W2D300-CQ01-17

AC axial fan

sickle-shaped blades (S series), single-intake

Fan housing with guard grille

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W2D300-CQ01-17**
Motor	**M2D074-EI**

Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	208	230	230	400	400	460
Wiring		Δ	Δ	Δ	Y	Y	Y
Frequency	Hz	60	50	60	50	60	60
Method of obtaining data		ml	ml	ml	ml	ml	ml
Valid for approval/standard		-	-	-	-	-	-
Speed (rpm)	min^{-1}	2550	2500	2700	2500	2700	2800
Power consumption	W	330	245	350	245	350	405
Current draw	A	0.6	0.7	0.95	0.4	0.55	0.55
Max. back pressure	Pa	150	125	140	125	140	190
Max. back pressure	inH2O	0.6	0.5	0.56	0.5	0.56	0.76
Min. ambient temperature	°C	-25	-25	-25	-25	-25	-25
Max. ambient temperature	°C	70	90	75	90	75	70
Starting current	A	1.25			1.65	1.6	1.54

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

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	33	29.9
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		43.1	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.25
09 Air flow q_v	m^3/h	2100
09 Pressure increase p_{fs}	Pa	143
10 Speed (rpm) n	min^{-1}	2515
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 Pa

LU-68886

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Technical description

Weight	4.1 kg
Fan size	300 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, 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	H1
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
Approval	CSA C22.2 No. 100; UL 1004-1

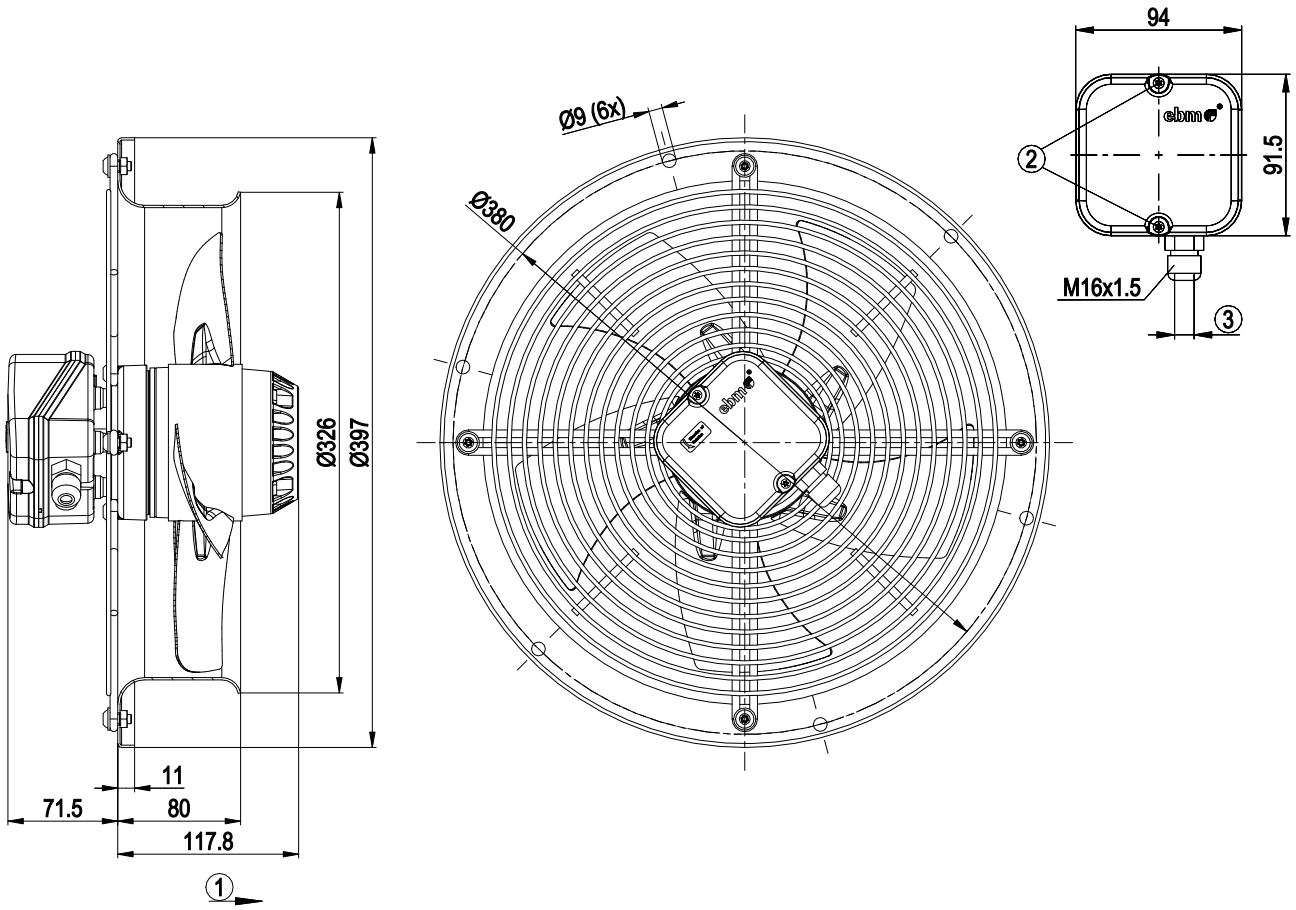
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Product drawing



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

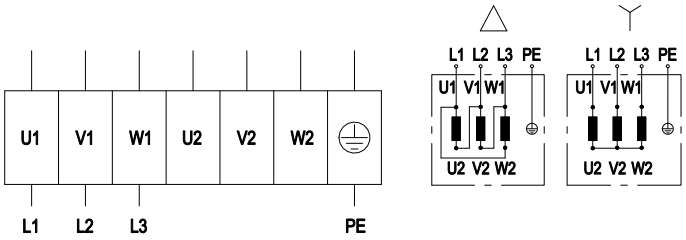
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Connection diagram



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

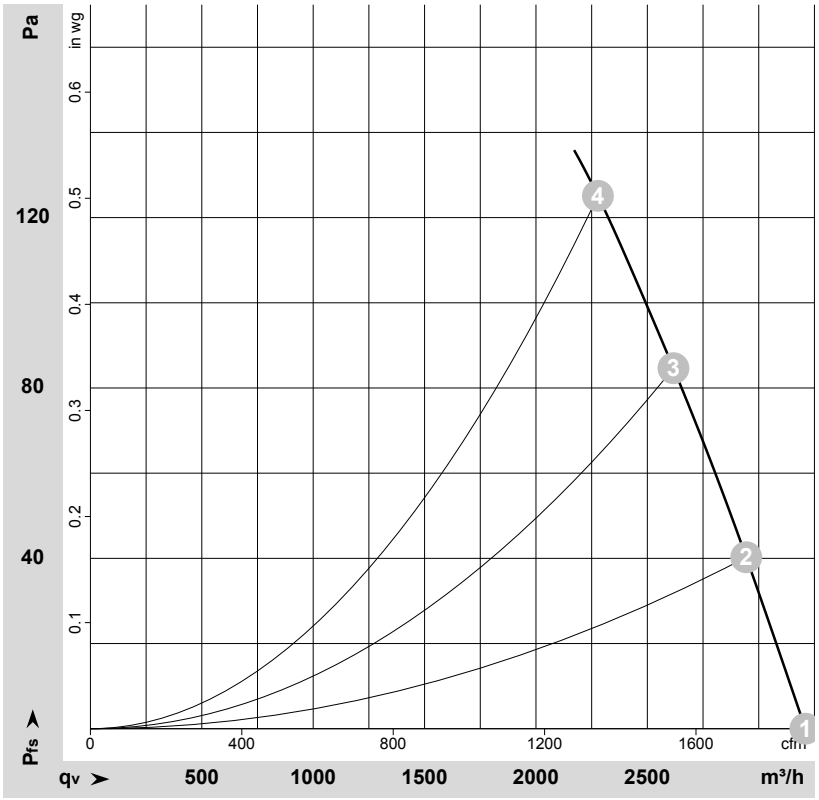
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-68886-1

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

	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	inH2O
1	400	50	2650	195	0.36	3210	0	1890	0.00
2	400	50	2605	214	0.39	2945	40	1735	0.16
3	400	50	2565	231	0.40	2615	85	1540	0.34
4	400	50	2500	245	0.40	2280	125	1340	0.50

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

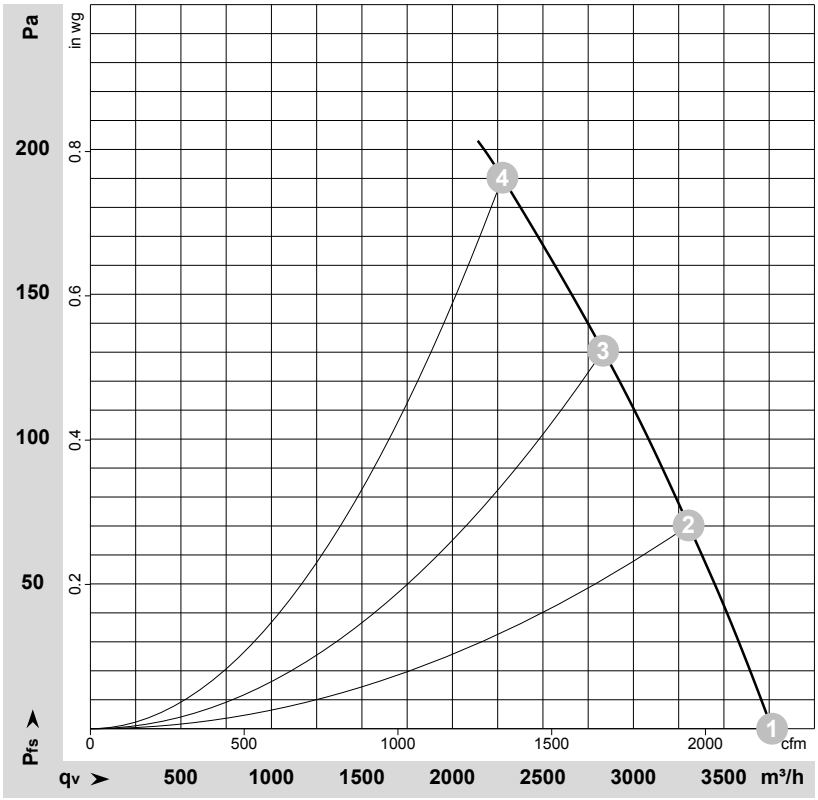
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Fan housing with guard grille

Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-181718-1

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	inH2O
1	Y	460	60	3060	305	0.45	3765	0	2215	0.00
2	Y	460	60	2960	351	0.51	3305	70	1945	0.28
3	Y	460	60	2890	382	0.55	2835	130	1665	0.52
4	Y	460	60	2800	405	0.55	2275	190	1340	0.76

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

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