

# AC axial fan

straight blades (A series)

A4S250-AA02-02 ebmpapst Datasheet

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## Nominal data

<b>Type</b>	A4S250-AA02-02		
<b>Motor</b>	M4S068-CF		
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 <sup>-1</sup>	1400	1620
Power consumption	W	72	67
Current draw	A	0.53	0.46
Max. back pressure	Pa	80	100
Max. back pressure	in. wg	0.32	0.4
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	50

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



# AC axial fan

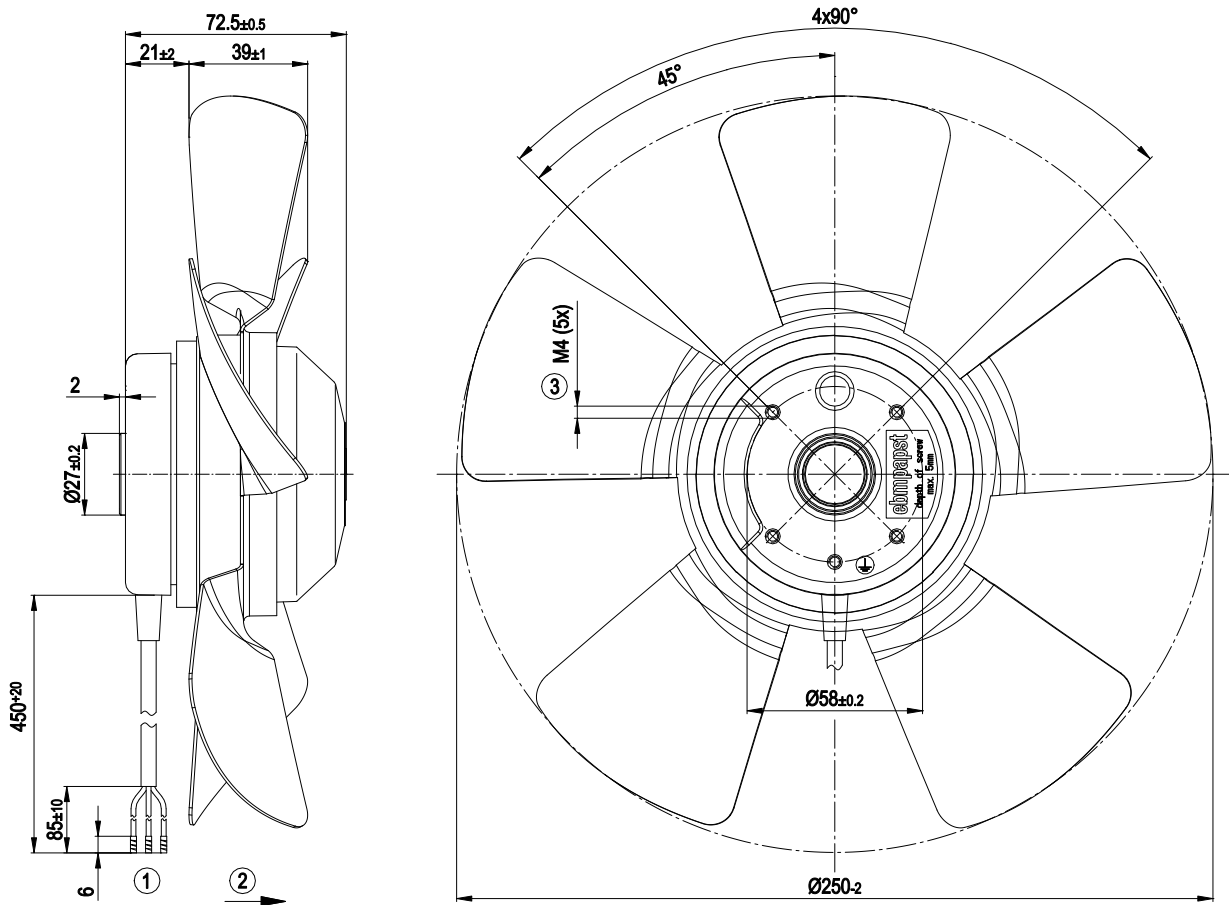
straight blades (A series)

## Technical description

<b>Weight</b>	1.59 kg
<b>Size</b>	250 mm
<b>Motor size</b>	68
<b>Rotor surface</b>	Painted black
<b>Impeller 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; CE

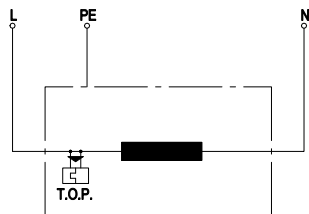


## Product drawing



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

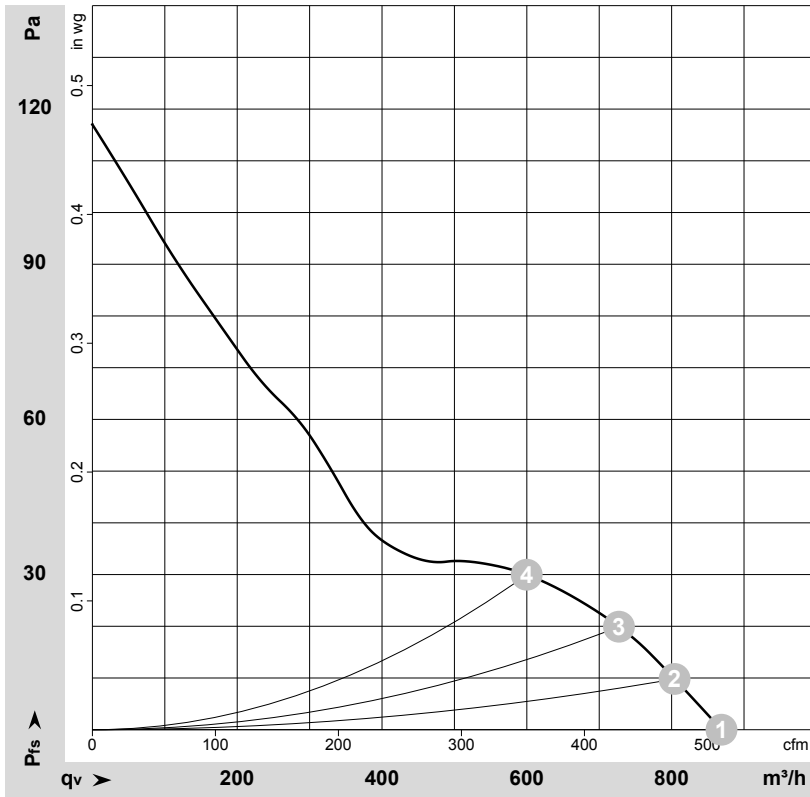
## Connection diagram



- L = blue
- PE = green/yellow
- N = brown
- TOP = thermal overload protector



## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-16243-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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.

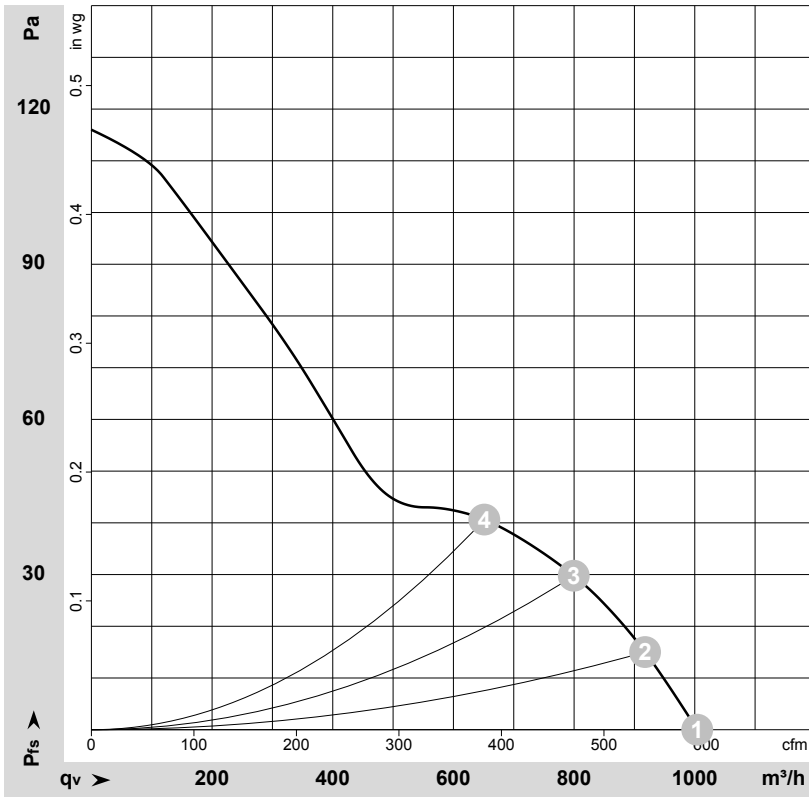
## Measured values

	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	1400	72	0.53	870	0	510	0.00
2	230	50	1400	70	0.52	805	10	475	0.04
3	230	50	1400	70	0.52	725	20	430	0.08
4	230	50	1390	70	0.52	600	30	355	0.12

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



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-16244-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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	1620	67	0.46	1005	0	590	0.00
2	230	60	1610	66	0.45	920	15	540	0.06
3	230	60	1605	67	0.46	800	30	470	0.12
4	230	60	1600	67	0.46	650	40	385	0.16

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

