S4D350-AR38-79

AC axial fan

sickled blades (S series)

with guard grille for short nozzle



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner: Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**S4D350-AR38-79**
Motor	**M4D068-EC**

Phase		3~	3~	3~	3~		
Nominal voltage	VAC	400	400	400	400	460	460
Connection		**Δ**	Y	**Δ**	Y	**Δ**	Y
Frequency	Hz	50	50	60	60	60	60
Valid for approval / standard		CE	CE	CE	CE	CE	CE
Speed	min^{-1}	1400	1220	1600	1220	1650	1340
Power input	W	150	100	190	135	210	150
Current draw	A	0.42	0.17	0.37	0.22	0.42	0.21

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

Installation category	A
Efficiency category	Static
Variable speed drive integrated	No
Specific ratio*	1,00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		29,1	25	29
Efficiency grade N		40,1	36	40
Power input P_e	kW	0,18		
Air flow q_v	m^3/h	2095		
Pressure increase p_{fs}	Pa	94		
Speed n	min^{-1}	1370		

Data established at point of optimum efficiency

ebmpapst

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

Technical features

Mass	4.7 kg
Size	350 mm
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	5
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
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

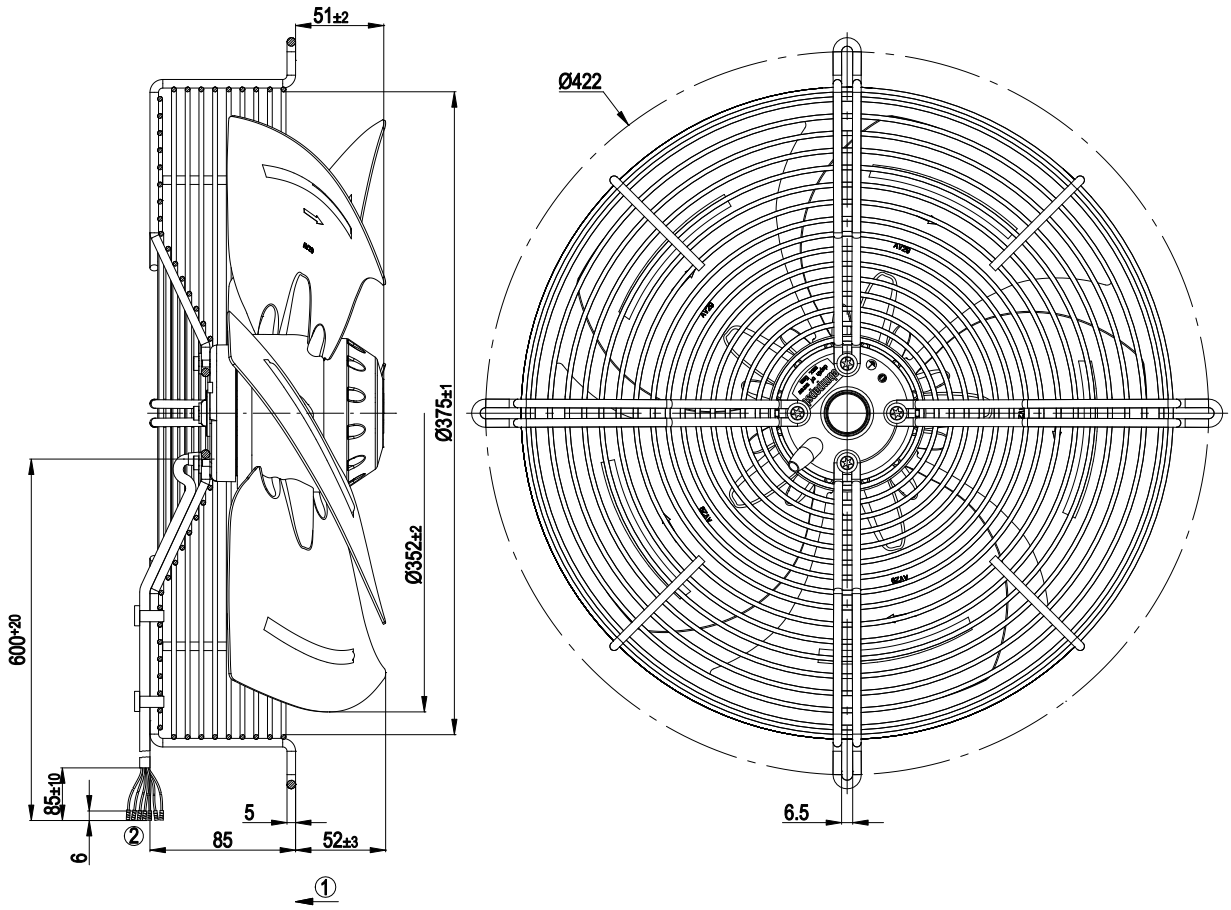
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

Product drawing



1	Direction of air flow "V"
2	Connection line halogen- and silicone-free, 9G 0.5 mm², 9 x brass lead tips crimped

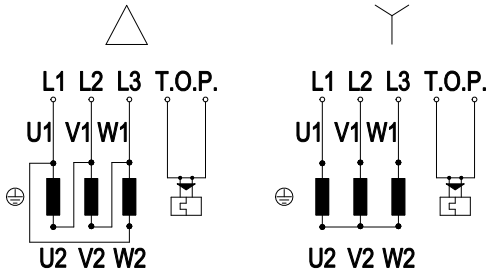
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

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
U2	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	grey

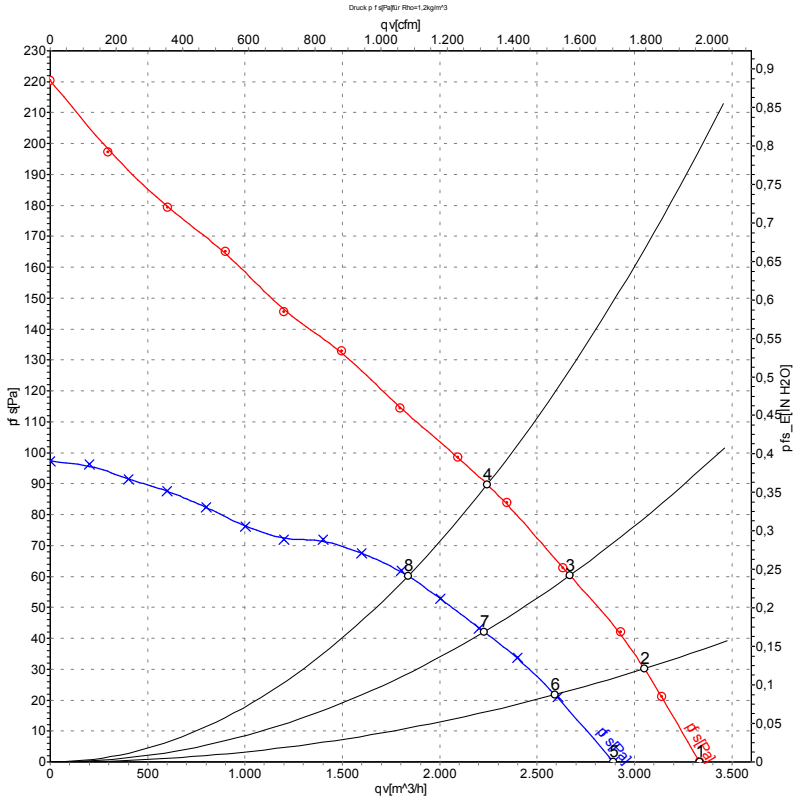
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

Charts: Air flow 50 Hz Δ



Measurement: LU-78687
Measurement: LU-78692

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: LwA measured as per ISO 13347 / LpA 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

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Δ	400	50	1400	150	0.42	3335	0
2	Δ	400	50	1400	158	0.43	3050	30
3	Δ	400	50	1385	171	0.43	2670	60
4	Δ	400	50	1375	182	0.43	2245	90
5	Y	400	50	1220	100	0.17	2890	0
6	Y	400	50	1185	108	0.18	2590	22
7	Y	400	50	1150	116	0.19	2230	42
8	Y	400	50	1120	123	0.20	1835	60

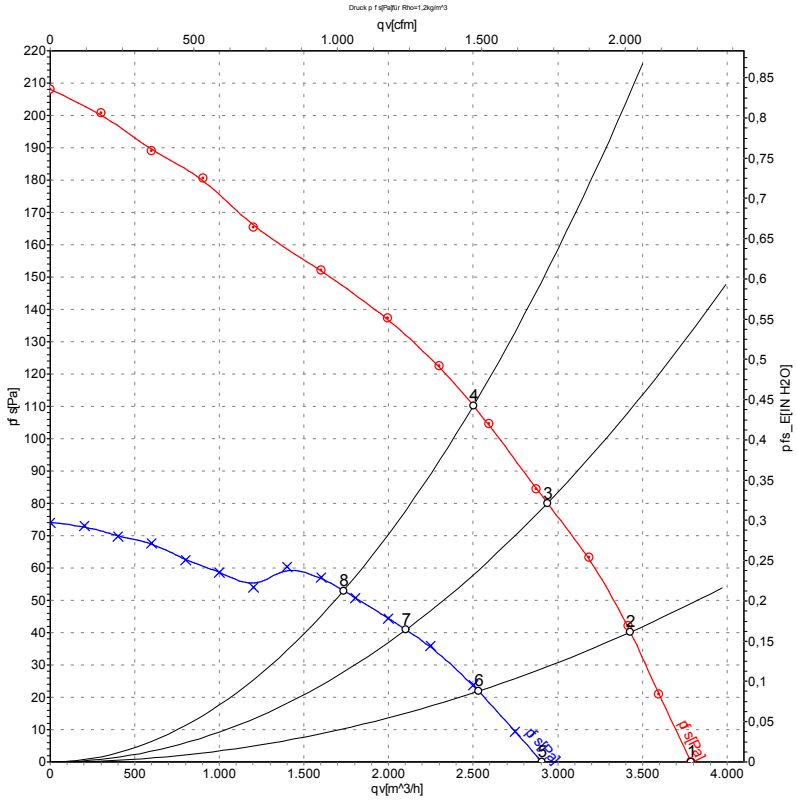
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

Charts: Air flow 60 Hz Δ



Measurement: LU-78690
Measurement: LU-78693

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: LwA measured as per ISO 13347 / LpA 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

	Conn.	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Δ	400	60	1600	190	0.37	3790	0
2	Δ	400	60	1585	211	0.40	3430	40
3	Δ	400	60	1555	231	0.42	2940	80
4	Δ	400	60	1530	248	0.44	2500	110
5	Y	400	60	1220	135	0.22	2905	0
6	Y	400	60	1165	143	0.23	2530	22
7	Y	400	60	1100	149	0.24	2100	41
8	Y	400	60	1055	153	0.25	1735	53

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com