

# AC axial fan

sickled blades (S series)

with full round nozzle

W4D315-CP10-30 ebmpapst Datasheet

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## Nominal data

<b>Type</b>	<b>W4D315-CP10-30</b>				
<b>Motor</b>	<b>M4D068-DF</b>				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Connection		$\Delta$	$\Delta$	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 <sup>-1</sup>	1400	1620	1400	1620
Power input	W	85	110	85	110
Current draw	A	0.45	0.42	0.26	0.24
Max. back pressure	Pa	120	120	120	120
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	55	55	55	55
Starting current	A	1.3	1.3	0.75	0.75

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



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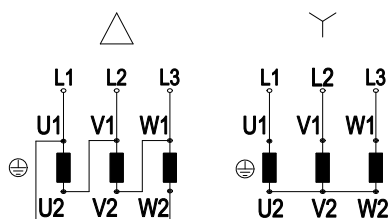
## Technical features

<b>Mass</b>	4.7 kg
<b>Size</b>	315 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</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
<b>Insulation class</b>	"B"
<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>Cable exit</b>	Axial
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1, motor does not have factory-installed overheating protection
<b>Approval</b>	CCC





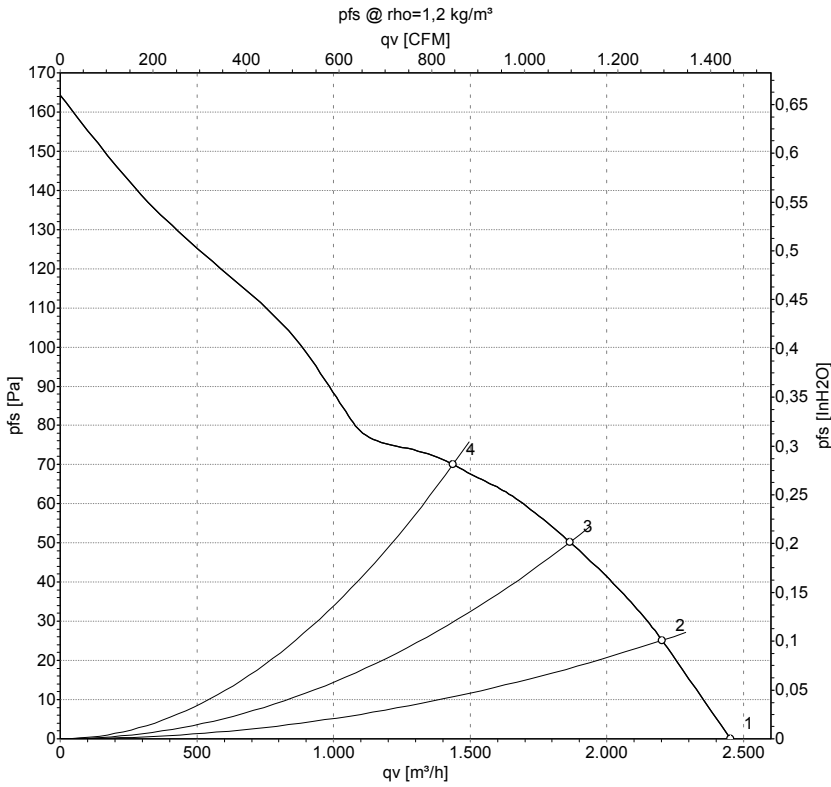
## Connection screen



Note: Direction of rotation changes when two phases are reversed

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

Charts: Air flow 50 Hz



Measurement: LU-33324

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.

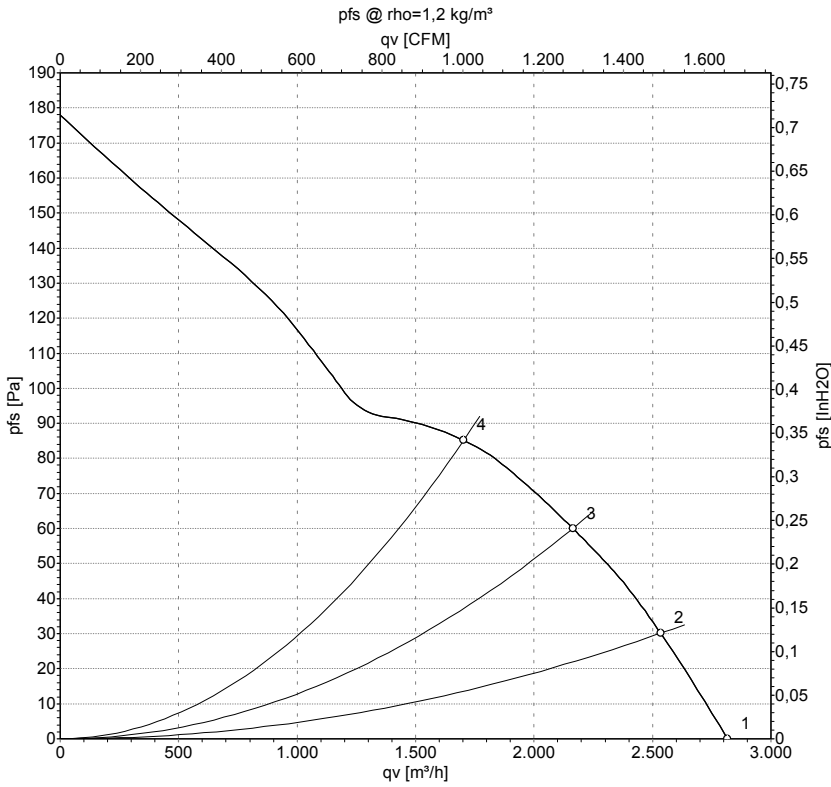
Measured values

	U	f	n	P <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	400	50	1400	85	0.26	2450	0
2	400	50	1395	89	0.26	2200	25
3	400	50	1385	98	0.26	1865	50
4	400	50	1360	108	0.27	1435	70

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase



Charts: Air flow 60 Hz



Measurement: LU-33325

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 <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	400	60	1620	110	0.24	2815	0
2	400	60	1600	119	0.24	2535	30
3	400	60	1575	132	0.25	2165	60
4	400	60	1535	147	0.26	1705	85

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

