

A2E200-AI86-70

# AC axial fan

sickle-shaped blades (S series)



A2E200-AI86-70 ebmpapst Datasheet

[sales@fansco.com](mailto:sales@fansco.com)

[www.fansco.com](http://www.fansco.com)

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

Type	A2E200-AI86-70			
Motor	M2E068-BF			
Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL 2111
Speed (rpm)	min <sup>-1</sup>	2500	2700	2700
Power consumption	W	65	82	85
Current draw	A	0.6	0.73	0.72
Capacitor	µF	5	5	5
Capacitor voltage	VDB	220	220	220
Capacitor standard		S0 (CE)		UL
Max. back pressure	Pa	140	140	141
Max. back pressure	inH <sub>2</sub> O	0.56	0.56	0.57
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	55	65	70

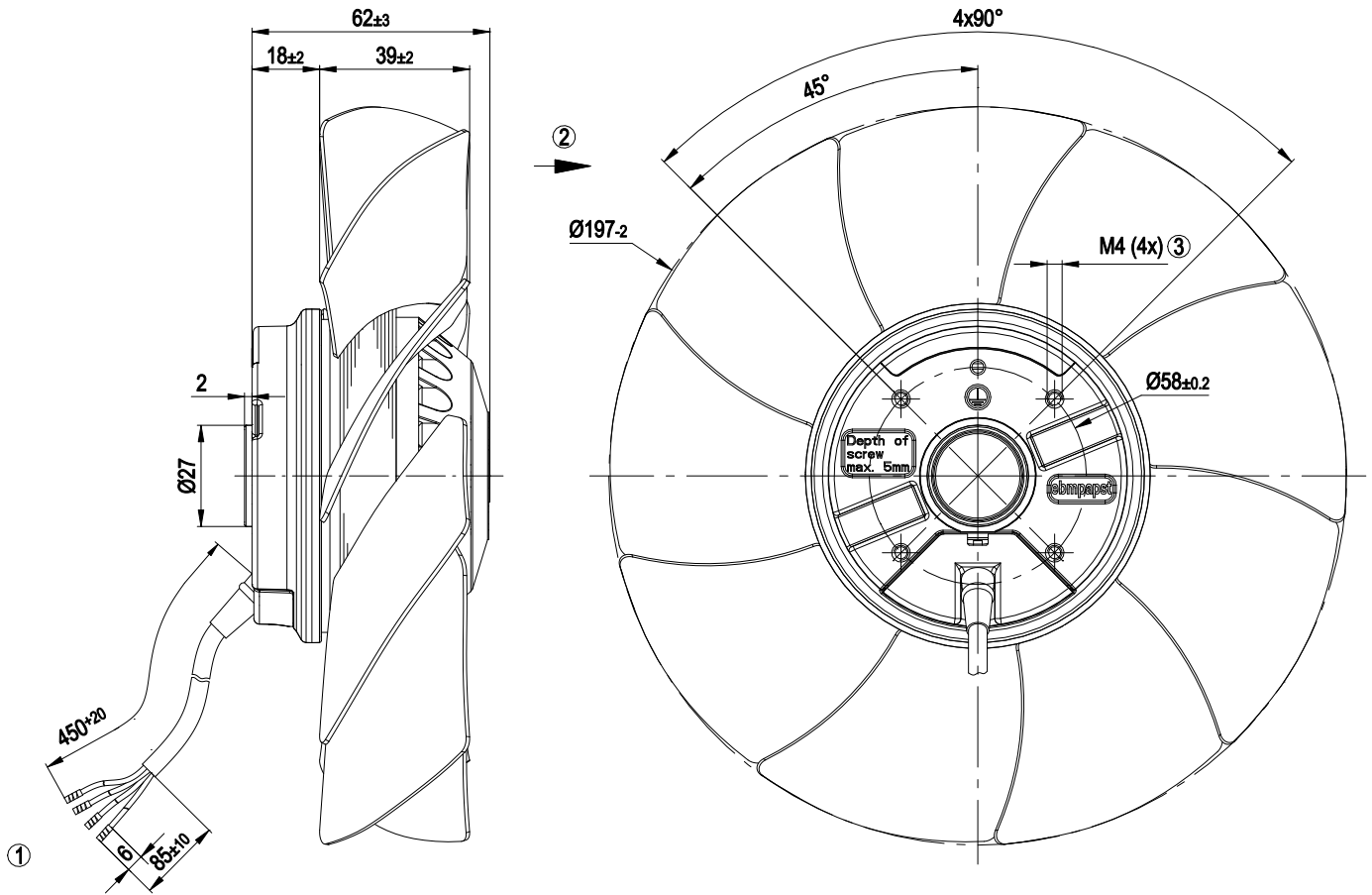
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



## Technical description

Weight	1.4 kg
Fan size	200 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	9
Airflow direction	"A"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
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	UL 2111; CSA C22.2 No. 77

## Product drawing



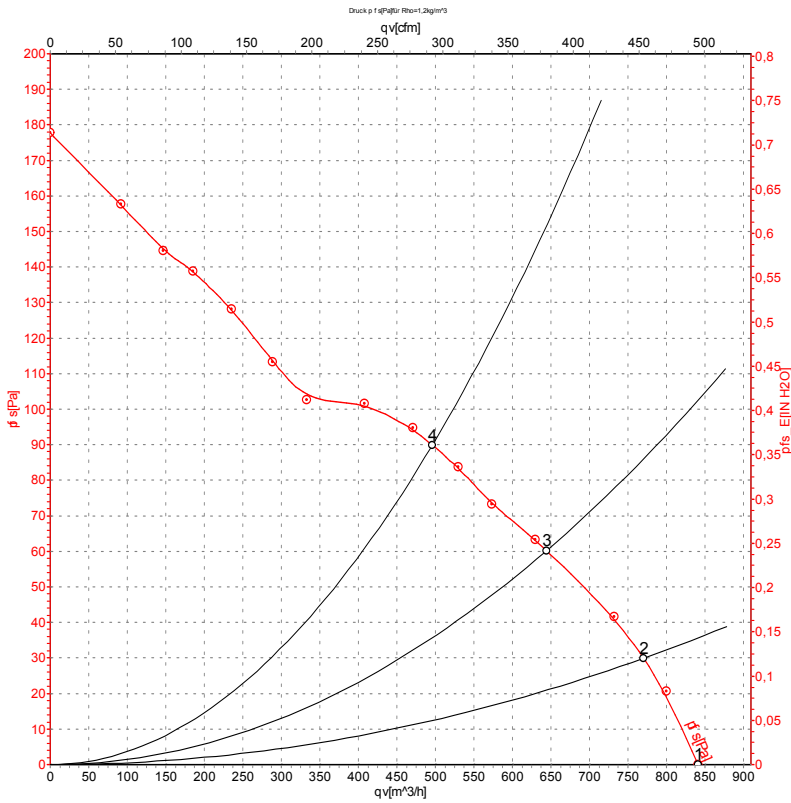
1	Direction of air flow "A"
2	Cable PVC, 4x crimped splices
3	Max. clearance for screw 5 mm

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



Measurement: LU-33654-1

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.

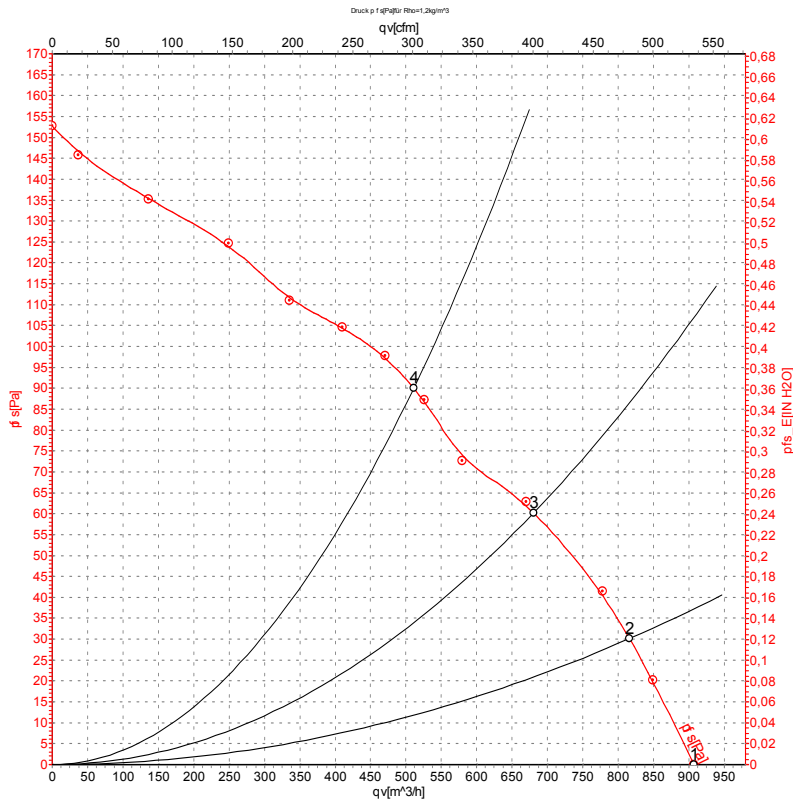
## Measured values

	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	inH <sub>2</sub> O
1	115	50	2500	65	0.60	840	0	495	0.00
2	115	50	2450	68	0.62	770	30	455	0.12
3	115	50	2395	70	0.63	645	60	380	0.24
4	115	50	2350	72	0.65	495	90	290	0.36

U = Power supply · 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-33655-1

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	inH2O
1	115	60	2700	82	0.73	905	0	535	0.00
2	115	60	2580	85	0.74	815	30	480	0.12
3	115	60	2460	88	0.76	680	60	400	0.24
4	115	60	2370	90	0.78	510	90	300	0.36

U = Power supply · 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

