

S4D350-BN08-36 ebmpapst Datasheet

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## Nominal data

Type	S4D350-BN08-36				
Motor	M4D074-DF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min <sup>-1</sup>	1370	1520	1370	1520
Power consumption	W	170	230	170	230
Current draw	A	0.64	0.70	0.37	0.40
Max. back pressure	Pa	90	90	90	90
Max. back pressure	inH <sub>2</sub> O	0.36	0.36	0.36	0.36
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	65	55	65	55
Starting current	A	1.9	1.9	1.1	1.1

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

## Data according to ErP Directive

		Actual	Req. 2015			
01 Overall efficiency $\eta_{es}$	%	28.7	28.6	09 Power consumption $P_e$	kW	0.16
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	2105
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	82
04 Efficiency grade N		40.1	40	10 Speed (rpm) n	min <sup>-1</sup>	1375
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.  
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

\* Specific ratio =  $1 + p_{fs} / 100\,000\text{ Pa}$ 

LU-131044



# AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

## Technical description

<b>Weight</b>	4.8 kg
<b>Fan size</b>	350 mm
<b>Rotor surface</b>	Painted black
<b>Blade material</b>	PP plastic
<b>Guard grille material</b>	Steel, coated with black plastic (RAL 9005)
<b>Number of blades</b>	5
<b>Airflow direction</b>	"V"
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"F"
<b>Moisture (F) / Environmental (H) protection class</b>	F2-2
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) with basic insulation
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE



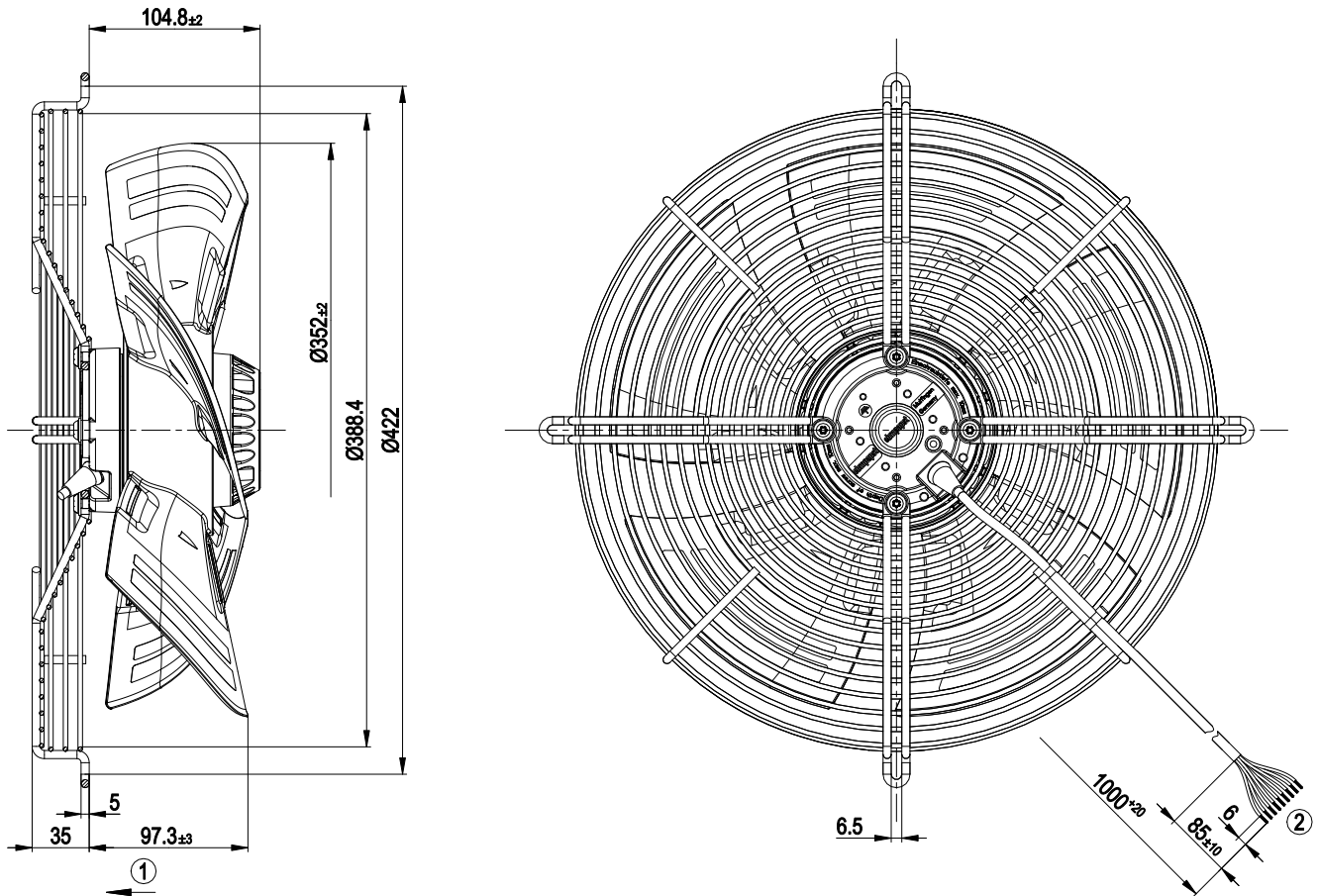
S4D350-BN08-36

# AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

## Product drawing



- |   |  |
|---|--|
| 1 | Direction of air flow "V"                                  |
| 2 | Cable silicone 9G 0.5 mm <sup>2</sup> , 4x crimped splices |

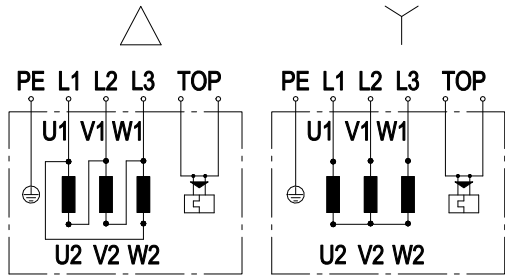


# AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

## Connection diagram



Note: Change of rotation direction by reversing two phases

Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2x gray
PE	green/yellow				

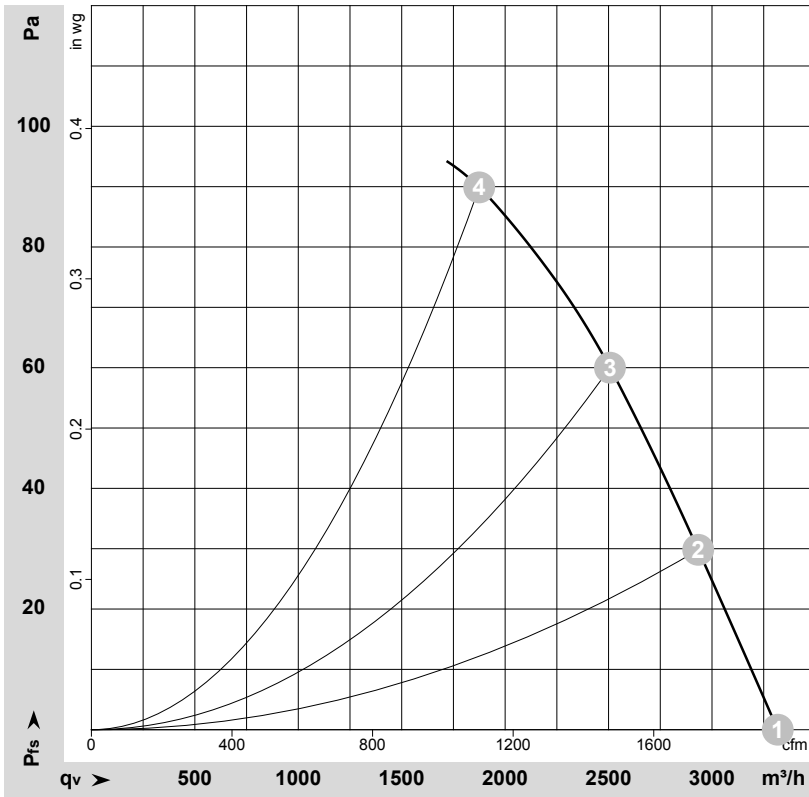


# AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-131044-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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

	Wired	U	f	n	P <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	P <sub>fs</sub>	qv	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	Y	400	50	1405	136	0.34	61	69	3320	0	1955	0.00
2	Y	400	50	1395	148	0.35	59	66	2935	30	1725	0.12
3	Y	400	50	1380	158	0.35	56	64	2505	60	1475	0.24
4	Y	400	50	1370	170	0.37	56	64	1875	90	1105	0.36

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
 qv = Air flow · P<sub>fs</sub> = Pressure increase

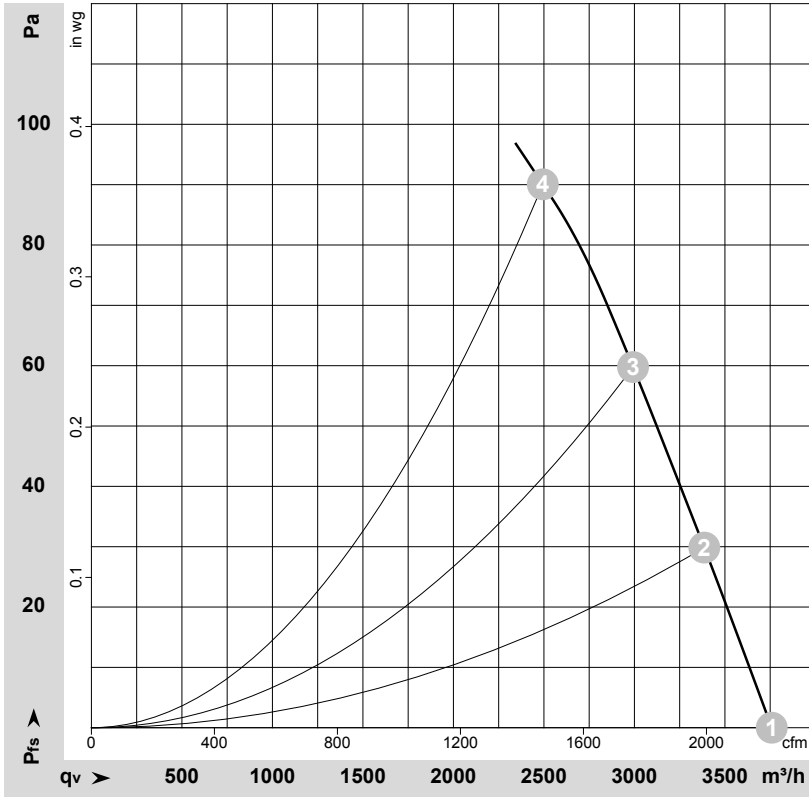


# AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

## Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-131047-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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

	Wired	U	f	n	P <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	P <sub>fs</sub>	qv	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	Y	400	60	1595	184	0.33	64	72	3760	0	2210	0.00
2	Y	400	60	1575	200	0.35	62	69	3385	30	1995	0.12
3	Y	400	60	1550	215	0.37	60	67	2995	60	1760	0.24
4	Y	400	60	1520	230	0.40	58	66	2495	90	1470	0.36

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
 qv = Air flow · P<sub>fs</sub> = Pressure increase

