A2D250-AE22-06

AC axial fan

straight blades (A series)

A2D250-AE22-06 ebmpapst Datasheet
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Nominal data

Type	**A2D250-AE22-06**
Motor	**M2D068-DC**

Phase		3~	3~		3~
Nominal voltage	VAC	400	400	460	460
Wiring		Y	Y	Y	Y
Frequency	Hz	50	60	60	60
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		CE	CE	CE	UL
Speed (rpm)	min^{-1}	2550	2700	2900	2900
Power consumption	W	53	75	82	85
Current draw	A	0.1	0.12	0.12	
Max. back pressure	Pa	200	200	200	
Max. back pressure	inH2O	0.8	0.8	0.8	
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	110	100	100	100

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	2.02 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
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	"F"
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 bottom; rotor on top on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 1004-1; CSA C22.2 No. 100

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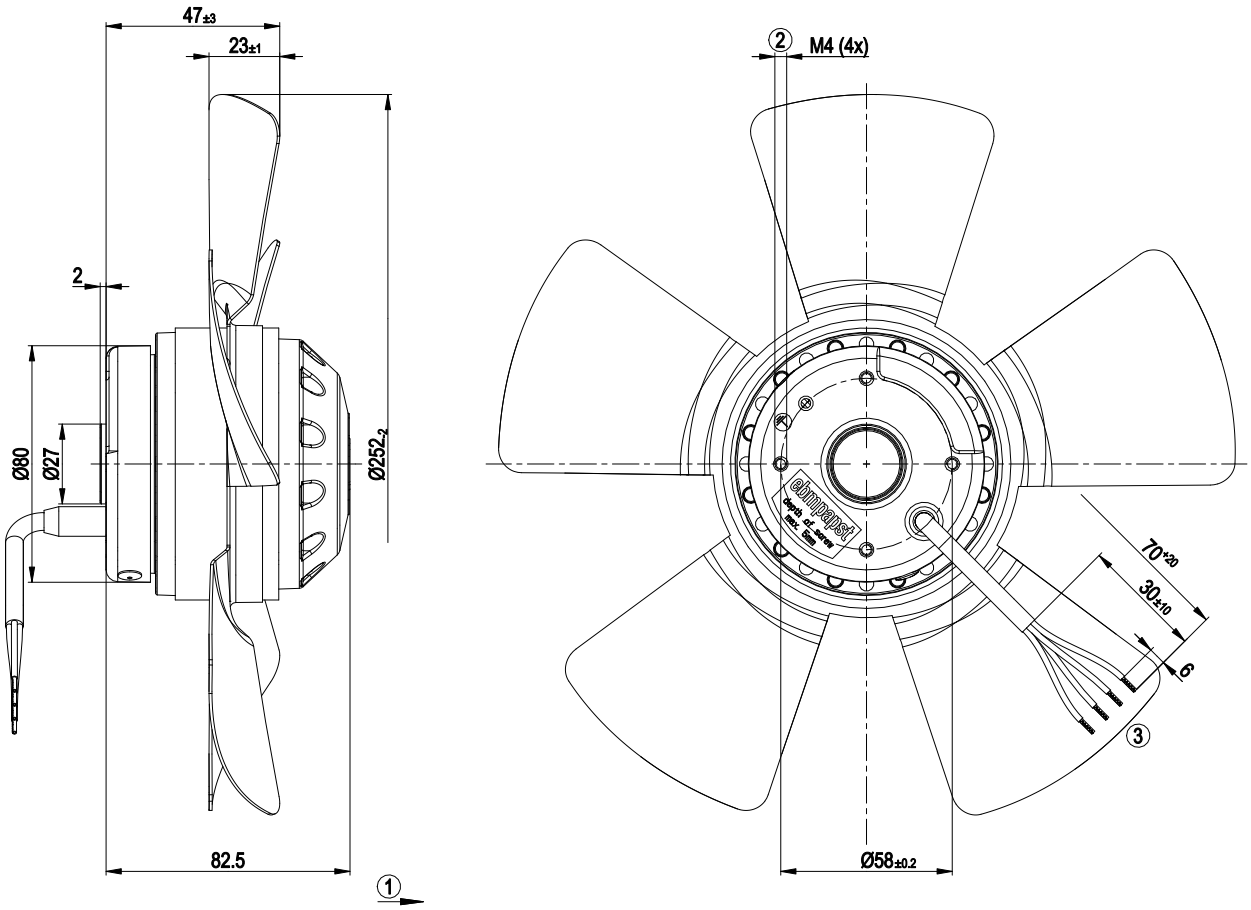
Product drawing



1	Direction of air flow "A"
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20 (green/yellow AWG18), 4x crimped splices

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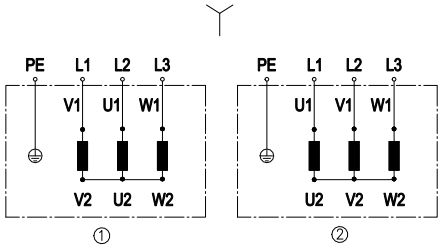
Connection diagram



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

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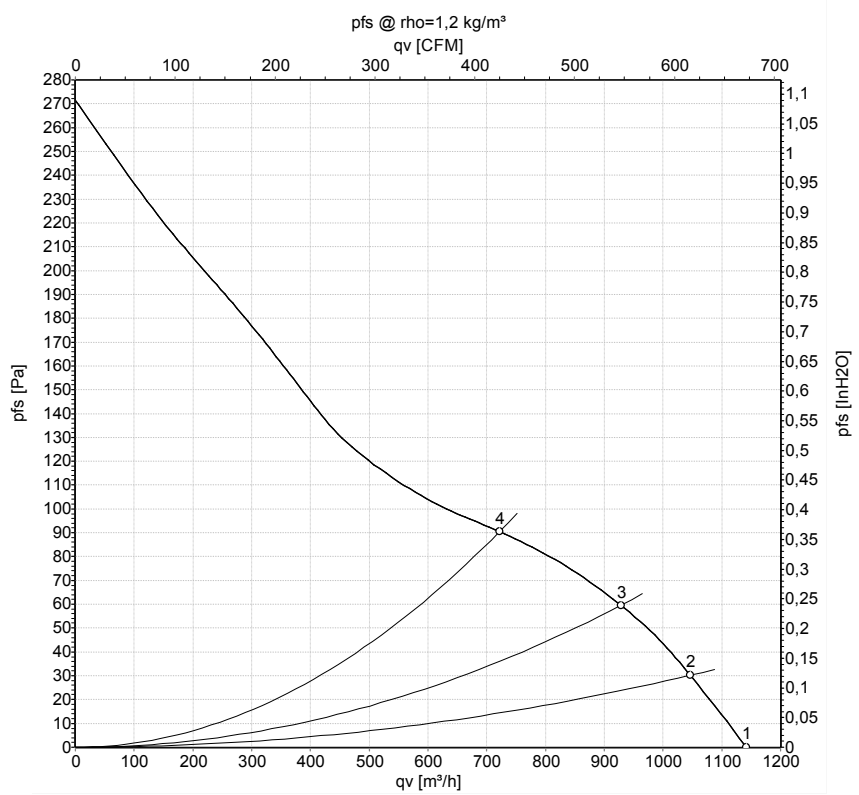
Curves: Air performance 50 Hz



Measurement: LU-43644-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	50	2550	53	0.10	1140	0	670	0.00
2	400	50	2500	58	0.09	1045	30	615	0.12
3	400	50	2455	62	0.10	930	60	545	0.24
4	400	50	2425	64	0.10	720	90	425	0.36

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

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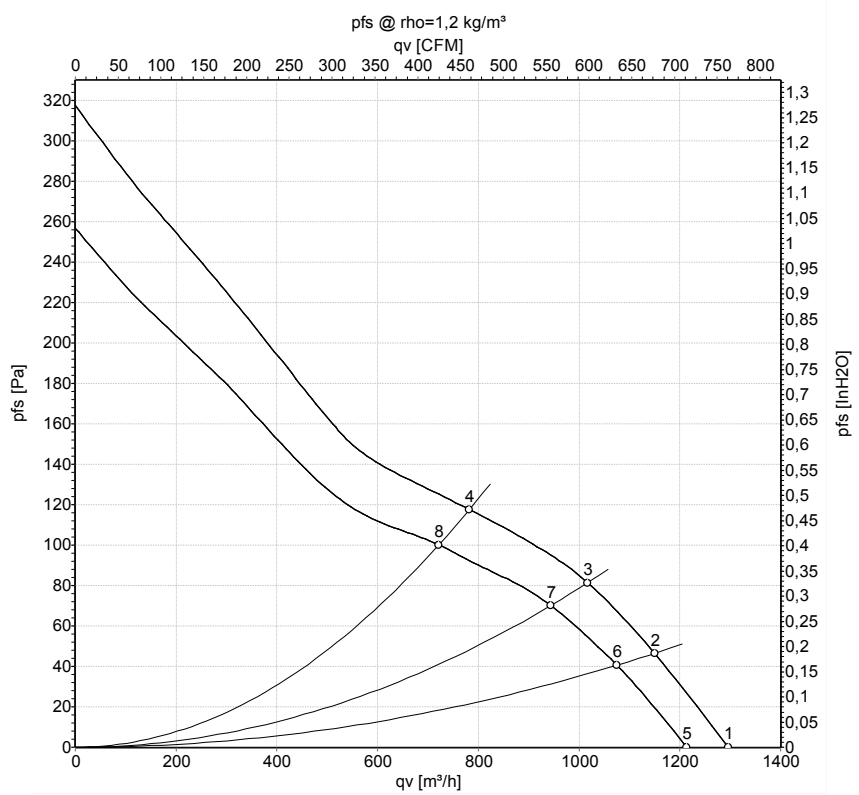
Curves: Air performance 60 Hz



Measurement: LU-43646-1
Measurement: LU-43645-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	60	2900	82	0.12	1295	0	765	0.00
2	400	60	2815	90	0.12	1150	47	675	0.19
3	400	60	2750	95	0.13	1015	83	600	0.33
4	400	60	2725	97	0.13	780	118	460	0.47
5	400	60	2700	75	0.12	1215	0	715	0.00
6	400	60	2605	82	0.13	1075	40	635	0.16
7	400	60	2540	85	0.13	945	70	555	0.28
8	400	60	2510	87	0.13	720	100	425	0.40

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