AC axial compact fan

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

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W2E200-HH82-18**
Motor	**M2E068-BF**

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	UL 2111	CE
Speed (rpm)	min^{-1}	2400	2400	2450
Power consumption	W	48	70	60
Current draw	A	0.42	0.60	0.53
Capacitor	µF	4	4	4
Capacitor voltage	VDB	220	220	220
Capacitor standard		S0 (CE)	UL	S0 (CE)
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	50	50

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

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Technical description

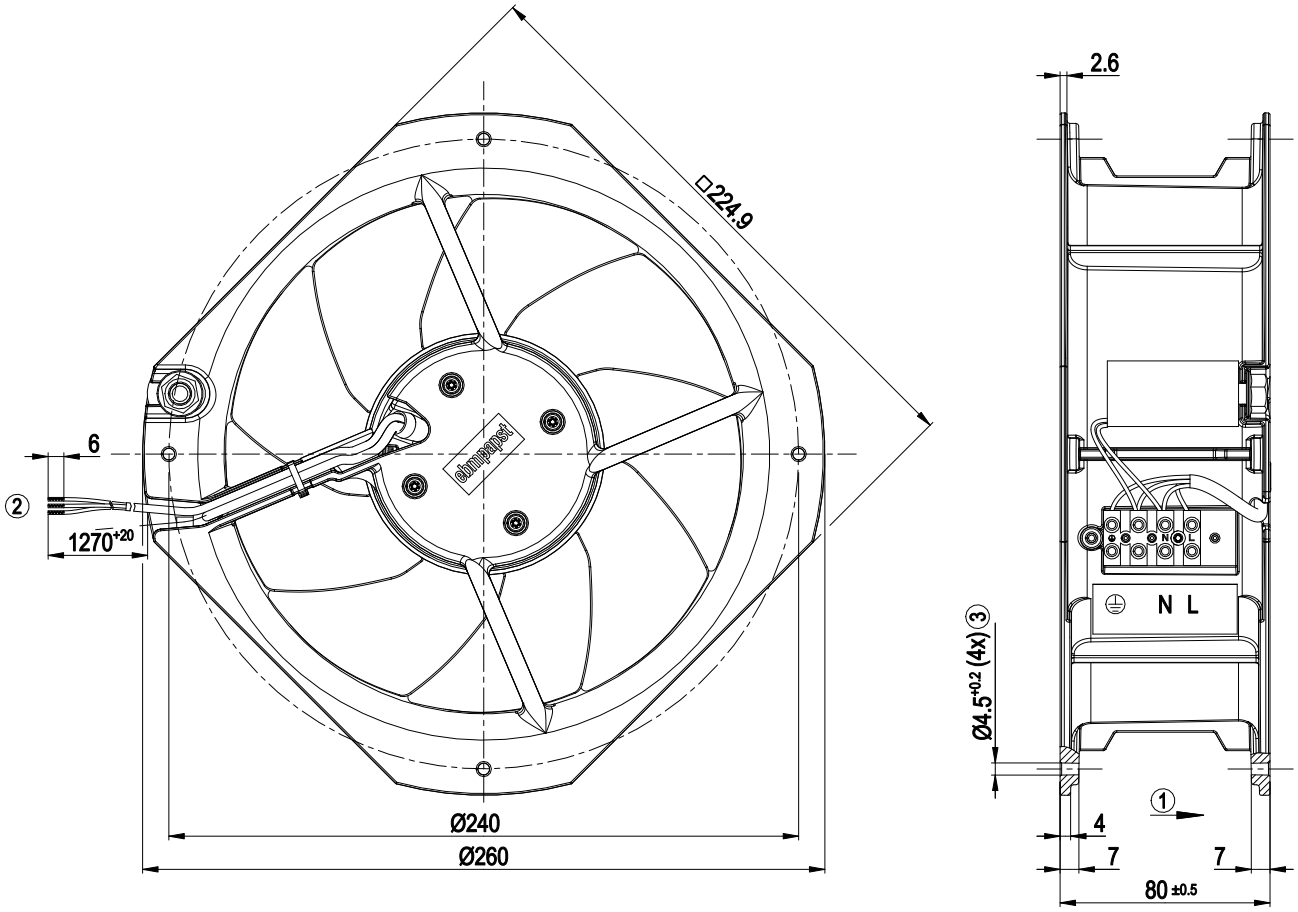
Weight	2.16 kg
Size	200 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Die-cast aluminum
Number of blades	9
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
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	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	CSA C22.2 No. 77; UL 1004-3

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Product drawing



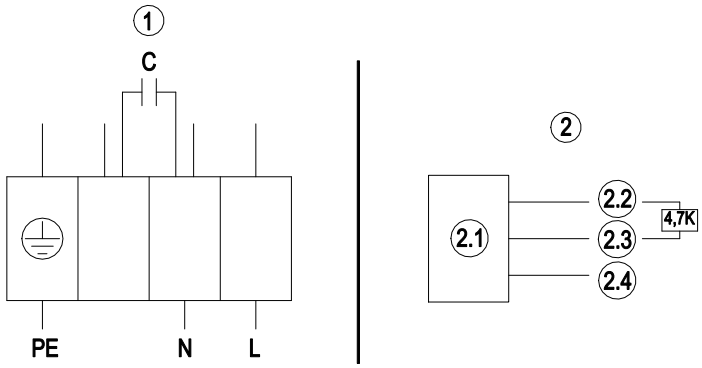
1	Airflow direction "V"
2	Cable Raychem Spec. 44, AWG24, 3x crimped splices
3	For self-tapping M5 screws

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Connection diagram



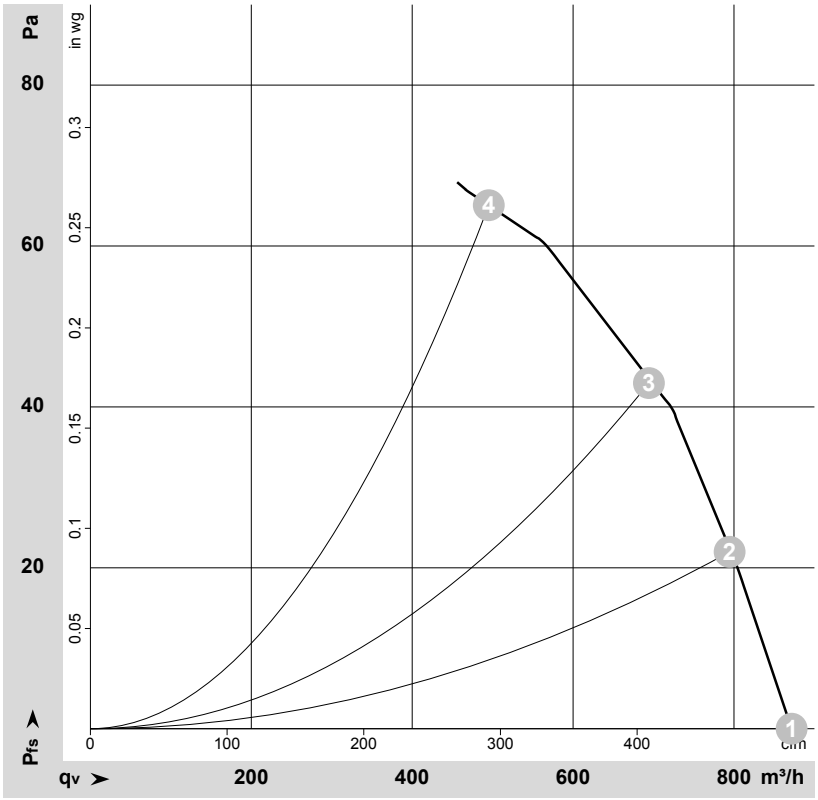
1	Fan connection diagram
PE	green/yellow
N	black
L	blue
2	Hall IC circuit
2.1	Hall IC
2.2	red (+5 V)
2.3	white (out)
2.4	black (0 V)

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-20470-1

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	2450	52	0.45	870	0	515	0.00
2	115	50	2355	53	0.46	795	22	470	0.09
3	115	50	2280	56	0.48	695	44	410	0.18
4	115	50	2195	60	0.53	495	65	290	0.26

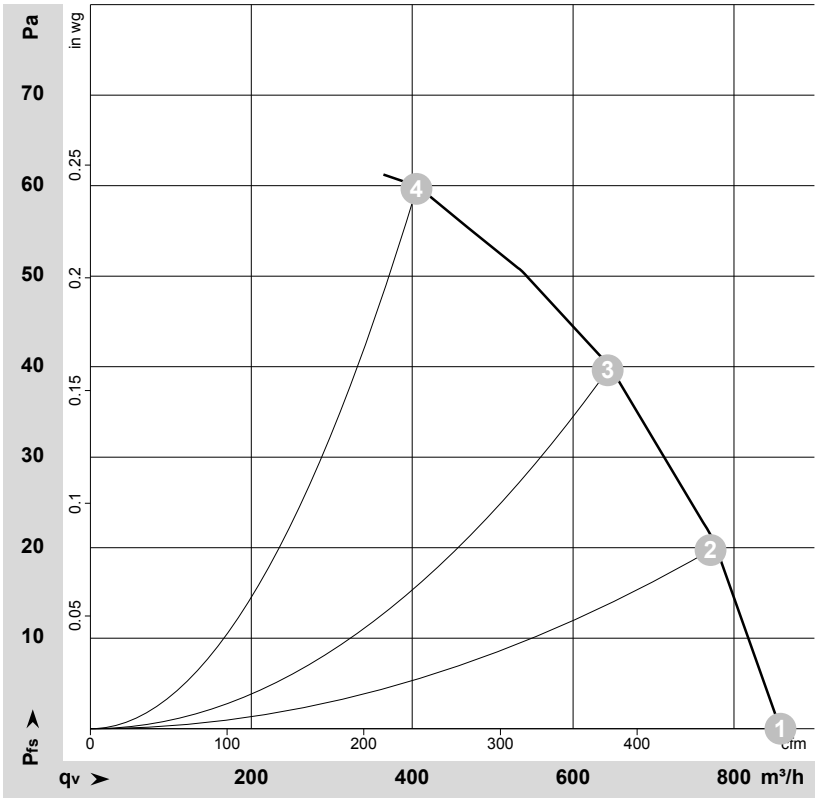
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-20471-1

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	2400	70	0.60	860	0	505	0.00
2	115	60	2265	68	0.59	770	21	455	0.08
3	115	60	2145	69	0.60	645	40	380	0.16
4	115	60	2025	71	0.61	405	60	240	0.24

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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