A2D300-AD02-01

AC axial fan

straight blades (A series)



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A2D300-AD02-01**
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		fa	fa	fa	fa
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min^{-1}	2650	2800	2650	2800
Power consumption	W	180	270	180	270
Current draw	A	0.54	0.71	0.31	0.41
Max. back pressure	Pa	150	100	150	100
Max. back pressure	inH2O	0.6	0.4	0.6	0.4
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	60	35	60	35
Starting current	A	1.75	1.65	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

AC axial fan

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Technical description

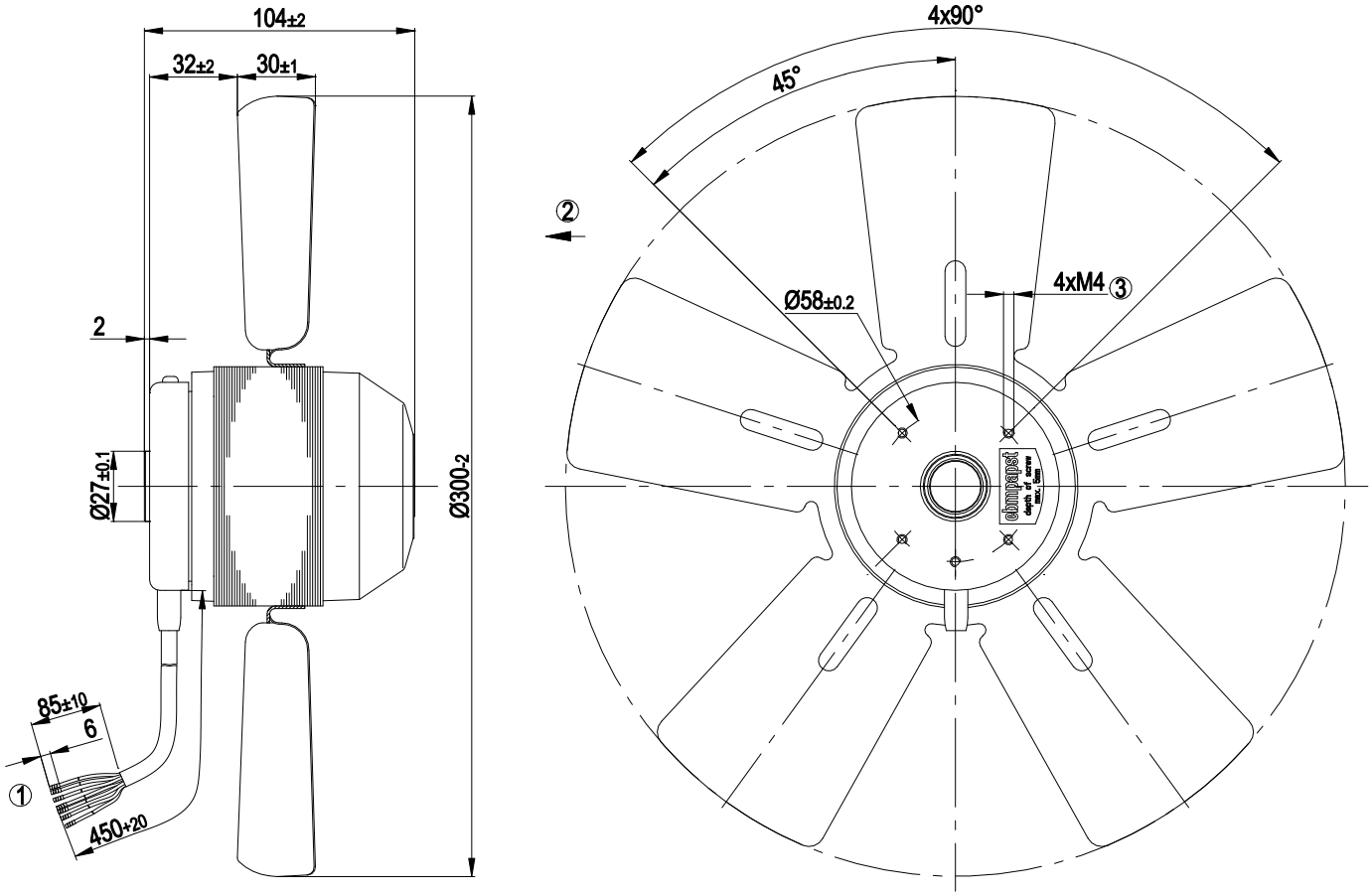
Weight	2.7 kg
Fan size	300 mm
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
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
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC

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Product drawing



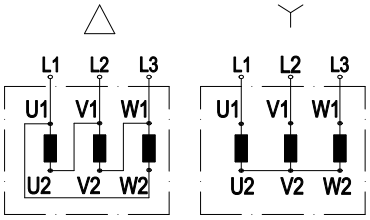
1	Cable PVC 7G 0.5 mm², 7x crimped splices
2	Direction of air flow "V"
3	Max. clearance for screw 5 mm

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Connection diagram



Change of rotation direction by reversing two phases

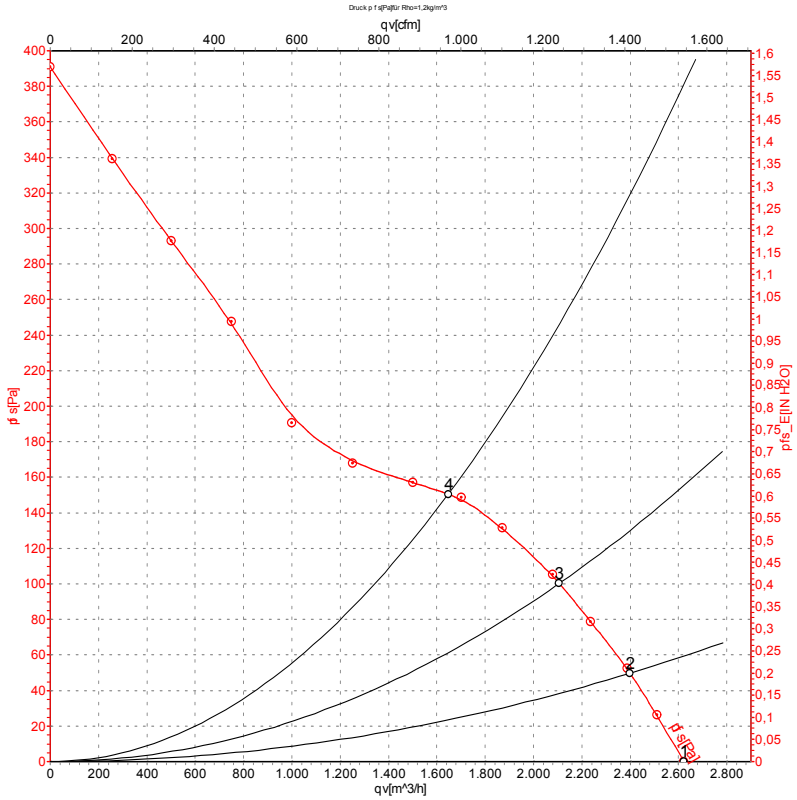
	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow

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AC axial fan

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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

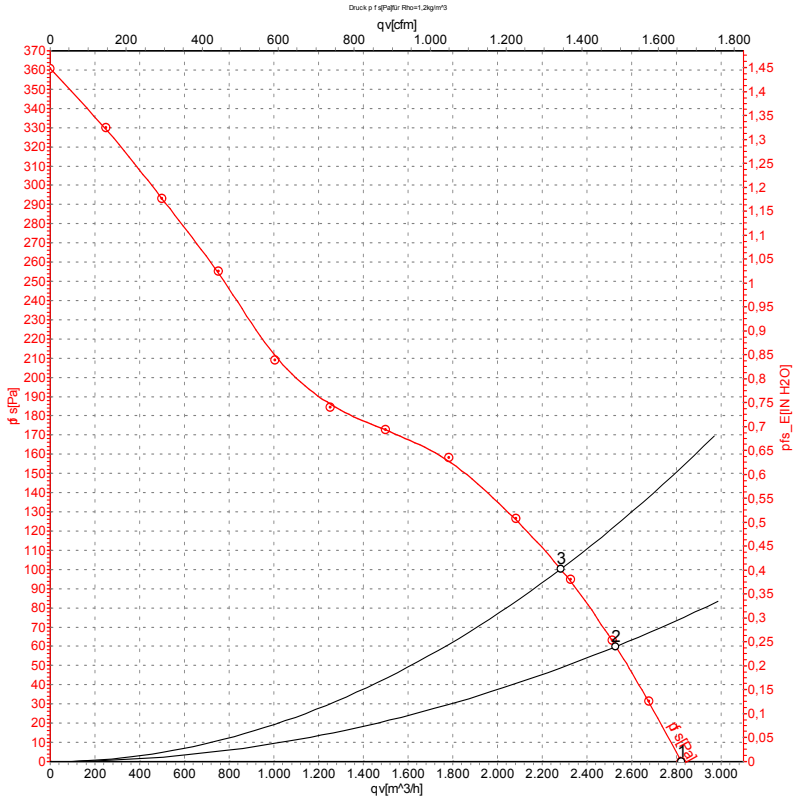
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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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

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