A2E250-AE31-16

AC axial fan

straight blades (A series)



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.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	**A2E250-AE31-16**	
Motor	**M2E068-DF**	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	2500
Power consumption	W	115
Current draw	A	1.02
Capacitor	µF	12
Capacitor voltage	VDB	220
Capacitor standard		S2 (CE)
Max. back pressure	Pa	150
Max. back pressure	inH2O	0.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	80
Starting current	A	2.0

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

AC axial fan

straight blades (A series)

Technical description

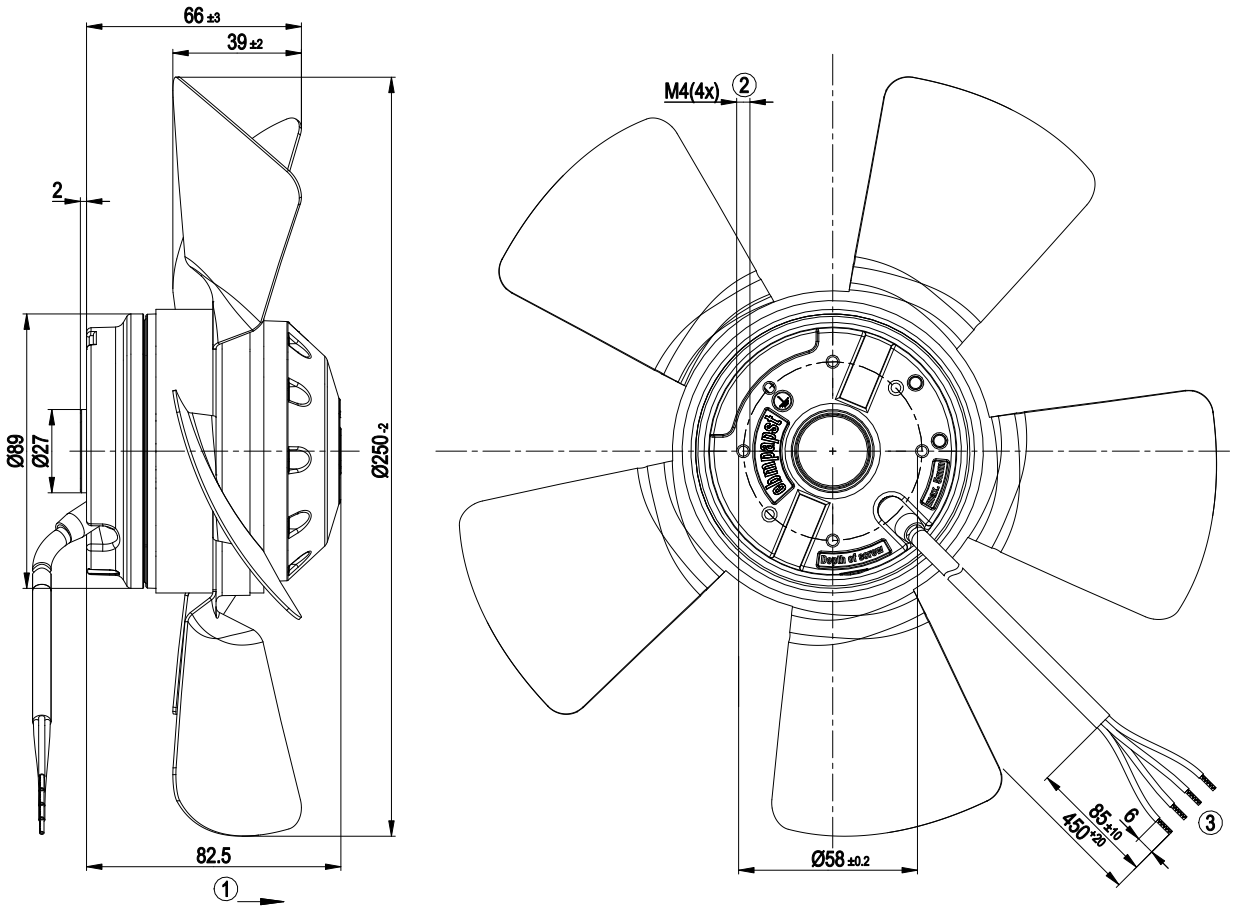
Weight	2.2 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, galvanized
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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 2111

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

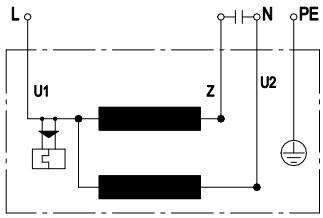
straight blades (A series)

Product drawing



1	Direction of air flow "A"
2	Max. clearance for screw 5 mm
3	Cable PVC 4G 0.5 mm², 4x crimped splices

Connection diagram



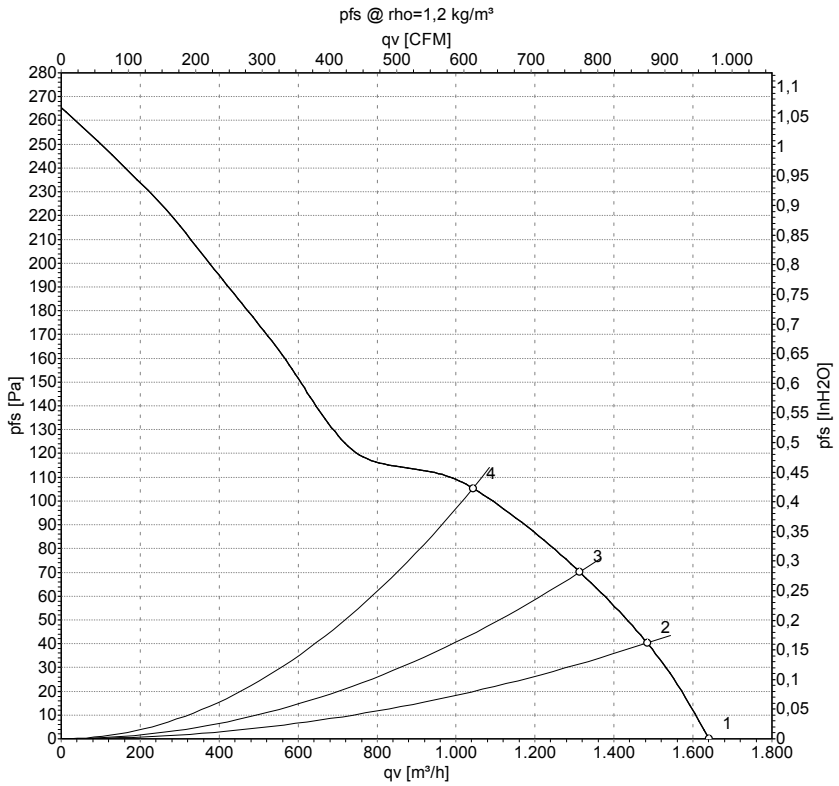
U1	blue	Z	brown	U2	black
PE	green/yellow				

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

straight blades (A series)

Curves: Air performance 50 Hz



Measurement: LU-56499-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	115	50	2500	115	1.02	1640	0	965	0.00
2	115	50	2470	119	1.04	1485	40	875	0.16
3	115	50	2440	122	1.07	1315	70	775	0.28
4	115	50	2425	124	1.09	1045	105	615	0.42

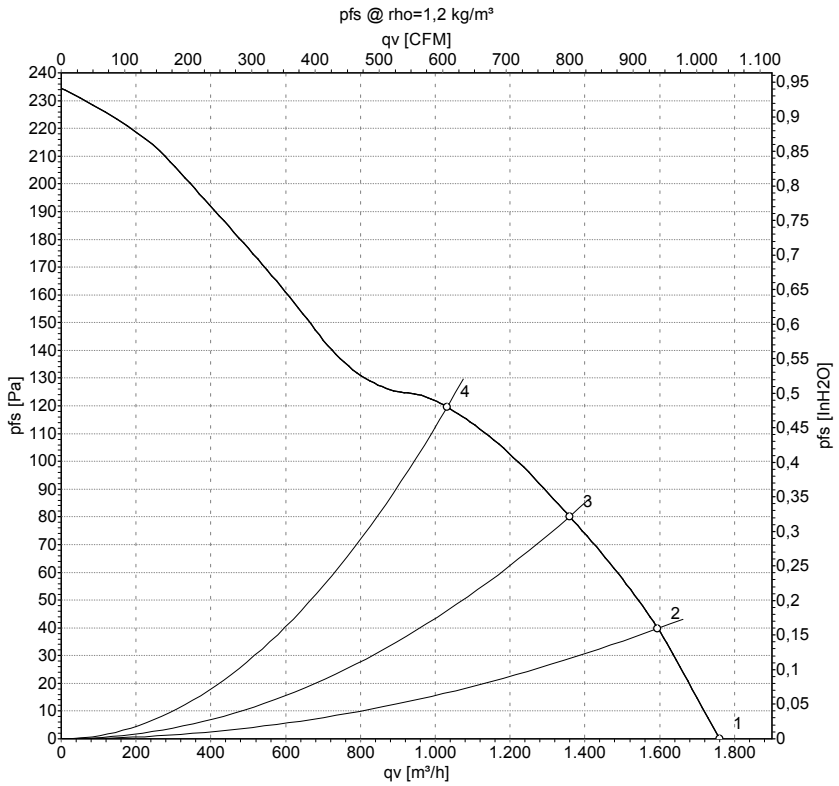
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan

straight blades (A series)

Curves: Air performance 60 Hz



Measurement: LU-56498-1

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_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	115	60	2690	160	1.40	1760	0	1035	0.00
2	115	60	2620	163	1.42	1595	40	940	0.16
3	115	60	2550	166	1.44	1360	80	800	0.32
4	115	60	2525	166	1.45	1030	120	605	0.48

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

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com