AC axial fan

W2E208-BA20-52 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	**W2E208-BA20-52**
Motor	**M2E068-CF**

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}	2750	3100
Power consumption	W	67	87
Current draw	A	0.33	0.39
Capacitor	µF	1.5	1.5
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Max. back pressure	Pa	135	165
Max. back pressure	in. wg	0.54	0.66
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	72	72
Starting current	A	0.92	0.86

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	2.7 kg
Size	208 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA plastic
Fan housing material	Die-cast aluminum, painted black
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
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; Hybrid bearing (balls of Si_3N_4)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal strip, capacitor connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
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. 113; UL 507

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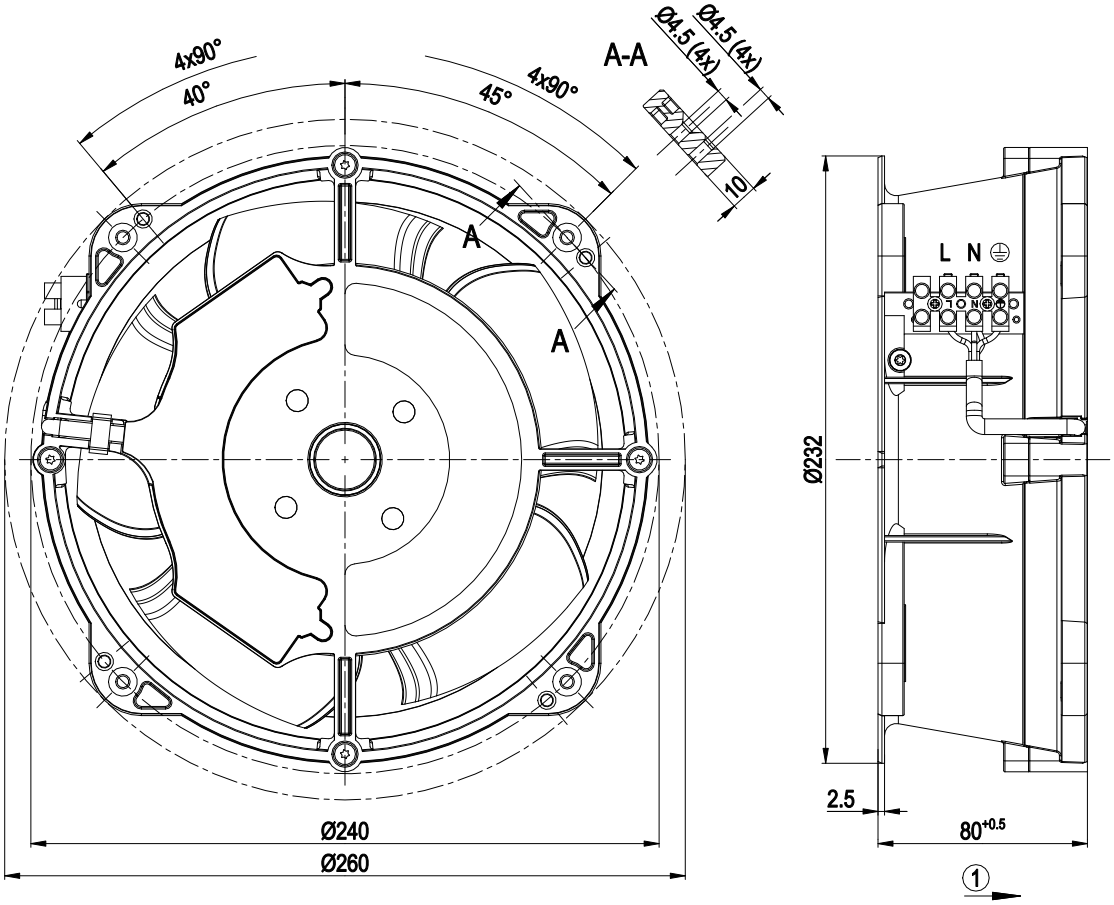
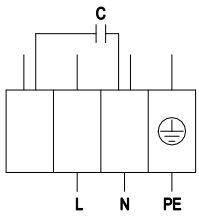
Product drawing



1	Airflow direction "V"

Connection diagram



2	L	3	N	4	PE

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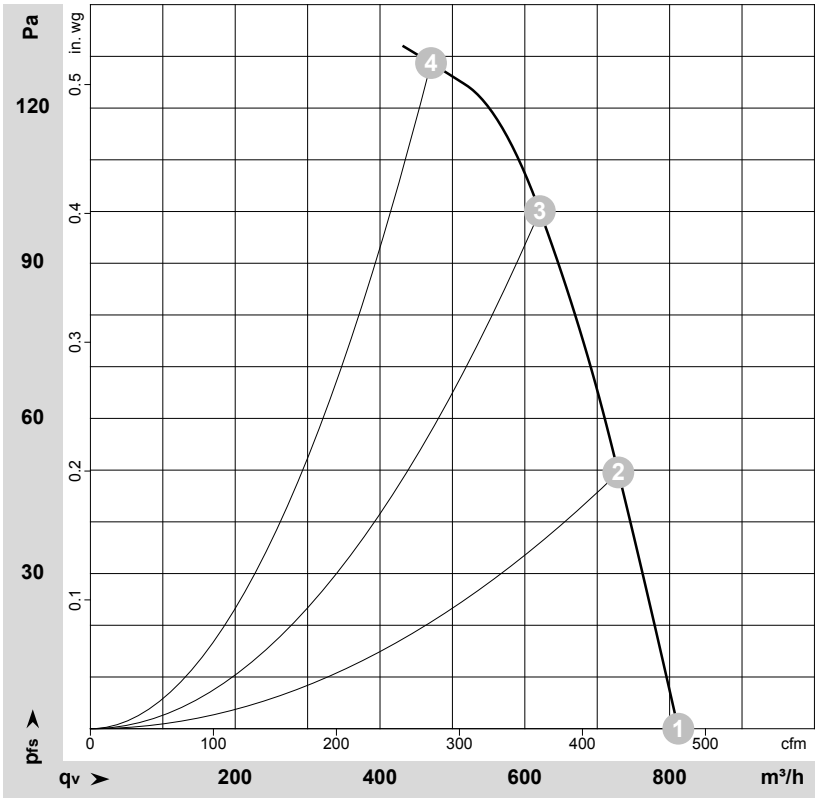
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-58196-1

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	2750	67	0.33	810	0	480	0.00
2	1~	230	50	2710	74	0.37	730	50	430	0.20
3	1~	230	50	2685	77	0.38	620	100	365	0.40
4	1~	230	50	2700	75	0.37	470	130	275	0.52

Wired = Wiring · 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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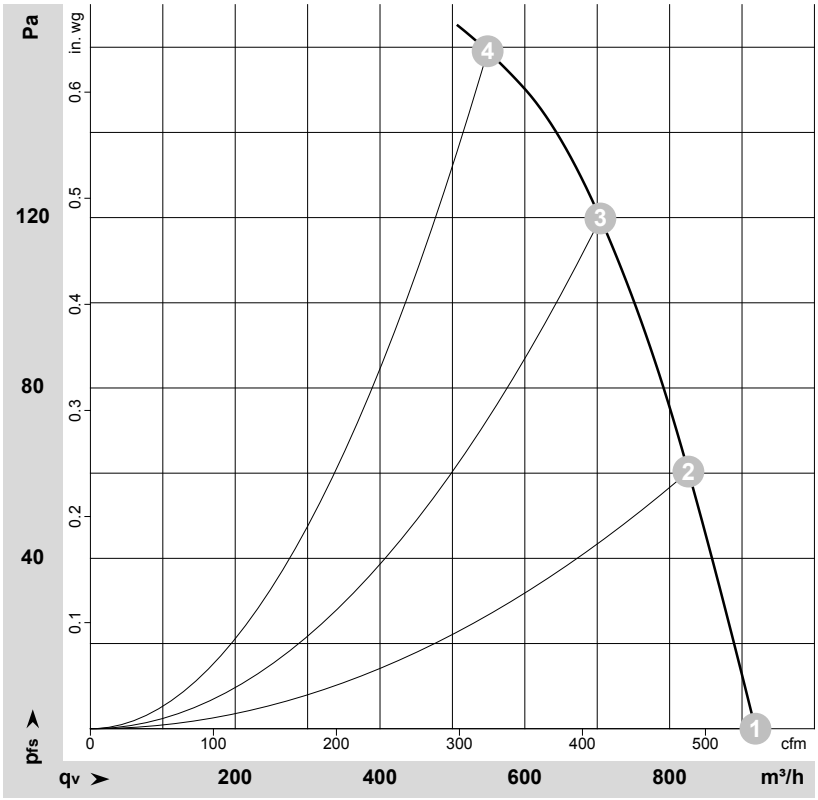
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-58197-1

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	3100	87	0.39	920	0	540	0.00
2	1~	230	60	3045	95	0.42	825	60	485	0.24
3	1~	230	60	2975	102	0.45	705	120	415	0.48
4	1~	230	60	2990	100	0.44	550	160	325	0.64

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