S4E315-AS20-74

AC axial fan

sickle-shaped blades (S series), single-intake

with guard grille for short nozzle

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Nominal data

Type	**S4E315-AS20-74**
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}	1350	1490	1490
Power consumption	W	110	155	148
Current draw	A	0.52	0.66	0.66
Capacitor	µF	3	3	3
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	UL	S0 (CE)
Max. back pressure	Pa	70	85	85
Max. back pressure	inH2O	0.28	0.34	0.34
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	65	70	70
Starting current	A	1.2		1.18

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

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Technical description

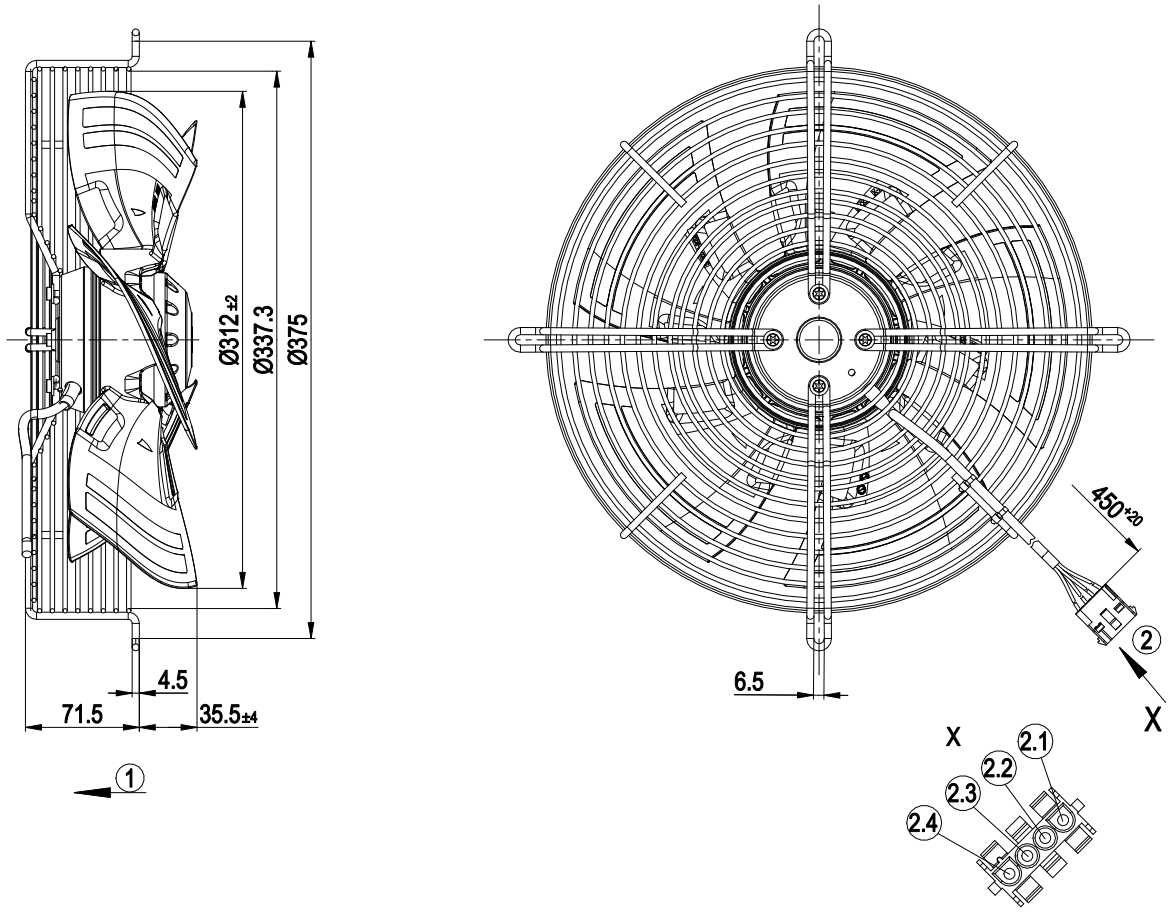
Weight	3.2 kg
Fan size	315 mm
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2
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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 1004-3

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Product drawing



1	Direction of air flow "V"
2	Cable silicone 4G 0.5 mm², 4-pole connector housing tyco 926305-7, 4x plug pin tyco 926885-1
2.1	PE (green/yellow)
2.2	N (black)
2.3	L (blue)
2.4	Z (brown)

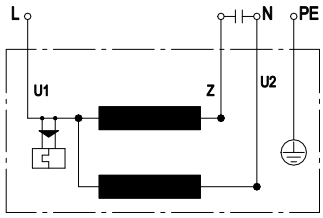
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Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

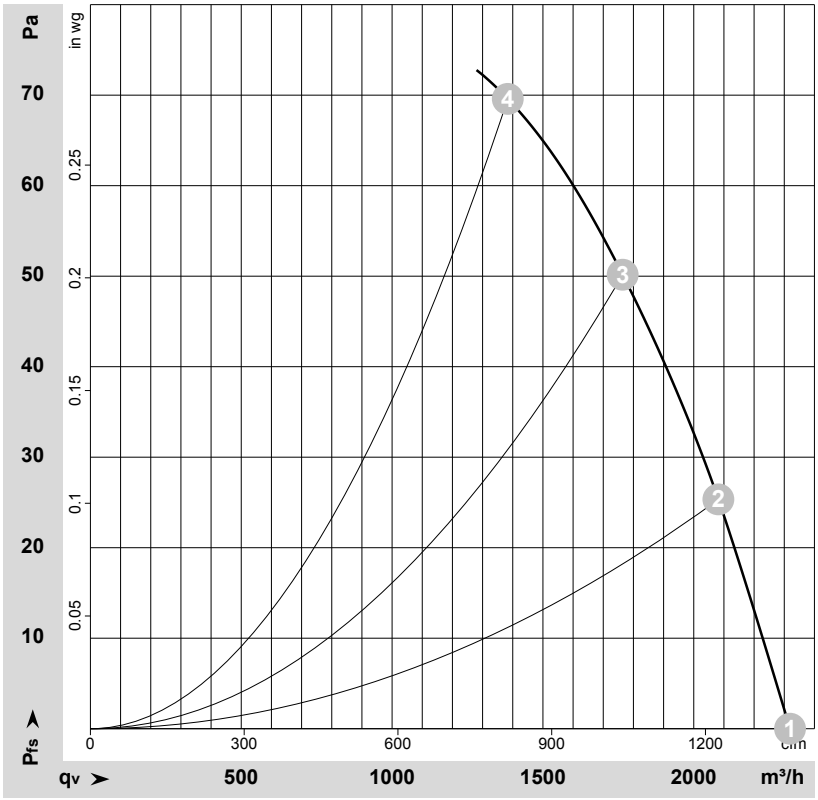
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-159582-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	1390	96	0.48	58	64	2320	0	1365	0.00
2	230	50	1380	101	0.49	55	61	2080	25	1225	0.10
3	230	50	1365	105	0.51	51	59	1765	50	1040	0.20
4	230	50	1350	110	0.52	53	61	1385	70	815	0.28

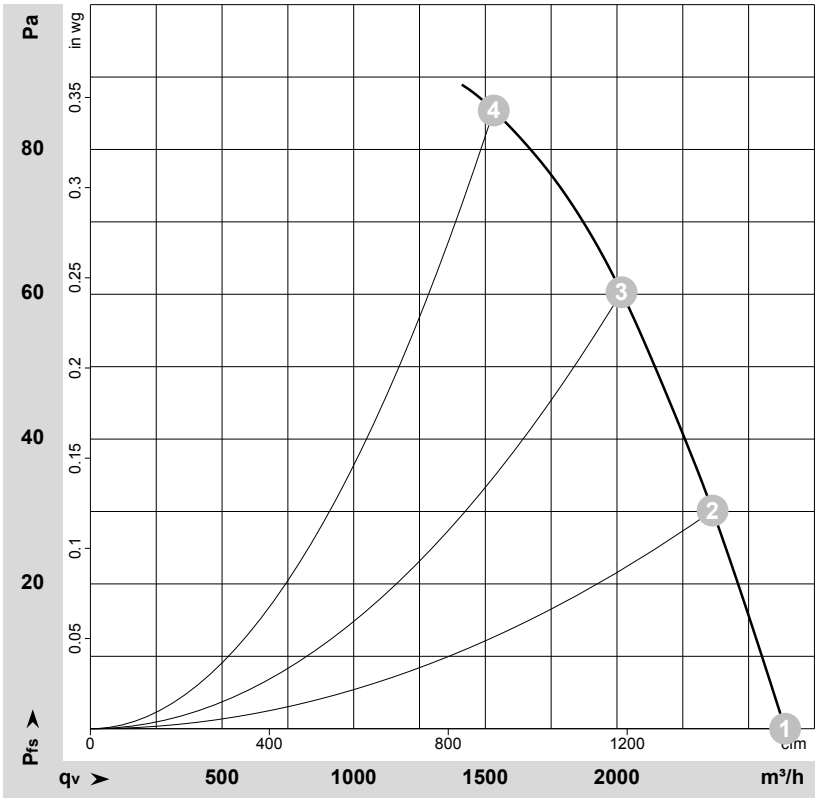
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-159796-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	60	1590	121	0.53	60	67	2640	0	1555	0.00
2	230	60	1560	130	0.57	58	64	2365	30	1390	0.12
3	230	60	1530	137	0.60	55	61	2015	60	1185	0.24
4	230	60	1490	148	0.66	60	68	1530	85	900	0.34

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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