AC axial compact fan

sickle-shaped blades (S series)

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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W2E250-HL08-07**
Motor	**M2E068-CF**

Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		-	UL 2111	-
Speed (rpm)	min^{-1}	2500	2650	2650
Power consumption	W	120	175	165
Current draw	A	1.05	1.47	1.45
Capacitor	µF	12	12	12
Capacitor voltage	VDB	220	220	220
Max. back pressure	Pa	130	90	90
Max. back pressure	in. wg	0.52	0.36	0.36
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	50	30	30
Starting current	A	1.82	1.8	1.8

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

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Technical description

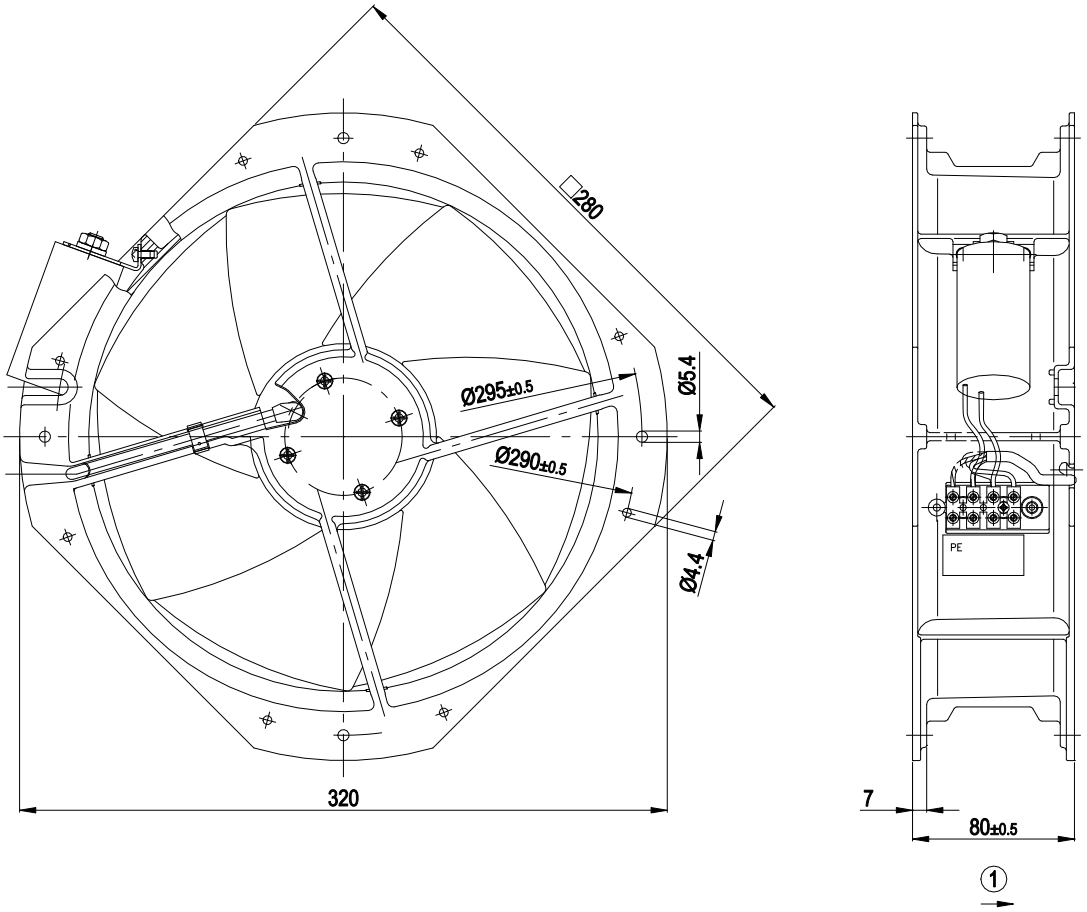
Weight	2.84 kg
Size	250 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Die-cast aluminum
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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 terminals, 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 60034-1; EN 60204-1; EN 60335-1
Comment on CE	Commissioning not permitted in the European Economic Area
Approval	CSA C22.2 No. 77; UL 1004-3

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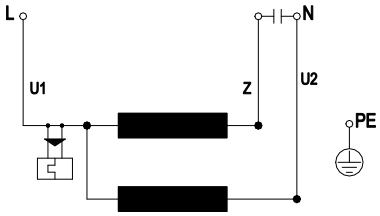
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Product drawing



1	Direction of air flow "V"

Connection diagram



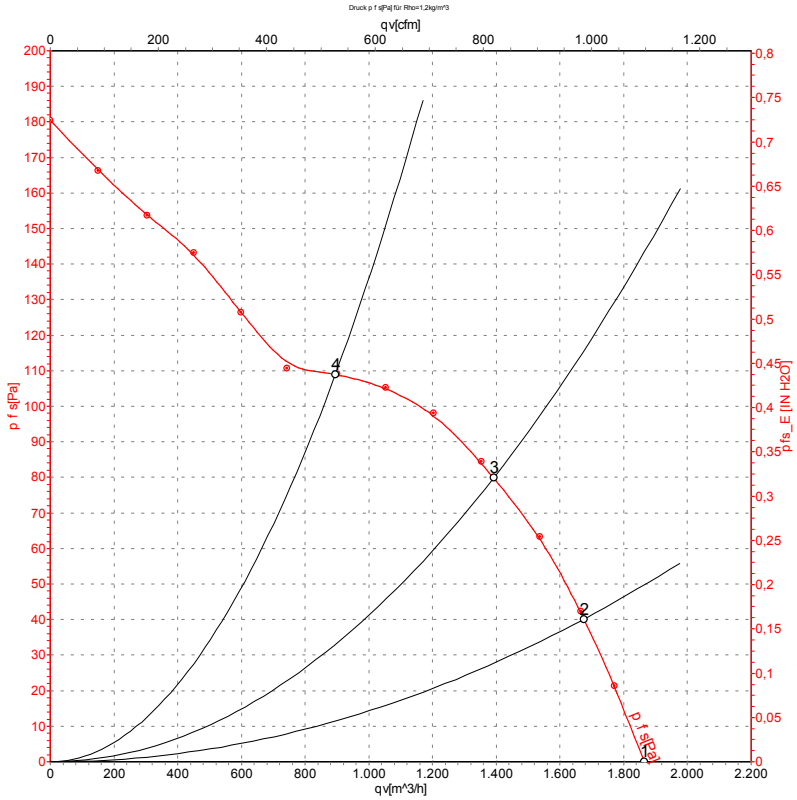
U1	blue	Z	brown	U2	black
PE	green/yellow				

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AC axial compact fan

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Curves: Air performance 50 Hz



Measurement: LU-63607-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	115	50	2500	120	1.05	1865	0	1095	0.00
2	115	50	2445	128	1.12	1675	40	985	0.16
3	115	50	2355	138	1.20	1390	80	820	0.32
4	115	50	2265	147	1.27	895	110	525	0.44

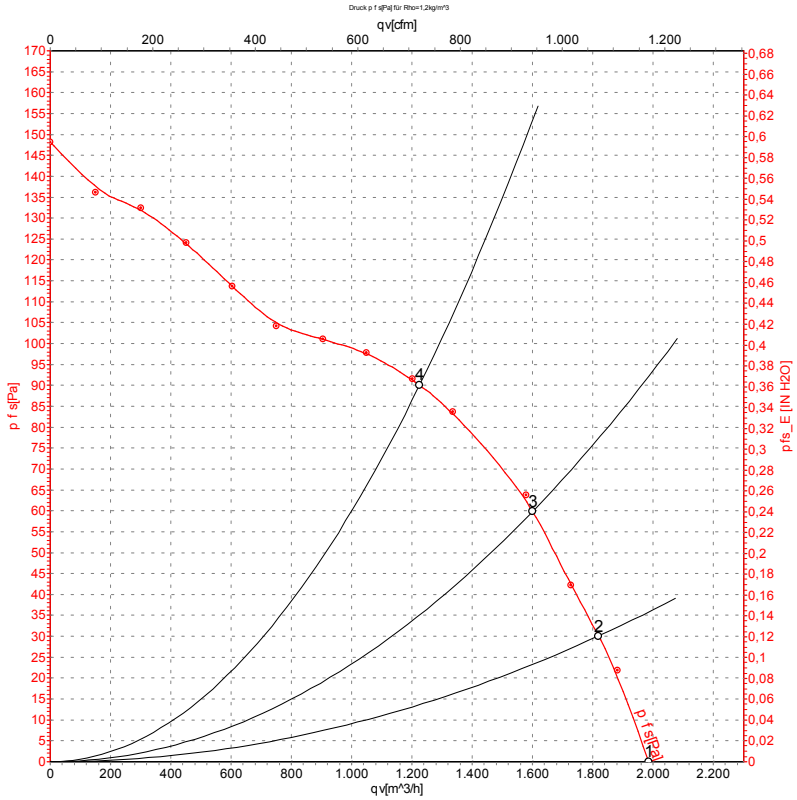
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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AC axial compact fan

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Curves: Air performance 60 Hz



Measurement: LU-63606-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	115	60	2650	165	1.45	1985	0	1170	0.00
2	115	60	2560	174	1.51	1820	30	1070	0.12
3	115	60	2440	178	1.55	1600	60	940	0.24
4	115	60	2275	183	1.59	1225	90	720	0.36

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

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