

# AC axial fan

sickle-shaped blades (S series)

with guard grille for full nozzle

S4D350-BN24-26 ebmpapst Datasheet

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## Nominal data

Type	S4D350-BN24-26				
Motor	M4D074-DF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	460
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>	1120	1050	1120	1200
Power consumption	W	110	140	110	165
Current draw	A	0.33	0.41	0.19	0.24
Max. back pressure	Pa	43	40	43	50
Max. back pressure	in. wg	0.17	0.16	0.17	0.2
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	65	60	65	55
Starting current	A	0.6	0.6	0.35	0.36

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



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## Technical description

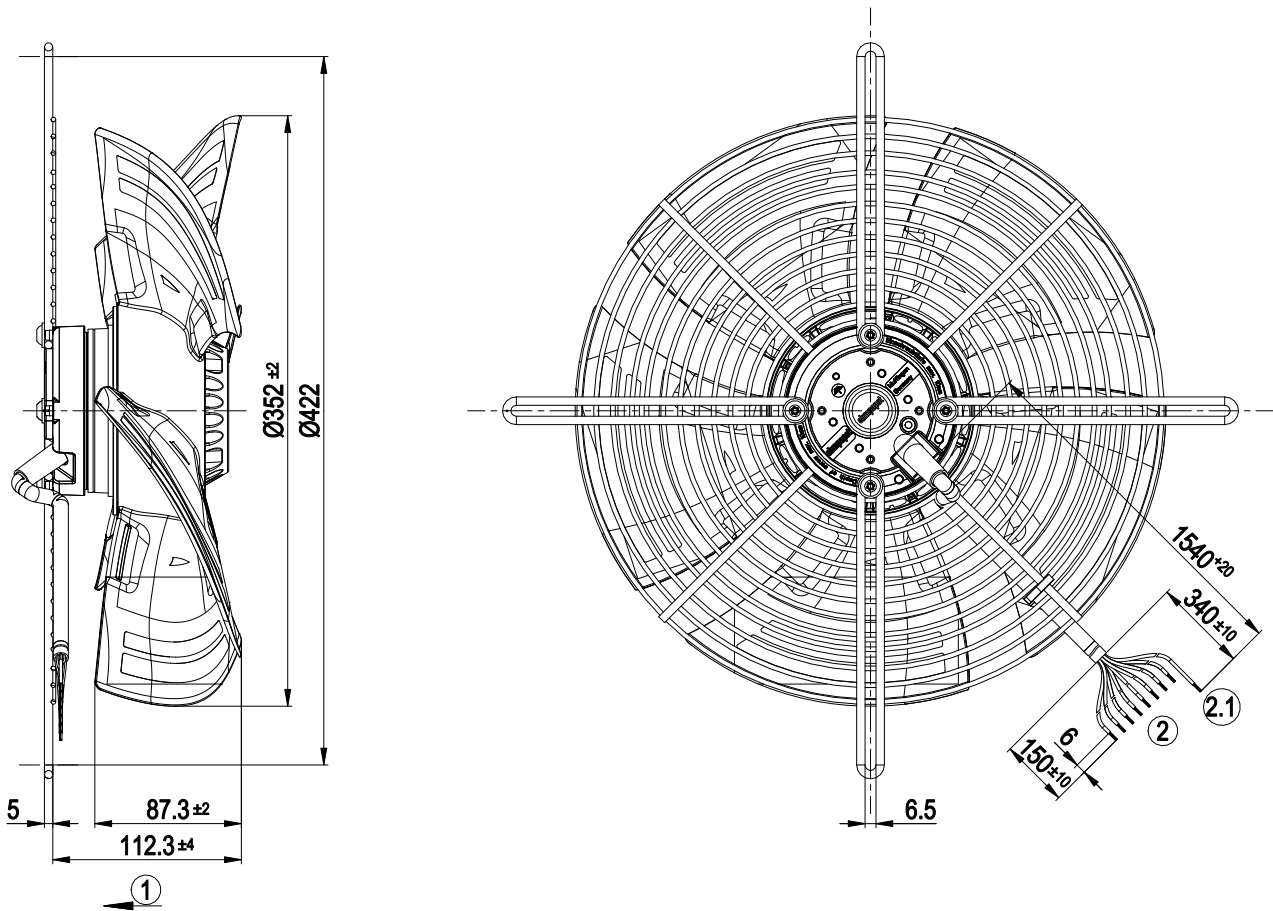
Weight	4 kg
Size	350 mm
Motor size	74
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
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) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1; CCC



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## Product drawing



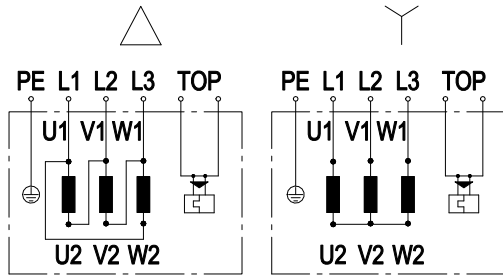
1	Airflow direction "V"
2	Cable PFA AWG20 (green/yellow AWG18)
	9x splice
2.1	PE (green/yellow)



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## Connection diagram



Note: Change of rotation direction by reversing two phases

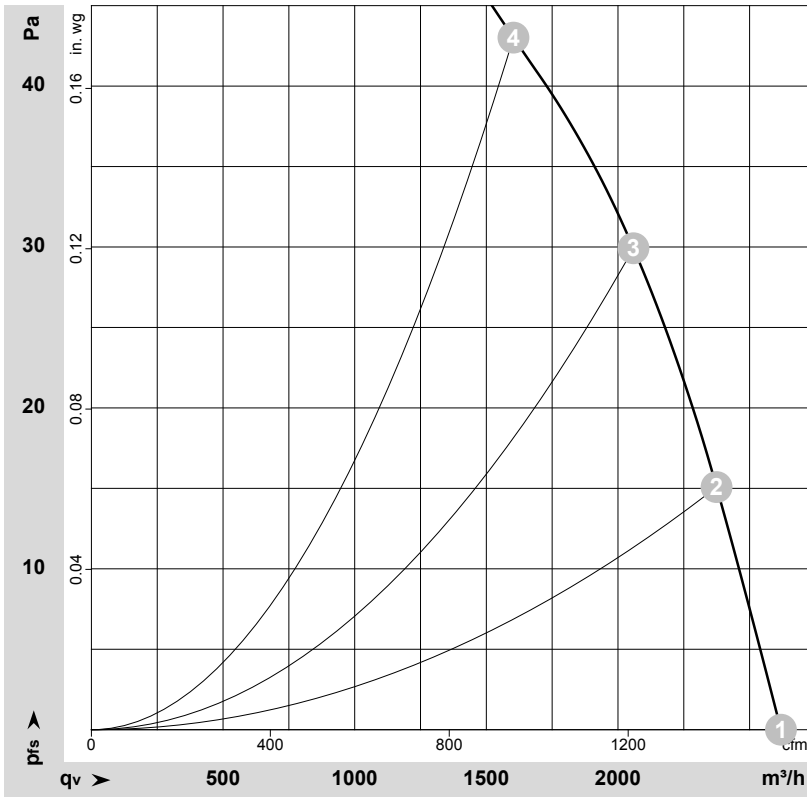
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2x gray
PE	green/yellow				



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## Curves: Air performance 50 Hz



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

Measurement: LU-183474-1

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	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	Y	400	50	1180	98	0.16	2620	0	1540	0.00
2	Y	400	50	1160	102	0.16	2375	15	1395	0.06
3	Y	400	50	1140	106	0.17	2060	30	1210	0.12
4	Y	400	50	1120	110	0.19	1605	43	945	0.17

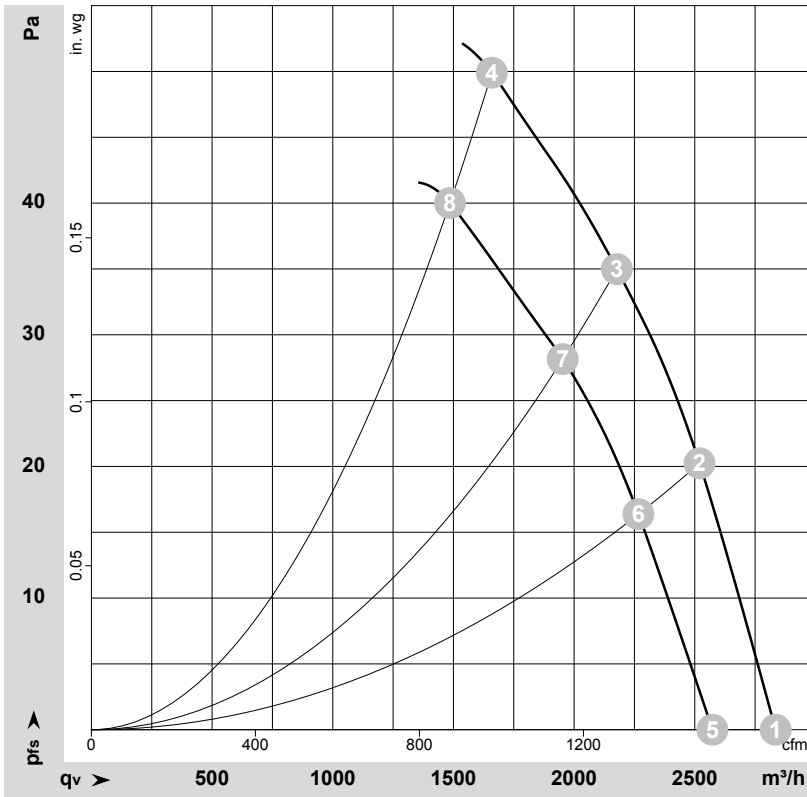
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase



# AC axial fan

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## Curves: Air performance 60 Hz



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

Measurement: LU-183476-1  
Measurement: LU-183473-1

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

	Wired	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	Y	460	60	1285	148	0.20	2835	0	1670	0.00
2	Y	460	60	1245	155	0.21	2520	20	1485	0.08
3	Y	460	60	1215	159	0.22	2175	35	1280	0.14
4	Y	460	60	1200	165	0.24	1660	50	975	0.20
5	Δ	230	60	1165	129	0.36	2575	0	1515	0.00
6	Δ	230	60	1125	133	0.37	2265	16	1335	0.06
7	Δ	230	60	1090	136	0.38	1955	28	1150	0.11
8	Δ	230	60	1050	140	0.41	1485	40	875	0.16

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

