

AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for short nozzle

S4E300-AT16-43 ebmpapst Datasheet

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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

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	inH ₂ O	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

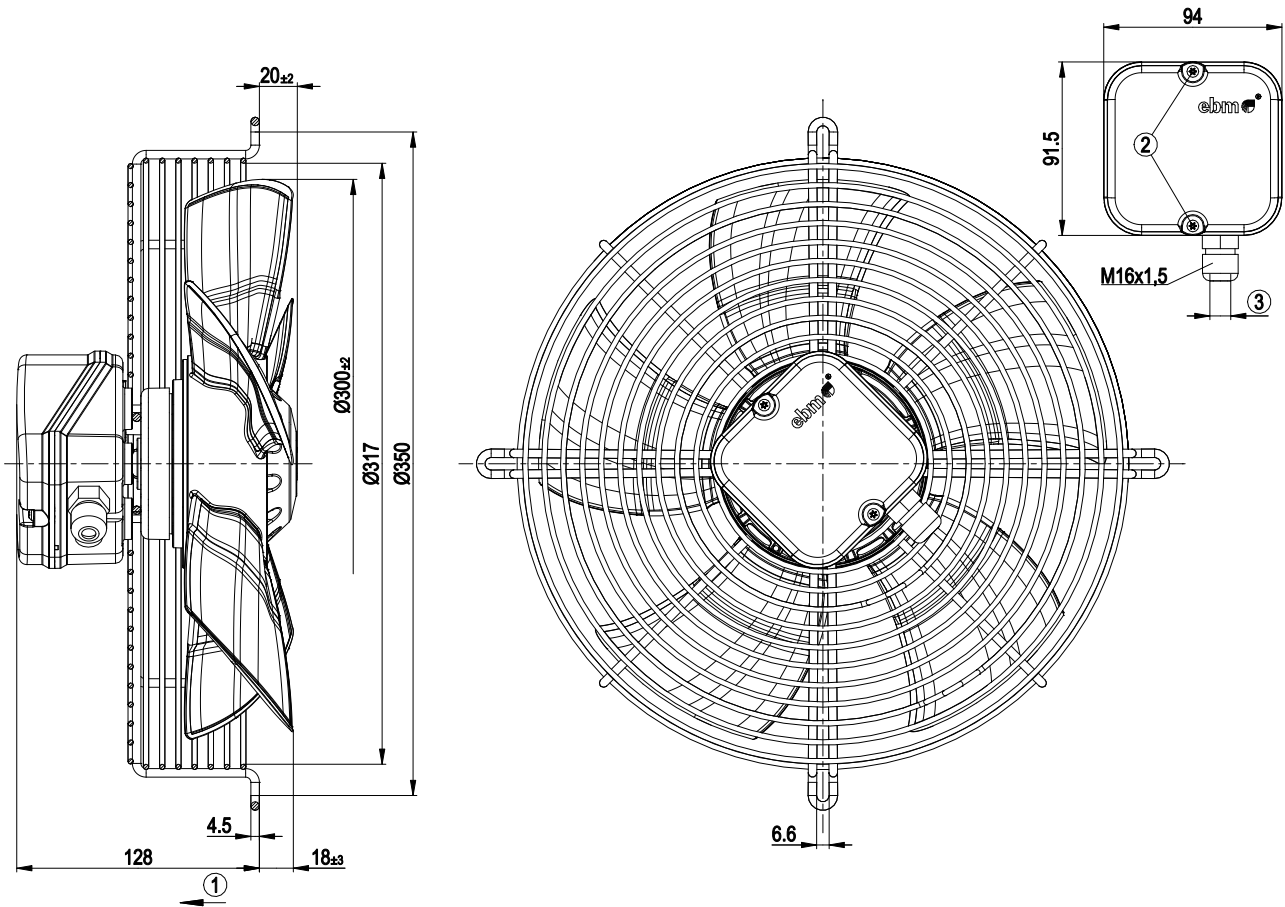
Weight	2.9 kg
Fan size	300 mm
Rotor surface	Painted black
Terminal box material	ABS plastic
Blade material	PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
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 bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	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	CSA C22.2 No. 77; EAC; UL 1004-3



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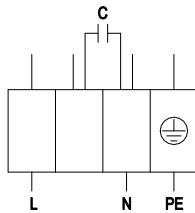
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Product drawing



- | | |
|---|---|
| 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 |

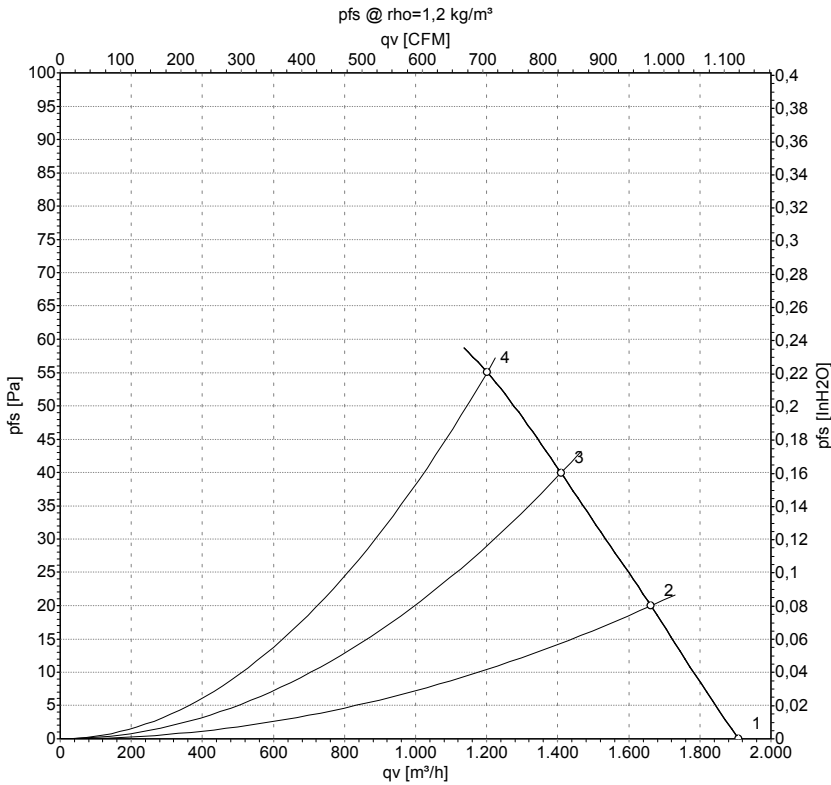
Connection diagram



PE	green/yellow	L	black	N	blue
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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.

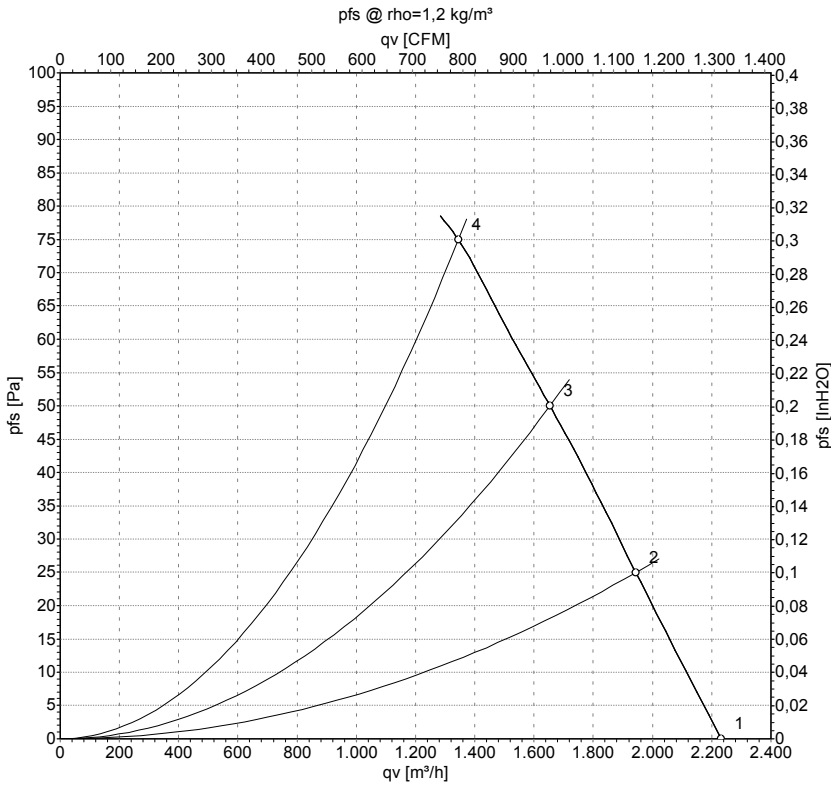
Measured values

	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	inH ₂ O
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



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	inH ₂ O
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

