A2D250-AJ02-11

AC axial fan

sickle-shaped blades (S series)

A2D250-AJ02-11 ebmpapst Datasheet
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Nominal data

Type	**A2D250-AJ02-11**
Motor	**M2D068-DC**

Phase		3~	3~	3~
Nominal voltage	VAC	400	400	460
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	CE
Speed (rpm)	min^{-1}	2650	2900	3050
Power consumption	W	113	160	172
Current draw	A	0.25	0.27	0.27
Max. back pressure	Pa	150	150	165
Max. back pressure	inH2O	0.6	0.6	0.66
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	70	70
Starting current	A	0.81	0.75	0.85

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	28.4	28.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40.1	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.14
09 Air flow q_v	m^3/h	1450
09 Pressure increase p_{fs}	Pa	100
10 Speed (rpm) n	min^{-1}	2530
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-51572

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Technical description

Weight	2.2 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	7
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	F2-2
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 top; rotor on bottom on request
Condensation drainage holes	On stator 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) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	CSA C22.2 No. 100; UL 1004-1

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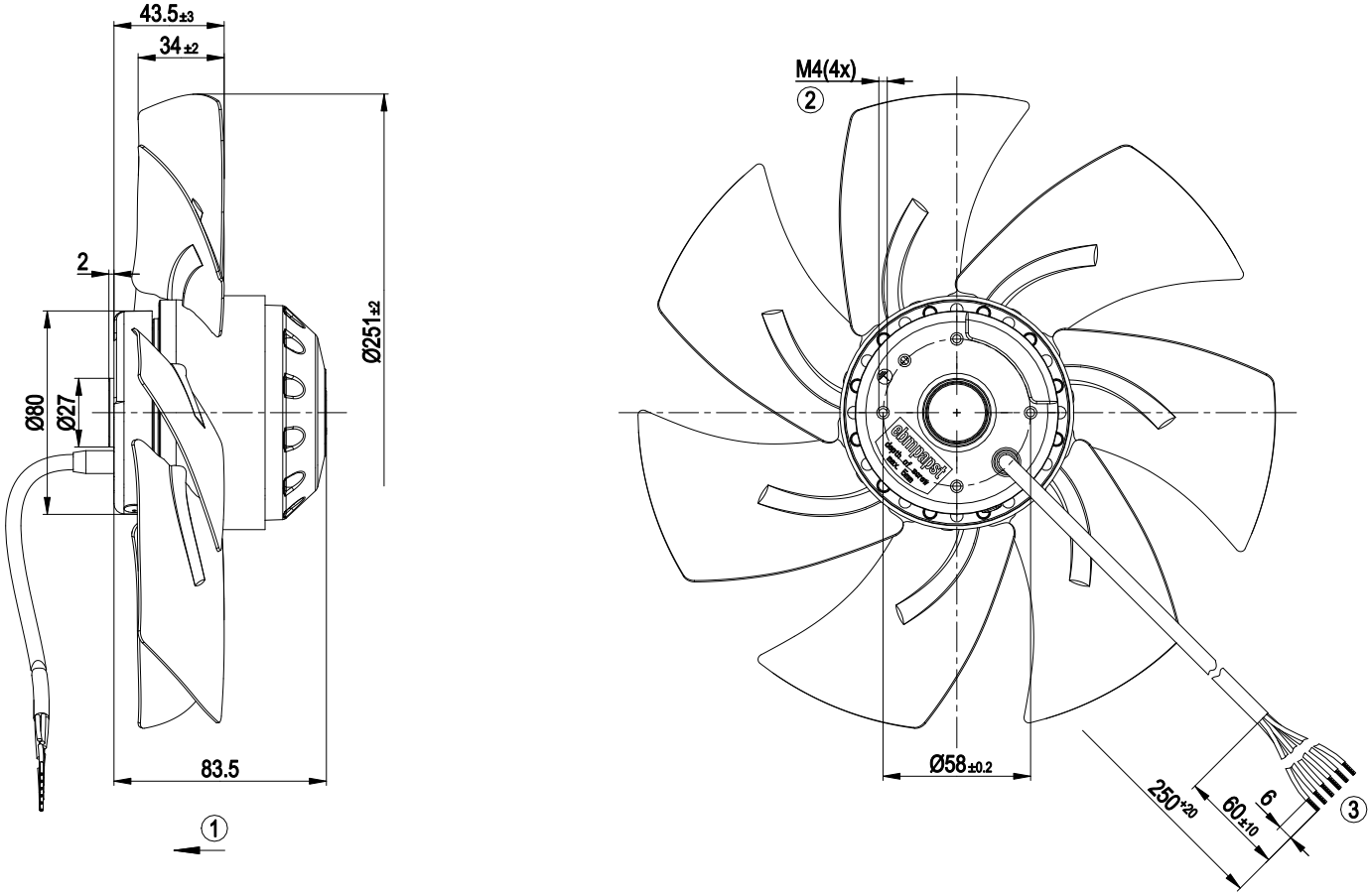
Product drawing



1	Direction of air flow "V"
2	Max. clearance for screw 5 mm
3	Cable PFA 6G, 6x crimped splices

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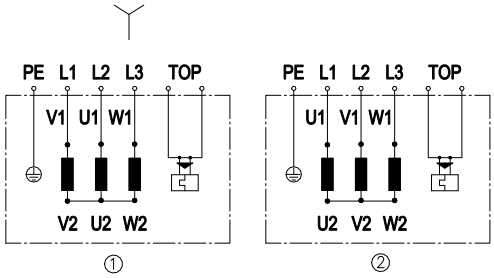
Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor
Y	Star connection
1	Counterclockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
PE	green/yellow
TOP	2x gray

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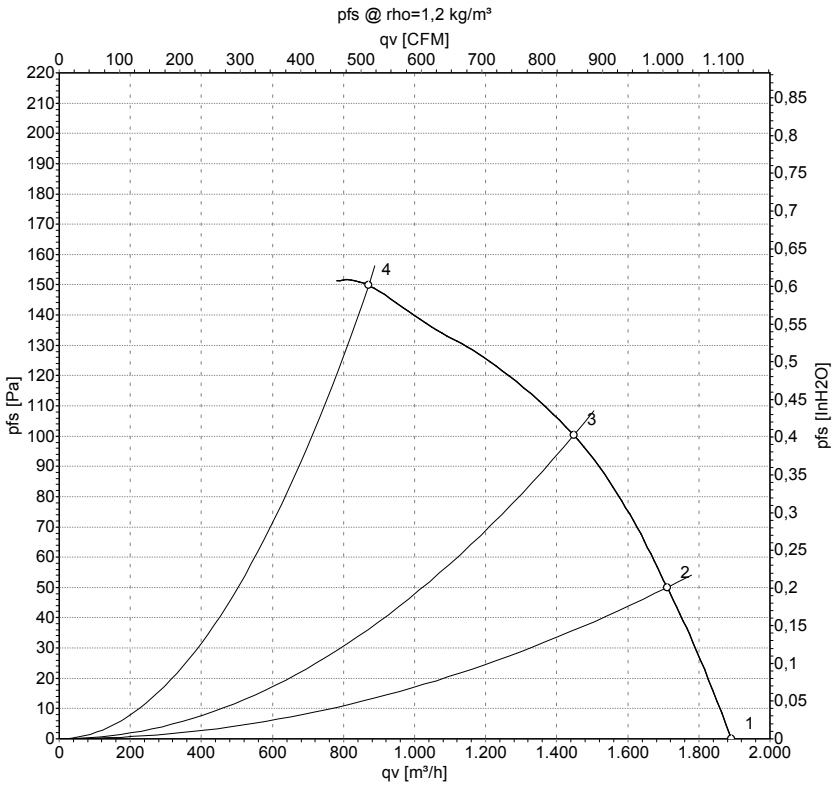
Curves: Air performance 50 Hz Y



Measurement: LU-51572-1

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	inH2O
1	Y	400	50	2650	113	0.25	1890	0	1115	0.00
2	Y	400	50	2590	127	0.25	1710	50	1005	0.20
3	Y	400	50	2530	141	0.27	1450	100	850	0.40
4	Y	400	50	2450	159	0.29	870	150	510	0.60

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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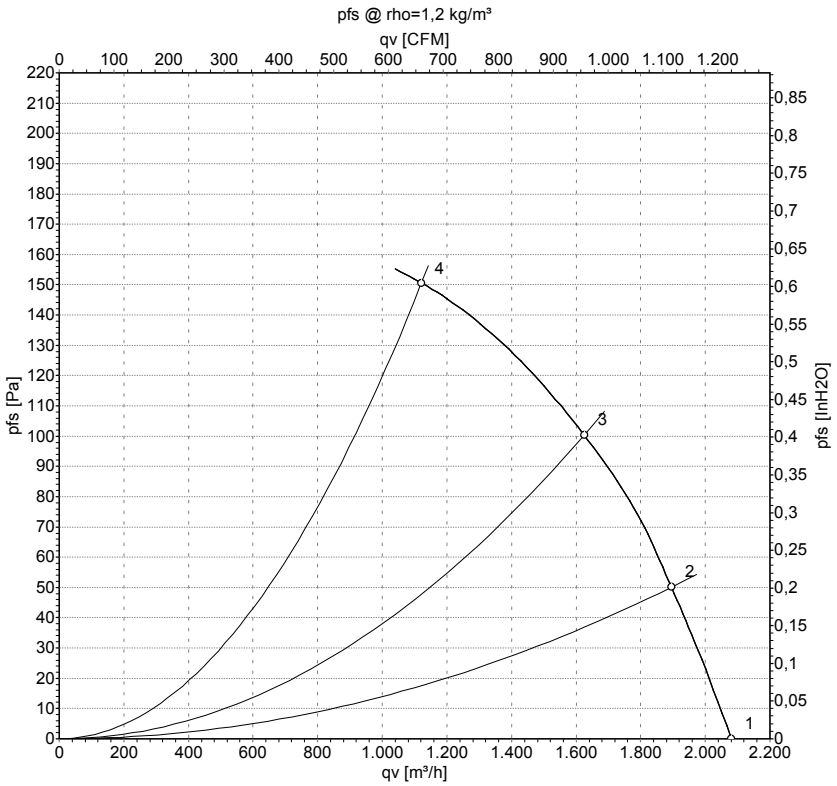
Curves: Air performance 60 Hz



Measurement: LU-51573-1

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	inH2O
1	Y	400	60	2900	160	0.27	2080	0	1225	0.00
2	Y	400	60	2815	174	0.28	1895	50	1115	0.20
3	Y	400	60	2710	192	0.31	1625	100	955	0.40
4	Y	400	60	2590	211	0.34	1120	150	660	0.60

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