

AC axial fan

straight blades (A series)

A4E250-AA04-33 ebmpapst Datasheet
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Nominal data

Type	A4E250-AA04-33			
Motor	M4E068-CF			
Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Valid for approval/standard		CE	CE	UL 1004-3
Speed (rpm)	min ⁻¹	1420	1660	1660
Power consumption	W	37	52	55
Current draw	A	0.17	0.24	0.25
Capacitor	μF	1.5	1.5	1.5
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	S0 (CE)	UL
Max. back pressure	Pa	40	55	55
Max. back pressure	inH ₂ O	0.16	0.22	0.22
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	-	-	-

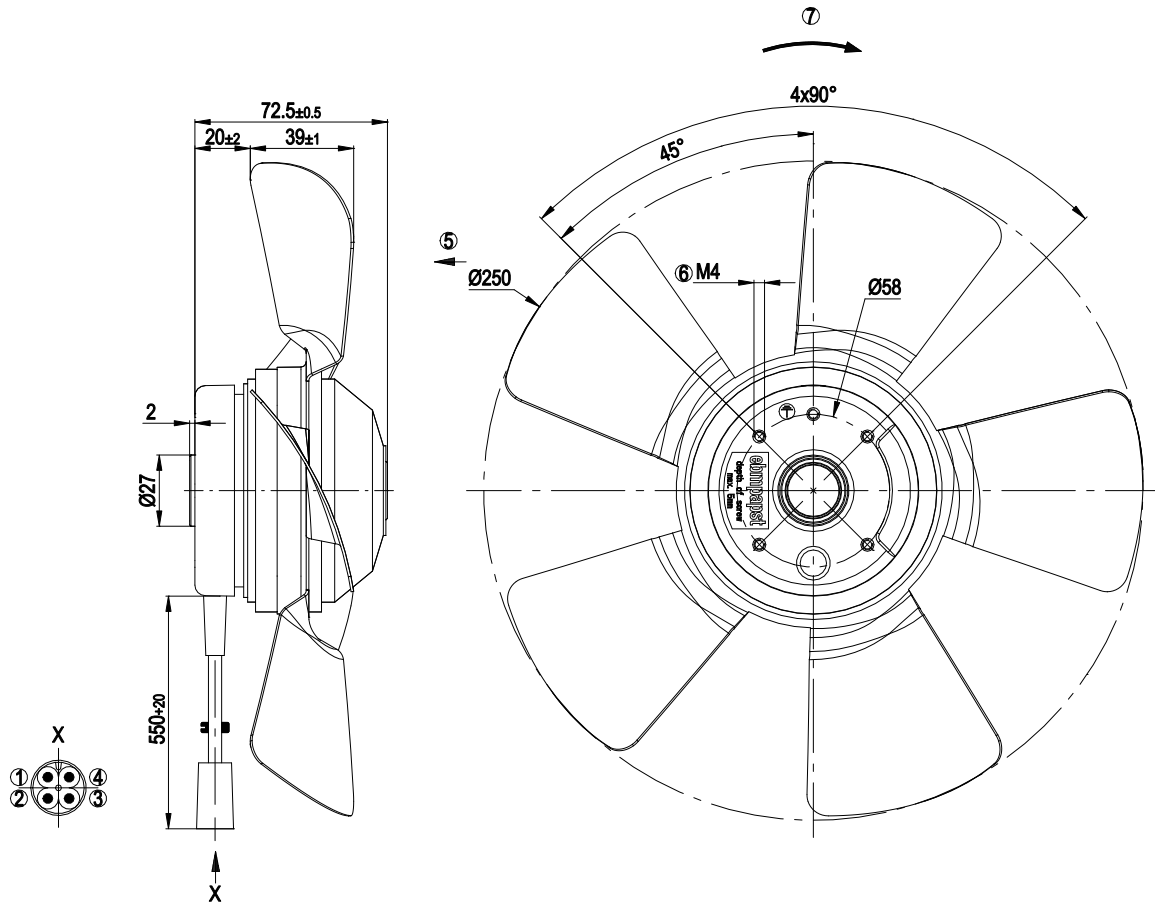
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
 Subject to change



Technical description

Weight	1.68 kg
Fan size	250 mm
Rotor surface	Painted black
Impeller material	Sheet steel
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
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	Lateral
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; CCC

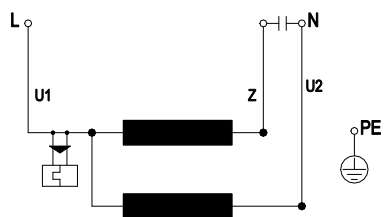
Product drawing



X	Connector housing AMP Mate-N-Lok, cable PVC, connected via plug pins.
1	brown
2	green/yellow
3	blue
4	black
5	Direction of air flow "V"
6	Max. clearance for screw 5 mm
7	Direction of rotation counterclockwise, viewed toward rotor



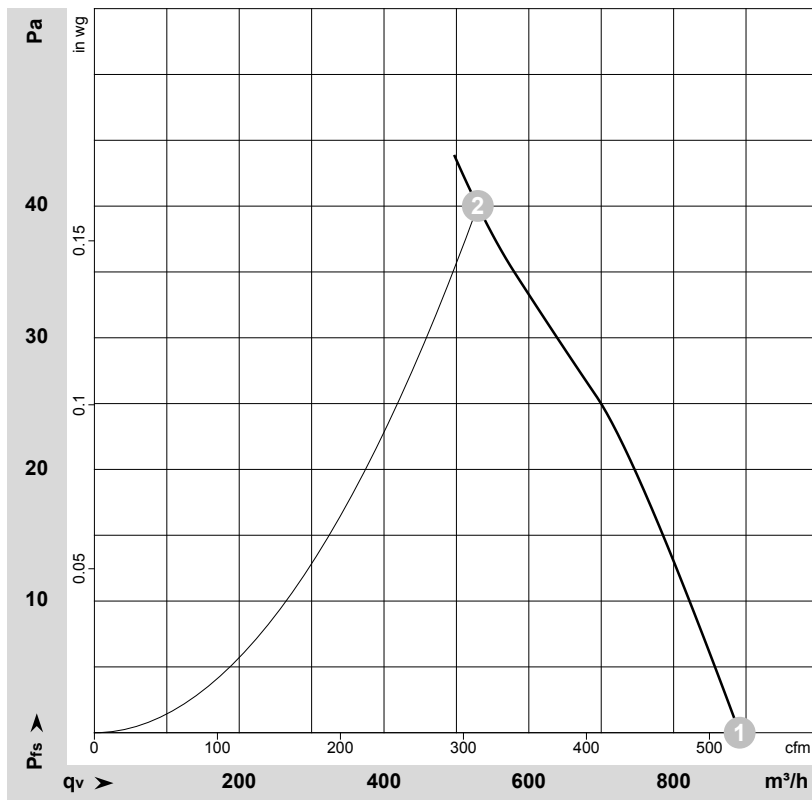
Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



Curves: Air performance 50 Hz



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

Measurement: LU-23449-1

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.

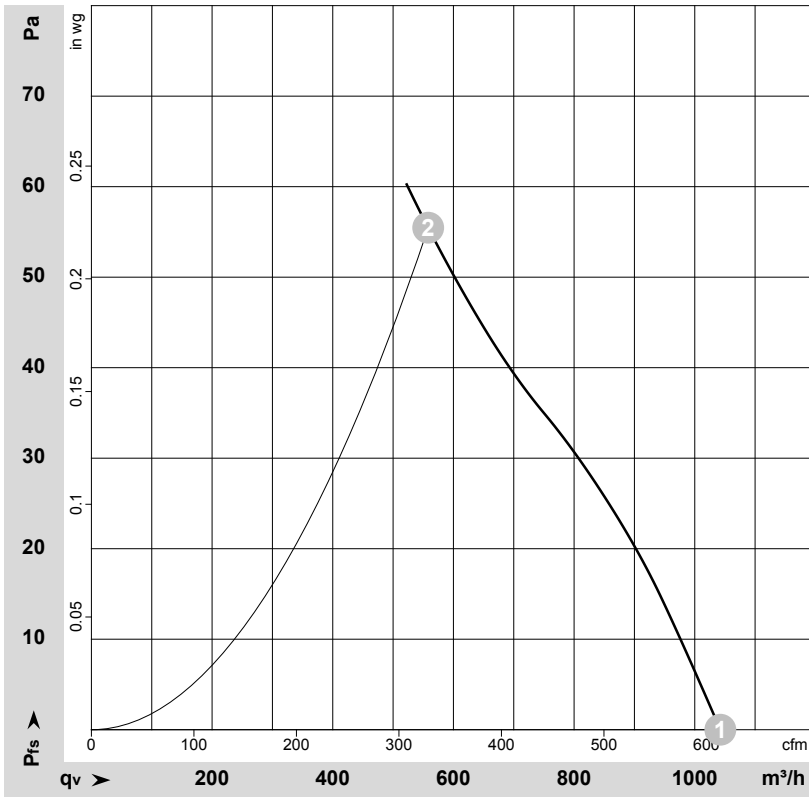
Measured values

	U	f	n	P _e	I	q _v	P _{fs}	q _v	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	230	50	1420	37	0.17	890	0	525	0.00
2	230	50	1415	39	0.17	530	40	310	0.16

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



Curves: Air performance 60 Hz



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

Measurement: LU-63563-1

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 _e	I	q _v	P _{fs}	q _v	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	230	60	1660	52	0.24	1040	0	615	0.00
2	230	60	1635	54	0.25	560	55	330	0.22

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

