

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

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-AP02-30				
Motor	M2D074-DF				
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	2580	2750	2580	2750
Power input	W	210	300	210	300
Current draw	A	0.62	0.84	0.36	0.48
Max. back pressure	Pa	200	125	200	125
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	75	40	75	40
Starting current	A	2.0	1.9	1.16	1.1

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	Overall efficiency η_{es}	Actual	Request 2013	Request 2015
Efficiency category	Static	Efficiency grade N	29.9	25.9	29.9
Variable speed drive	No	Power input P_e	40	36	40
Specific ratio*	1.00	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 short nozzle

Technical features

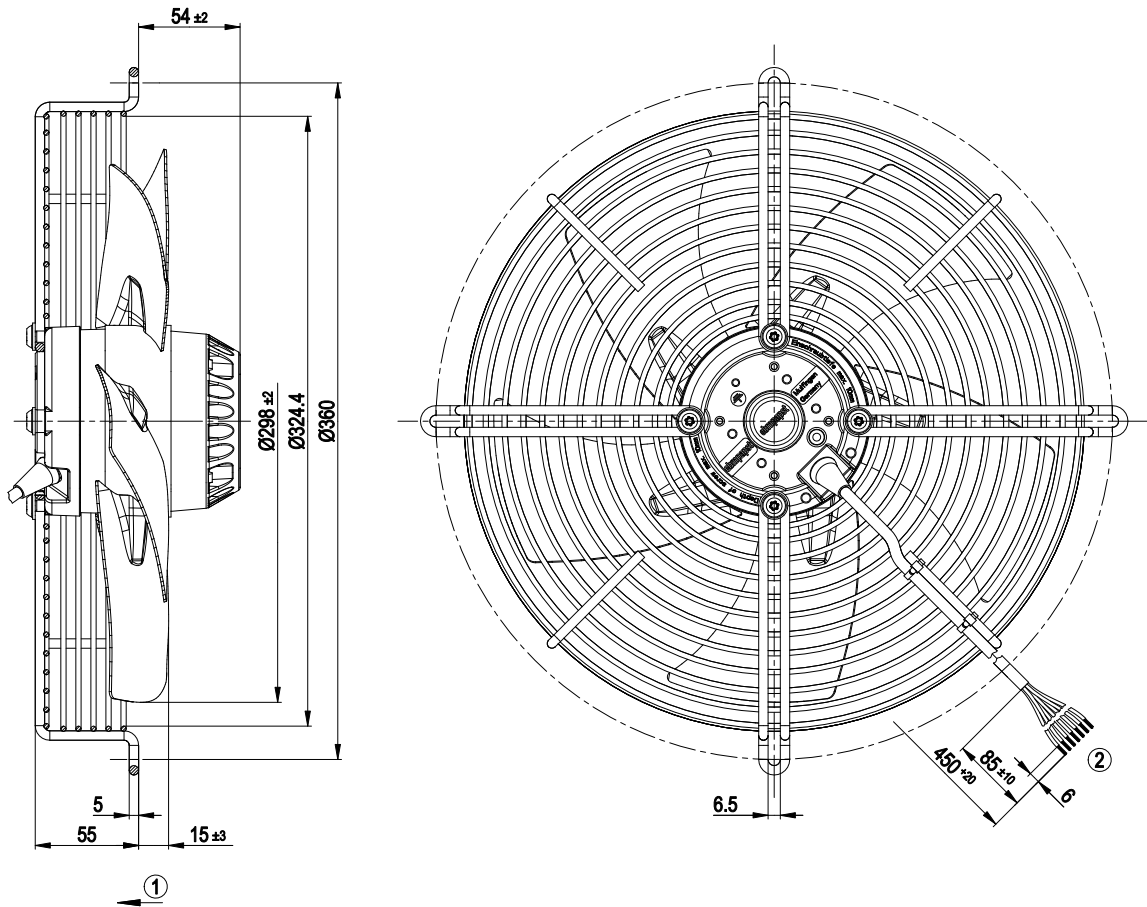
Mass	4.1 kg
Size	300 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	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)
Product conforming to standard	EN 60335-1
Approval	CCC



AC axial fan

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

Product drawing



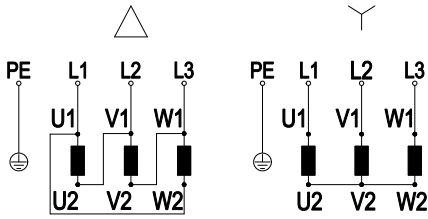
- | | |
|---|---------------------------------------------------------------------|
| 1 | Direction of air flow "V" |
| 2 | Connection line PFA AWG20 (gn/ye AWG18), 7x brass lead tips crimped |



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

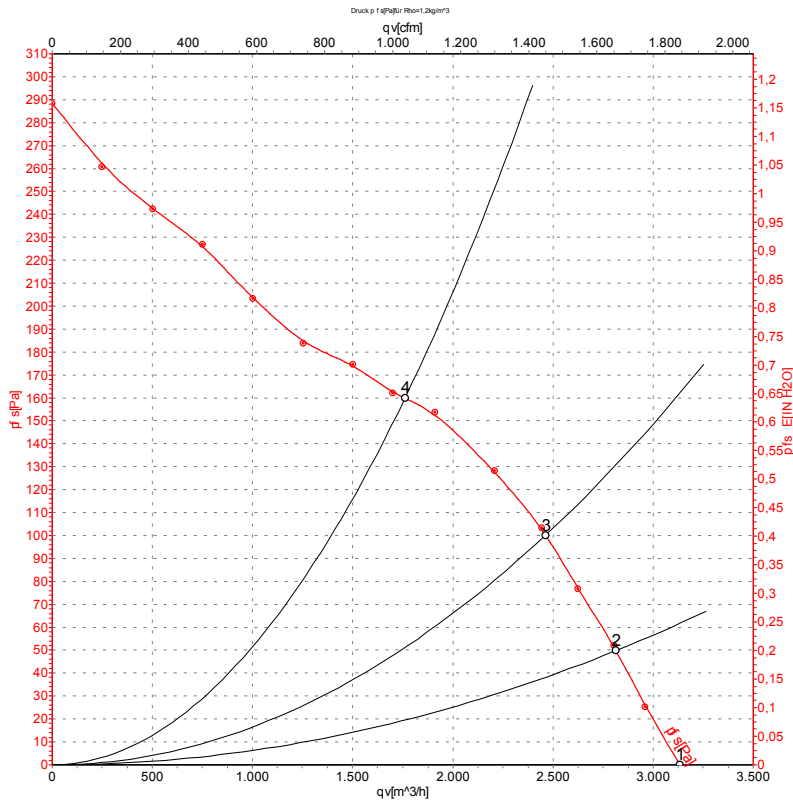
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	PE	green/yellow



AC axial fan

sickled blades (S series)
with guard grille for short 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	Pe	I	LpA _{in}	LwA _{in}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /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

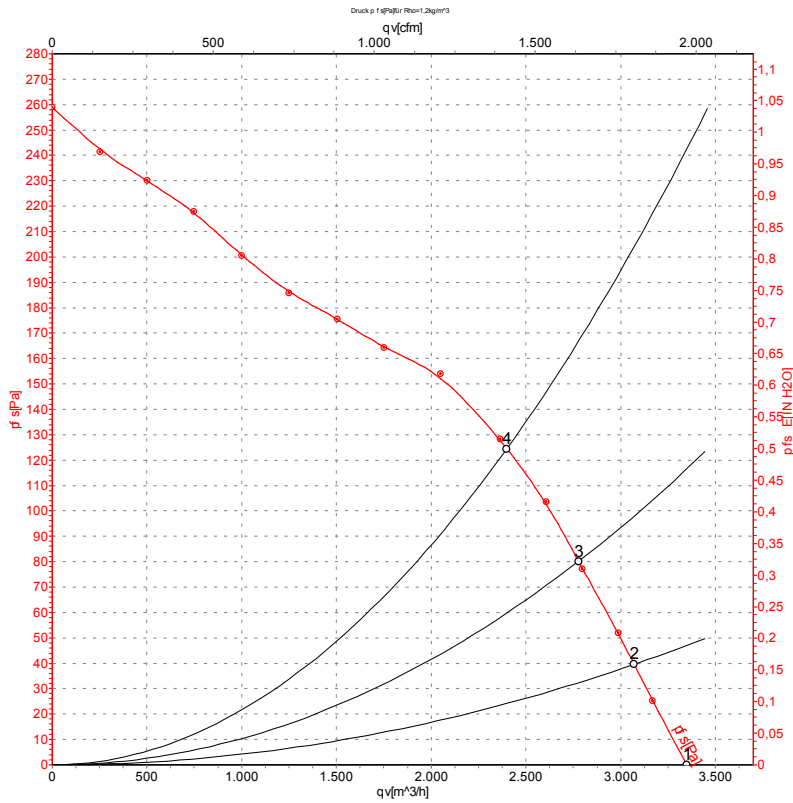
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase



AC axial fan

sickled blades (S series)
with guard grille for short 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	L _{pA_{in}}	L _{wA_{in}}	qv	p _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /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 · L_{pA_{in}} = Sound pressure level inlet side · L_{wA_{in}} = Sound power level inlet side · qv = Air flow
p_{ts} = Pressure increase

