W2D300-CP02-49

AC axial fan

sickled blades (S series)

with full round nozzle

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**W2D300-CP02-49**
Motor	**M2D074-DF**

Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min^{-1}	2580	2750
Power input	W	210	300
Current draw	A	0.36	0.48
Max. back pressure	Pa	200	125
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	75	40
Starting current	A	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
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 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 definition with optimum efficiency. LU-62732
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

Mass	5.43 kg
Size	300 mm
Surface of rotor	Coated in black
Material of terminal box	Die-cast aluminium
Material of blades	Sheet steel, coated in black
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
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 as per EN 60034-5
Insulation class	"F"
Humidity class	F2-2
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
Electrical leads	Via terminal box
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1
Approval	CCC

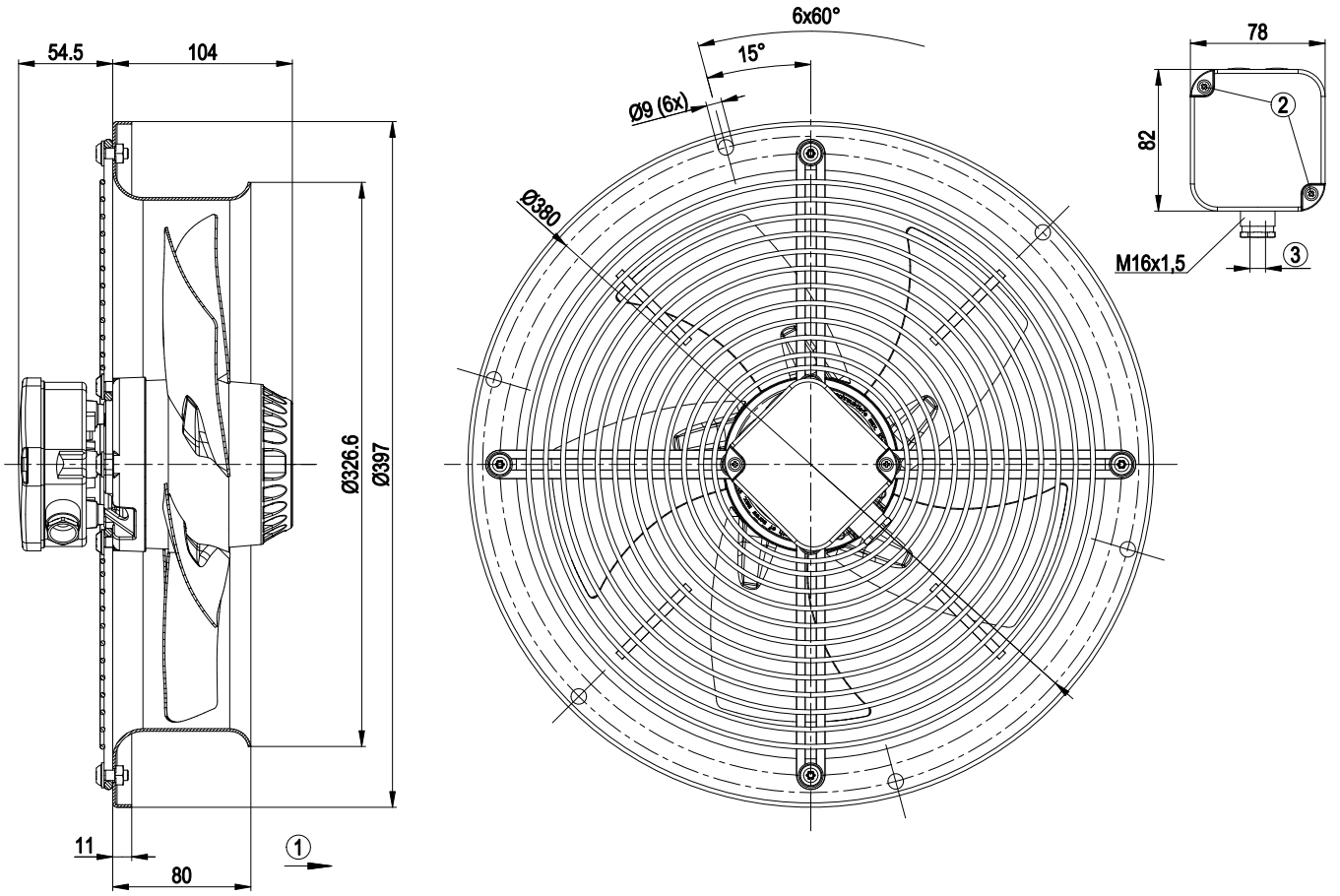
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Product drawing



1	Direction of air flow "A"
2	Tightening torque 2.0±0.3 Nm
3	Cable diameter: min. 6 mm, max. 9 mm, tightening torque: 1.3 ± 0.2 Nm

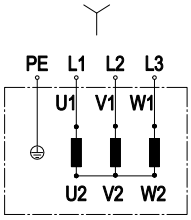
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Connection screen



Change direction of rotation by reversing two phases

	Three-phase motor	Y	Star connection	L1	black
L2	blue	L3	brown	PE	green/yellow

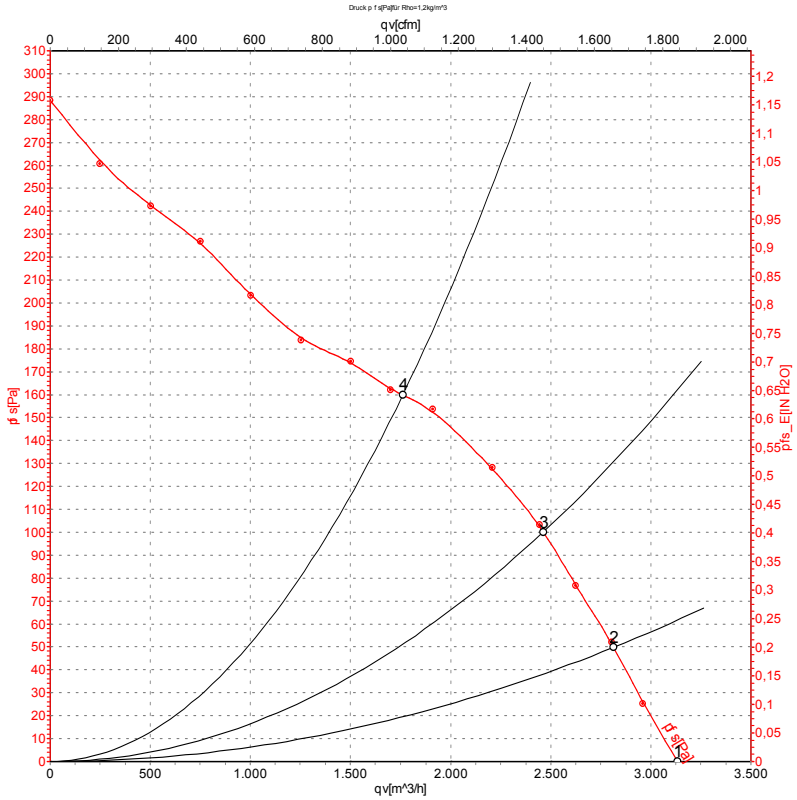
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Charts: Air flow 50 Hz



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_{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

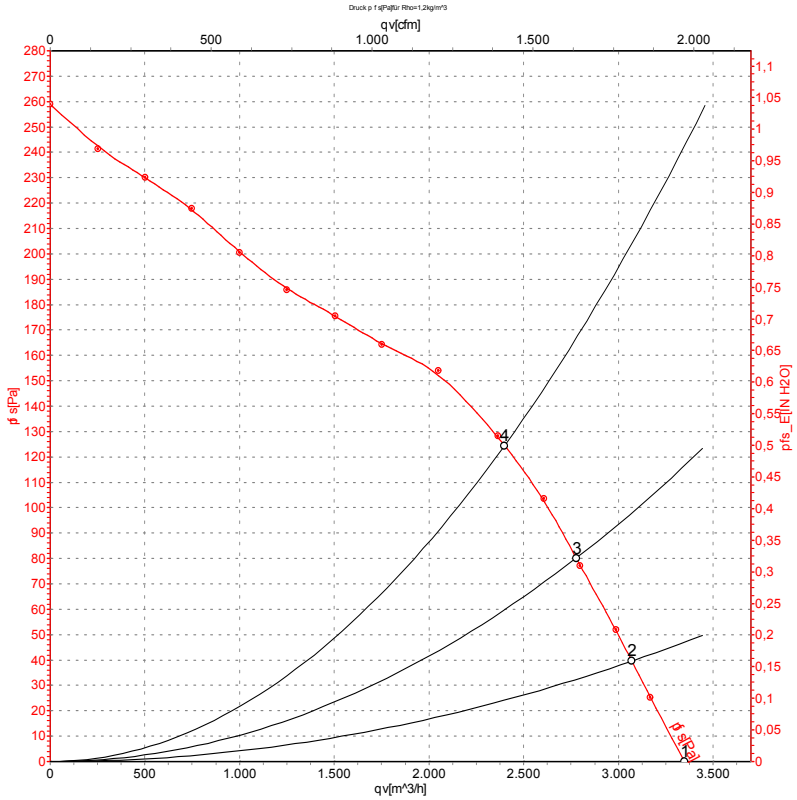
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Charts: Air flow 60 Hz



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_{fs}
	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 · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

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