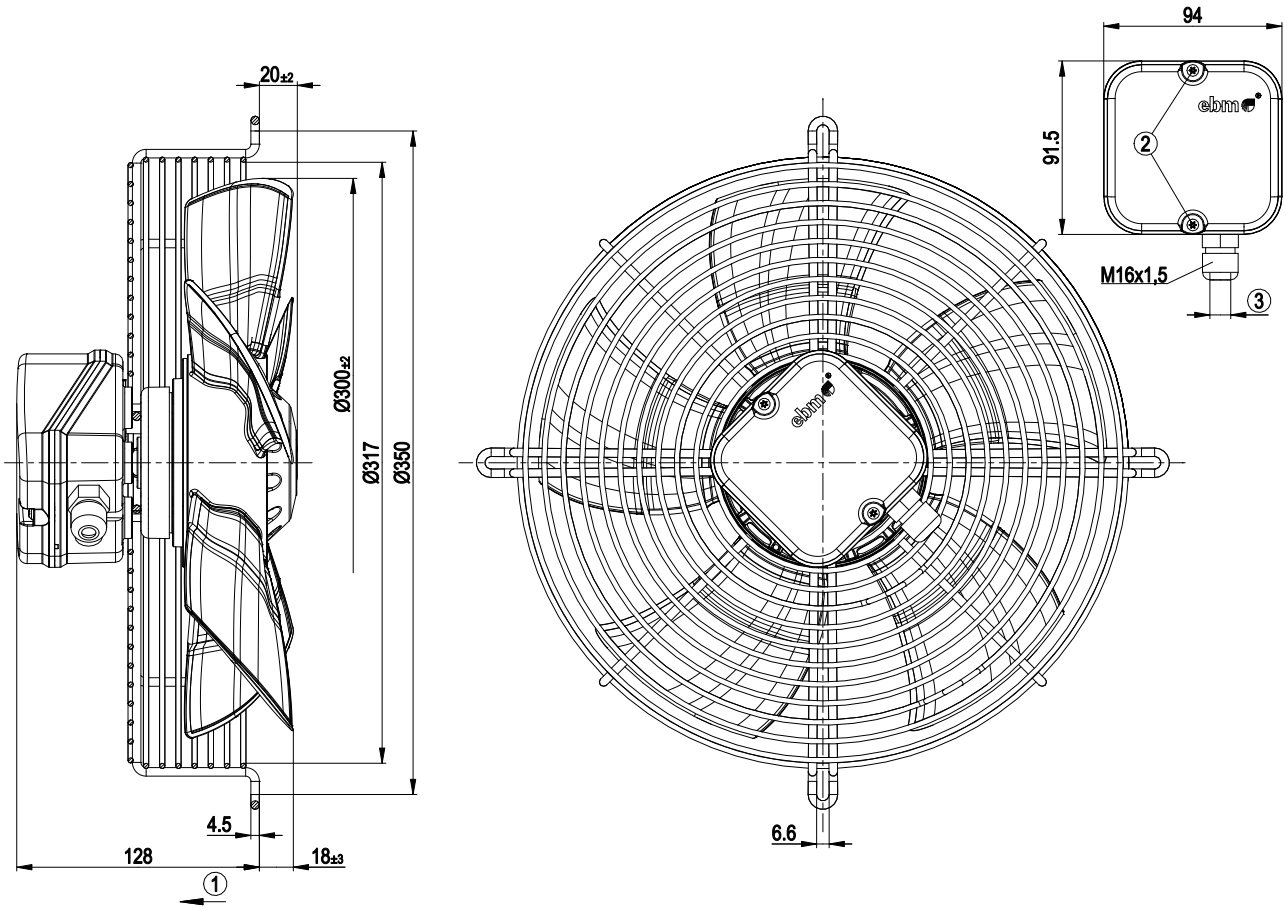
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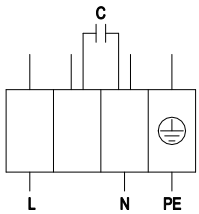
with guard grille for short nozzle

Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.5±0.1 Nm
3	Cable diameter: min. 6 mm, max. 12 mm, tightening torque 2±0.3 Nm

Connection diagram



PE	green/yellow	L	black	N	blue

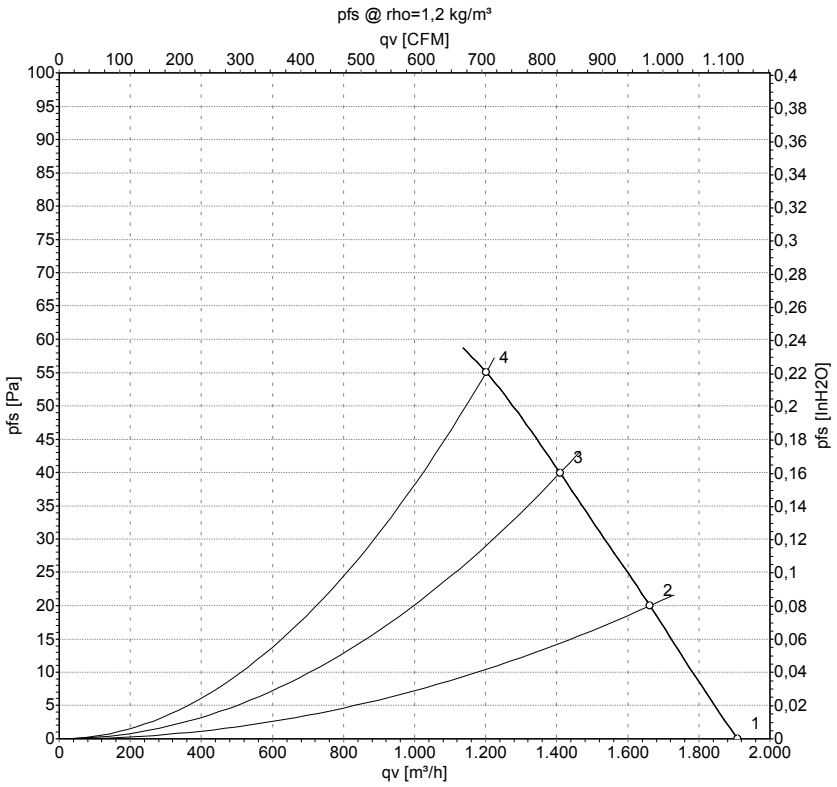
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AC axial fan - HyBlade

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Curves: Air performance 50 Hz



Measurement: LU-136914-1

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

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	50	1425	60	0.30	1910	0	1125	0.00
2	230	50	1410	65	0.32	1660	20	980	0.08
3	230	50	1400	68	0.33	1410	40	830	0.16
4	230	50	1390	72	0.33	1200	55	705	0.22

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

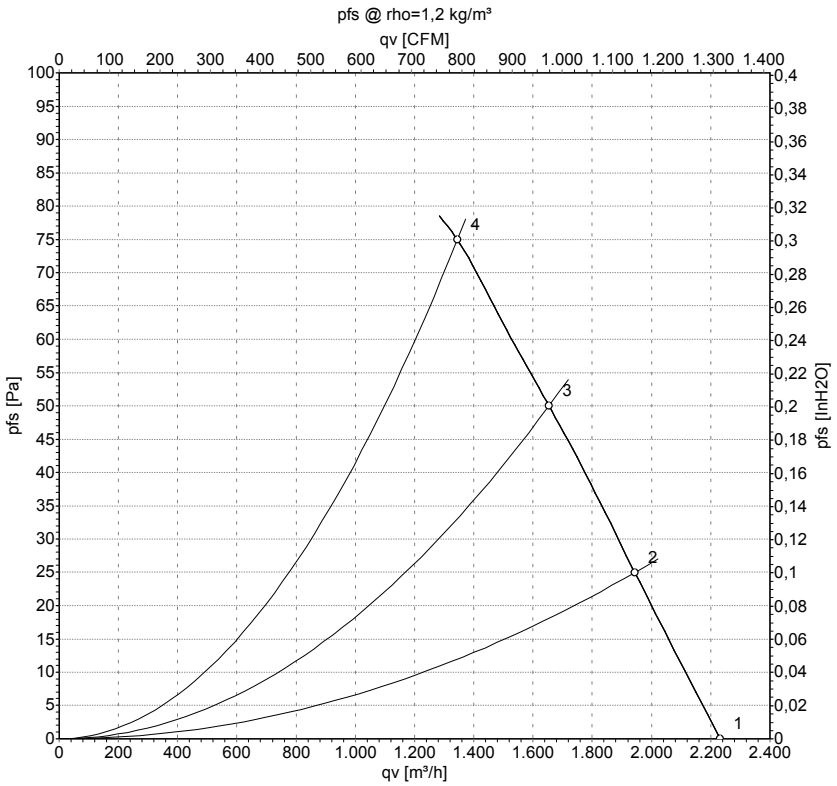
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Curves: Air performance 60 Hz



Measurement: LU-136913-1

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

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	60	1660	75	0.33	2230	0	1315	0.00
2	230	60	1630	83	0.36	1945	25	1145	0.10
3	230	60	1610	89	0.39	1655	50	975	0.20
4	230	60	1590	97	0.43	1345	75	790	0.30

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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