AC axial compact fan

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Nominal data

Type	**W2E143-AA15-01**
Motor	**M2E052-BF**

Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Type of data definition		fa	fa	fa
Valid for approval / standard		CE	UL	CE
Speed (rpm)	min^{-1}	2800	3300	3300
Power input	W	24	28	26
Current draw	A	0.25		0.23
Motor capacitor	µF	3	3	3
Capacitor voltage	VDB	250	250	250
Capacitor standard		S0 (CE)	UL	S0 (CE)
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	70	70

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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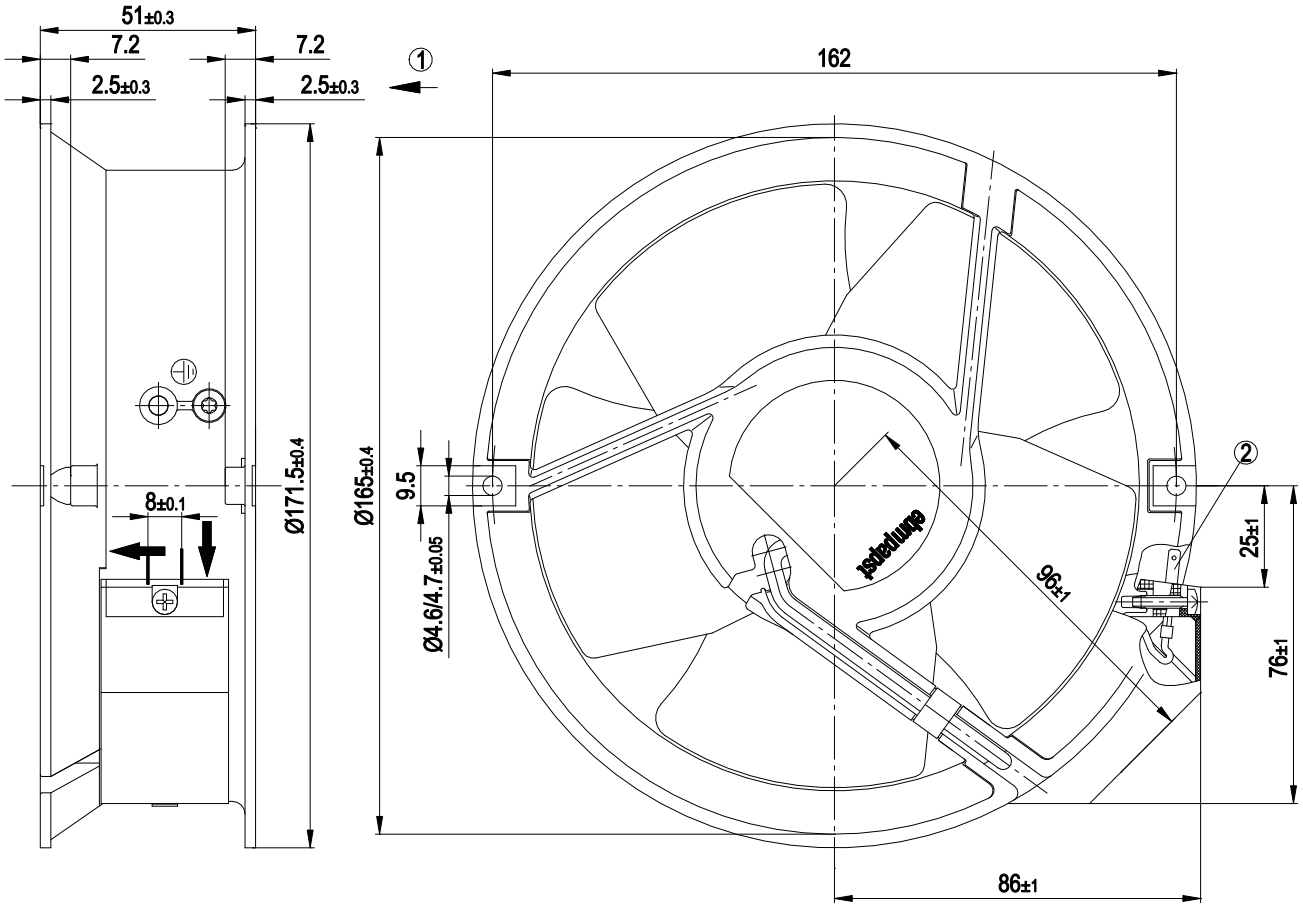
Technical features

Mass	0.94 kg
Size	143 mm
Motor size	52
Surface of rotor	Rotor open, coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium, coated in black
Number of blades	5
Direction of air flow	V
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP20
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H0+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical connection	Plug
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	I (if earth wire is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 no. 113; EAC; VDE; UL 507

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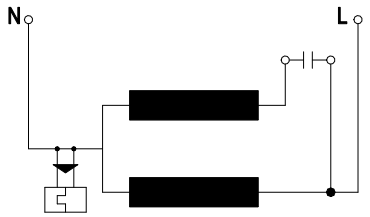
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Product drawing



1	Direction of air flow "V"
2	Blade terminal 2.8 x 0.5 mm

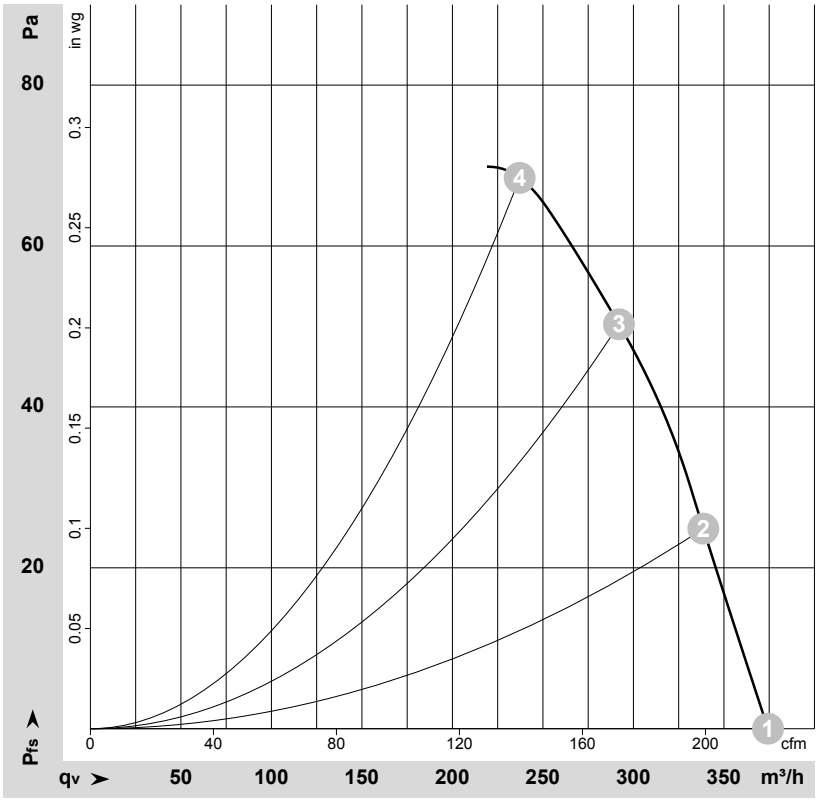
Connection screen



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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-28180-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

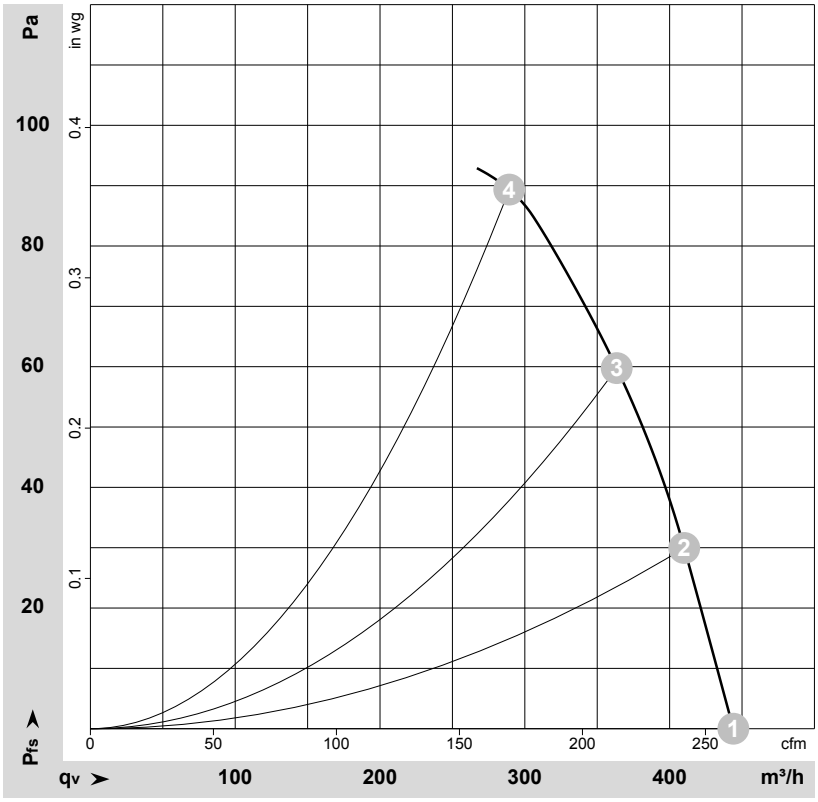
	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	115	50	2800	24	0.25	375	0	220	0.00
2	115	50	2850	25	0.25	340	25	200	0.10
3	115	50	2825	26	0.25	290	50	170	0.20
4	115	50	2815	27	0.25	235	70	140	0.28

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

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AC axial compact fan

Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-28191-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

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	3300	26	0.23	445	0	260	0.00
2	115	60	3340	28	0.24	410	30	240	0.12
3	115	60	3315	29	0.25	365	60	215	0.24
4	115	60	3270	30	0.27	290	90	170	0.36

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

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