

W2E143-AB69-01 ebmpapst Datasheet
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Nominal data

Type	W2E143-AB69-01		
Motor	M2E052-BF		
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	2300
Power consumption	W	15	19
Current draw	A	0.08	0.1
Capacitor	μF	0.75	0.75
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	80	70
Starting current	A	0.45	0.45

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



Technical description

Weight	1.0 kg
Size	143 mm
Motor size	52
Rotor surface	Rotor open, painted black
Blade material	Sheet steel, painted black
Housing material	Die-cast aluminum, painted black
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
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, open rotor
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 (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



Technical drawing of a circular mechanical component, showing a side view (left) and a top view (right).

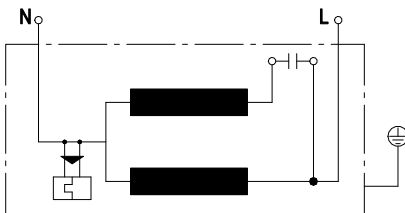
Side View (Left):

- Overall width: 51 ±0.3
- Top flange thickness: 7.2
- Bottom flange thickness: 2.5 ±0.3
- Internal diameter: Ø171.5 ±0.4
- Mounting holes: 4 holes, 2 on each side, with dimensions 14 and 16.
- Internal components: 2 (indicated by arrows pointing to internal parts).

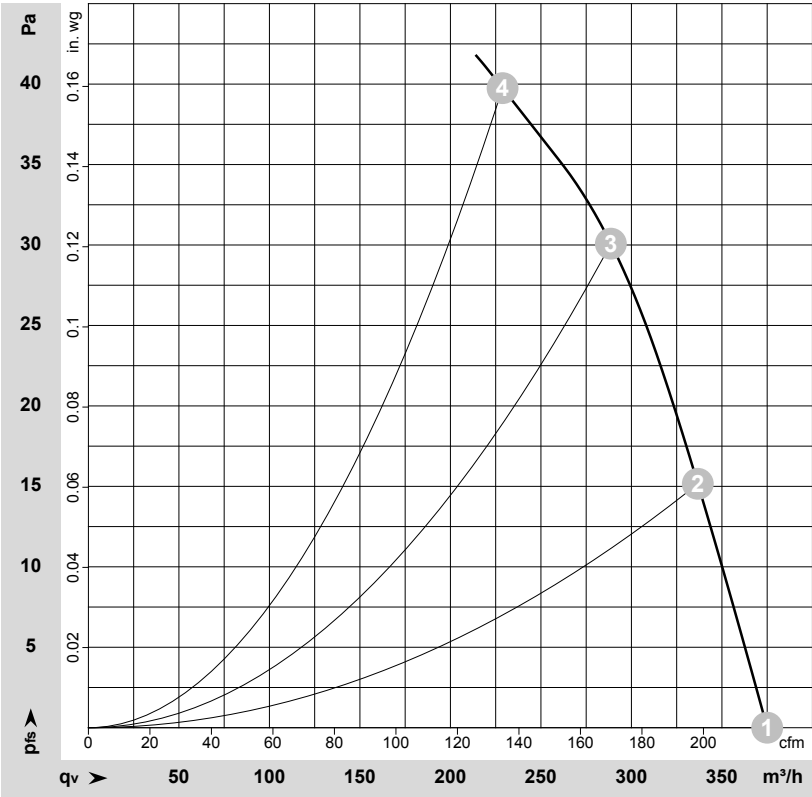
Top View (Right):

- Overall diameter: 162
- Internal diameter: Ø165 ±0.4
- Mounting hole diameter: Ø4.6/4.7 ±0.05
- Mounting hole offset: 9.5
- Internal diameter of mounting hole: 96 ±1
- Mounting hole offset: 25 ±1
- Internal diameter of mounting hole: 76 ±1
- Internal diameter of mounting hole: 86 ±1

- ## Connection diagram



Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-27806-1

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.

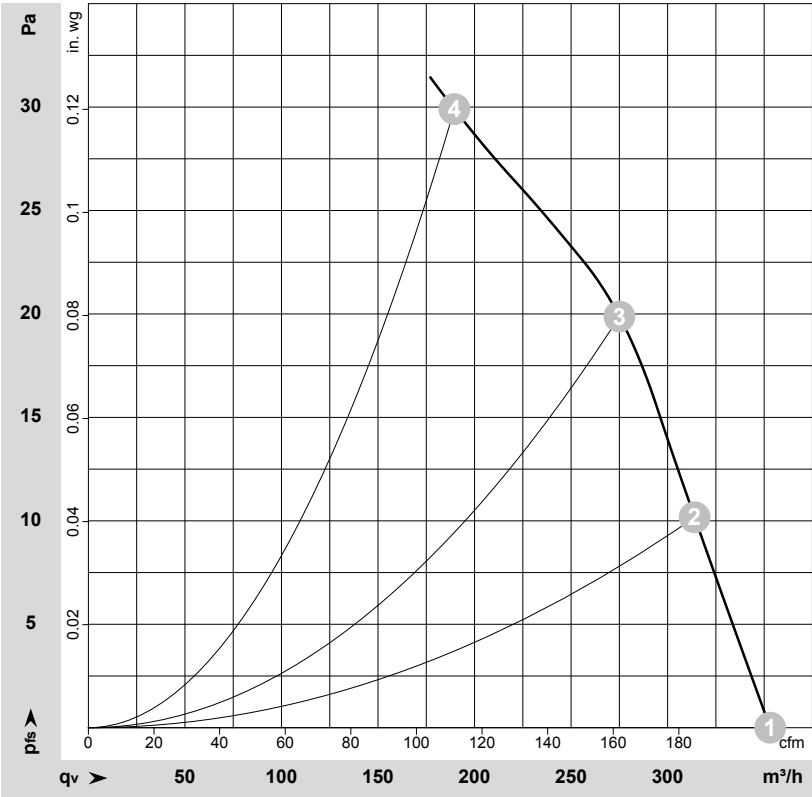
Measured values

	Wired	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	1~	230	50	2450	15	0.08	375	0	220	0.00
2	1~	230	50	2380	15	0.08	335	15	200	0.06
3	1~	230	50	2320	16	0.08	290	30	170	0.12
4	1~	230	50	2245	16	0.08	230	40	135	0.16

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



Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-27807-1

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

	Wired	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	1~	230	60	2300	19	0.10	355	0	210	0.00
2	1~	230	60	2205	19	0.10	315	10	185	0.04
3	1~	230	60	2110	19	0.10	275	20	160	0.08
4	1~	230	60	1945	19	0.10	190	30	110	0.12

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

