W2E250-HP06-06

AC axial compact fan

sickle-shaped blades (S series)

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Nominal data

Type	**W2E250-HP06-06**
Motor	**M2E068-CF**

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 1004-3
Speed (rpm)	min^{-1}	2320	2300	2300
Power consumption	W	125	160	166
Current draw	A	0.55	0.71	0.74
Capacitor	µF	3	3	3
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	S0 (CE)	S0 (CE)
Max. back pressure	Pa	100	110	110
Max. back pressure	in. wg	0.4	0.44	0.44
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	50	50
Starting current	A	0.83	0.81	0.81

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

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Technical description

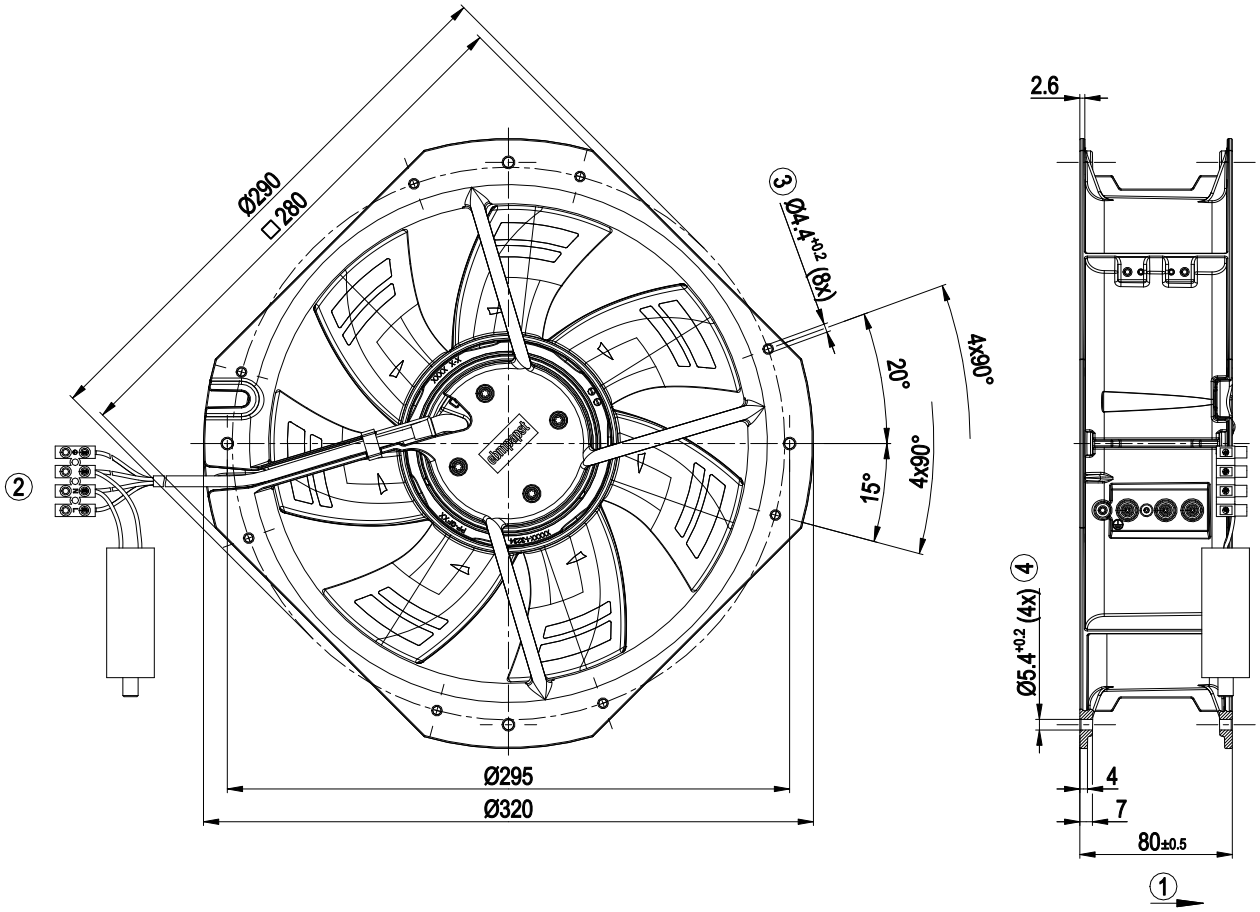
Weight	2.8 kg
Size	250 mm
Motor size	68
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Housing material	Die-cast aluminum
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
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
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	CSA C22.2 No. 77; UL 1004-3

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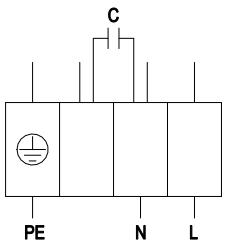
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Product drawing



1	Airflow direction "V"
2	Cable silicone 4G 0.5 mm² with terminal strip
3	For self-tapping M5 screws
4	For self-tapping M6 screws

Connection diagram



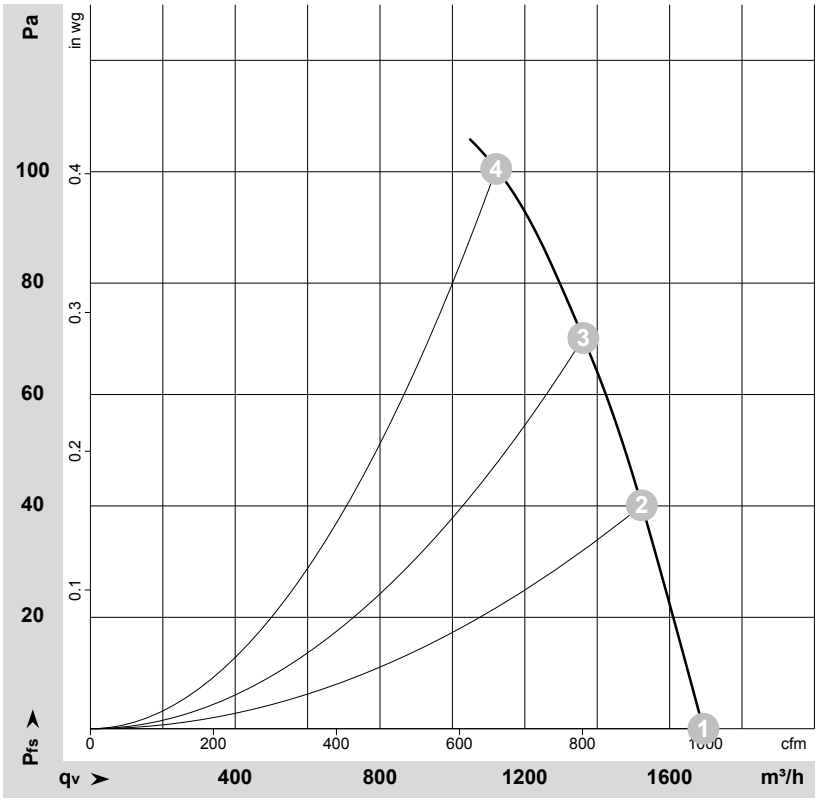
PE	green/yellow	N	black	L	blue

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AC axial compact fan

sickle-shaped blades (S series)

Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-162612-1

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	in. wg
1	230	50	2550	101	0.44	63	70	1695	0	995	0.00
2	230	50	2475	109	0.48	62	69	1525	40	895	0.16
3	230	50	2405	115	0.50	61	68	1360	70	800	0.28
4	230	50	2320	125	0.55	62	69	1120	100	660	0.40

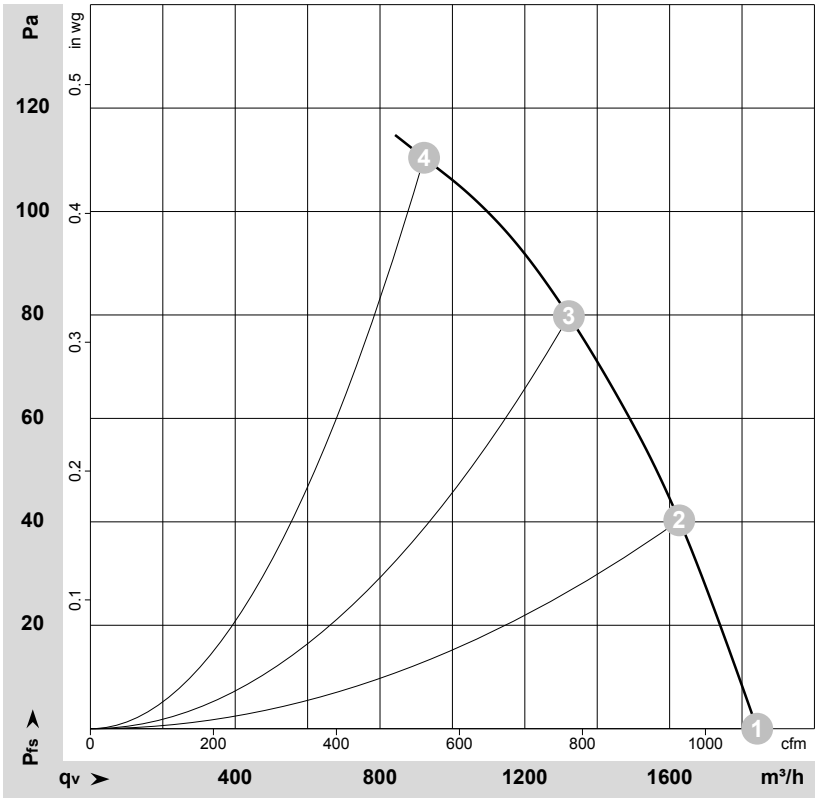
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-163044-1

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	in. wg
1	230	60	2750	134	0.59	64	71	1840	0	1085	0.00
2	230	60	2595	145	0.63	63	70	1625	40	960	0.16
3	230	60	2400	153	0.66	62	68	1320	80	780	0.32
4	230	60	2300	160	0.71	66	74	920	110	545	0.44

U = Voltage · 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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