AC axial fan

straight blades (A series), single-intake

A2D300-AD02-41 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A2D300-AD02-41**
Motor	**M2D068-EC**

Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2650	2800
Power consumption	W	180	270
Current draw	A	0.31	0.41
Max. back pressure	Pa	150	100
Max. back pressure	inH2O	0.6	0.4
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	35
Starting current	A	1.0	0.95

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}	%	32.4	29.3
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	0.2
09 Air flow q_v	m^3/h	1705
09 Pressure increase p_{fs}	Pa	141
10 Speed (rpm) n	min^{-1}	2525
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-64793

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	IP54; installation- and position-dependent
Insulation class	"B"
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	Shaft horizontal or rotor on top; rotor on bottom 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
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	EAC

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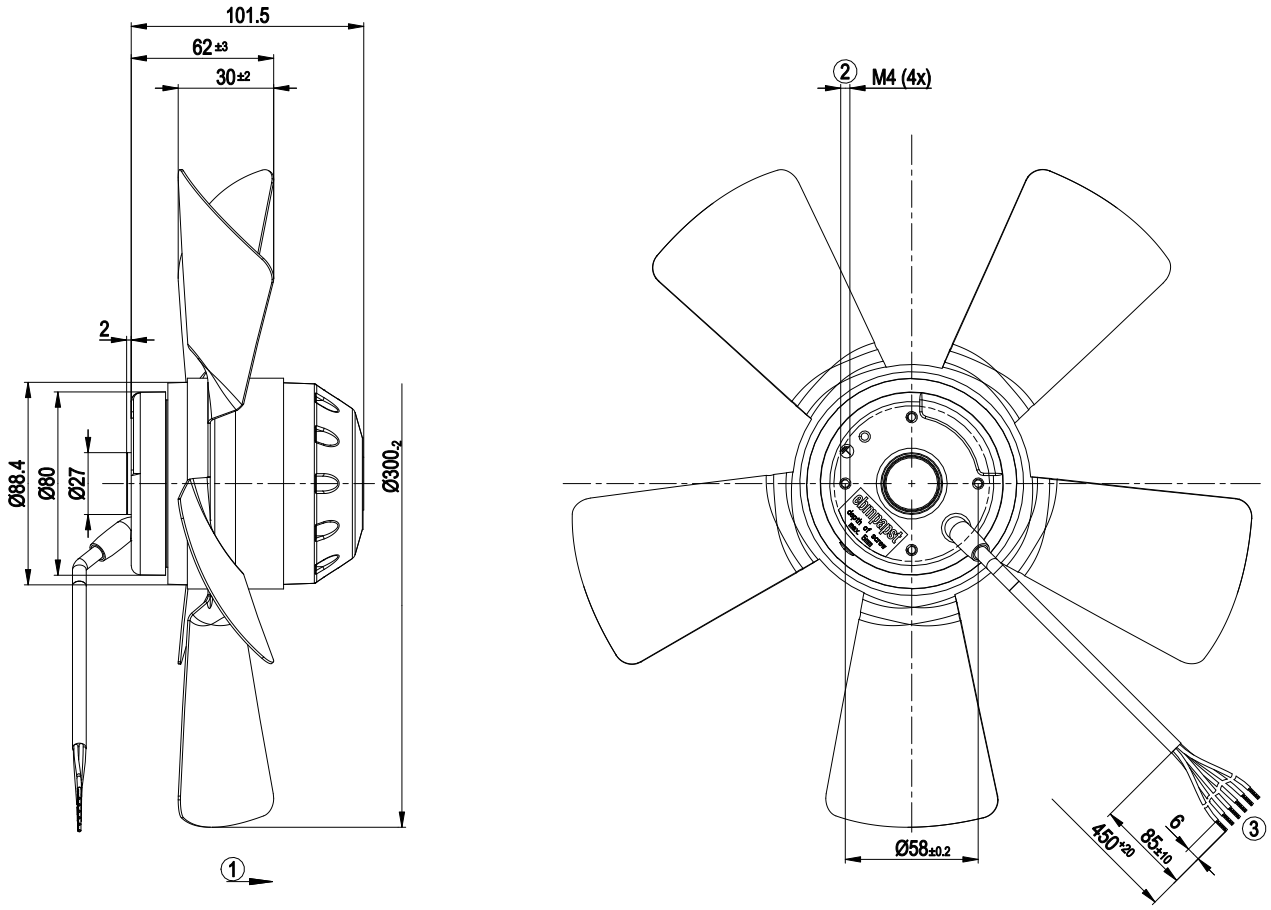
Product drawing



1	Direction of air flow "A"
2	Max. clearance for screw 5 mm
3	Cable halogen-silicone-free 6G 0.5 mm², 6x crimped splices

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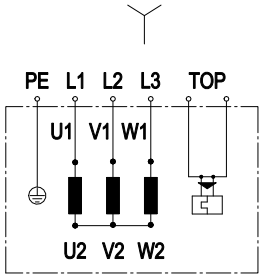
Connection diagram



Note: Change of rotation direction by reversing two phases

Y	Star connection	L1	black	L2	blue
L3	brown	TOP	white	PE	green/yellow

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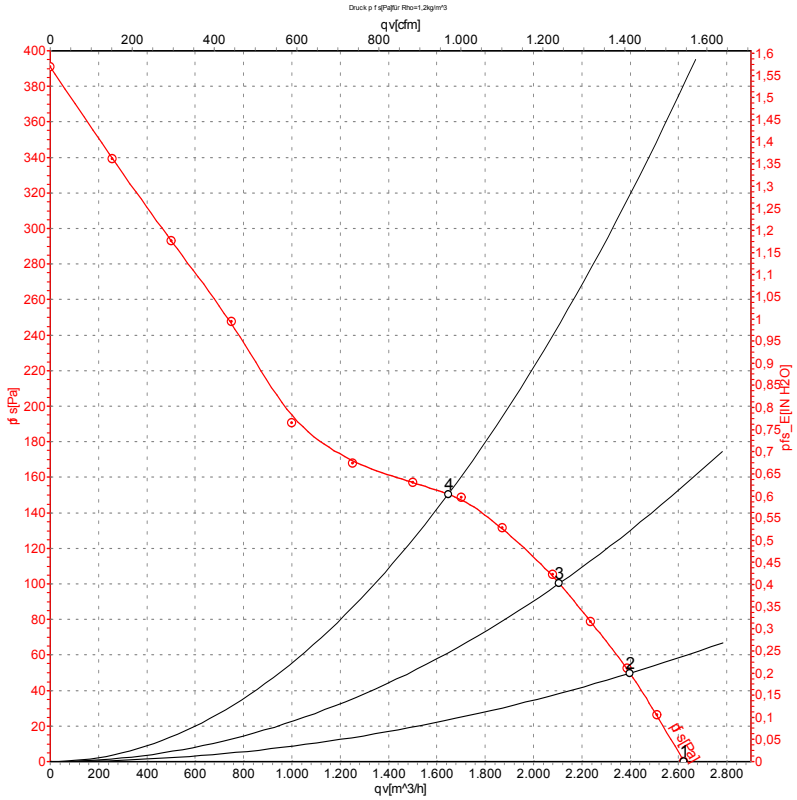
Curves: Air performance 50 Hz



Measurement: LU-64793-1

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	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	50	2650	180	0.31	2620	0	1545	0.00
2	400	50	2595	182	0.31	2400	50	1415	0.20
3	400	50	2555	195	0.32	2105	100	1240	0.40
4	400	50	2525	205	0.34	1650	150	970	0.60

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

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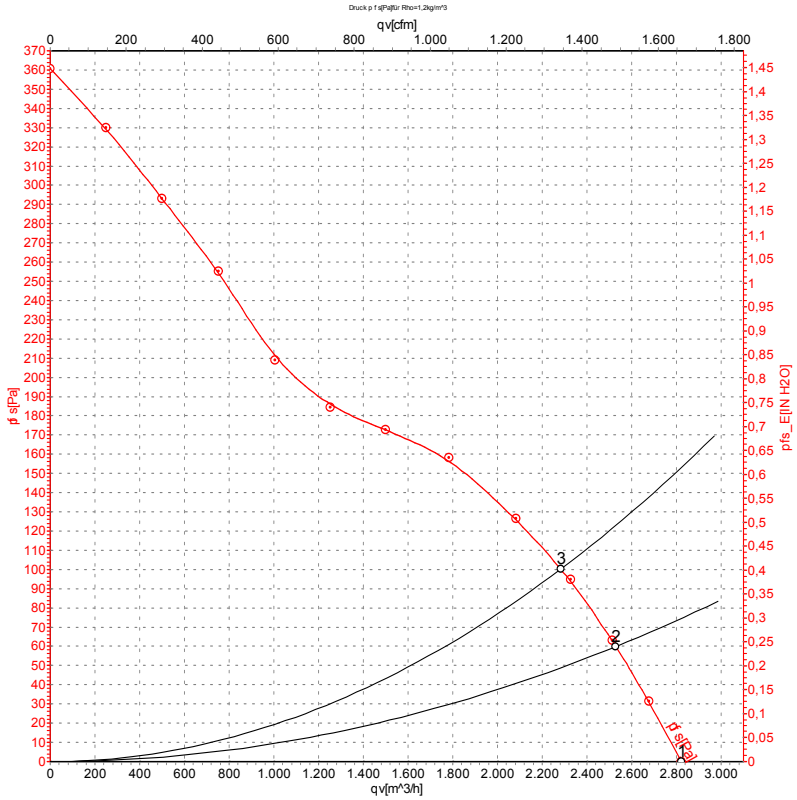
Curves: Air performance 60 Hz



Measurement: LU-64794-1

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	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	60	2800	270	0.41	2825	0	1660	0.00
2	400	60	2755	270	0.42	2530	60	1490	0.24
3	400	60	2700	278	0.43	2285	100	1345	0.40

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