A2D250-AA02-82

AC axial fan

straight blades (A series)



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A2D250-AA02-82**
Motor	**M2D068-DF**

Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2650	2950
Power consumption	W	110	160
Current draw	A	0.22	0.26
Max. back pressure	Pa	250	300
Max. back pressure	inH2O	1	1.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	90	60
Starting current	A	0.78	0.75

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}	%	28.1	28.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.13
09 Air flow q_v	m^3/h	1050
09 Pressure increase p_{fs}	Pa	121
10 Speed (rpm) n	min^{-1}	2600
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-69121

AC axial fan

straight blades (A series)

Technical description

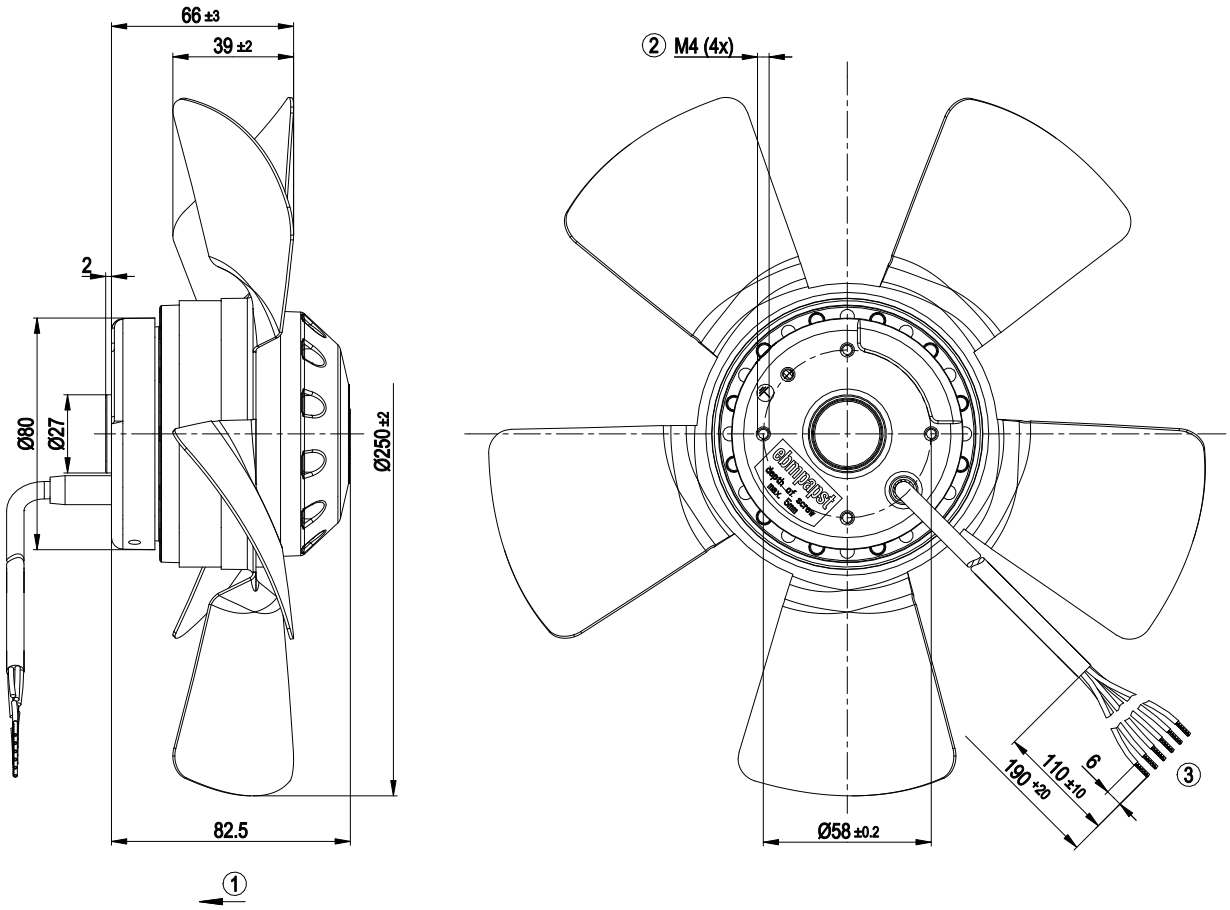
Weight	2.1 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / 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
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; CE
Approval	EAC; UL 1004-1; CSA C22.2 No. 100

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Product drawing



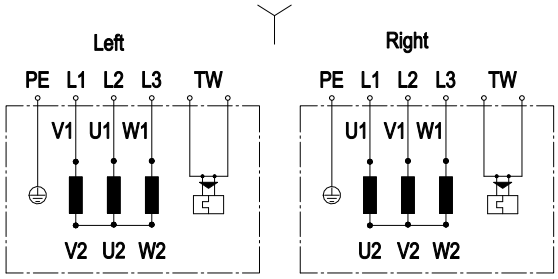
1	Direction of air flow "V"
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20 (green/yellow AWG18), 6x crimped splices

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Connection diagram



Note: Change of rotation direction by reversing two phases

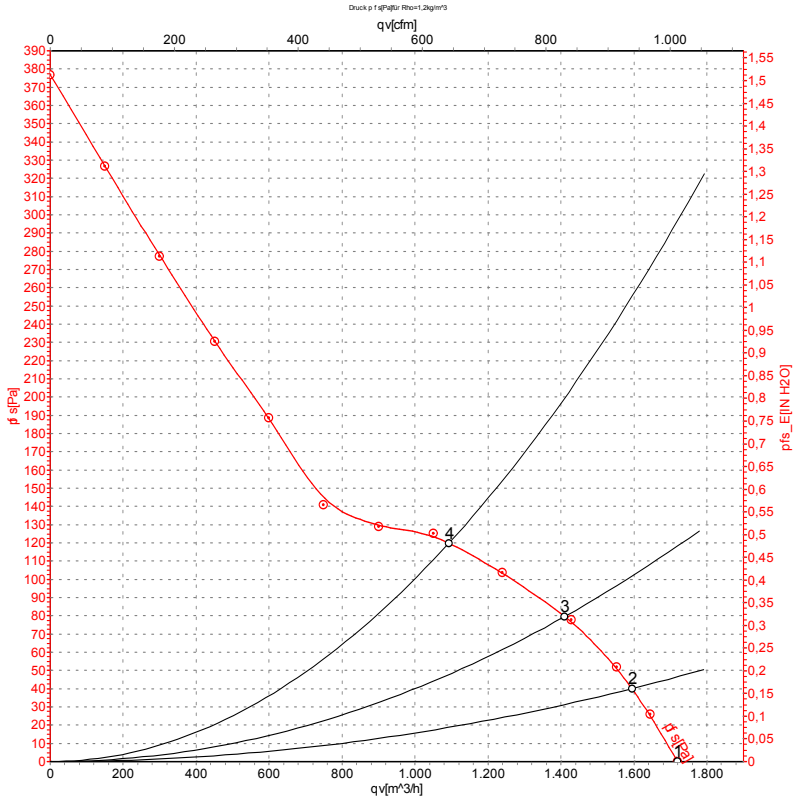
Y	Star connection	L1	=U1=black	L2	=V1=blue
L3	=W1=brown	TOP	2x gray	PE	green/yellow

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AC axial fan

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Curves: Air performance 50 Hz Y



Measurement: LU-69121-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Y	400	50	2650	110	0.22	1720	0	1010	0.00
2	Y	400	50	2620	126	0.23	1595	40	940	0.16
3	Y	400	50	2600	131	0.24	1410	80	830	0.32
4	Y	400	50	2595	131	0.24	1090	120	645	0.48

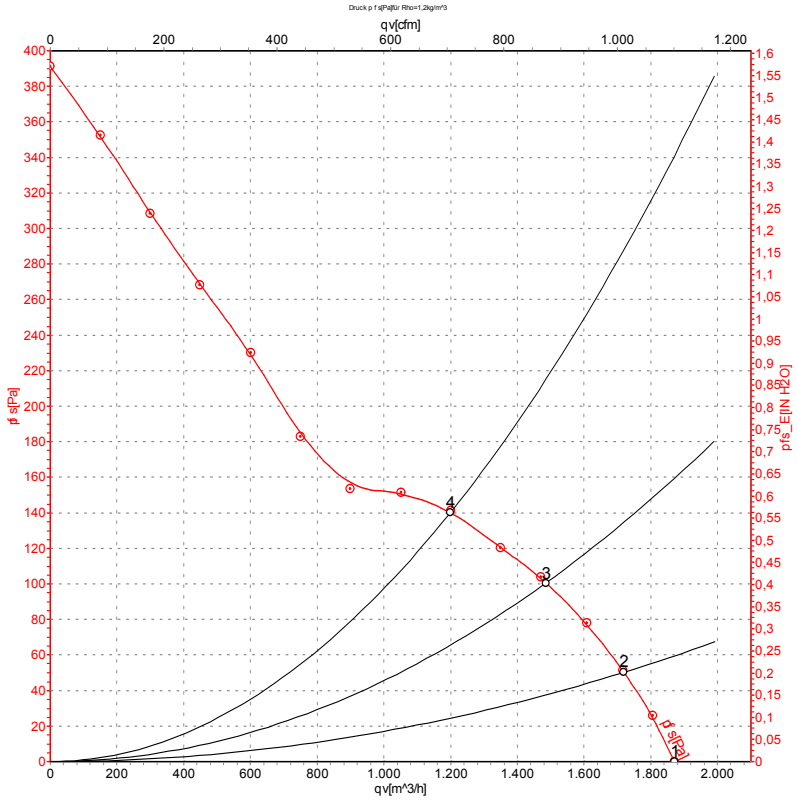
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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AC axial fan

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Curves: Air performance 60 Hz Y



Measurement: LU-69123-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Y	400	60	2950	160	0.26	1870	0	1100	0.00
2	Y	400	60	2850	177	0.28	1720	50	1010	0.20
3	Y	400	60	2810	184	0.29	1485	100	875	0.40
4	Y	400	60	2805	184	0.29	1200	140	705	0.56

Wired = Wiring · 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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