AC axial fan

sickle-shaped blades (S series)

with support ring

S4S200-EI04-06 ebmpapst Datasheet
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Nominal data

Type	**S4S200-EI04-06**
Motor	**M4S068-BF**

Phase		1~	1~	1~	1~
Nominal voltage	VAC	115	115	230	230
Frequency	Hz	50	60	50	60
Method of obtaining data		fa	fa/ce	fa	fa
Valid for approval/standard		CE	UL	CE	UL
Speed (rpm)	min^{-1}	1240	1400	1240	1400
Power consumption	W	27	26	27	26
Current draw	A	0.38	0.35	0.2	0.18
Max. back pressure	Pa	20	23	20	23
Max. back pressure	inH2O	0.08	0.09	0.08	0.09
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	65	75	65	75
Starting current	A	0.49	0.42	0.25	0.21

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	1.5 kg
Fan size	200 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	9
Airflow direction	"A"
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
Speed levels	Dual-voltage
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 No. 77

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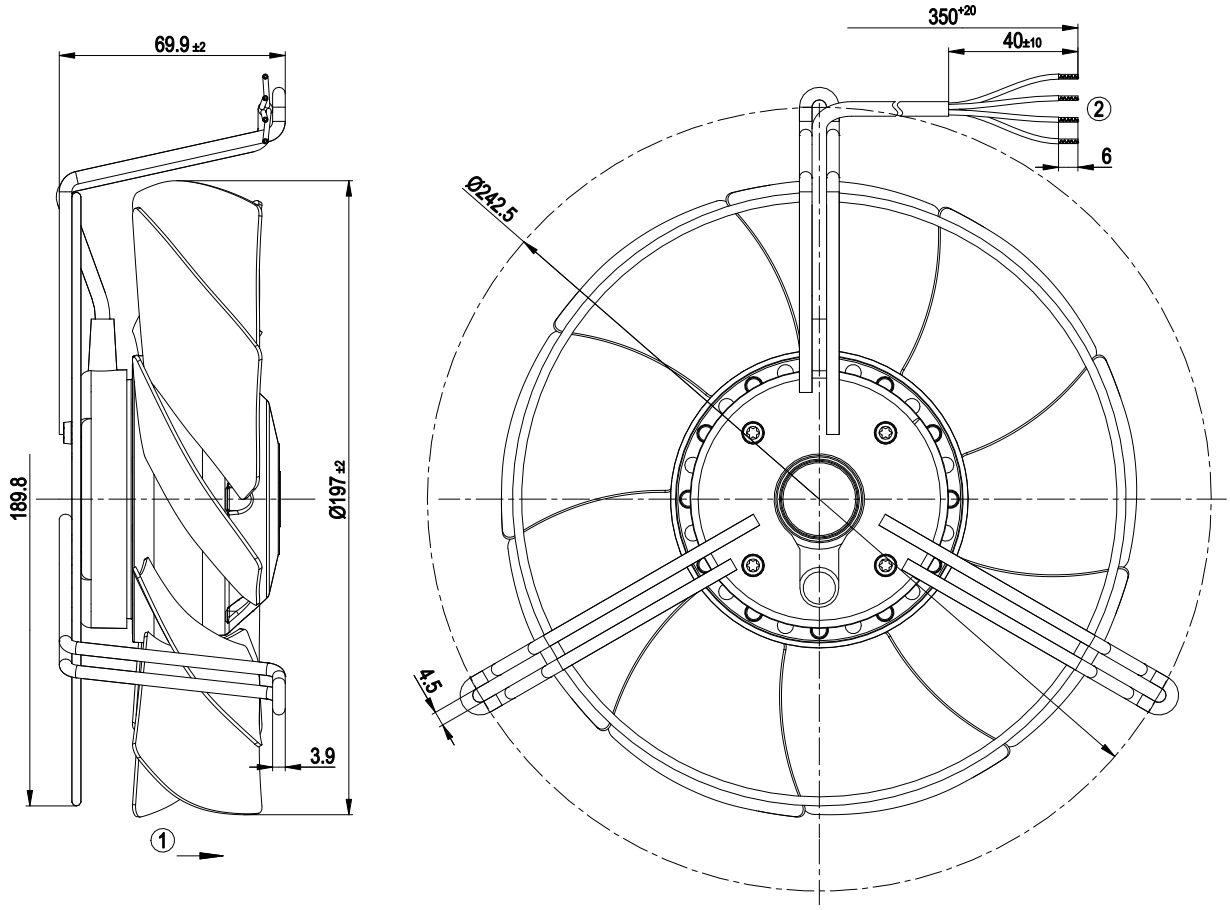
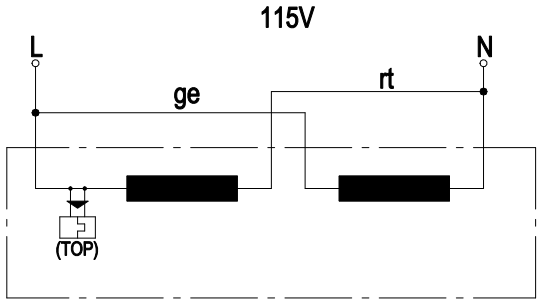
Product drawing



1	Direction of air flow "A"
2	Cable PFA AWG20, 4x crimped splices

Connection diagram



	115 V	L	black + yellow	N	blue + red

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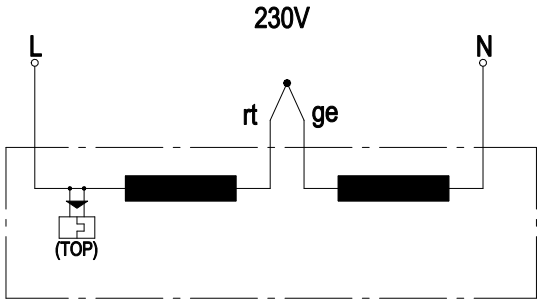
Connection diagram 2



	230 V	L	black	N	blue
	red + yellow				

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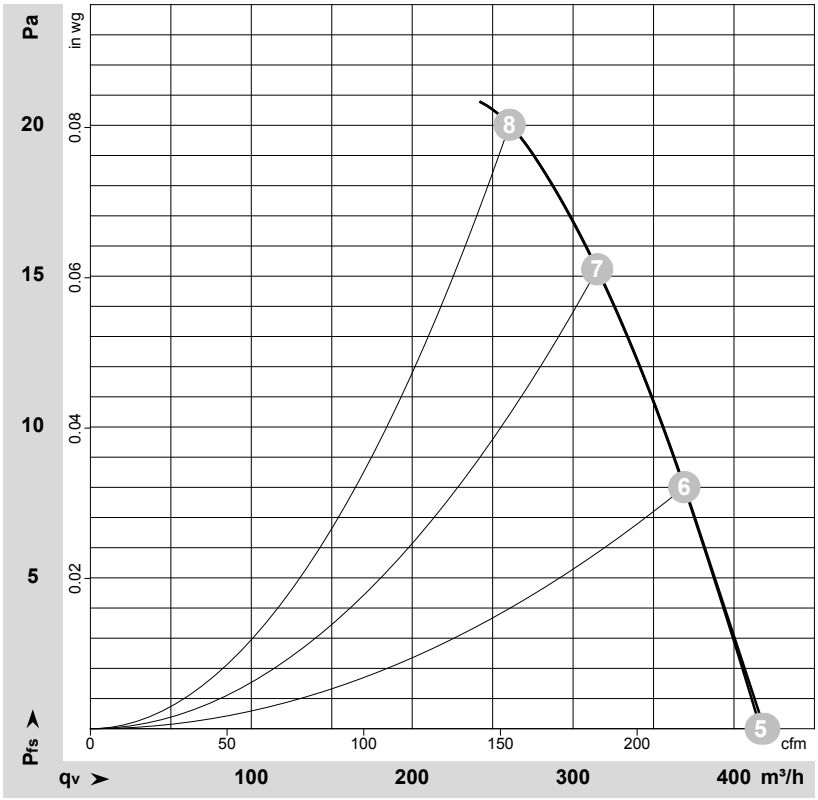
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-60742-1
Measurement: LU-60740-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1240	27	0.20	420	0	245	0.00
2	230	50	1215	28	0.20	370	8	215	0.03
3	230	50	1195	28	0.20	315	15	185	0.06
4	230	50	1180	29	0.20	260	20	155	0.08
5	115	50	1240	27	0.38	415	0	245	0.00
6	115	50	1220	27	0.38	370	8	215	0.03
7	115	50	1195	28	0.39	315	15	185	0.06
8	115	50	1185	28	0.39	260	20	155	0.08

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

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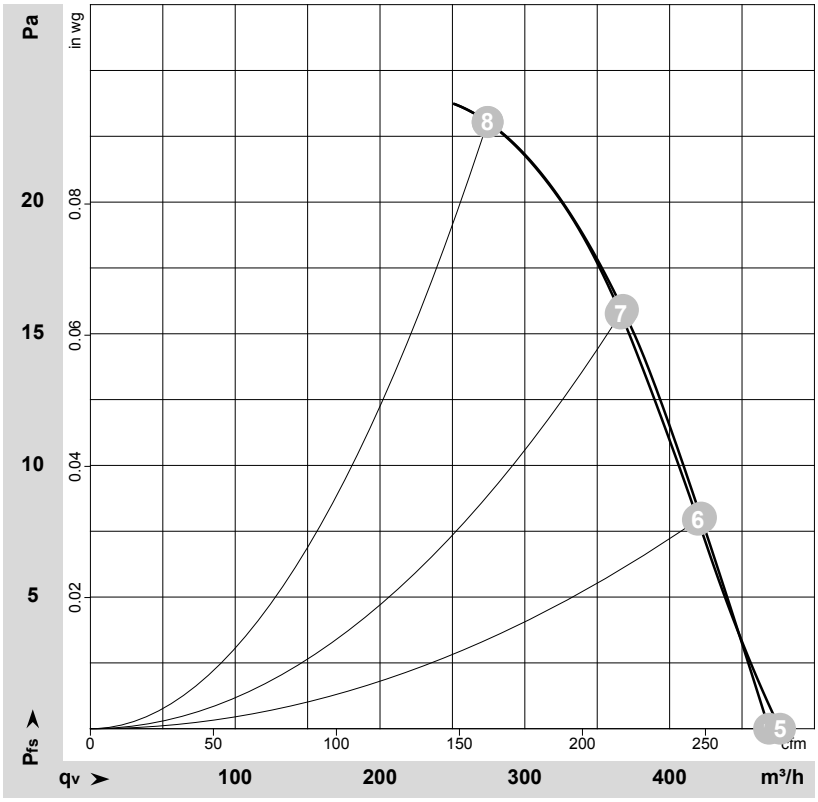
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-60743-1
Measurement: LU-60741-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	60	1400	24	0.17	470	0	275	0.00
2	230	60	1360	25	0.17	420	8	250	0.03
3	230	60	1320	26	0.17	370	16	215	0.06
4	230	60	1270	26	0.17	275	23	160	0.09
5	115	60	1400	24	0.33	475	0	280	0.00
6	115	60	1360	25	0.34	420	8	245	0.03
7	115	60	1315	26	0.34	365	16	215	0.06
8	115	60	1270	26	0.35	275	23	160	0.09

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