

AC axial fan

sickle-shaped blades (S series)

Fan housing with guard grille

W2D300-CP02-16 ebmpapst Datasheet

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Nominal data

Type	W2D300-CP02-16				
Motor	M2D074-DF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	220	230	380	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	50	50	50
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	2560	2580	2560	2580
Power consumption	W	195	210	195	210
Current draw	A	0.59	0.62	0.34	0.36
Max. back pressure	Pa	190	200	190	200
Max. back pressure	inH ₂ O	0.76	0.8	0.76	0.8
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	75	75	75	75
Starting current	A		2.0		1.16

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to ErP Directive

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	29.9	29.9	09 Power consumption P_e	kW	0.25
02 Measurement category		A		09 Air flow q_v	m ³ /h	2210
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	125
04 Efficiency grade N		40	40	10 Speed (rpm) n	min ⁻¹	2455
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-62732



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Technical description

Weight	5.33 kg
Fan size	300 mm
Rotor surface	Painted black
Terminal box material	ABS plastic
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, pre-galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

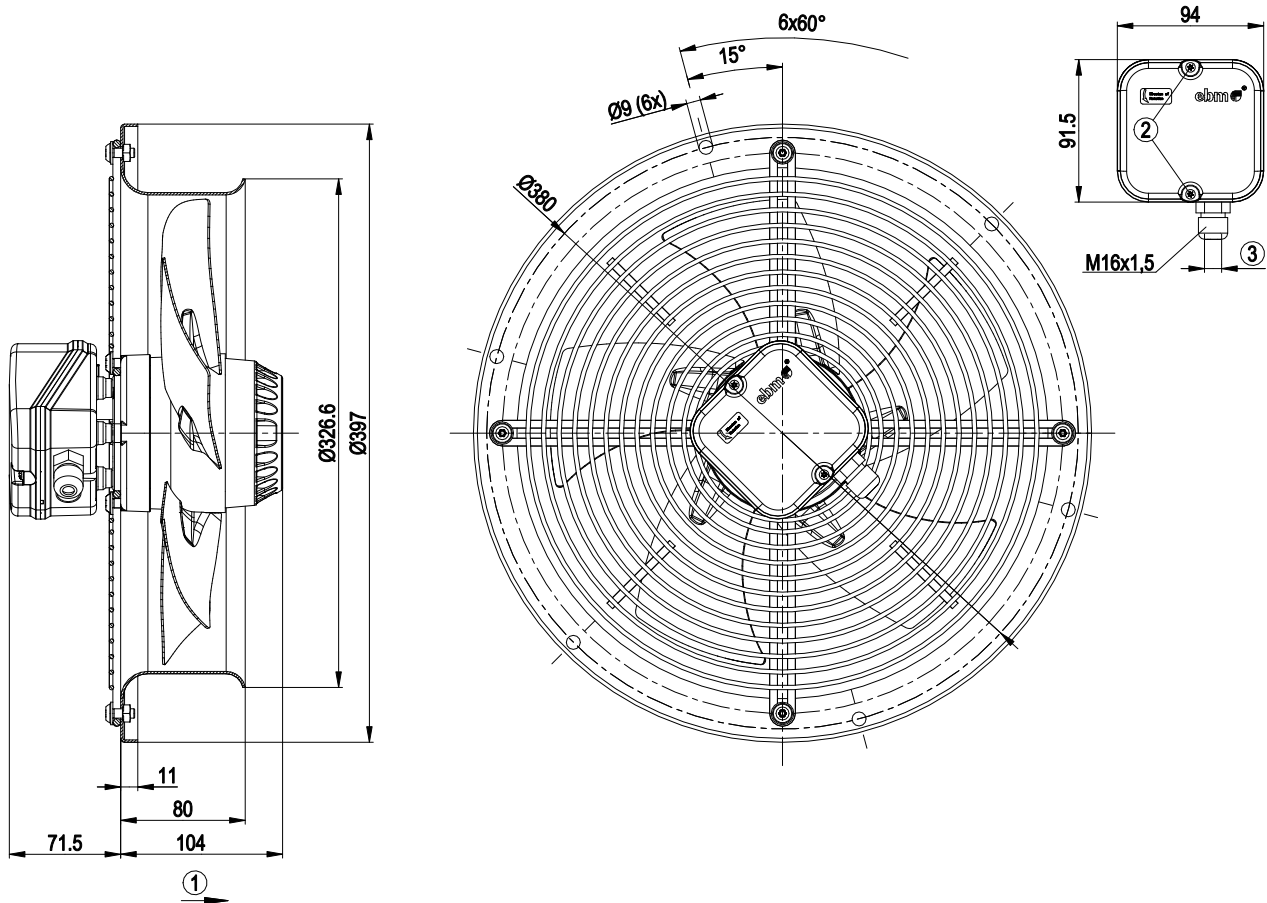


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Product drawing



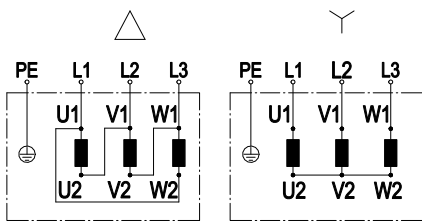
1	Direction of air flow "A"
2	Tightening torque 0.5 ± 0.1 Nm
3	Cable diameter: max. 10 mm, tightening torque 1.3 ± 0.2 Nm



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Connection diagram



Change of rotation direction by reversing two phases

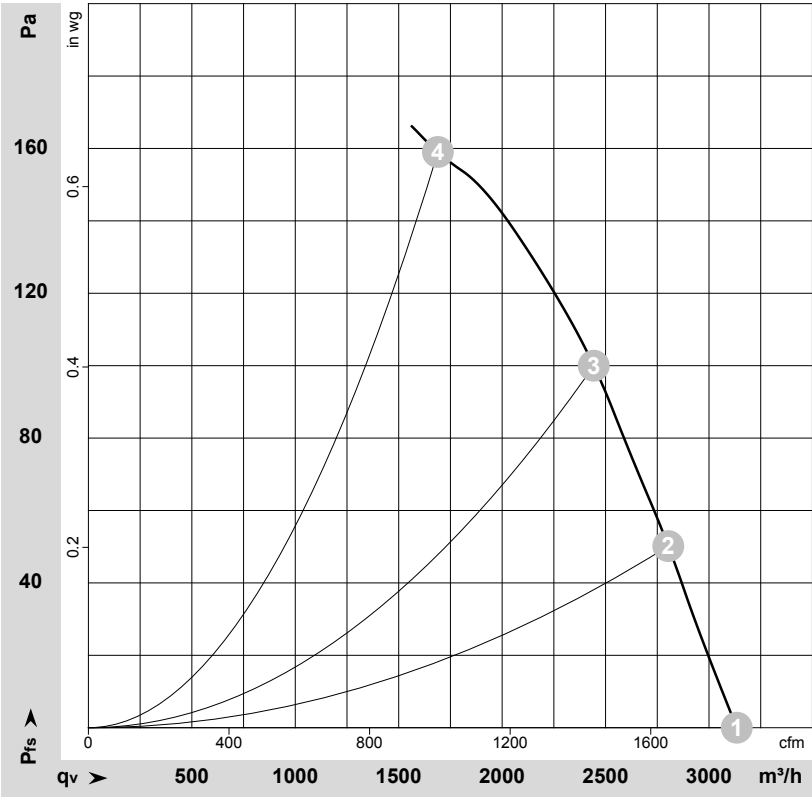
	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow
PE	green/yellow				



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-62732-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	Y	400	50	2580	210	0.36	3135	0	1845	0.00
2	Y	400	50	2540	228	0.36	2805	50	1650	0.20
3	Y	400	50	2490	244	0.39	2445	100	1440	0.40
4	Y	400	50	2385	281	0.44	1690	160	995	0.64

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

