

# AC axial fan

straight blades (A series)

A2E300-AA01-02 ebmpapst Datasheet

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## Nominal data

<b>Type</b>	<b>A2E300-AA01-02</b>		
<b>Motor</b>	<b>M2E068-EC</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min <sup>-1</sup>	2650	2900
Power consumption	W	160	205
Current draw	A	0.71	0.9
Capacitor	μF	5	5
Capacitor voltage	VDB	400	400
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	30

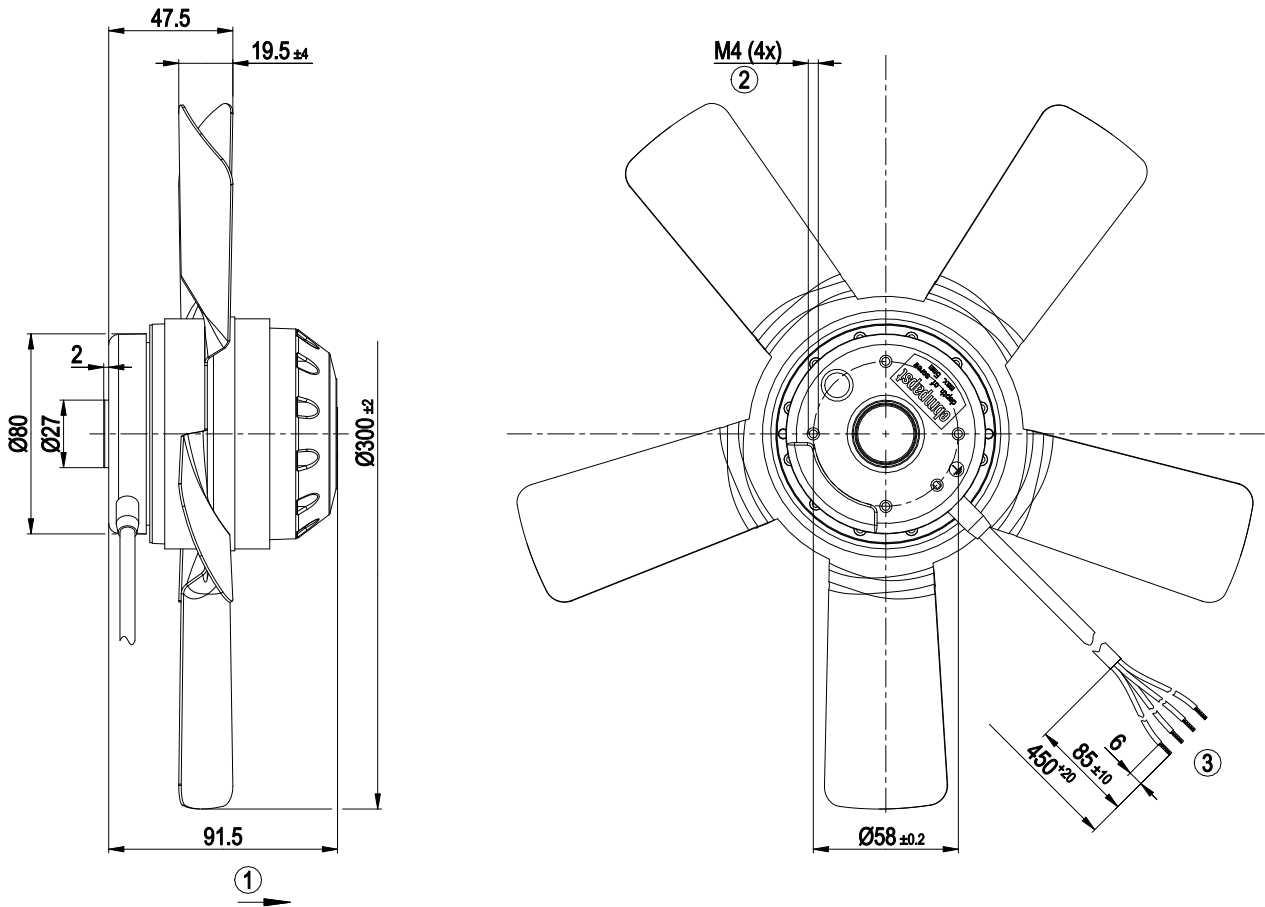
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



## Technical description

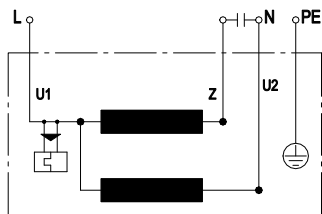
<b>Weight</b>	2.5 kg
<b>Size</b>	300 mm
<b>Motor size</b>	68
<b>Rotor surface</b>	Painted black
<b>Blade material</b>	Sheet steel, painted black
<b>Number of blades</b>	5
<b>Airflow direction</b>	A
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Lateral
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1

## Product drawing



1	Direction of air flow "A"
2	Max. clearance for screw 5 mm
3	Cable PVC 4G 0.5 mm <sup>2</sup> , 4x crimped splices

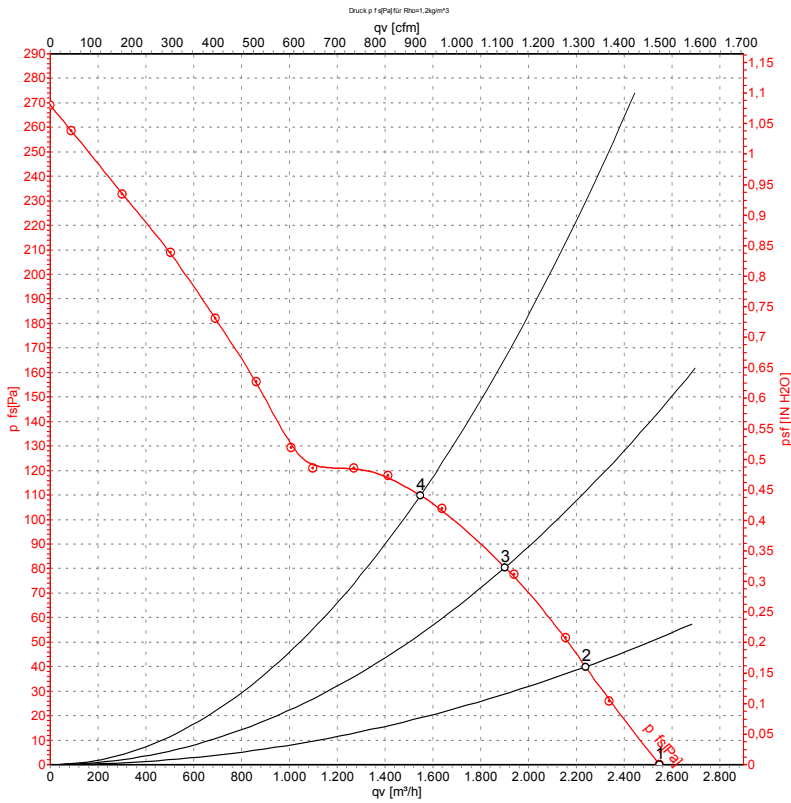
## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



## Curves: Air performance 50 Hz



Measurement: LU-4907-1

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.

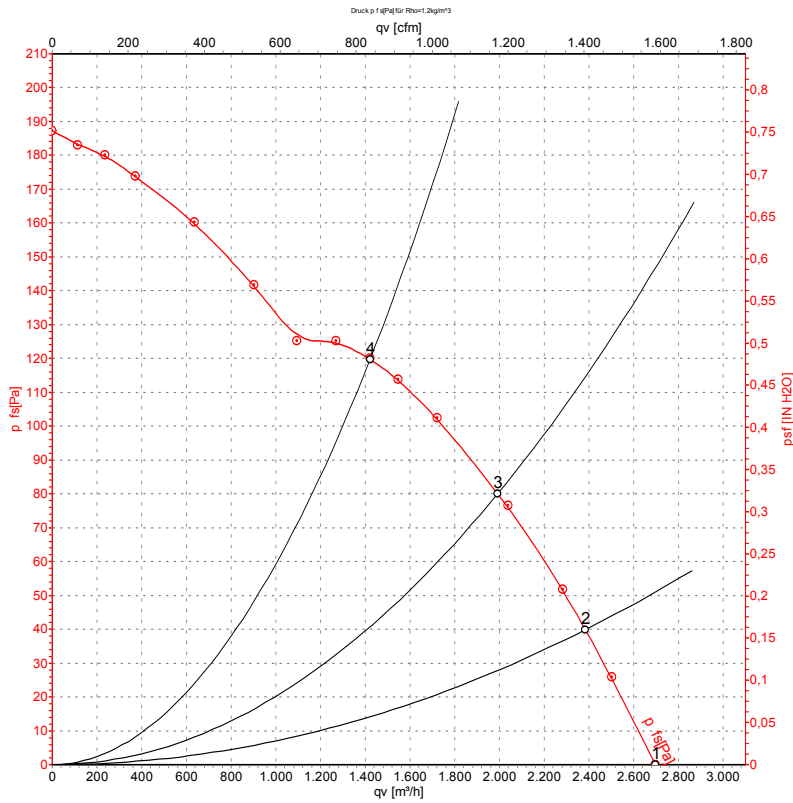
## Measured values

	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	50	2650	160	0.71	2550	0	1500	0.00
2	230	50	2595	175	0.77	2240	40	1320	0.16
3	230	50	2565	183	0.80	1905	80	1120	0.32
4	230	50	2535	187	0.82	1550	110	910	0.44

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



## Curves: Air performance 60 Hz



Measurement: LU-4908-1

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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	60	2900	205	0.90	2695	0	1585	0.00
2	230	60	2745	225	0.97	2385	40	1405	0.16
3	230	60	2640	236	1.02	1990	80	1170	0.32
4	230	60	2550	242	1.05	1420	120	835	0.48

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

