

A6E500-BB05-09 ebmpapst Datasheet FansCo

sales@fansco.com

www.fansco.com

## Nominal data

<b>Type</b>	<b>A6E500-BB05-09</b>		
<b>Motor</b>	<b>M6E094-FA</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	845	875
Power input	W	220	290
Current draw	A	0.98	1.27
Motor capacitor	μF	6	6
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Max. back pressure	Pa	60	60
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	95	80
Starting current	A	1.65	

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

		Actual	Request 2013	Request 2015
Installation category	A			
Efficiency category	Static			
Variable speed drive	No			
Specific ratio*	1.00			
Overall efficiency $\eta_{es}$		29.4	25.4	29.4
Efficiency grade N		40	36	40
Power input $P_e$	kW	0.21		
Air flow $q_v$	m <sup>3</sup> /h	3770		
Pressure increase $p_{fs}$	Pa	60		
Speed n	min <sup>-1</sup>	850		

Data established at point of optimum efficiency

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



# AC axial fan

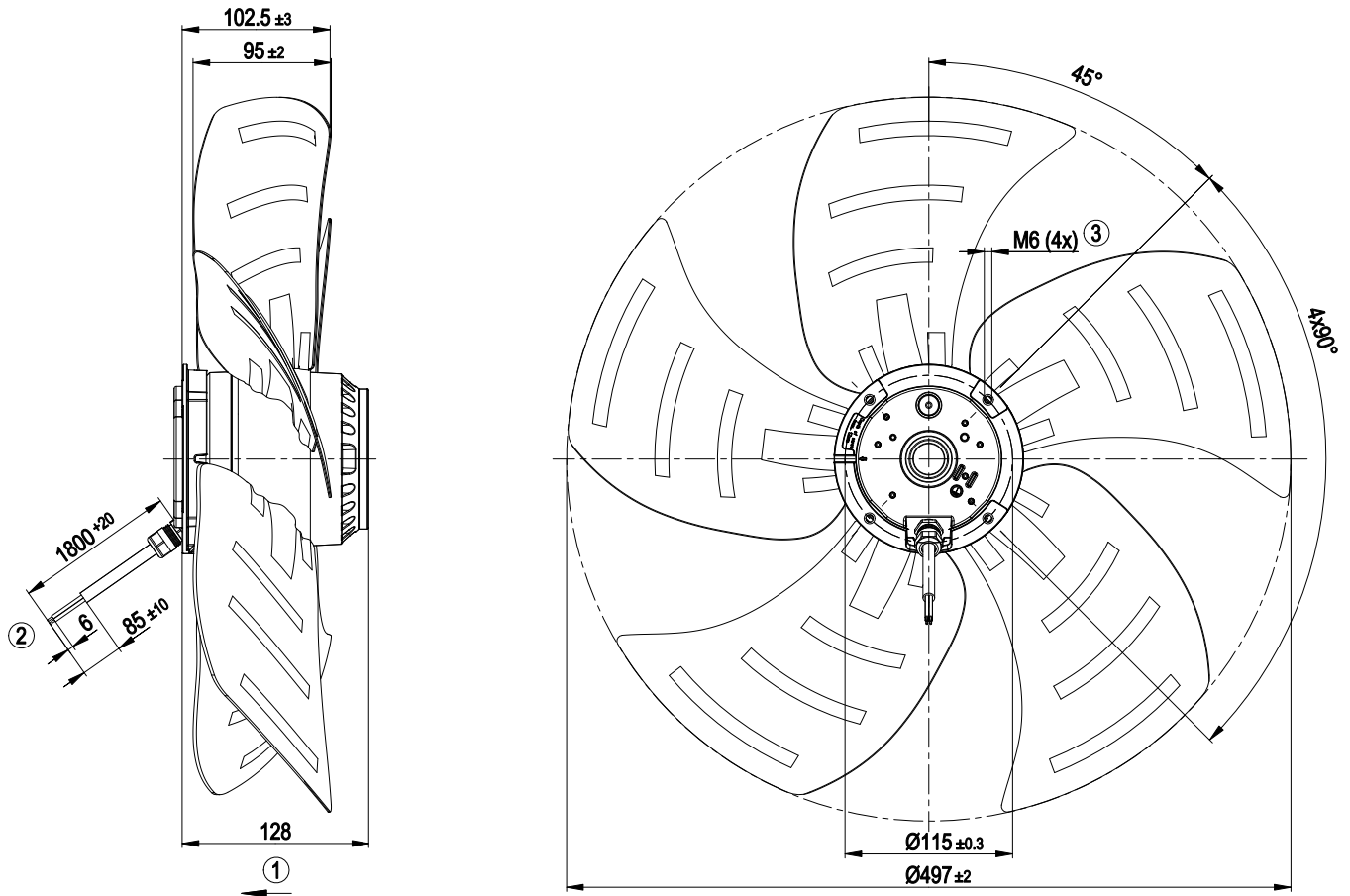
sickled blades (S series)

## Technical features

<b>Size</b>	500 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of blades</b>	Sheet steel, coated in black
<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 54
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F3-1
<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>	<= 3.5 mA
<b>Motor protection</b>	Thermal overload protector (TOP) brought out
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60034-1 (2004)



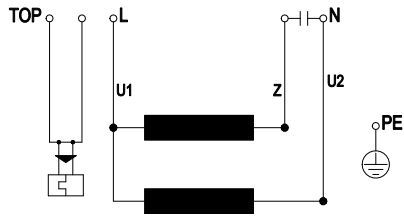
Product drawing



1	Direction of air flow "V"
2	Connection line silicone 6G 0.50mm <sup>2</sup> , 6x brass lead tips crimped
3	Screw depth max. 12 mm

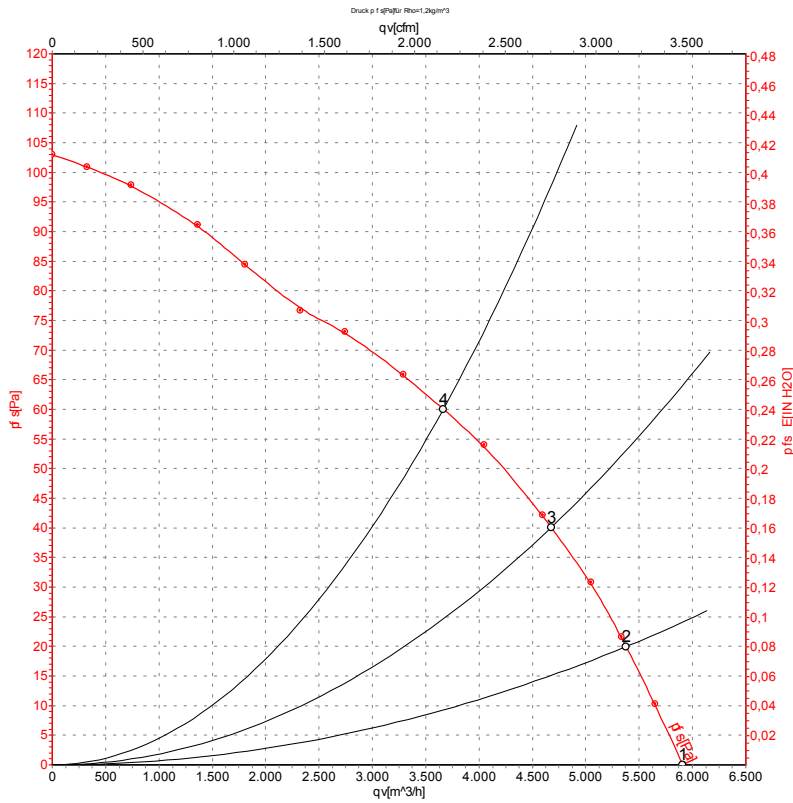


## Connection screen



TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		

## Charts: Air flow 50 Hz



Measurement: LU-52337

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.

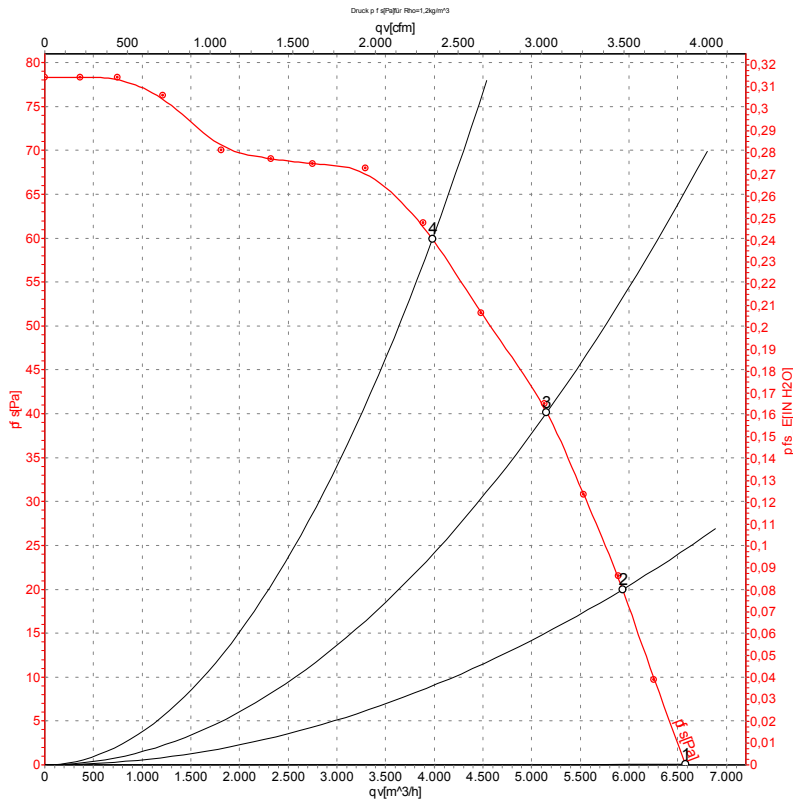
## Measured values

	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	895	190	0.84	5900	0
2	230	50	880	199	0.88	5375	20
3	230	50	865	211	0.93	4675	40
4	230	50	845	220	0.98	3665	60

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-52336

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	m³/h	Pa
1	230	60	995	267	1.16	6580	0
2	230	60	960	277	1.20	5935	20
3	230	60	925	284	1.23	5155	40
4	230	60	875	290	1.27	3980	60

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

