A4E250-AB89-06

AC axial fan

straight blades (A series)

A4E250-AB89-06 ebmpapst Datasheet
sales@fansco.com
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	**A4E250-AB89-06**
Motor	**M4E068-BF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL 2111
Speed (rpm)	min^{-1}	1050	1080	1080
Power consumption	W	18	20	21
Current draw	A	0.08	0.09	0.1
Capacitor	µF	0.47	0.47	0.47
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	S0 (CE)	UL
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	80	80

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

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Technical description

Weight	1.3 kg
Size	250 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, galvanized
Airflow direction	V
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	H1
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 mounting	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	CSA C22.2 No. 77; UL 1004-3

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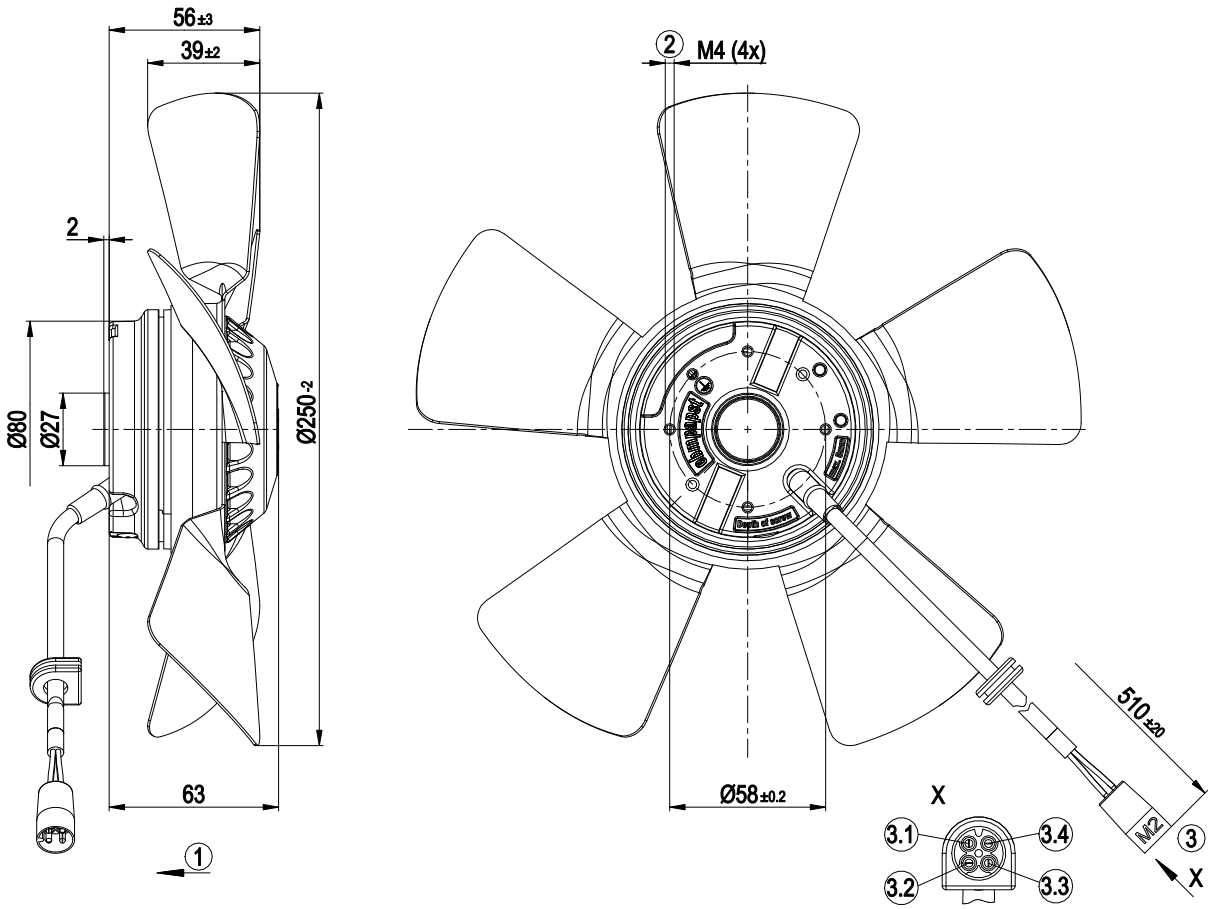
Product drawing



1	Airflow direction "V"
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20, 4-pole connector housing tyco 925075-7, 4x plug pin tyco 163555-6
3.1	Z (brown)
3.2	PE (green/yellow)
3.3	L (blue)
3.4	N (black)

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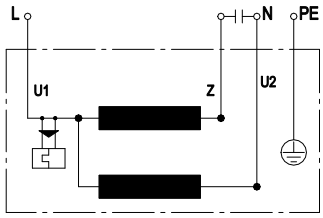
Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

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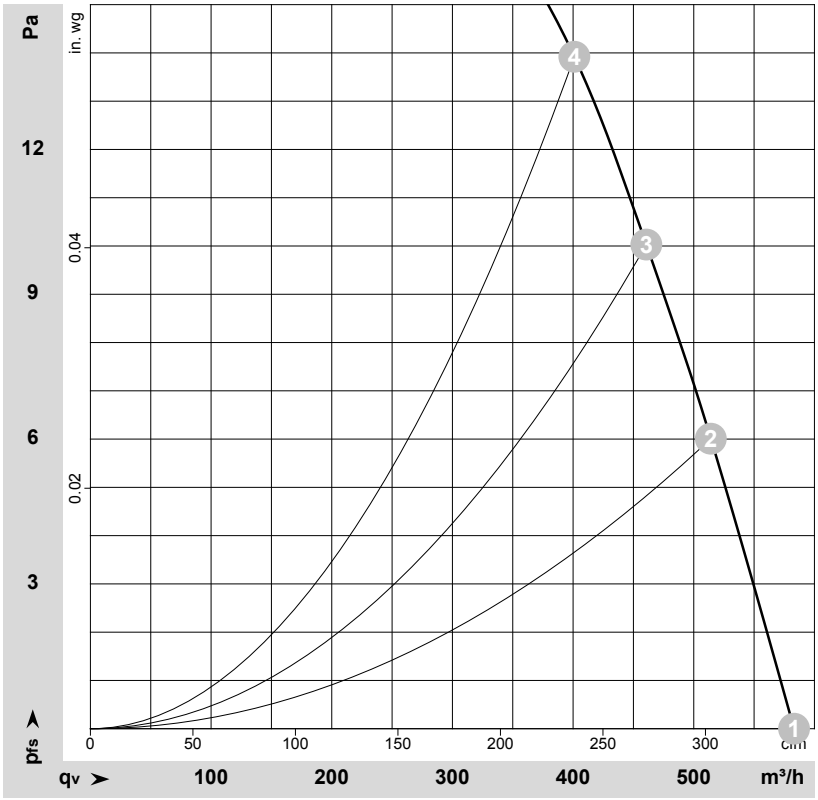
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-52860-1

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

	Wired	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1~	230	50	1050	18	0.08	585	0	345	0.00
2	1~	230	50	1040	18	0.08	515	6	305	0.02
3	1~	230	50	1030	18	0.08	460	10	270	0.04
4	1~	230	50	1020	18	0.08	400	14	235	0.06

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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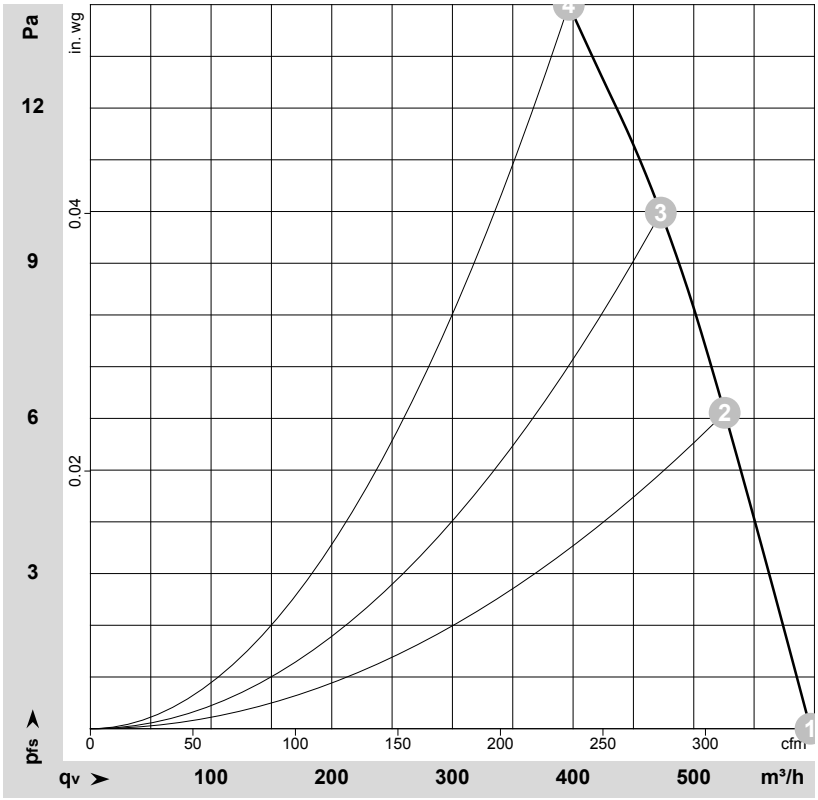
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-52861-1

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

	Wired	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1~	230	60	1080	20	0.09	595	0	350	0.00
2	1~	230	60	1060	20	0.09	525	6	310	0.02
3	1~	230	60	1050	20	0.09	475	10	280	0.04
4	1~	230	60	1025	20	0.09	395	14	235	0.06

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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