AC axial compact fan

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Nominal data

Type	**W2E142-CC15-16**
Motor	**M2E052-BA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2450	2700
Power consumption	W	14	15
Current draw	A	0.06	0.07
Capacitor	µF	0.47	0.47
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Max. ambient temperature	°C	80	80

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

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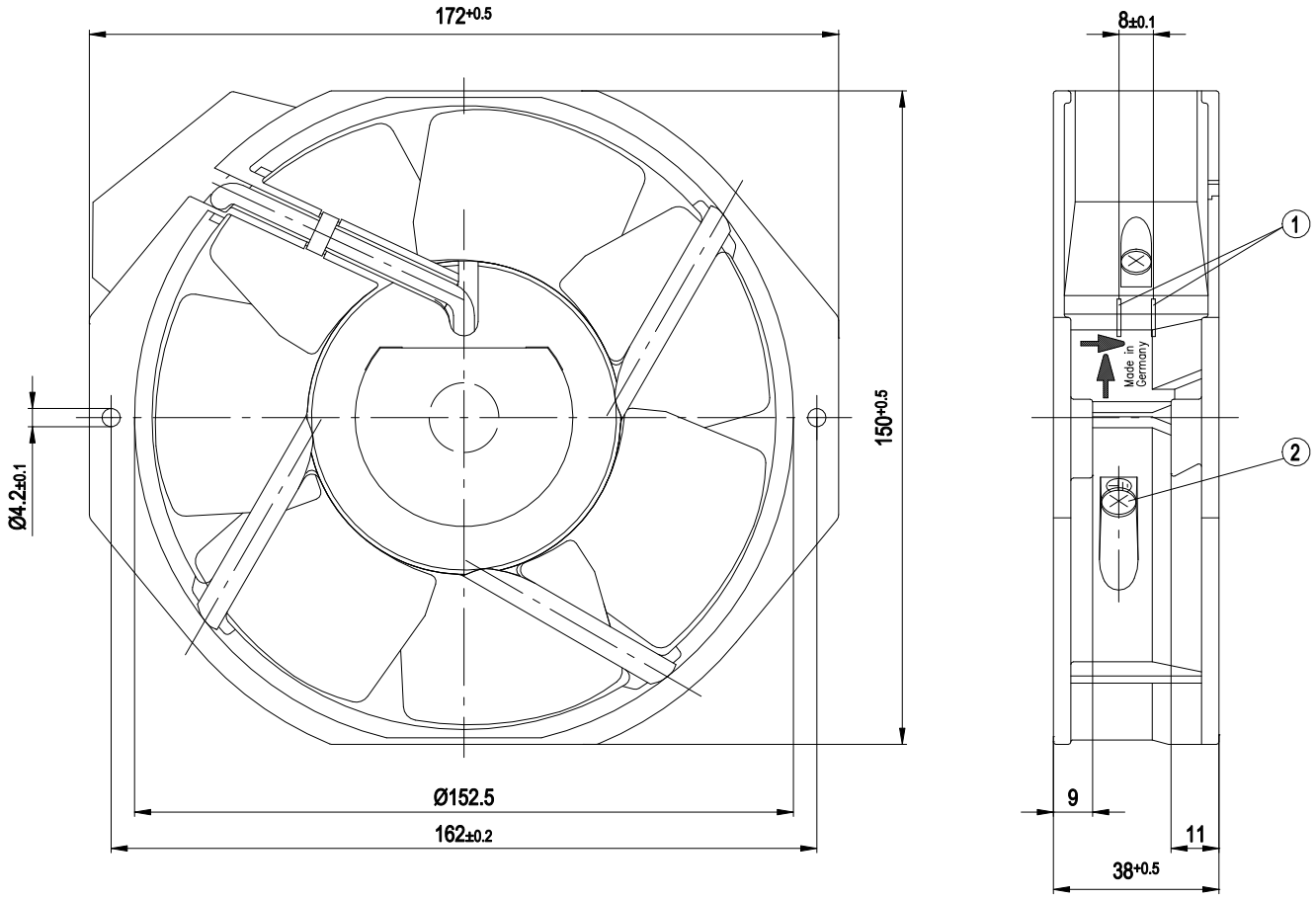
Technical description

Weight	0.8 kg
Size	142 mm
Motor size	52
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Die-cast aluminum, painted black
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP22; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
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	Plug
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (if the protective earth is connected by the customer to the marked PE connection point)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	CE
Approval	UL 507

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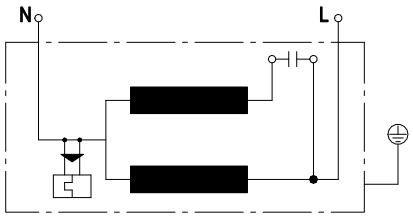
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Product drawing



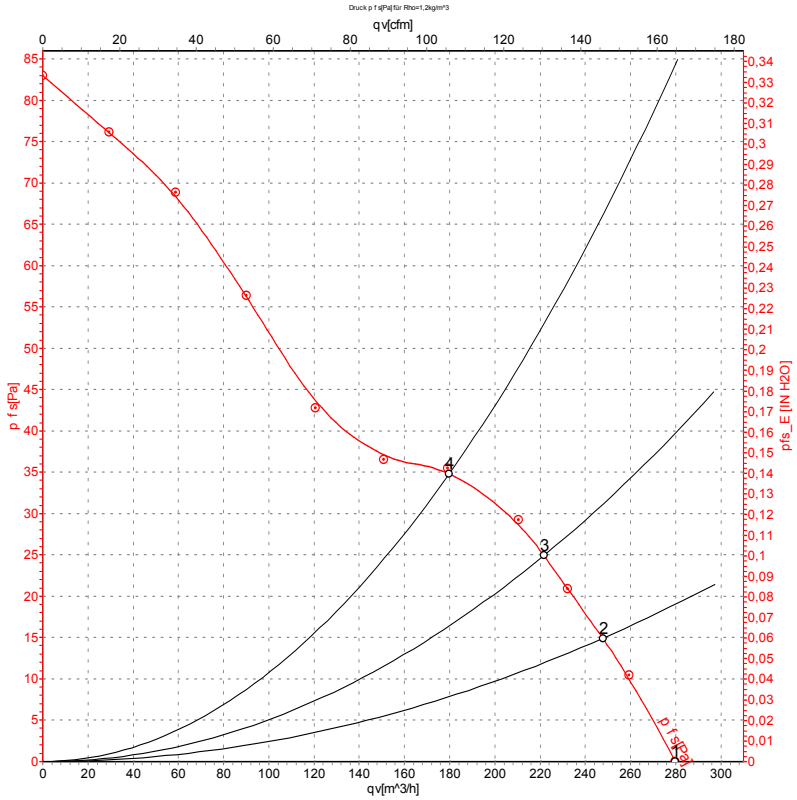
1	2x flat plugs 2.8 x 0.5 mm
2	M4 screw for fastening ground connector

Connection diagram



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Curves: Air performance 50 Hz



Measurement: LU-64119-1

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

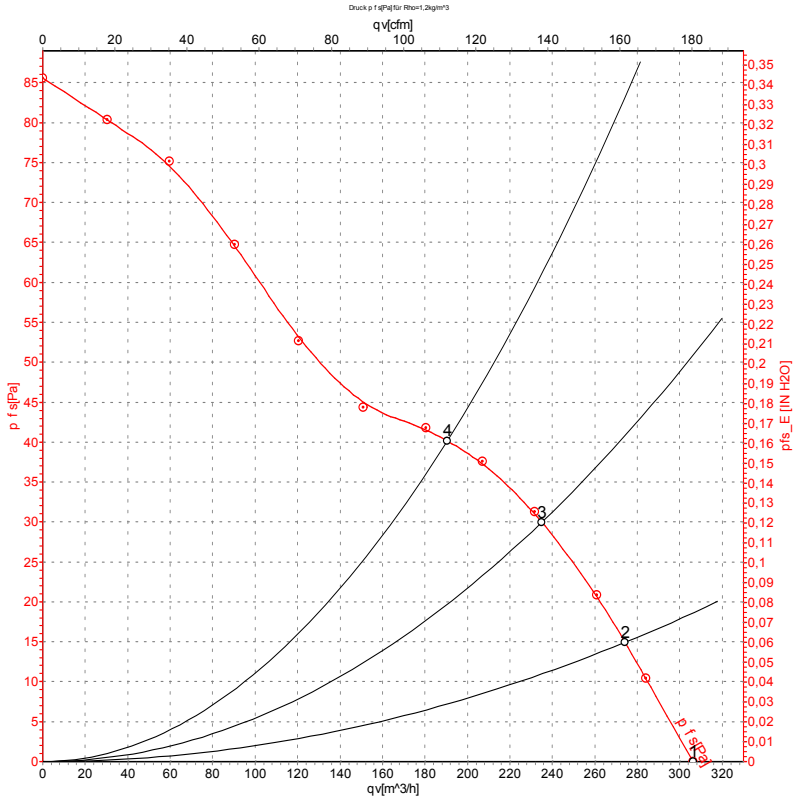
	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	50	2450	14	0.06	280	0	165	0.00
2	230	50	2395	14	0.06	250	15	145	0.06
3	230	50	2330	14	0.06	220	25	130	0.10
4	230	50	2270	14	0.06	180	35	105	0.14

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



Measurement: LU-64120-1

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	230	60	2700	15	0.07	305	0	180	0.00
2	230	60	2620	15	0.07	275	15	160	0.06
3	230	60	2515	15	0.07	235	30	140	0.12
4	230	60	2450	15	0.07	190	40	110	0.16

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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