A2D300-AD20-49

AC axial fan

straight blades (A series), single-intake

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A2D300-AD20-49**
Motor	**M2D068-EC**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		ce	ce	ce	ce
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min^{-1}	2650	2900	2650	2900
Power consumption	W	220	320	220	320
Current draw	A	0.70	0.87	0.4	0.5
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	50	45	50	45

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}	%	35.7	29.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		46.2	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.22
09 Air flow q_v	m^3/h	1905
09 Pressure increase p_{fs}	Pa	155
10 Speed (rpm) n	min^{-1}	2615
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-171541

ebmpapst

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Technical description

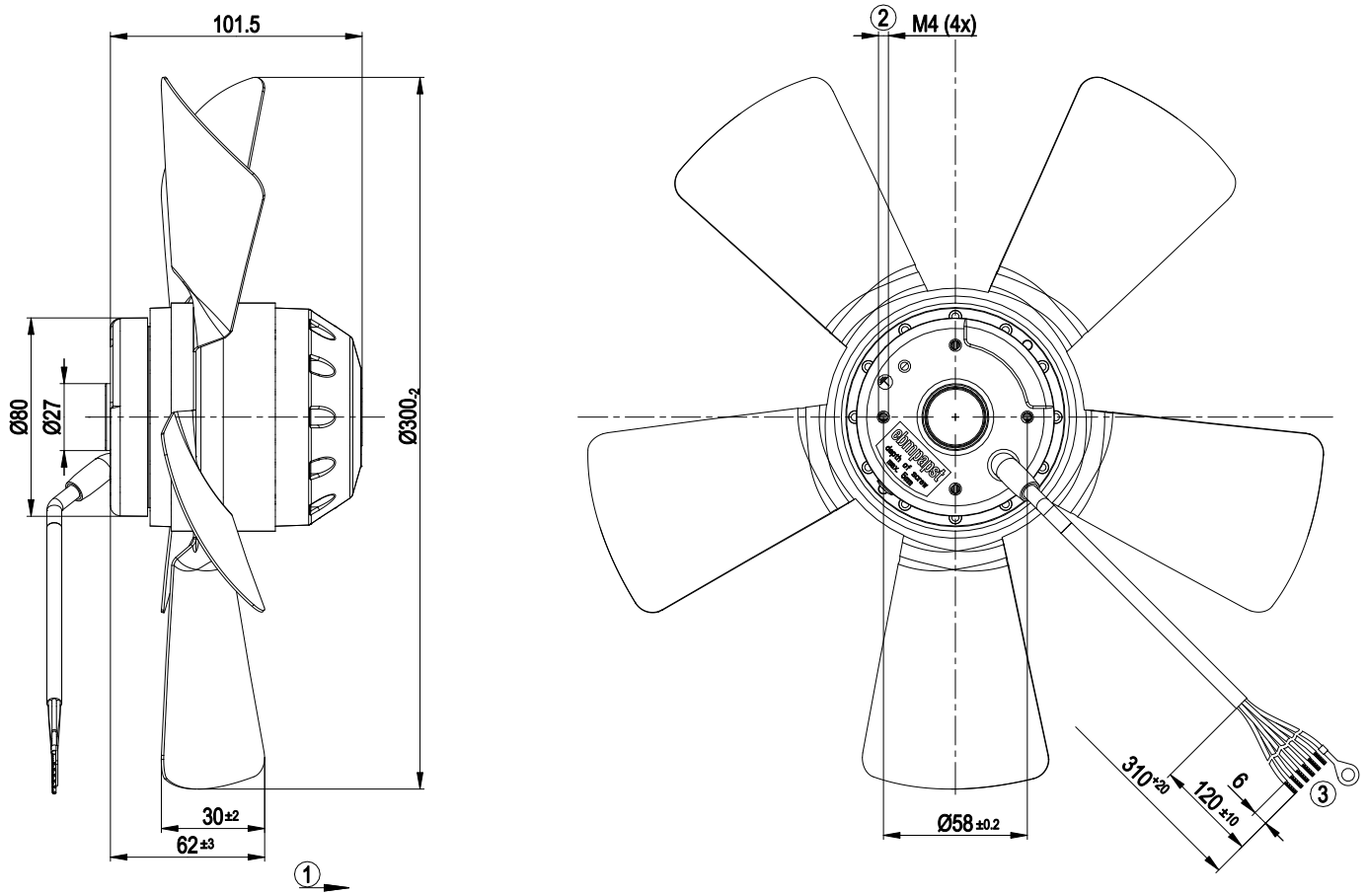
Weight	2.8 kg
Fan size	300 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection
Approval	CCC; EAC

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Product drawing



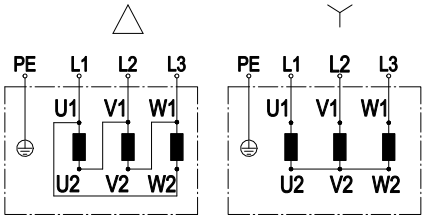
1	Direction of air flow "A"
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20 (green/yellow AWG18), 6x crimped splices and 1x crimped ring terminal Ø 5.2

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Connection diagram



Change of rotation direction by reversing two phases

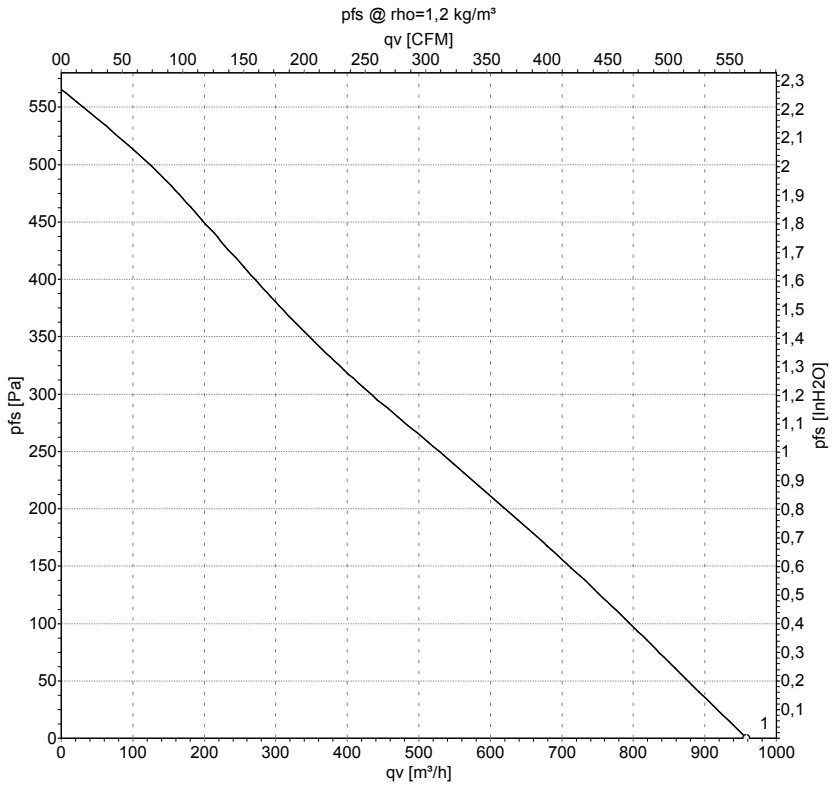
	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow
PE	green/yellow				

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AC axial fan

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Curves: Air performance 50 Hz



Measurement: LU-31980-1

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	qv	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	CFM	inH2O
1	400	50	2650	220	0.40	960	565	0.00

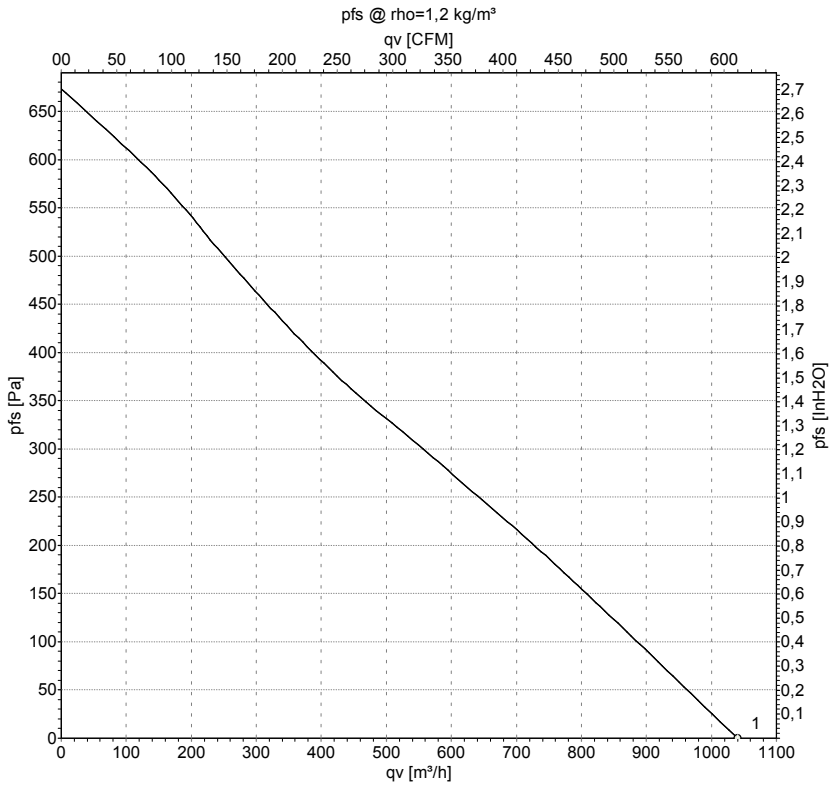
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow

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AC axial fan

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Curves: Air performance 60 Hz



Measurement: LU-31982-1

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	qv	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	CFM	inH2O
1	400	60	2900	320	0.50	1040	610	0.00

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow

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