AC axial fan

sickled blades (S series)

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**A4S200-AH04-09**
Motor	**M4S068-BF**

Phase		1~	1~	1~	1~	1~	1~	1~
Nominal voltage	VAC	115	115	115	230	230	240	277
Nominal voltage range	VAC	90 .. 115		90 .. 115	190 .. 240			
Frequency	Hz	50	60	60	50	60	60	60
Type of data definition		fa	fa	fa	fa	fa	fa	fa
Valid for approval / standard		CE	UL 2111	CE	CE	UL 2111	UL 2111	UL 1004-1
Speed (rpm)	min^{-1}	1350	1400	1550	1350	1400	1500	
Power input	W	27	26	28	33	26	26	
Current draw	A	0.4	0.35	0.38	0.23	0.18	0.18	
Max. back pressure	Pa	25	23	30	25	23	32	
Min. ambient temperature	°C	-25	-25	-25	-25	-25	-25	-25
Max. ambient temperature	°C	65	75	75	65	75	75	-
Starting current	A	0.6	0.42	0.52	0.33	0.21	0.28	

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	1.2 kg
Size	200 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Number of blades	9
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0+
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)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Lateral
Protection class	I (if protective earth is connected by customer at the connection point of the housing)
Product conforming to standard	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 No.77

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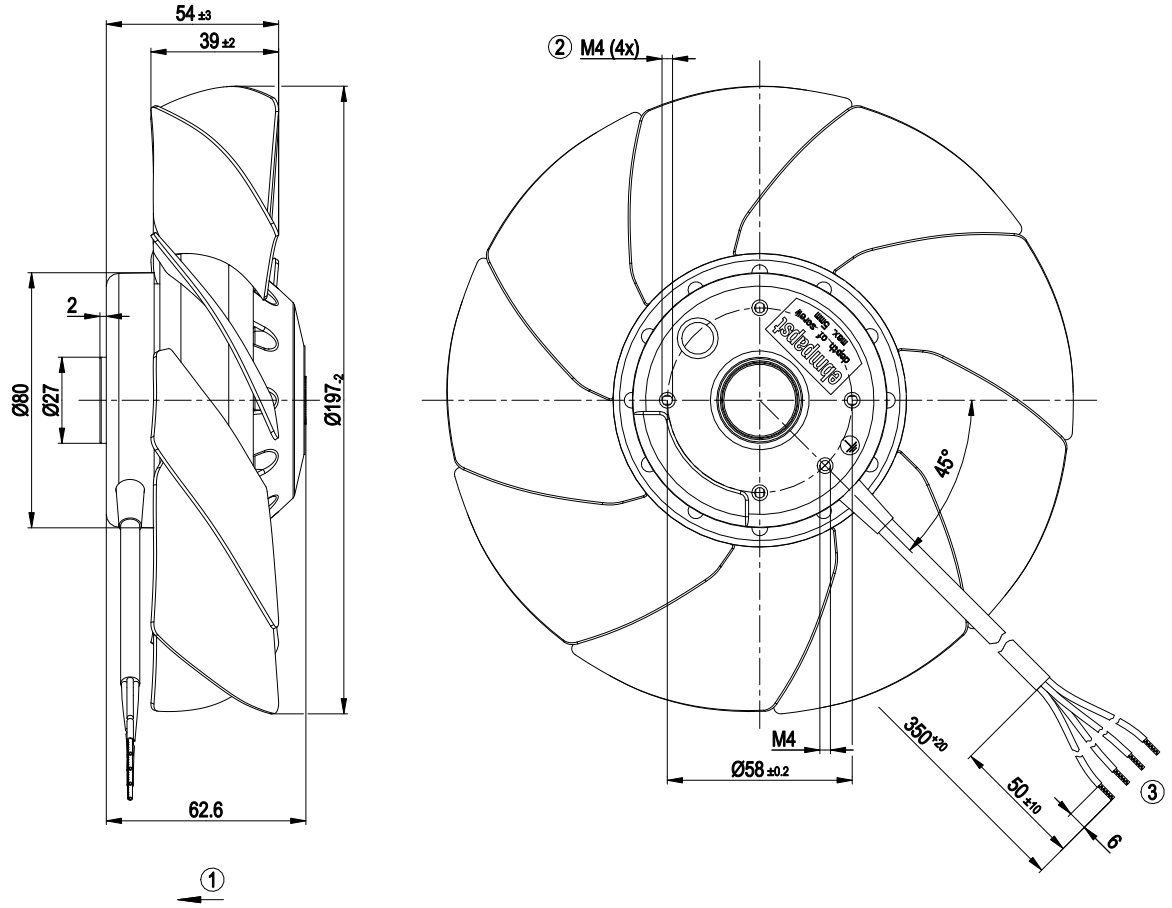
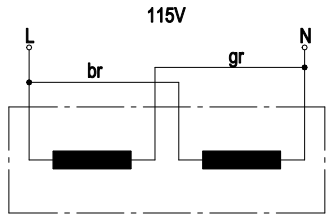
Product drawing



1	Direction of air flow "V"
2	Thread reach max. 5 mm
3	Connection line PFA AWG20, 4x lead tips crimped

Connection screen



	115 V	L	black + brown	N	blue + grey

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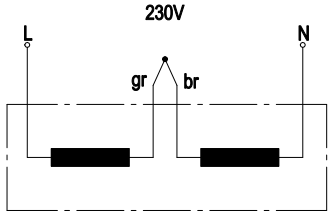
Connection screen 2



	230 V	L	black	N	blue
	brown + grey				

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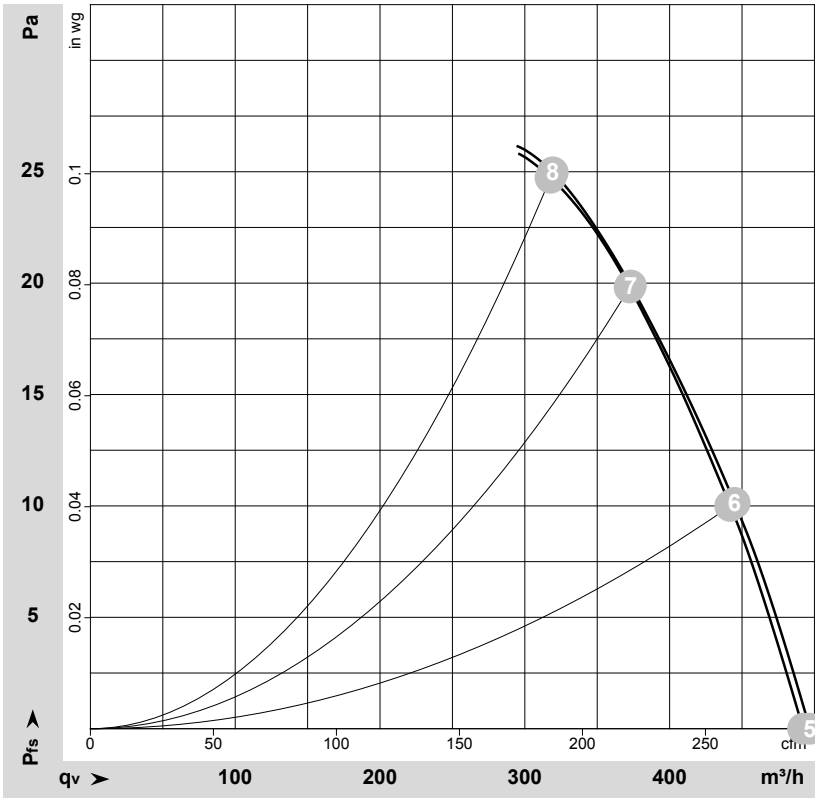
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-173301-1
Measurement: LU-173310-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1350	33	0.23	490	0	290	0.00
2	230	50	1330	31	0.22	440	10	260	0.04
3	230	50	1320	31	0.22	370	20	220	0.08
4	230	50	1315	31	0.22	320	25	185	0.10
5	115	50	1350	27	0.40	495	0	295	0.00
6	115	50	1335	29	0.40	445	10	260	0.04
7	115	50	1320	30	0.41	375	20	220	0.08
8	115	50	1315	30	0.41	320	25	190	0.10

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

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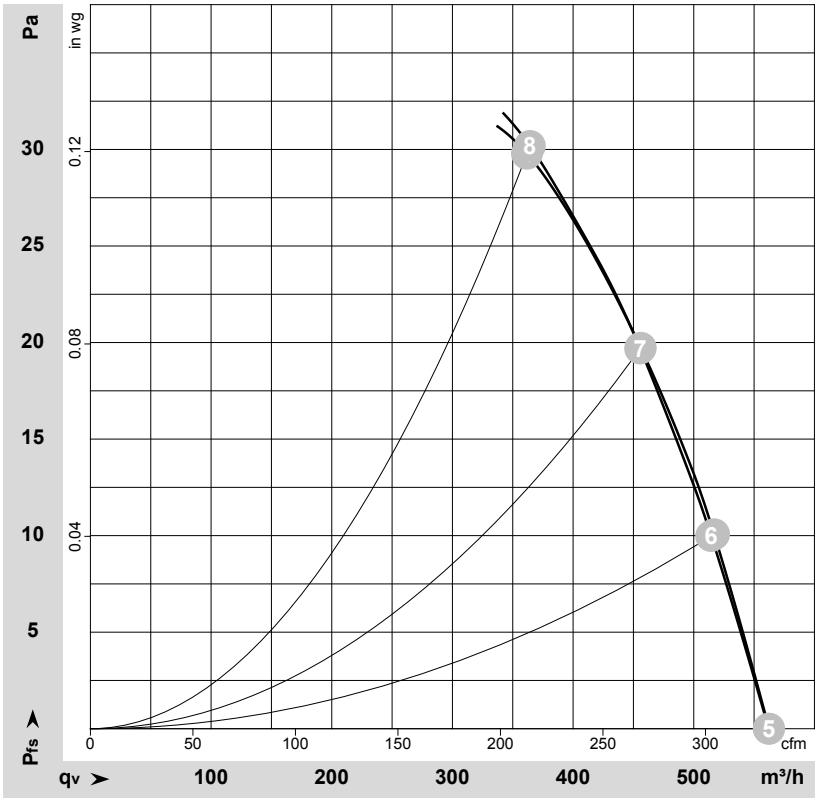
Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-173306-1
Measurement: LU-173311-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	60	1530	29	0.19	560	0	330	0.00
2	230	60	1505	29	0.20	515	10	305	0.04
3	230	60	1475	30	0.20	455	20	270	0.08
4	230	60	1455	30	0.20	360	30	215	0.12
5	115	60	1550	28	0.38	560	0	330	0.00
6	115	60	1510	28	0.38	515	10	305	0.04
7	115	60	1485	29	0.39	455	20	270	0.08
8	115	60	1465	29	0.39	365	30	215	0.12

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