

AC axial fan

sickle-shaped blades (S series), single-intake
with guard grille for short nozzle

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S4E315-AS22-16		
Motor	M4E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		cs	cs
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1300	1390
Power consumption	W	95	125
Current draw	A	0.42	0.55
Capacitor	µF	3	3
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Max. back pressure	Pa	40	45
Max. back pressure	in. wg	0.16	0.18
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	40
Starting current	A	0.69	0.64

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



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Technical description

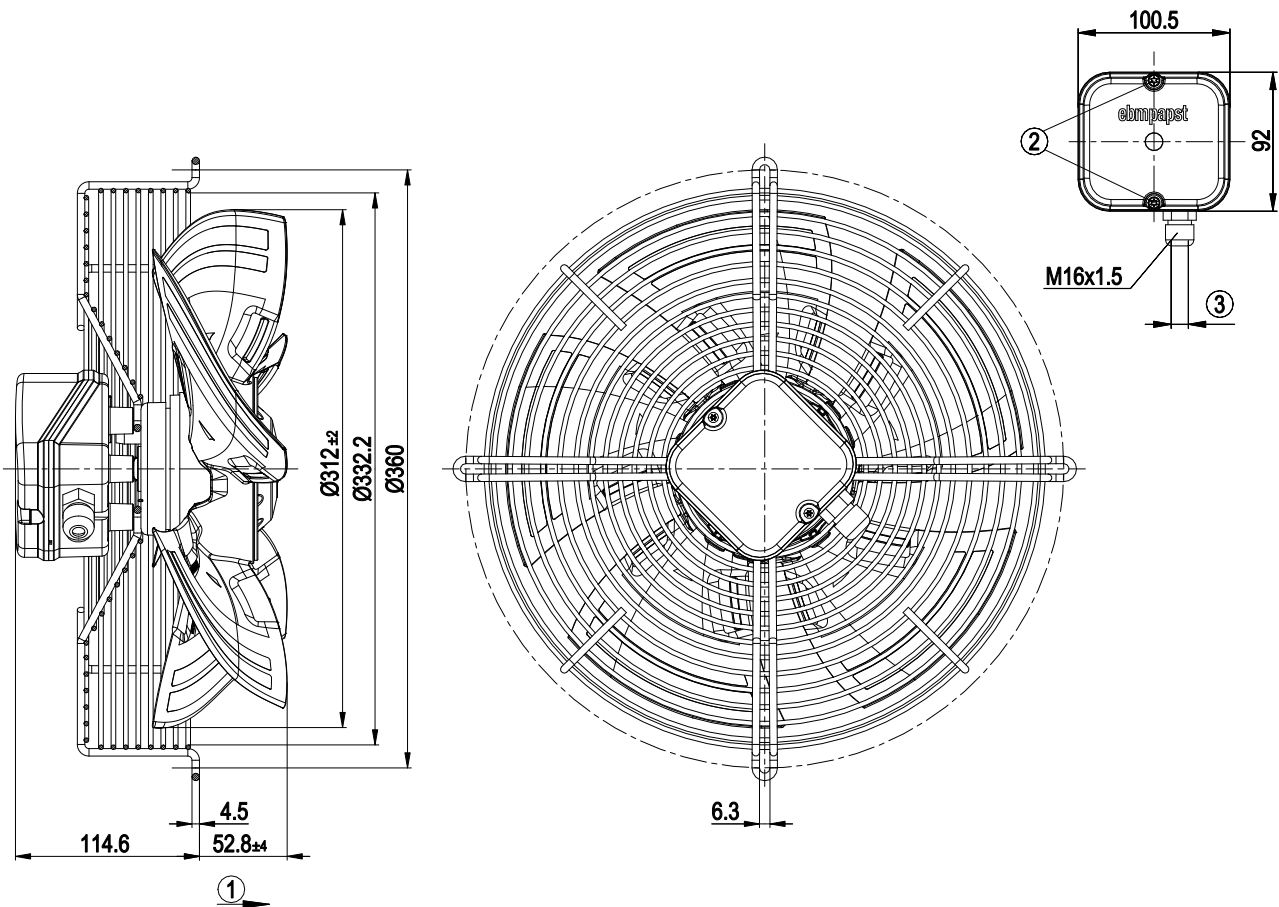
Weight	3.41 kg
Size	315 mm
Motor size	68
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
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	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box
Motor protection	Thermal overload protector (TOP) internally connected
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; UKCA; CE
Approval	EAC



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Product drawing

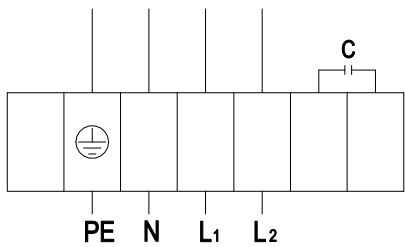


1	Direction of air flow "A"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter min. 4 mm, max. 10 mm, tightening torque 2.5 ± 0.4 Nm

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Connection diagram



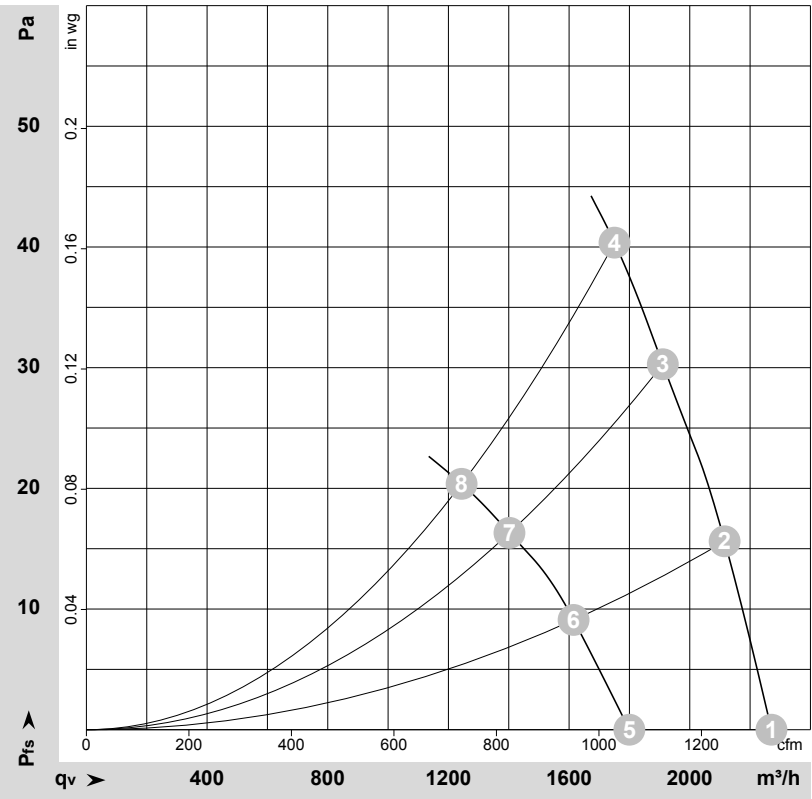
PE	green/yellow	N	blue	L1	black (high speed)
L2	white (low speed)	C	yellow	C	brown



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-166256-1
Measurement: LU-166390-1

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

	Stage	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	2	230	50	1340	86	0.38	2270	0	1335	0.00
2	2	230	50	1325	89	0.39	2115	15	1245	0.06
3	2	230	50	1310	92	0.40	1910	30	1125	0.12
4	2	230	50	1300	95	0.42	1750	40	1030	0.16
5	1	230	50	1065	79	0.35	1800	0	1060	0.00
6	1	230	50	1015	82	0.36	1615	9	950	0.04
7	1	230	50	965	84	0.37	1400	16	825	0.06
8	1	230	50	925	86	0.37	1245	20	730	0.08

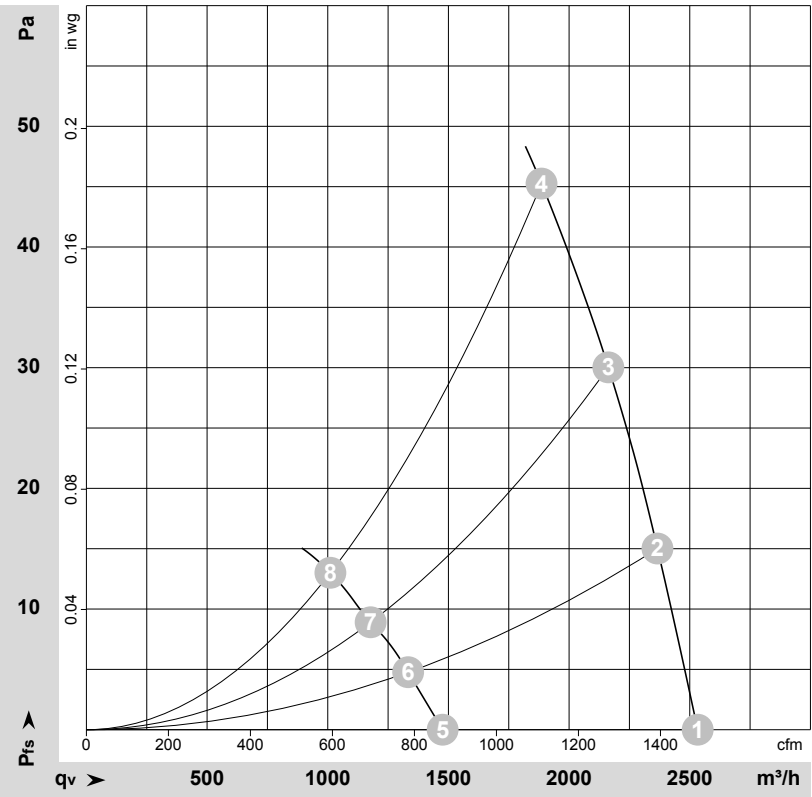
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-166382-1
Measurement: LU-166393-1

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

	Stage	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	2	230	60	1495	115	0.50	2535	0	1490	0.00
2	2	230	60	1465	117	0.51	2365	15	1395	0.06
3	2	230	60	1430	120	0.52	2165	30	1275	0.12
4	2	230	60	1390	125	0.55	1885	45	1110	0.18
5	1	230	60	875	87	0.38	1475	0	870	0.00
6	1	230	60	830	86	0.38	1335	5	785	0.02
7	1	230	60	790	88	0.39	1180	9	695	0.04
8	1	230	60	745	87	0.39	1010	13	595	0.05

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

