

AC axial fan

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

ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

sales@fansco.com

www.fansco.com

Limited partnership · Headquarters Mulfingen

County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

County court Stuttgart · HRB 590142



Nominal data

Type	S2D300-BP02-31		
Motor	M2D074-DF		
Phase		3~	3~
Nominal voltage	VAC	230	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min ⁻¹	2580	2580
Power input	W	210	210
Current draw	A	0.62	0.36
Max. back pressure	Pa	200	200
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	75	75
Starting current	A	2.0	1.16

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	No
Specific ratio*	1.00

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		29.9	25.9	29.9
Efficiency grade N		40	36	40
Power input P_e	kW	0.25		
Air flow q_v	m ³ /h	2210		
Pressure increase p_{fs}	Pa	125		
Speed n	min ⁻¹	2455		

Data established at point of optimum efficiency



AC axial fan

sickled blades (S series)

with guard grille for full nozzle

Technical features

Mass	3.8 kg
Size	300 mm
Surface of rotor	Coated in black
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	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity class	F1-2
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
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)

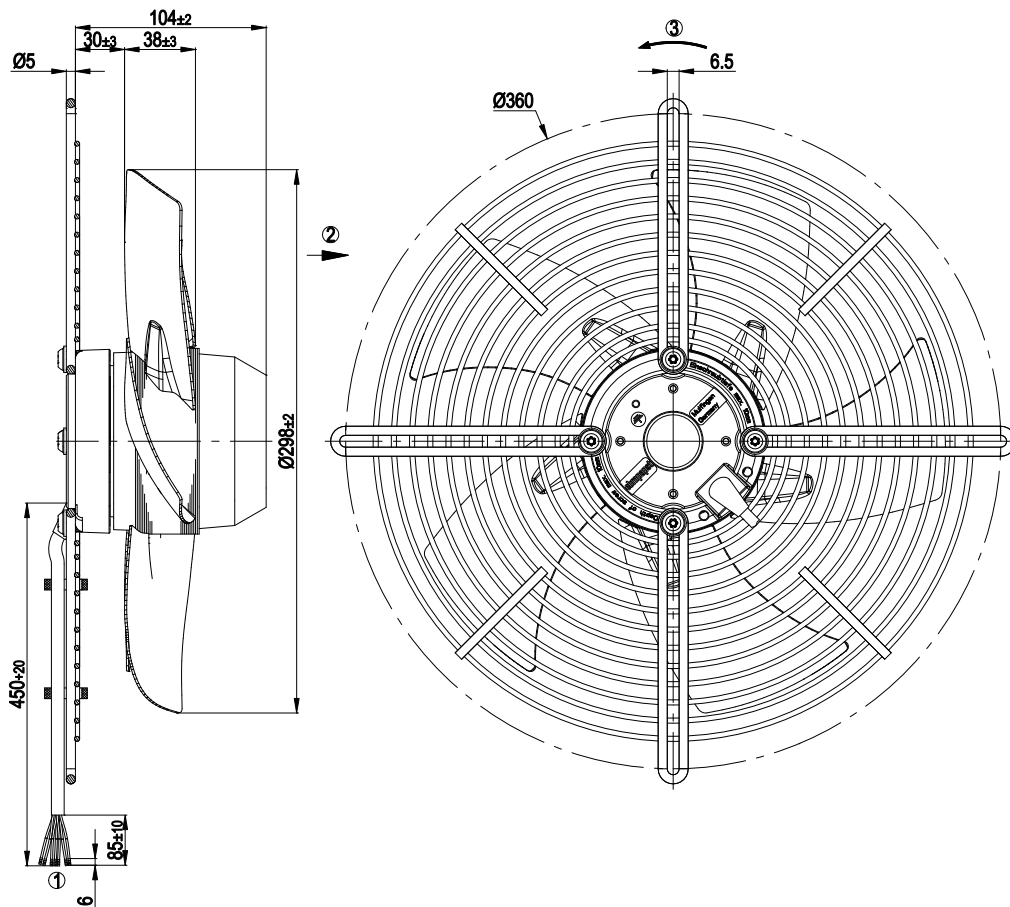


AC axial fan

sickled blades (S series)

with guard grille for full nozzle

Product drawing

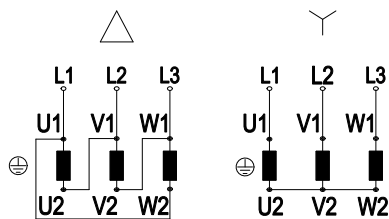


1	Connection line PVC, 7x brass lead tips crimped
2	Direction of air flow "A"
3	Direction of rotation clockwise, seen on rotor

AC axial fan

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

Connection screen



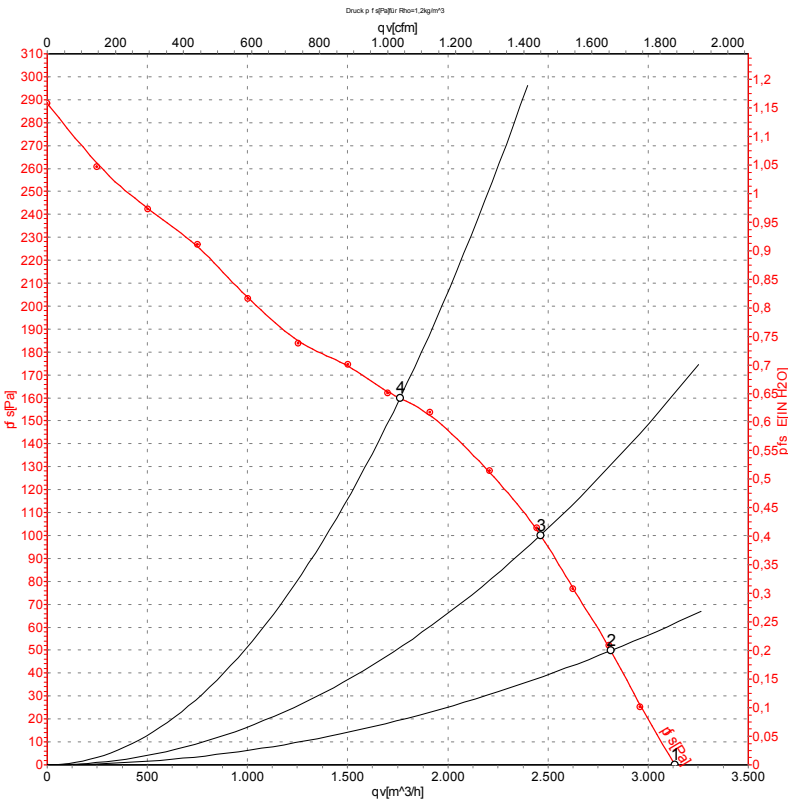
Note: Direction of rotation changes when two phases are reversed

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



AC axial fan
sickled blades (S series)
with guard grille for full nozzle

Charts: Air flow 50 Hz



Measurement: LU-62732

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

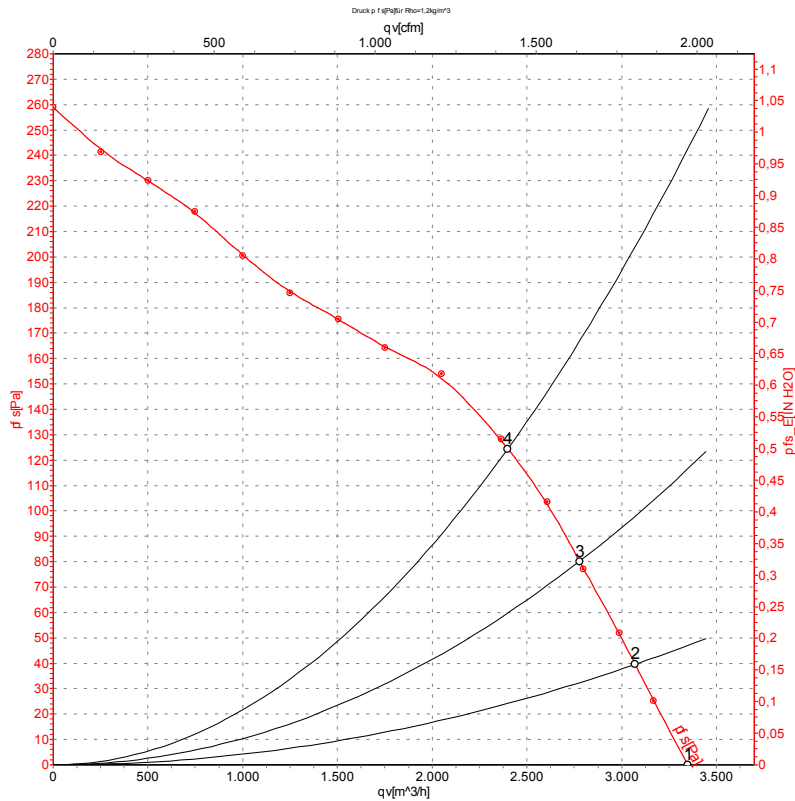
	U	f	n	P _e	I	LpA _{in}	LwA _{in}	qv	p _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	400	50	2580	210	0.36	71	78	3135	0
2	400	50	2540	227	0.36	71	78	2815	50
3	400	50	2490	244	0.39	70	77	2465	100
4	400	50	2395	278	0.43	71	78	1760	160

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{ts} = Pressure increase



AC axial fan
sickled blades (S series)
with guard grille for full nozzle

Charts: Air flow 60 Hz



Measurement: LU-62733

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	LpA _{in}	LwA _{in}	qv	p _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	400	60	2750	300	0.48	73	80	3350	0
2	400	60	2685	316	0.48	72	79	3070	40
3	400	60	2625	331	0.50	72	79	2775	80
4	400	60	2550	347	0.52	71	78	2400	125

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{ts} = Pressure increase

