A2E250-AQ52-05

AC axial fan

sickle-shaped blades (S series)

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A2E250-AQ52-05**
Motor	**M2E068-DF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	CE	UL 2111
Speed (rpm)	min^{-1}	2525	2650	2650
Power consumption	W	135	185	192
Current draw	A	0.61	0.81	0.84
Capacitor	µF	3	3	3
Capacitor voltage	VDB	400	400	400
Capacitor standard		P0 (CE)	P0 (CE)	P0 (CE)
Max. back pressure	Pa	135	150	150
Max. back pressure	inH2O	0.54	0.6	0.6
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	50	50
Starting current	A	1.25	1.1	1.1

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}	%	32.5	28.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44.4	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.13
09 Air flow q_v	m^3/h	1175
09 Pressure increase p_{fs}	Pa	136
10 Speed (rpm) n	min^{-1}	2535
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-162239

AC axial fan

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Technical description

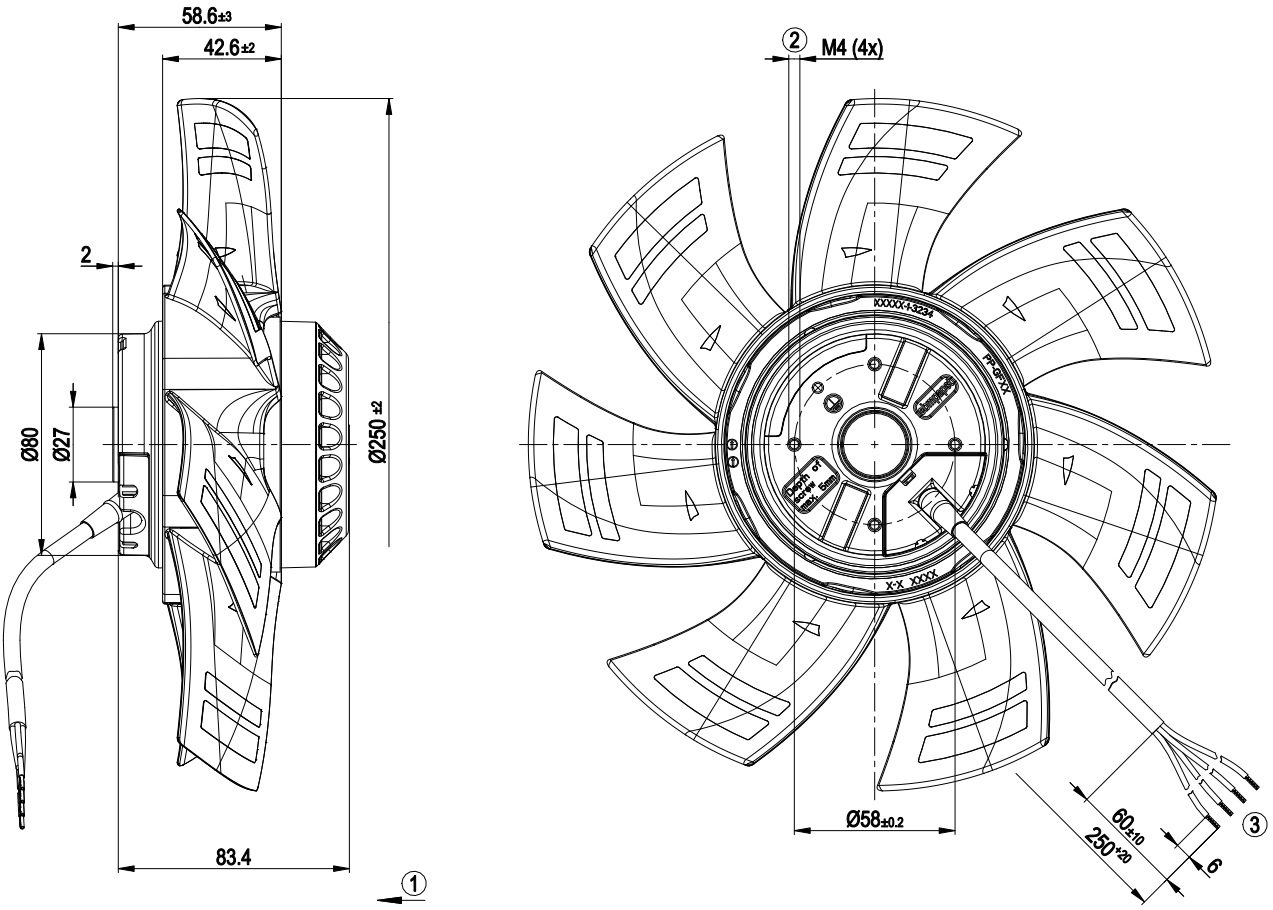
Weight	2.1 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	PP plastic
Number of blades	7
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / 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 top; rotor on bottom 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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	UL 2111; CSA C22.2 No. 77

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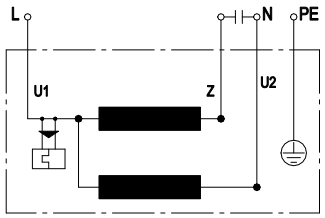
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Product drawing



1	Direction of air flow "V"
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20, 4x crimped splices

Connection diagram



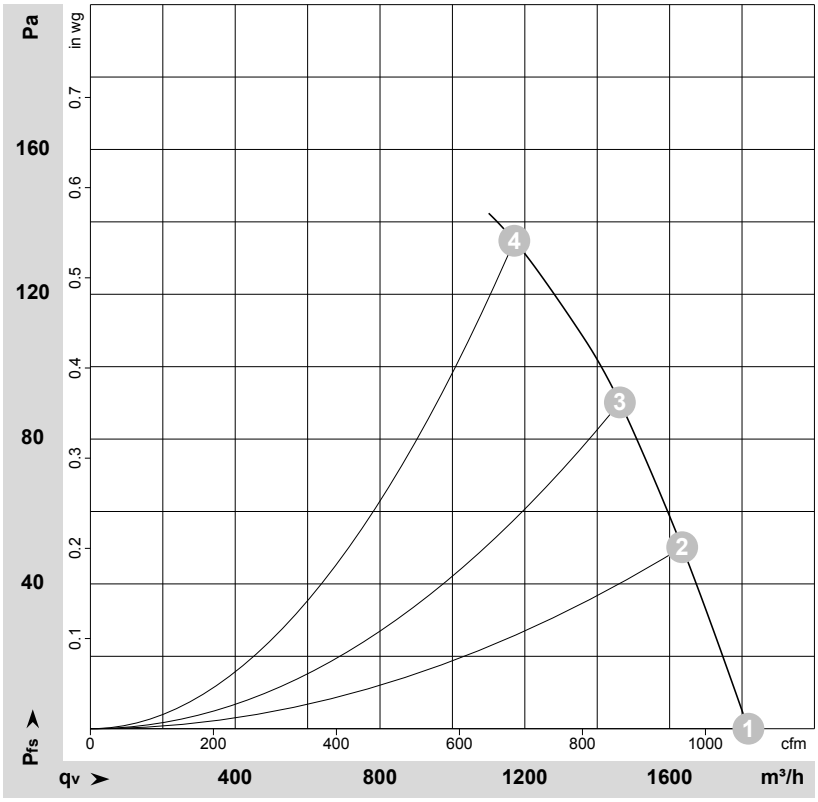
U1	blue	Z	brown	U2	black
PE	green/yellow				

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AC axial fan

sickle-shaped blades (S series)

Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-162239-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	2685	109	0.50	66	72	1820	0	1070	0.00
2	230	50	2625	120	0.54	66	73	1635	50	960	0.20
3	230	50	2580	129	0.58	67	73	1465	90	860	0.36
4	230	50	2525	135	0.61	68	75	1170	135	690	0.54

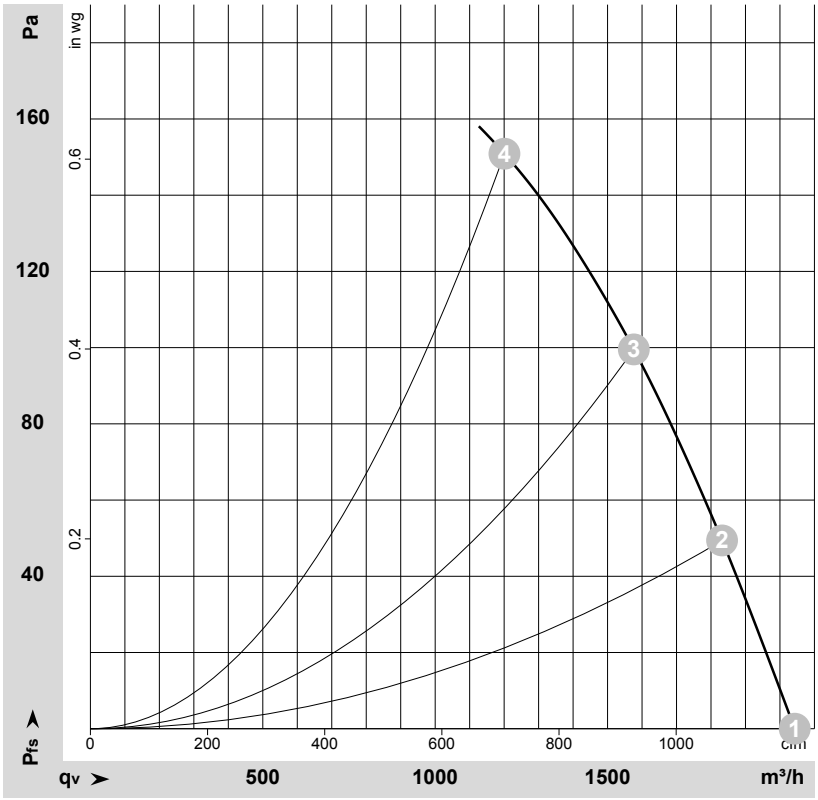
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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AC axial fan

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-162385-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	60	3015	150	0.66	68	75	2045	0	1200	0.00
2	230	60	2895	165	0.72	69	75	1830	50	1080	0.20
3	230	60	2765	178	0.77	69	75	1575	100	930	0.40
4	230	60	2650	185	0.81	70	77	1200	150	705	0.60

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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