

## AC axial fan

sickled blades (S series)

Wall ring with guard grille

## ASIA PACIFIC SHENGRUI LIMITED

Phone +00852 56261528

info@apacfan.com

www.apacfan.com



## Nominal data

Type	W4D400-DP12-40				
Motor	M4D074-EI				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	200	220	230	230
Connection		$\Delta$	$\Delta$	$\Delta$	$\Delta$
Frequency	Hz	50	60	50	60
Type of data definition		fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE
Speed	min <sup>-1</sup>	1400	1630	1430	1640
Power input	W	150	220	175	225
Current draw	A	0.72	0.78	0.92	0.80
Max. back pressure	Pa	100	125	100	125
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	65	60	65	60
Starting current	A	2.8	2.8	3.0	3.0

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 $\eta_{es}$	32.7	25.1	29.1
Efficiency grade N	43.6	36	40
Power input $P_e$	kW	0.19	
Air flow $q_v$	m <sup>3</sup> /h	2595	
Pressure increase $p_{fs}$	Pa	91	
Speed n	min <sup>-1</sup>	1415	

Data definition with optimum efficiency.

The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



# AC axial fan

sickled blades (S series)

Wall ring with guard grille

## Technical features

<b>Mass</b>	9 kg
<b>Size</b>	400 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of blades</b>	Sheet steel, coated in black
<b>Material of wall ring</b>	Sheet steel, pre-galvanised and coated in black plastic
<b>Material of guard grille</b>	Steel, phosphated and coated in black plastic
<b>Number of blades</b>	5
<b>Direction of air flow</b>	"V"
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position as per EN 60034-5
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F1-2
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensate discharge holes</b>	Rotor-side
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) brought out
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	CE
<b>Approval</b>	UL 1004-1; CSA C22.2 Nr.100; CCC



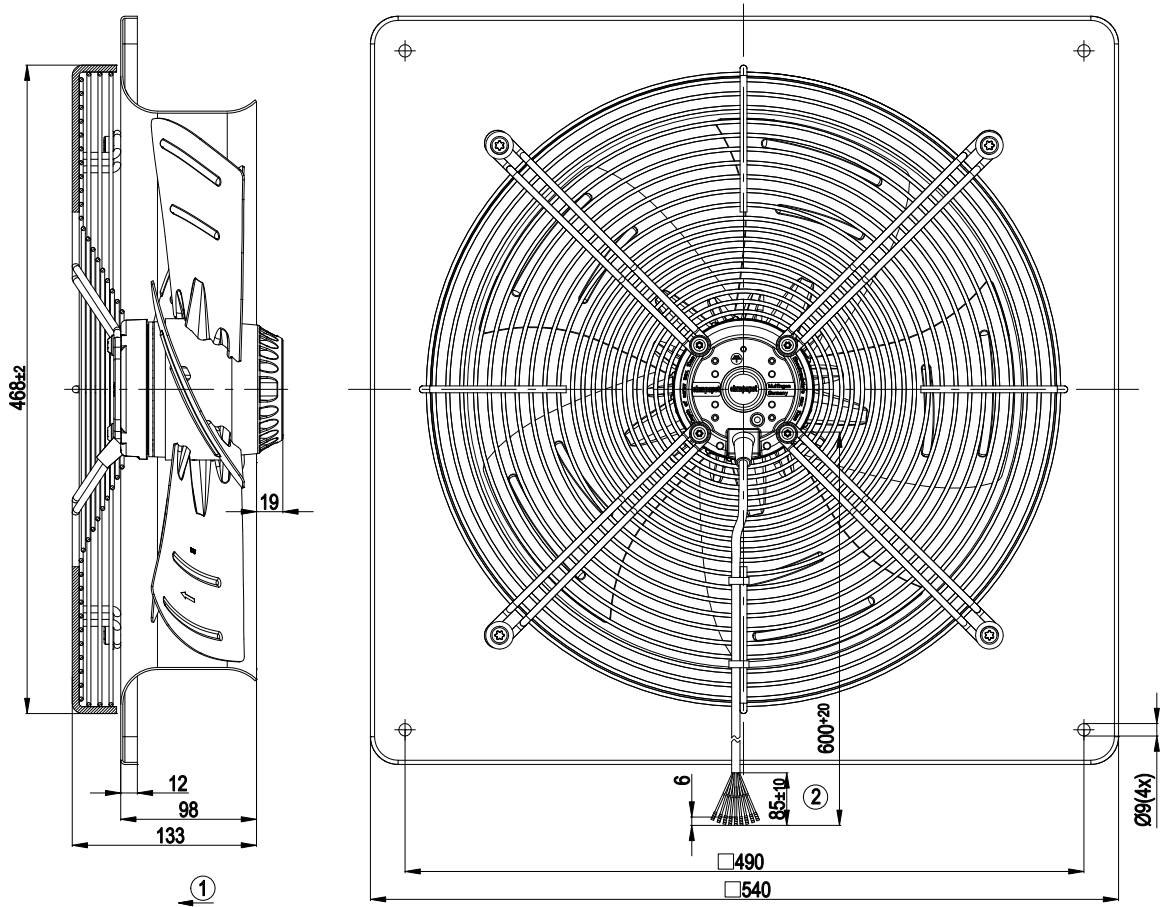
W4D400-DP12-40

# AC axial fan

sickled blades (S series)

Wall ring with guard grille

## Product drawing



- |   |  |
|---|--|
| 1 | Direction of air flow "V"  |
| 2 | Connection line PFA 9G 0.5mm <sup>2</sup> , 9x brass lead tips crimped |

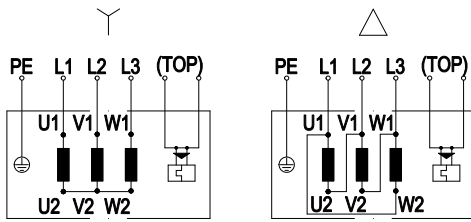


# AC axial fan

sickled blades (S series)

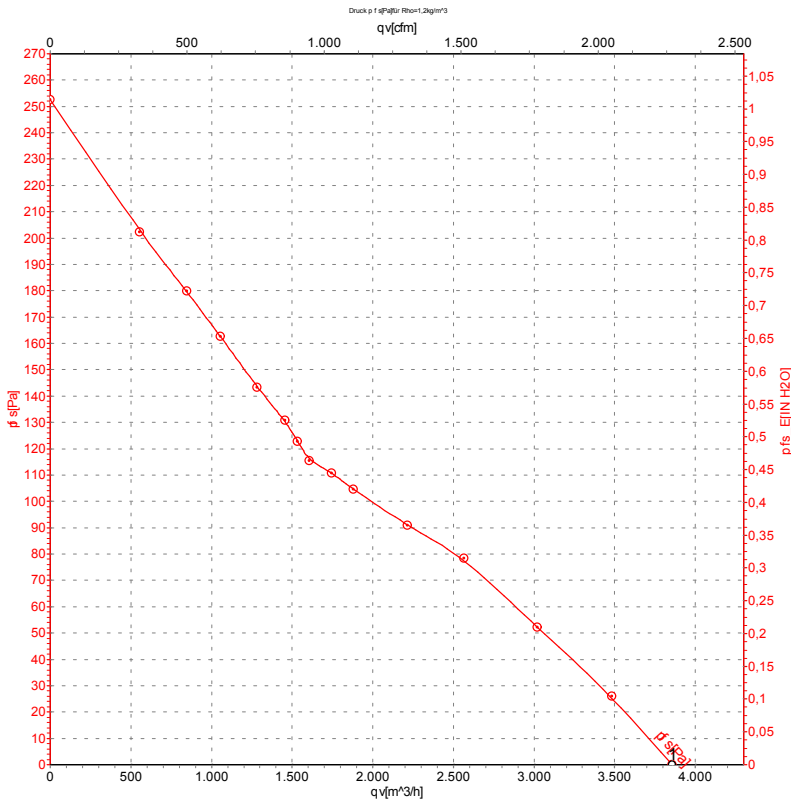
Wall ring with guard grille

## Connection screen



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

Charts: Air flow 50 Hz Δ



Measurement: LU-50712

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.

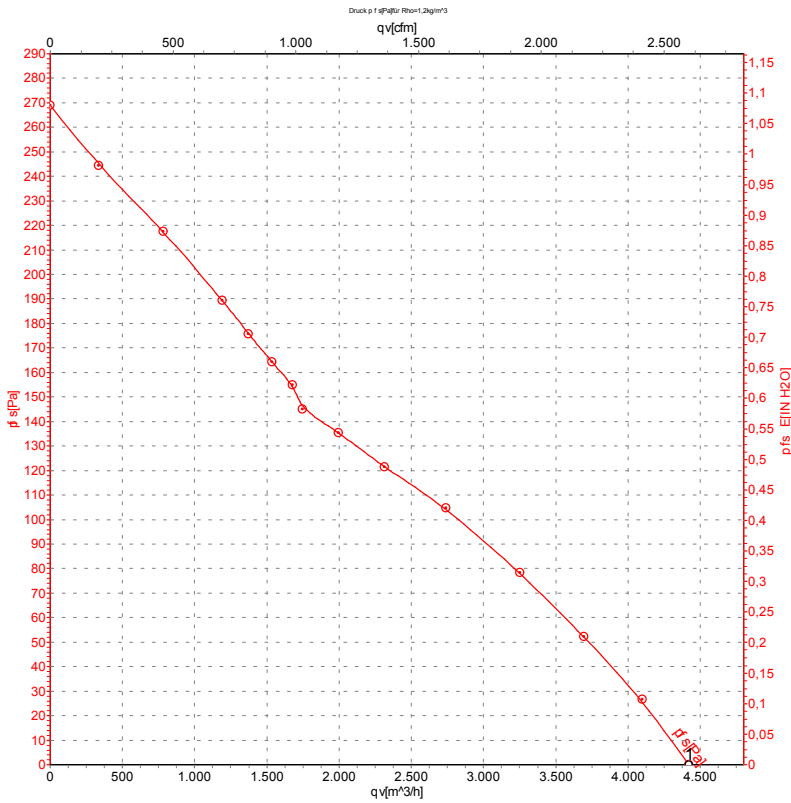
Measured values

	Conn.	U	f	n	P <sub>e</sub>	I	qv
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h
1	Δ	230	50	1430	175	0.92	3855

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow



Charts: Air flow 60 Hz Δ



Measurement: LU-50713

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 <sub>e</sub>	I	qv
		V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h
1	Δ	230	60	1640	225	0.80	4420

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow

