A2E300-AC50-09

AC axial fan

straight blades (A series), single-intake

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**A2E300-AC50-09**		
Motor	**M2E068-EC**		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2700	3000
Power consumption	W	160	215
Current draw	A	0.70	0.94
Capacitor	µF	5	5
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	120	140
Max. back pressure	in. wg	0.48	0.56
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	90	65

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 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	29.8	29
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40.8	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.17
09 Air flow q_v	m^3/h	1710
09 Pressure increase p_{fs}	Pa	113
10 Speed (rpm) n	min^{-1}	2610
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-64449

AC axial fan

straight blades (A series), single-intake

Technical description

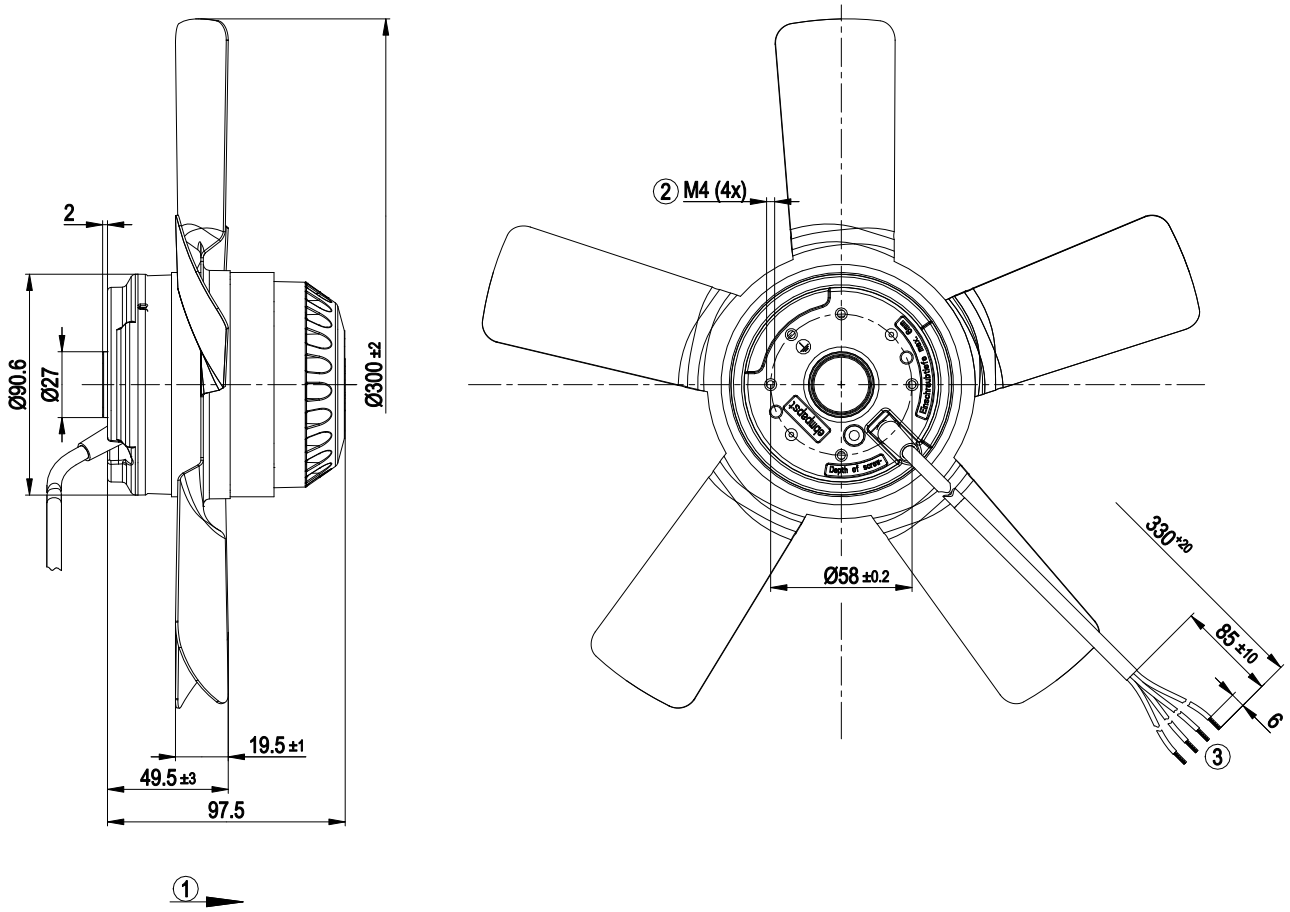
Weight	2.7 kg
Size	300 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

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AC axial fan

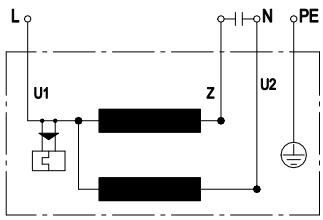
straight blades (A series), single-intake

Product drawing



1	Direction of air flow "A"
2	Max. clearance for screw 6 mm
3	Cable PFA AWG18, 1x crimped splice, cable PFA AWG20, 3x crimped splices

Connection diagram



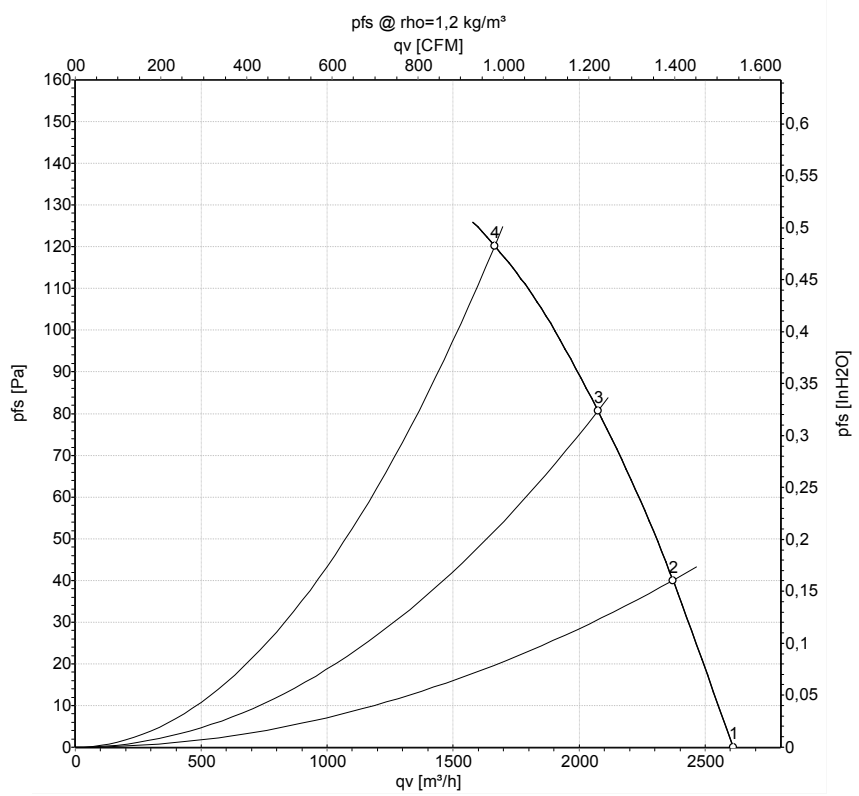
U1	blue	Z	brown	U2	black
PE	green/yellow				

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AC axial fan

straight blades (A series), single-intake

Curves: Air performance 50 Hz



Measurement: LU-64449-1

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	in. wg
1	230	50	2700	160	0.70	2610	0	1535	0.00
2	230	50	2665	166	0.73	2375	40	1395	0.16
3	230	50	2635	174	0.76	2075	80	1220	0.32
4	230	50	2615	179	0.78	1665	120	980	0.48

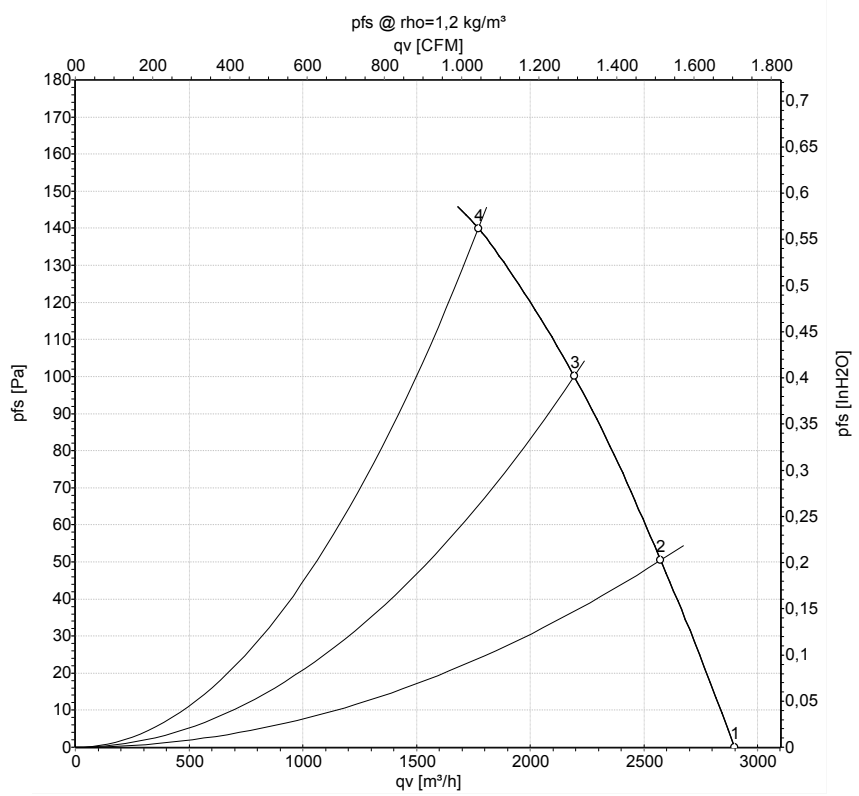
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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AC axial fan

straight blades (A series), single-intake

Curves: Air performance 60 Hz



Measurement: LU-64450-1

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	in. wg
1	230	60	3000	215	0.94	2895	0	1705	0.00
2	230	60	2920	229	1.00	2575	50	1515	0.20
3	230	60	2845	240	1.04	2195	100	1290	0.40
4	230	60	2795	246	1.07	1770	140	1045	0.56

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

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