AC axial compact fan

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

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Nominal data

Type	**W2E250-HL08-06**
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		CE	CE	UL 2111
Speed (rpm)	min^{-1}	2500	2650	2650
Power consumption	W	120	165	175
Current draw	A	1.05	1.45	1.47
Capacitor	µF	12	12	12
Capacitor voltage	VDB	220	220	220
Max. back pressure	Pa	130	90	90
Max. back pressure	inH2O	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

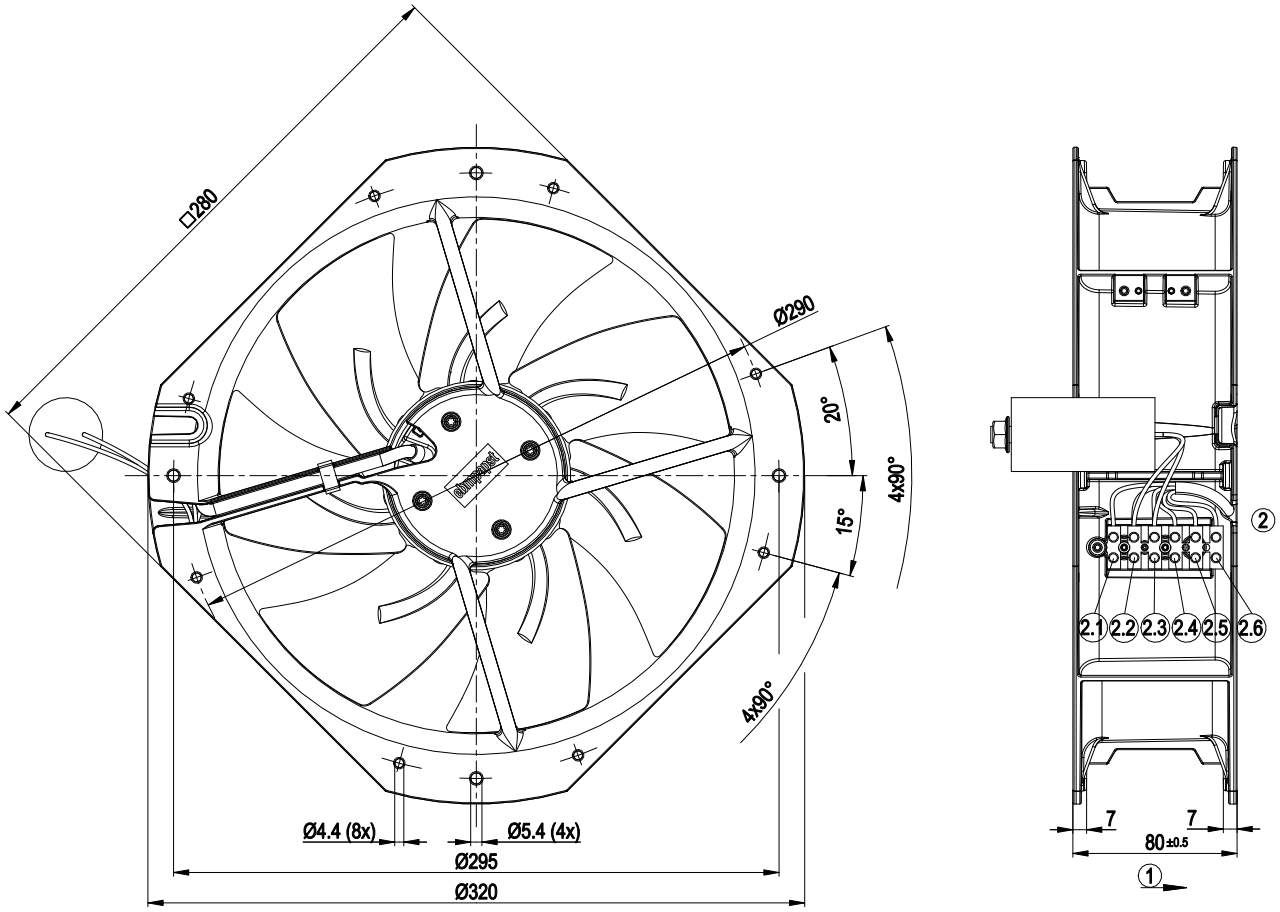
Weight	3 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Housing material	Die-cast aluminum
Number of blades	7
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
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 terminals, capacitor connected
Motor protection	Thermal overload protector (TOP) with basic insulation
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

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Product drawing



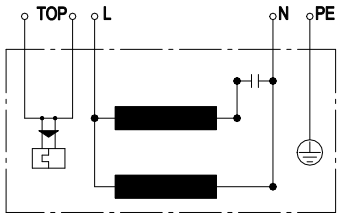
1	Direction of air flow "V"
2	Cable PFA 6G AWG20 with terminal strip
2.1	green/yellow
2.2	brown + capacitor
2.3	black + capacitor
2.4	blue
2.5	white
2.6	white

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Connection diagram



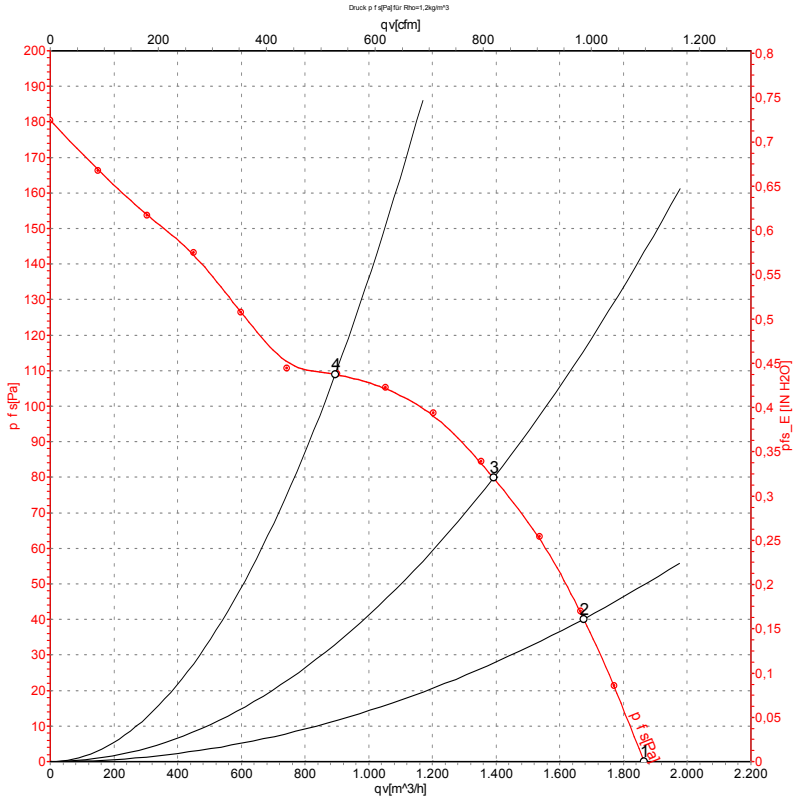
L	blue	N	black	PE	green/yellow
TOP	2x white				

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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	inH2O
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

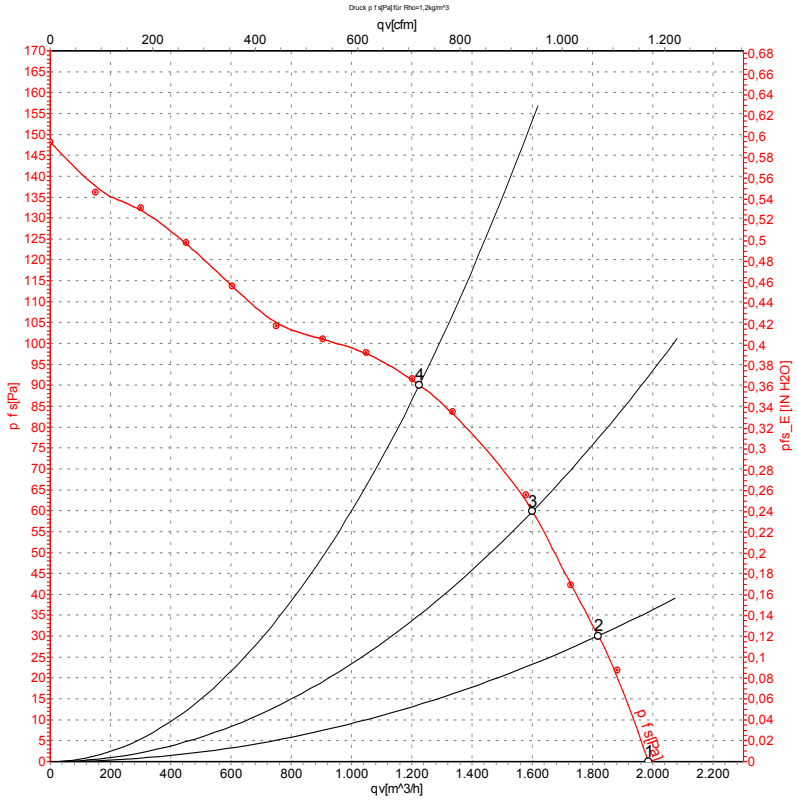
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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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	inH2O
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 = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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