

# AC axial fan

sickle-shaped blades (S series)

with guard grille for full nozzle

S4E350-BN19-70 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Limited partnership · Headquarters Muldingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

<b>Type</b>	<b>S4E350-BN19-70</b>		
<b>Motor</b>	<b>M4E074-DF</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min <sup>-1</sup>	1270	1350
Power consumption	W	158	200
Current draw	A	0.70	0.88
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	80	60
Max. back pressure	inH <sub>2</sub> O	0.32	0.24
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	45
Starting current	A	1.1	1.11

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



# AC axial fan

sickle-shaped blades (S series)  
with guard grille for full nozzle

## Technical description

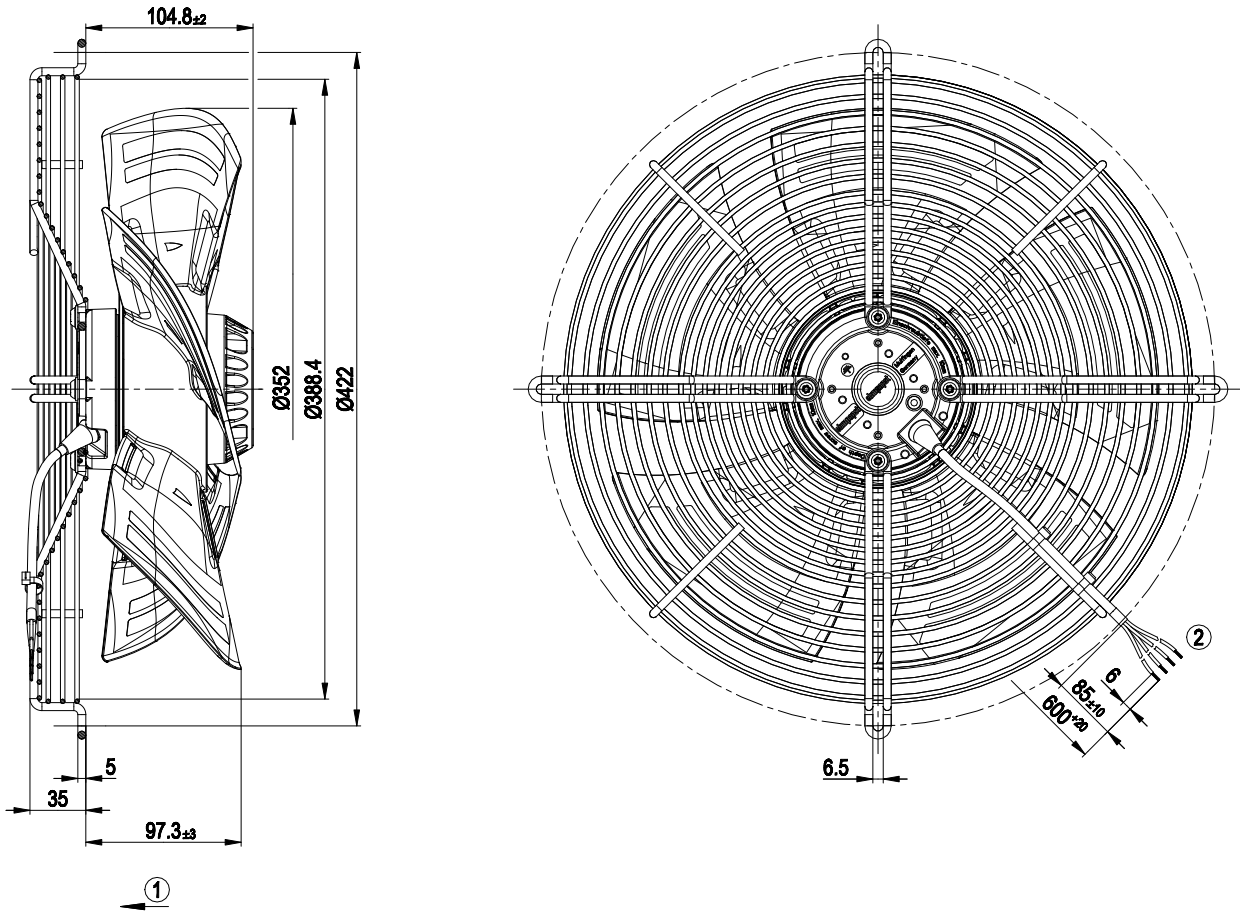
Weight	4.24 kg
Fan size	350 mm
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	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
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
Approval	UL 1004-1; CSA C22.2 No. 100



# AC axial fan

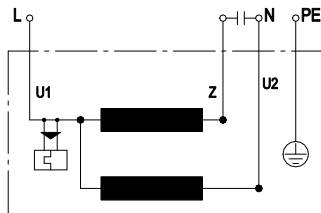
sickle-shaped blades (S series)  
with guard grille for full nozzle

## Product drawing



- |   |   |
|---|---|
| 1 | Direction of air flow "V"                                       |
| 2 | Cable PFA 3x AWG20, 1x AWG18 (green/yellow); 4x crimped splices |

## Connection diagram



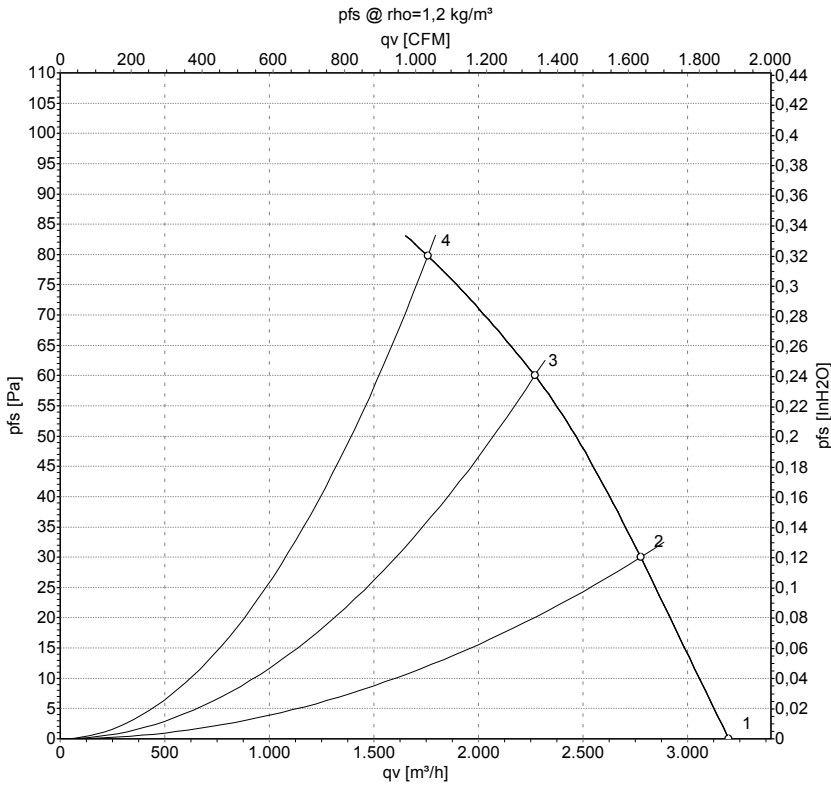
U1	blue	Z	brown	U2	black
PE	green/yellow				



# AC axial fan

sickle-shaped blades (S series)  
with guard grille for full nozzle

## Curves: Air performance 50 Hz



Measurement: LU-134319-1

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 <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	50	1355	134	0.60	3200	0	1885	0.00
2	230	50	1330	142	0.63	2775	30	1635	0.12
3	230	50	1305	151	0.66	2270	60	1335	0.24
4	230	50	1270	158	0.70	1760	80	1035	0.32

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

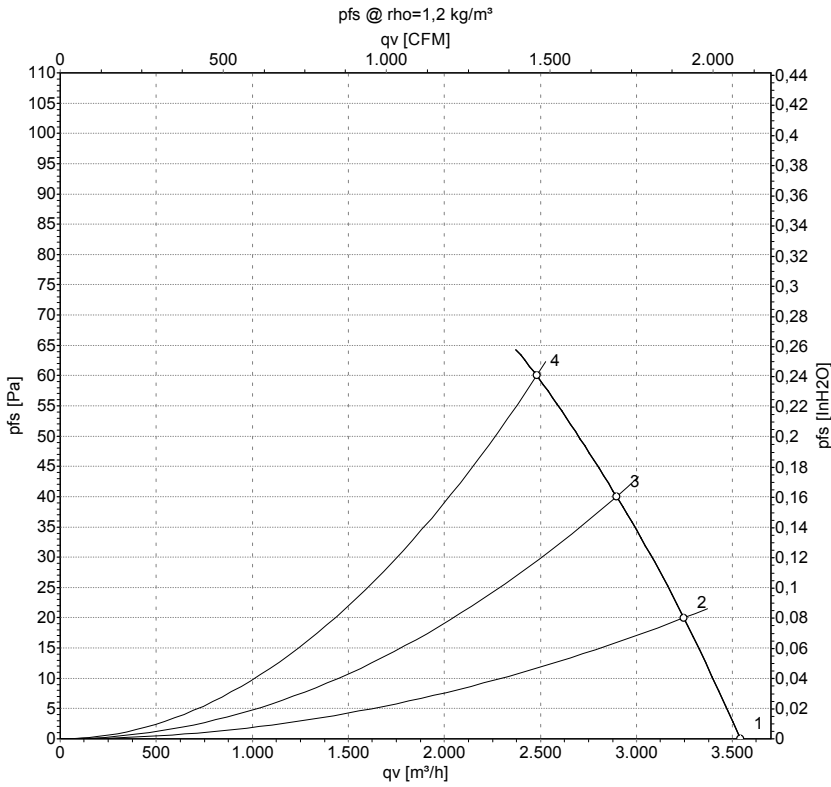


# AC axial fan

sickle-shaped blades (S series)

with guard grille for full nozzle

## Curves: Air performance 60 Hz



Measurement: LU-134321-1

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 <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	60	1500	183	0.80	3540	0	2085	0.00
2	230	60	1465	189	0.82	3245	20	1910	0.08
3	230	60	1420	194	0.84	2895	40	1705	0.16
4	230	60	1350	200	0.88	2480	60	1460	0.24

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

