

# AC axial fan

straight blades (A series)

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## Nominal data

Type	A4E400-AA06-01		
Motor	M4E068-EC		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1360	1430
Power input	W	160	225
Current draw	A	0.71	0.99
Motor capacitor	µF	5	5
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Max. back pressure	Pa	90	40
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	30

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations

## Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

\* Specific ratio =  $1 + p_g / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	30.4	25	29
Efficiency grade N	41.4	36	40
Power input $P_e$	kW	0.18	
Air flow $q_v$	m <sup>3</sup> /h	2475	
Pressure increase $p_{fs}$	Pa	80	
Speed n	min <sup>-1</sup>	1315	

Data established at point of optimum efficiency



# AC axial fan

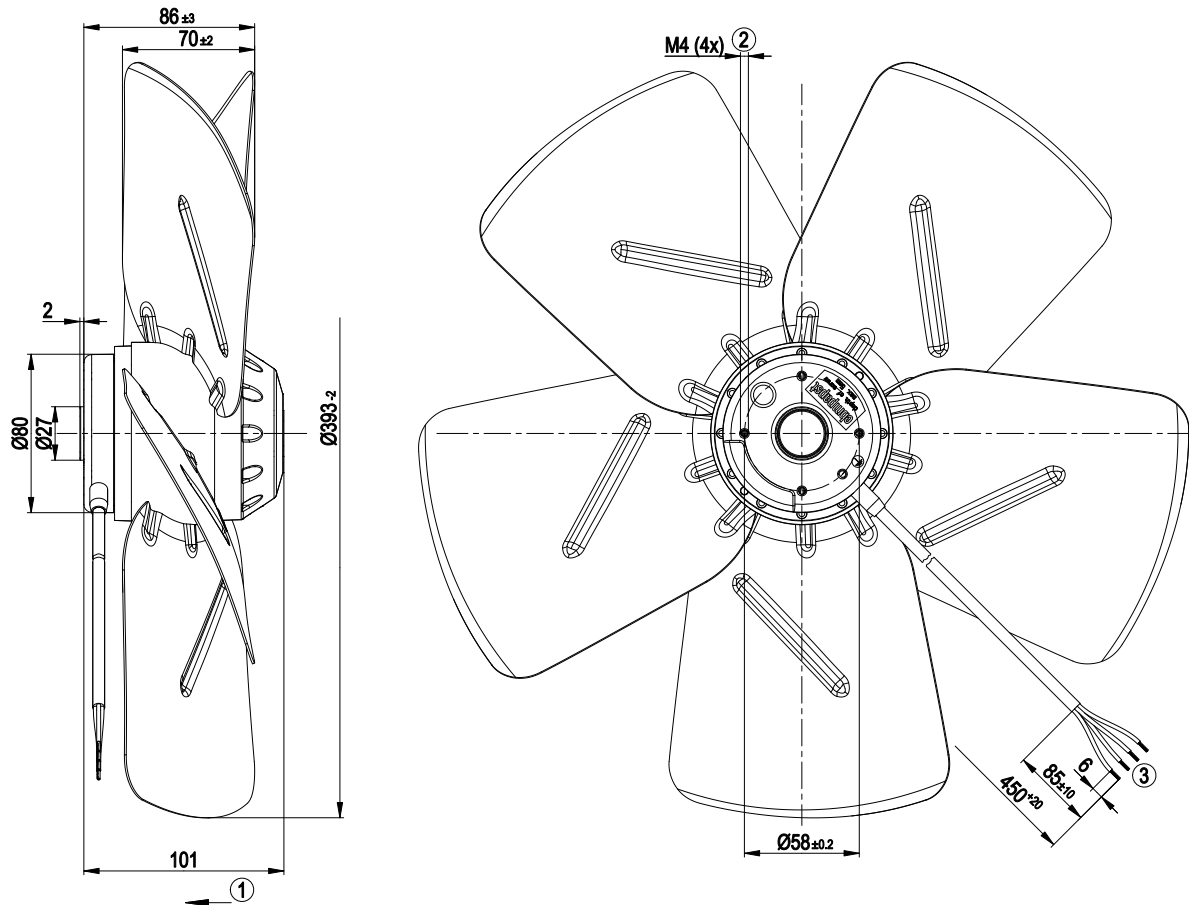
straight blades (A series)

## Technical features

<b>Mass</b>	3 kg
<b>Size</b>	400 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of blades</b>	Sheet steel, galvanised
<b>Number of blades</b>	5
<b>Direction of air flow</b>	"V"
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F5
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensate discharge holes</b>	Rotor-side
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Lateral
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE

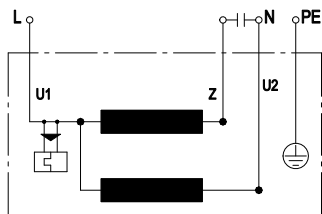


## Product drawing



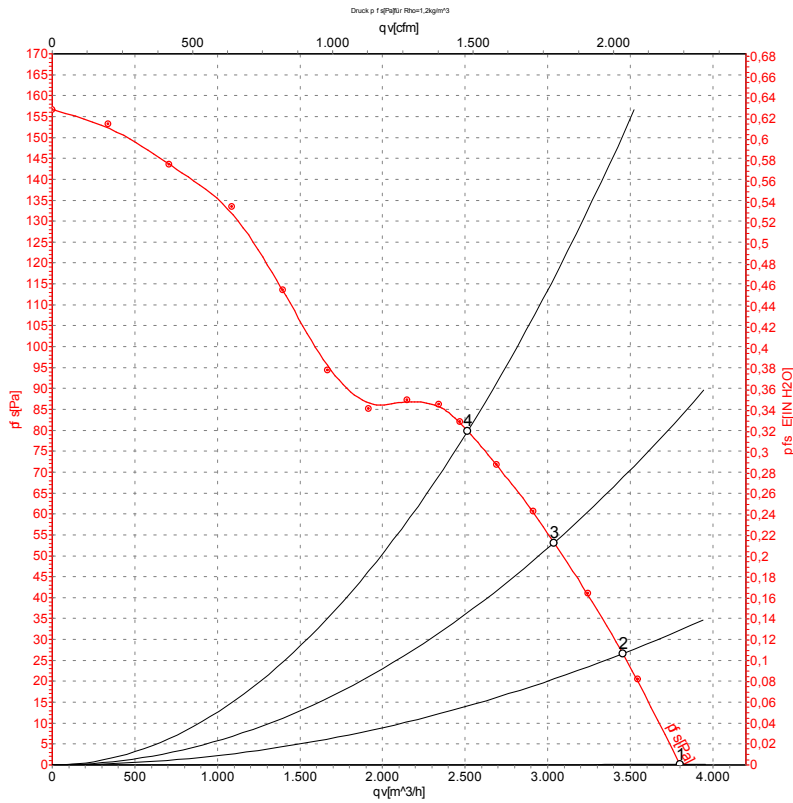
1	Direction of air flow "V"
2	Depth of screw max. 5 mm
3	Connection line PVC 4G 0.5 mm <sup>2</sup> , 4x brass lead tips crimped

## Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Charts: Air flow 50 Hz



Measurement: LU-24432

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

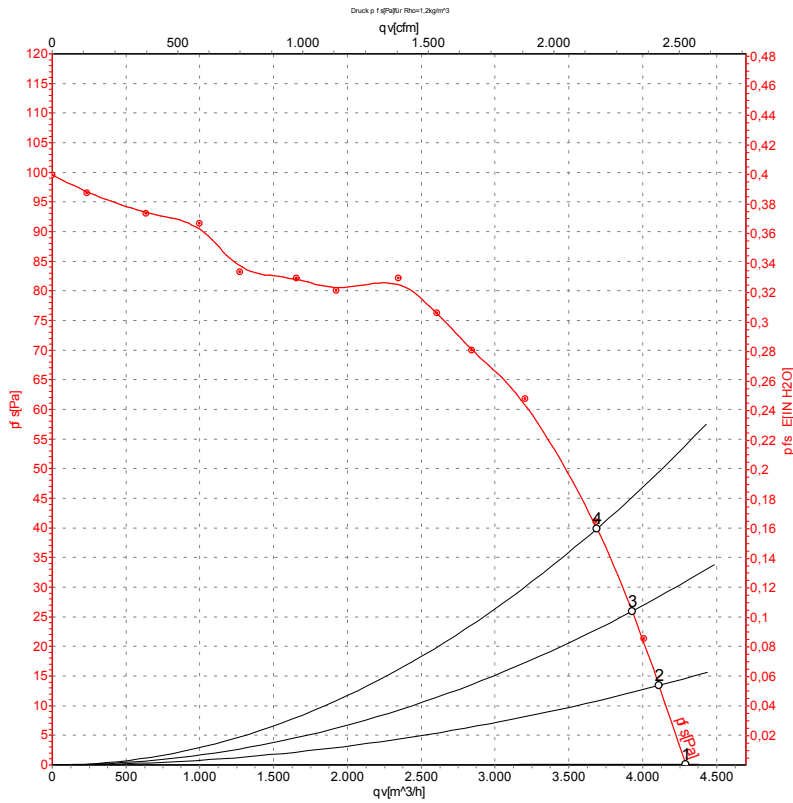
## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1405	129	0.57	3800	0
2	230	50	1380	146	0.64	3455	27
3	230	50	1350	162	0.71	3040	53
4	230	50	1315	180	0.78	2515	80

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



## Charts: Air flow 60 Hz



Measurement: LU-24433

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	1600	179	0.79	4290	0
2	230	60	1575	189	0.83	4110	15
3	230	60	1545	199	0.87	3930	25
4	230	60	1505	211	0.92	3690	40

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

