S4E315-BP18-31

AC axial fan

sickle-shaped blades (S series)

with guard grille for full nozzle

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Nominal data

Type	**S4E315-BP18-31**
Motor	**M4E068-DF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1410	1650
Power consumption	W	102	120
Current draw	A	0.52	0.53
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	120	120
Max. back pressure	inH2O	0.48	0.48
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	55
Starting current	A	1.4	1.3

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	3.3 kg
Fan size	315 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, 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	F1-2
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
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	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

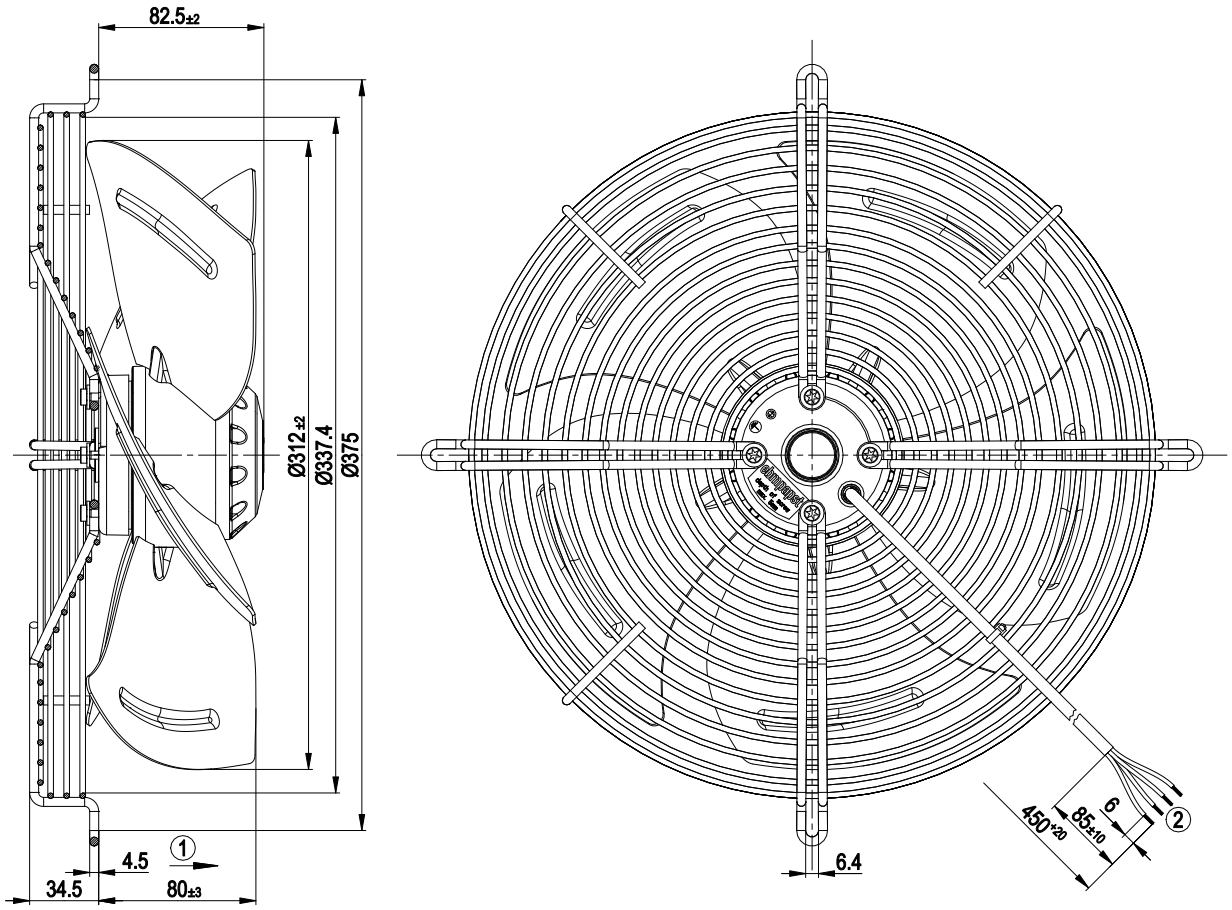
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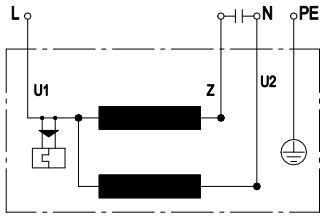
with guard grille for full nozzle

Product drawing



1	Direction of air flow "A"
2	Cable PVC 4G 0.5 mm², 4x crimped splices

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

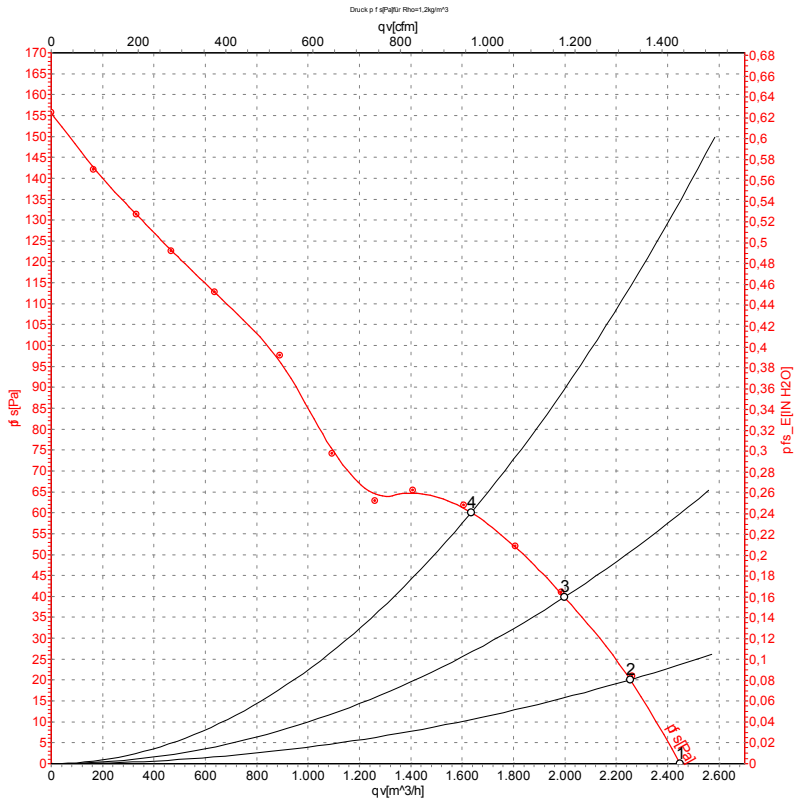
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Curves: Air performance 50 Hz



Measurement: LU-32939-1

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	1410	102	0.52	2450	0	1440	0.00
2	230	50	1410	107	0.53	2255	20	1325	0.08
3	230	50	1395	112	0.54	2000	40	1175	0.16
4	230	50	1380	120	0.56	1635	60	965	0.24

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

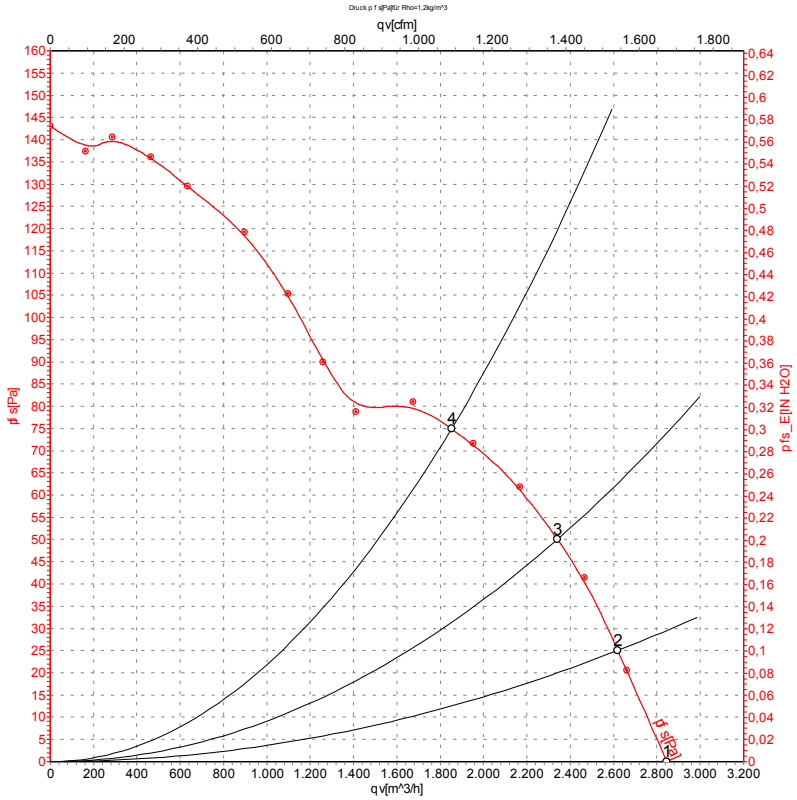
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Curves: Air performance 60 Hz



Measurement: LU-32940-1

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	1650	120	0.53	2845	0	1675	0.00
2	230	60	1635	128	0.55	2620	25	1540	0.10
3	230	60	1610	137	0.60	2340	50	1375	0.20
4	230	60	1570	153	0.66	1850	75	1090	0.30

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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