W2E250-HQ52-11

AC axial compact fan

sickle-shaped blades (S series), single-intake

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Nominal data

Type	**W2E250-HQ52-11**
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}	2530	2730	2730
Power consumption	W	142	190	210
Current draw	A	0.63	0.84	0.89
Capacitor	µF	3.5	3.5	3.5
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	S0 (CE)	UL
Max. back pressure	Pa	120	105	105
Max. back pressure	inH2O	0.48	0.42	0.42
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	55	55
Starting current	A	1.17	1.12	

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}	%	28.3	28.3
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	0.14
09 Air flow q_v	m^3/h	1205
09 Pressure increase p_{fs}	Pa	121
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-155463

AC axial compact fan

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Technical description

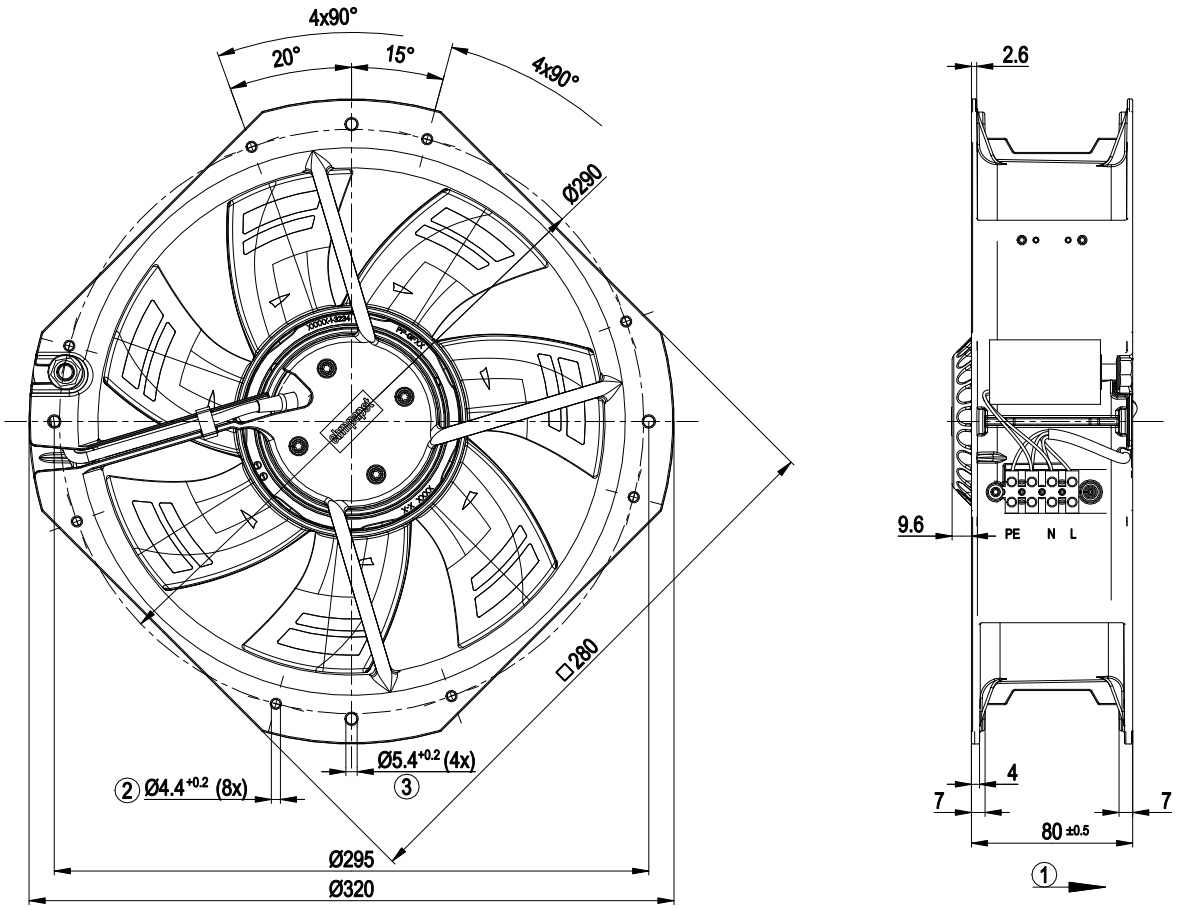
Weight	3.3 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Fan housing material	Die-cast aluminum
Number of blades	7
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
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
Electrical hookup	Via terminal strip, capacitor connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE
Approval	UL 2111; CCC; CSA C22.2 No. 77

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AC axial compact fan

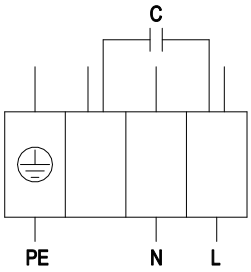
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Product drawing



1	Direction of air flow "V"
2	For self-tapping M5 screws
3	For self-tapping M6 screws

Connection diagram



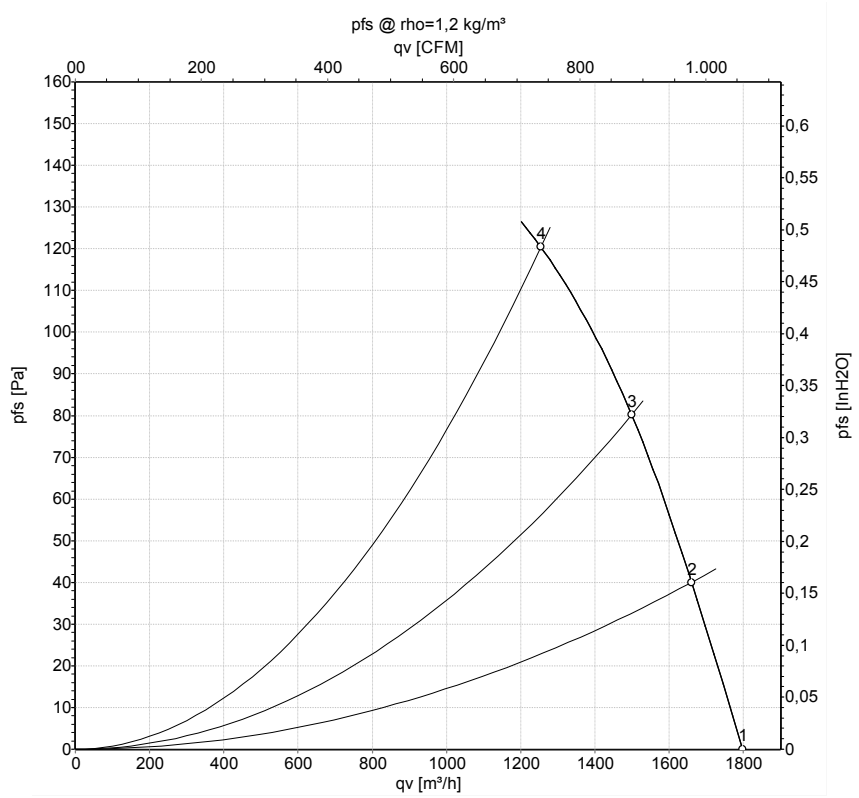
PE	green/yellow	N	blue	L	black

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AC axial compact fan

sickle-shaped blades (S series), single-intake

Curves: Air performance 50 Hz



Measurement: LU-155463-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	2690	116	0.51	63	69	1800	0	1060	0.00
2	230	50	2640	125	0.55	63	70	1660	40	975	0.16
3	230	50	2585	133	0.58	63	70	1500	80	880	0.32
4	230	50	2530	142	0.63	63	70	1255	120	740	0.48

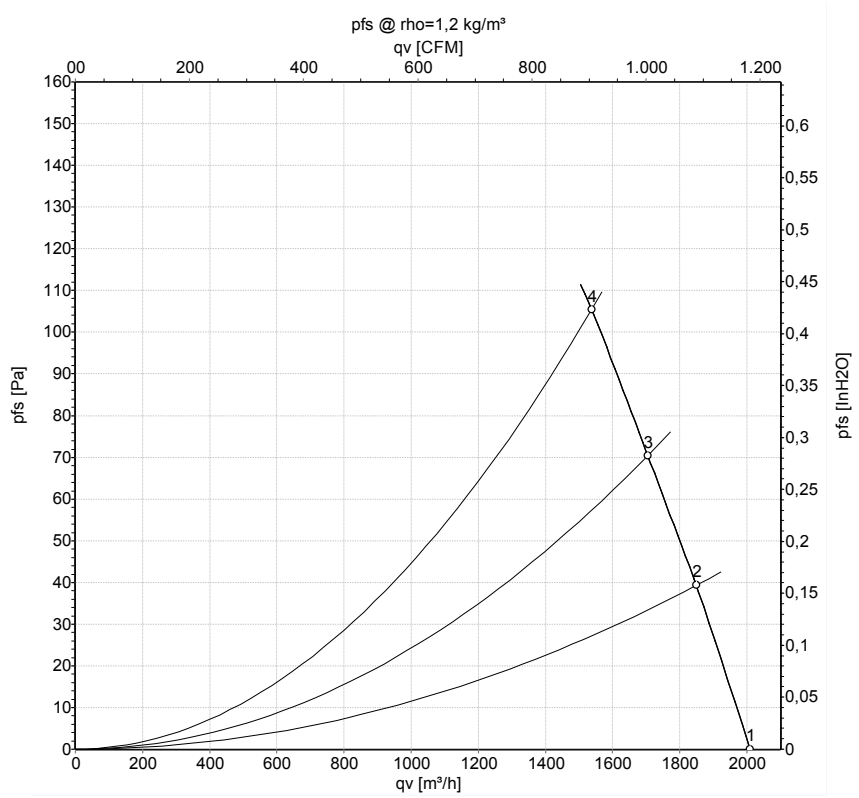
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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AC axial compact fan

sickle-shaped blades (S series), single-intake

Curves: Air performance 60 Hz



Measurement: LU-155467-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	60	2990	167	0.73	65	72	2010	0	1180	0.00
2	230	60	2920	174	0.76	71	79	1850	40	1090	0.16
3	230	60	2845	181	0.79	74	82	1705	70	1005	0.28
4	230	60	2730	190	0.84	72	80	1535	105	905	0.42

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
q_V = Air flow · p_{fs} = Pressure increase

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