

AC axial fan

sickled blades (S series), single inlet
Wall ring with guard grille

W4E250-CM32-01 ebmpapst Datasheet
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Nominal data

Type	W4E250-CM32-01		
Motor	M4E068-BF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed (rpm)	min ⁻¹	1350	1550
Power input	W	38	43
Current draw	A	0.17	0.19
Motor capacitor	µF	1.5	1.5
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	40	55
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	70
Starting current	A	0.27	0.28

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

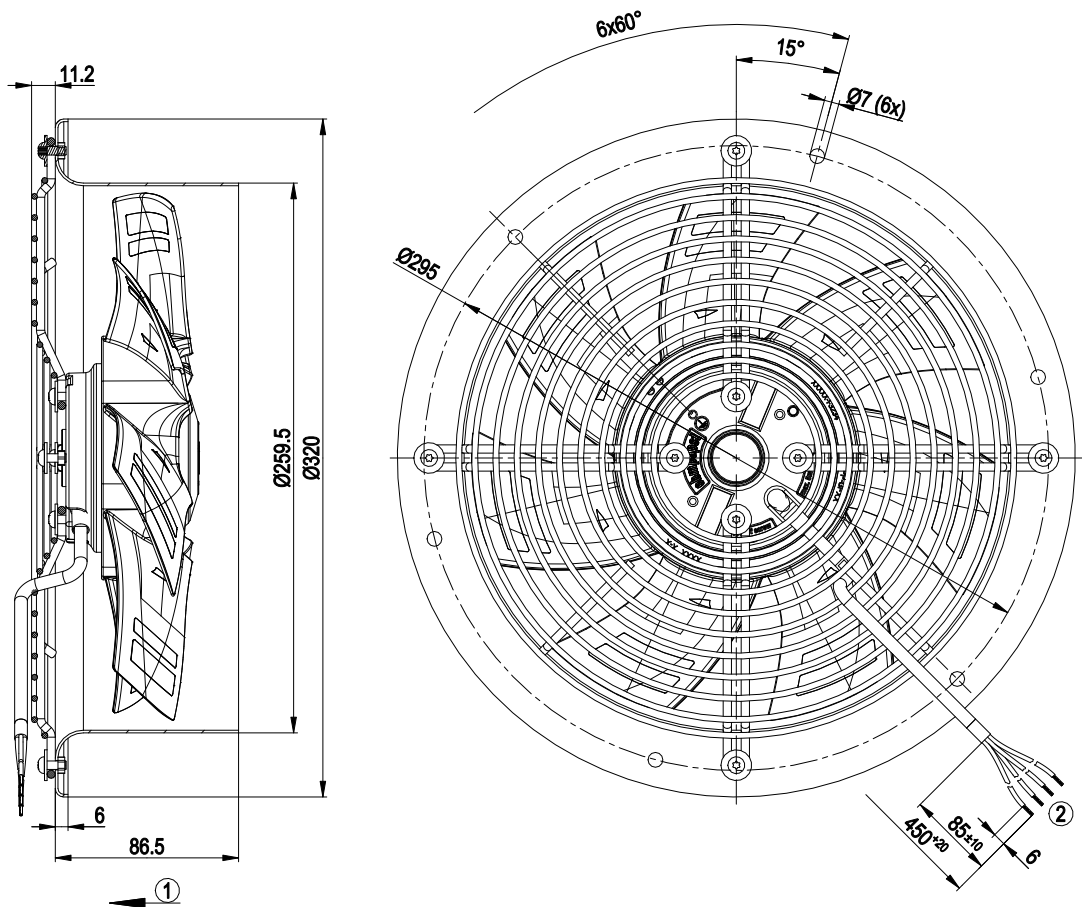
Mass	3 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of wall ring	Sheet steel, galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
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	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	EAC



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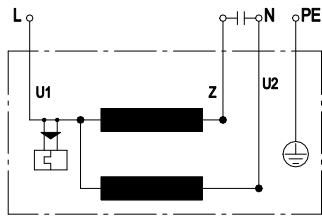
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Product drawing



- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Connection line PVC 4G 0.5 mm², 4x lead tips crimped |

Connection screen

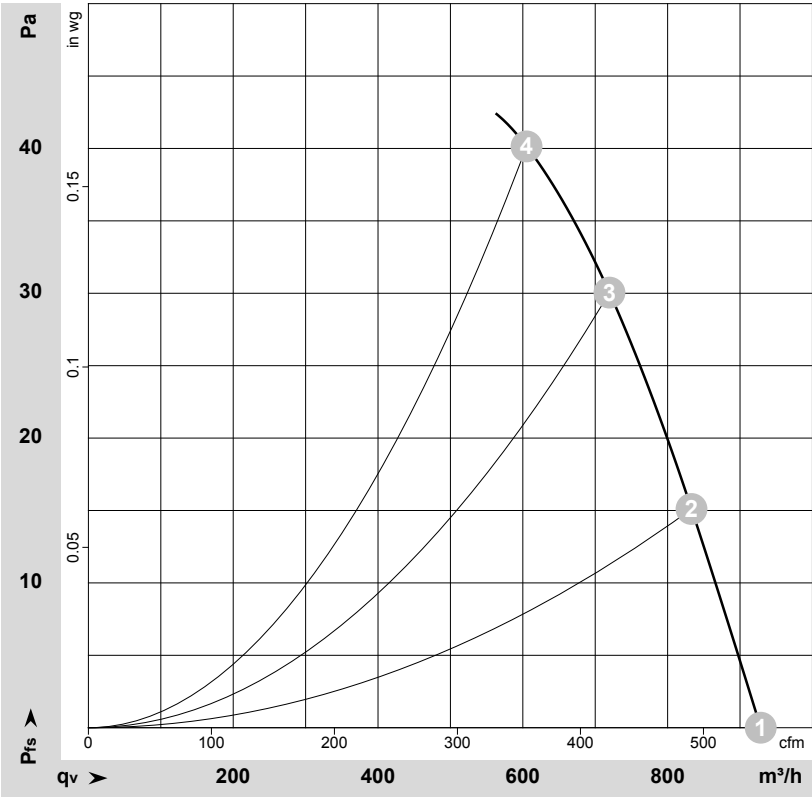


U1	blue	Z	brown	U2	black
PE	green/yellow				



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Charts: Air flow 50 Hz



$\rho = 1.18 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-168907-1

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	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	inH2O
1	230	50	1395	36	0.16	49	56	930	0	545	0.00
2	230	50	1375	37	0.16	48	56	835	15	490	0.06
3	230	50	1365	37	0.16	49	56	720	30	425	0.12
4	230	50	1350	38	0.17	51	58	605	40	355	0.16

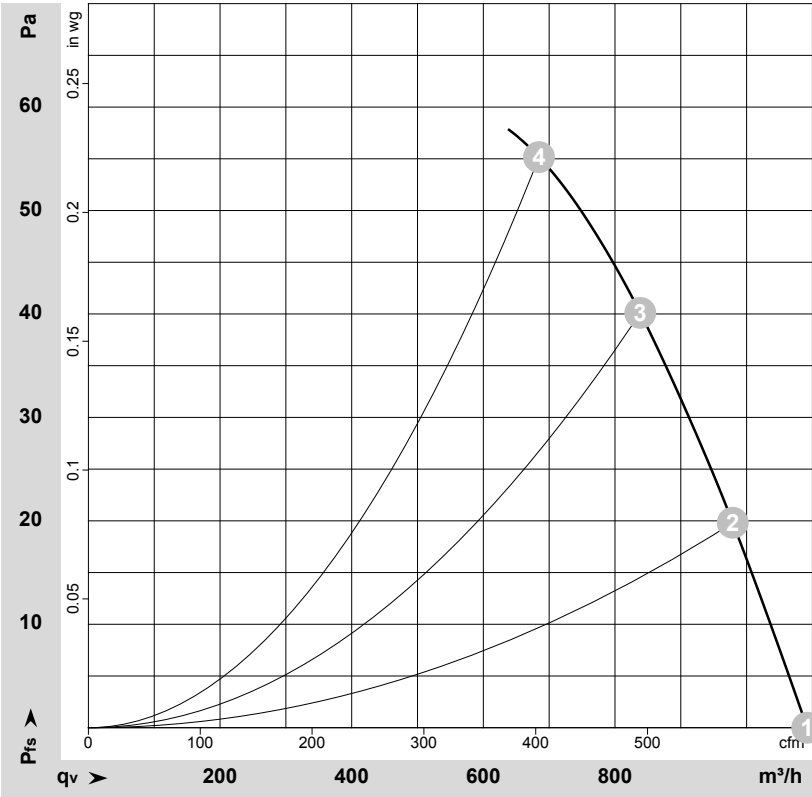
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_v = Air flow
p_{fs} = Pressure increase



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Charts: Air flow 60 Hz



$\rho = 1.181 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-168915-1

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	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	inH2O
1	230	60	1635	39	0.18	53	60	1090	0	645	0.00
2	230	60	1605	41	0.18	53	60	980	20	575	0.08
3	230	60	1575	42	0.19	53	60	840	40	495	0.16
4	230	60	1550	43	0.19	55	63	685	55	405	0.22

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_v = Air flow
p_{fs} = Pressure increase

