

# AC axial fan

sickle-shaped blades (S series)

Fan housing with guard grille

W2E250-CM06-71 ebmpapst Datasheet

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## Nominal data

<b>Type</b>	W2E250-CM06-71		
<b>Motor</b>	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 <sup>-1</sup>	2450	2600
Power consumption	W	115	150
Current draw	A	0.51	0.66
Capacitor	µF	3	3
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Max. back pressure	Pa	120	85
Max. back pressure	in. wg	0.48	0.34
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	50
Starting current	A	0.88	0.87

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



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## Technical description

<b>Weight</b>	3.2 kg
<b>Fan size</b>	250 mm
<b>Rotor surface</b>	Painted black
<b>Blade material</b>	Sheet steel, painted black
<b>Fan housing material</b>	Sheet steel, pre-galvanized and coated with black plastic (RAL 9005)
<b>Guard grille material</b>	Steel, phosphated and coated with black plastic (RAL 9005)
<b>Number of blades</b>	9
<b>Airflow direction</b>	"A"
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	CCC; CSA C22.2 No. 77; UL 1004-3

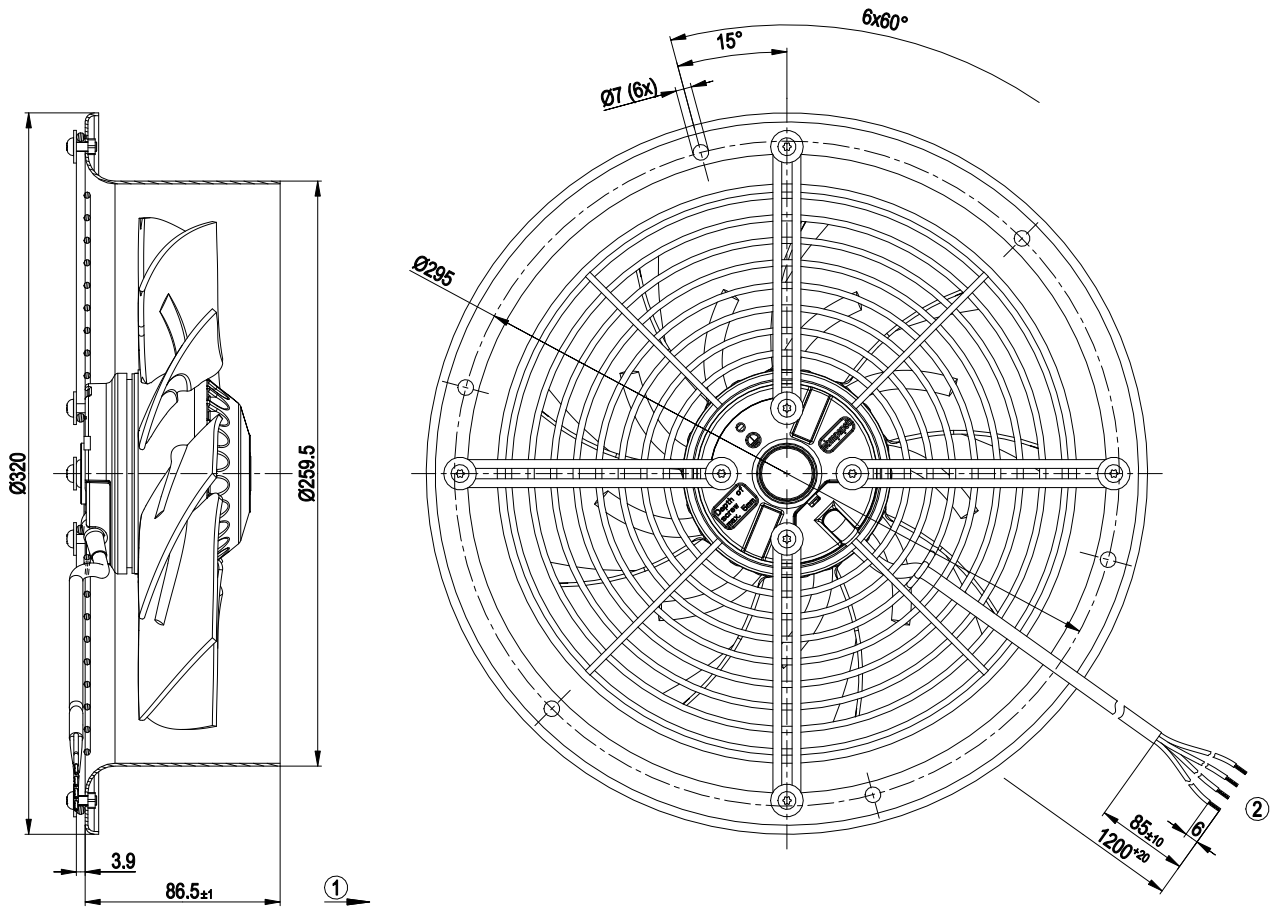


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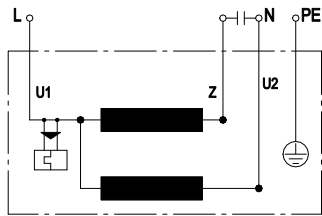
Fan housing with guard grille

## Product drawing



- 1 Direction of air flow "A"
- 2 Cable PVC AWG20, 4x crimped splices

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

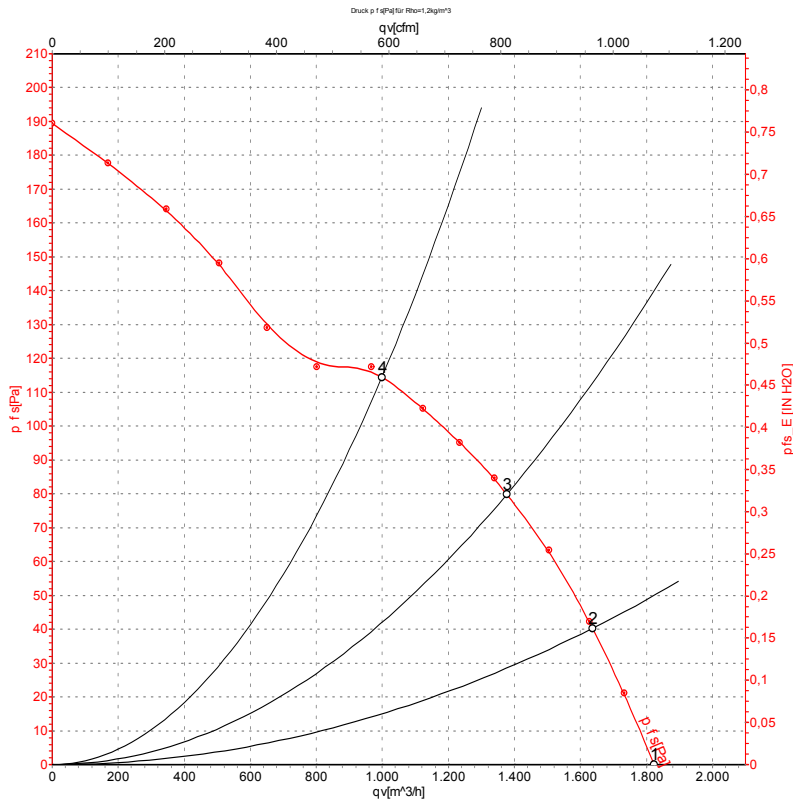


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## Curves: Air performance 50 Hz



Measurement: LU-59608-1

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	115	0.51	1820	0	1070	0.00
2	230	50	2420	120	0.52	1635	40	965	0.16
3	230	50	2335	125	0.56	1375	80	810	0.32
4	230	50	2270	134	0.58	1000	115	585	0.46

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

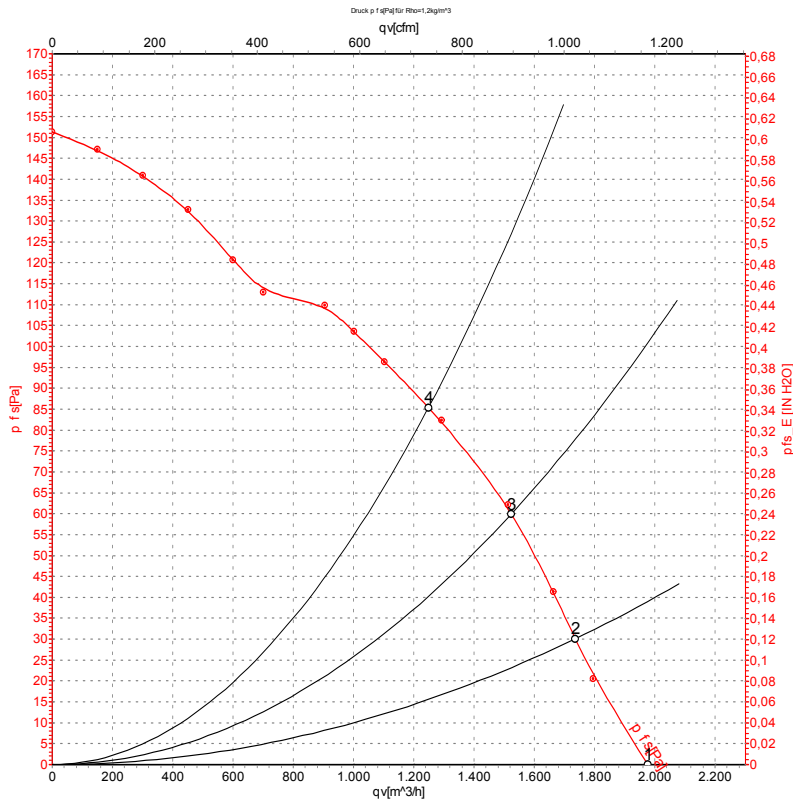


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## Curves: Air performance 60 Hz



Measurement: LU-59609-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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 <sub>e</sub>	I	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	60	2600	150	0.66	1970	0	1160	0.00
2	230	60	2525	156	0.68	1735	30	1020	0.12
3	230	60	2415	160	0.70	1525	60	895	0.24
4	230	60	2300	164	0.71	1250	85	735	0.34

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

