

AC axial fan

sickled blades (S series)
with guard grille for short nozzle

S4D350-AR06-80 ebmpapst Datasheet
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Nominal data

Type	S4D350-AR06-80				
Motor	M4D068-EC				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE
Speed	min ⁻¹	1420	1620	1420	1620
Power input	W	135	185	135	185
Current draw	A	0.73	0.64	0.42	0.37
Max. back pressure	Pa	120	145	120	145
Max. ambient temperature	°C	60	45	60	45
Starting current	A	1.15	1.15	1.15	1.15

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

		Actual	Request 2013	Request 2015	
Installation category	A	Overall efficiency η_{es}	29.4	24.8	28.8
Efficiency category	Static	Efficiency grade N	40.6	36	40
Variable speed drive	No	Power input P_e	kW	0.17	
Specific ratio*	1.00	Air flow q_v	m³/h	2100	
		Pressure increase p_{fs}	Pa	89	
		Speed n	min ⁻¹	1380	

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

Data established at point of optimum efficiency

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



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Technical features

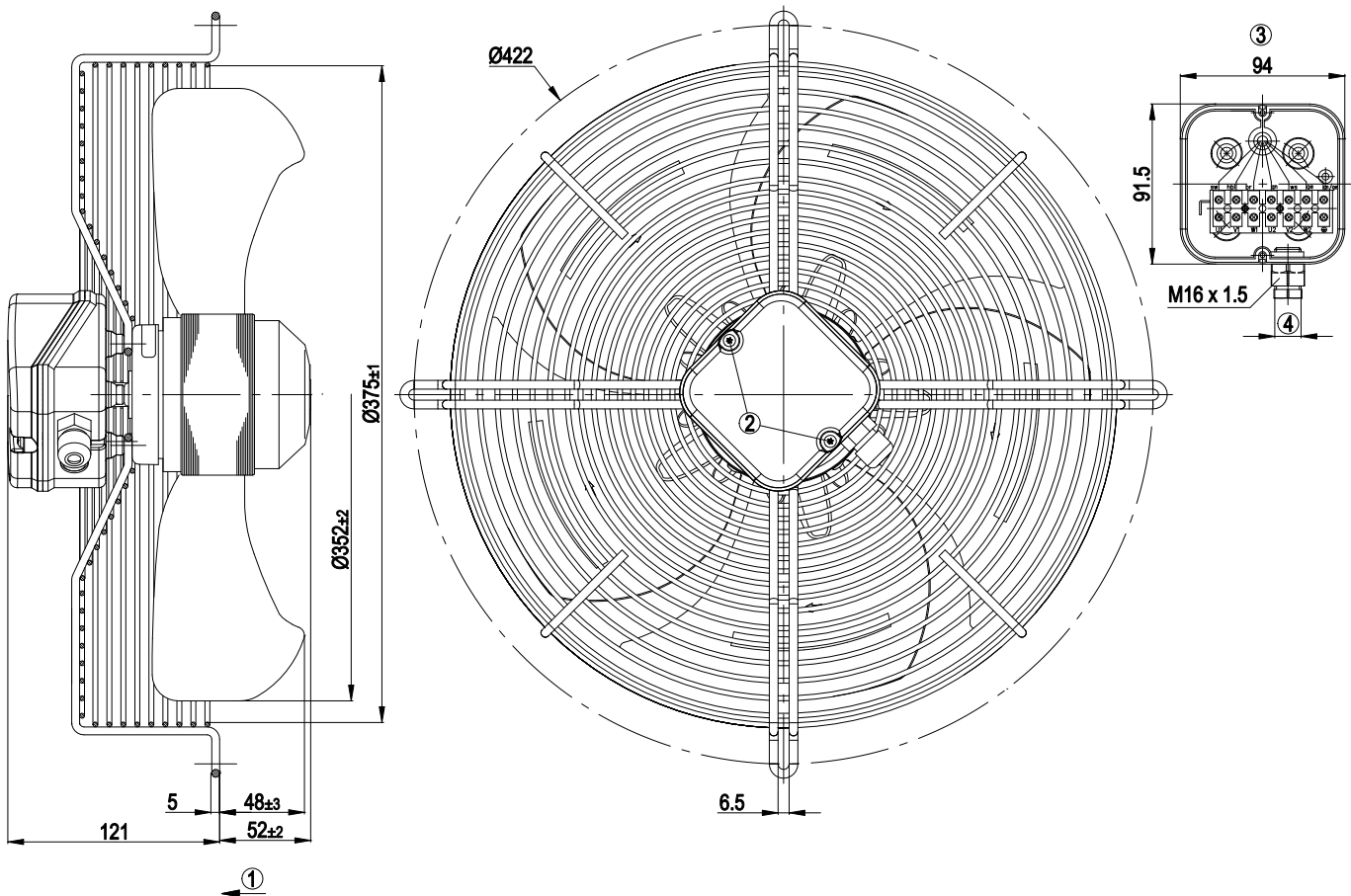
Mass	4.8 kg
Size	350 mm
Surface of rotor	Coated in black
Material of terminal box	ABS plastic, black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and coated in black plastic
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F5
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal box
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1



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Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.7±0.2 Nm
3	Illustration without terminal box cover
4	Cable diameter: max. 7.5 mm, tightening torque 1.3 ±0.2 Nm

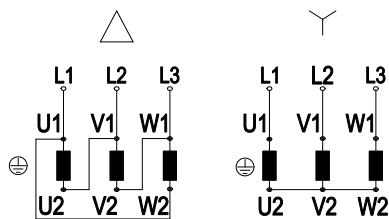


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Connection screen



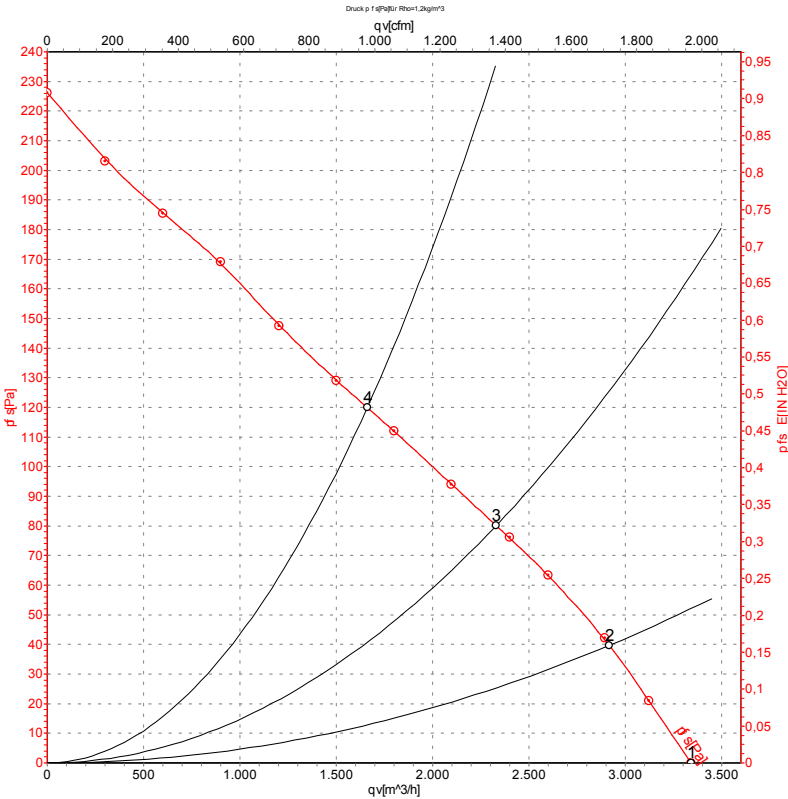
Note: Direction of rotation changes when two phases are reversed

Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow		



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Charts: Air flow 50 Hz



Measurement: LU-67369

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: L_{wA} measured as per ISO 13347 /
L_{pA} measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

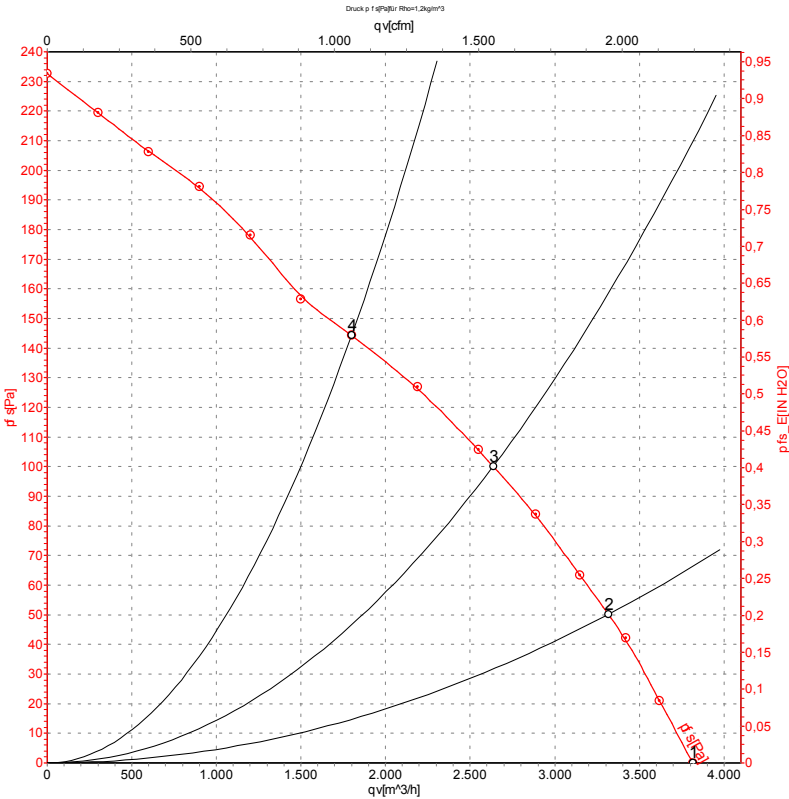
	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	400	50	1420	135	0.42	3340	0
2	400	50	1405	153	0.42	2915	40
3	400	50	1385	170	0.42	2330	80
4	400	50	1345	207	0.44	1660	120

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



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Charts: Air flow 60 Hz



Measurement: LU-67370

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: L_{wA} measured as per ISO 13347 /
L_{pA} measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	400	60	1620	185	0.37	3815	0
2	400	60	1590	208	0.39	3315	50
3	400	60	1560	233	0.42	2635	100
4	400	60	1455	303	0.51	1800	145

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

