W4S250-CA02-01

AC axial fan

straight blades (A series)

with round full nozzle

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W4S250-CA02-01**
Motor	**M4S068-CF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	UL	CE
Speed (rpm)	min^{-1}	1400	1620	1620
Power consumption	W	72	75	67
Current draw	A	0.53	0.33	0.46
Max. back pressure	Pa	80	100	100
Max. back pressure	inH2O	0.32	0.4	0.4
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	40	50	50

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	2.9 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, pre-galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	7
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

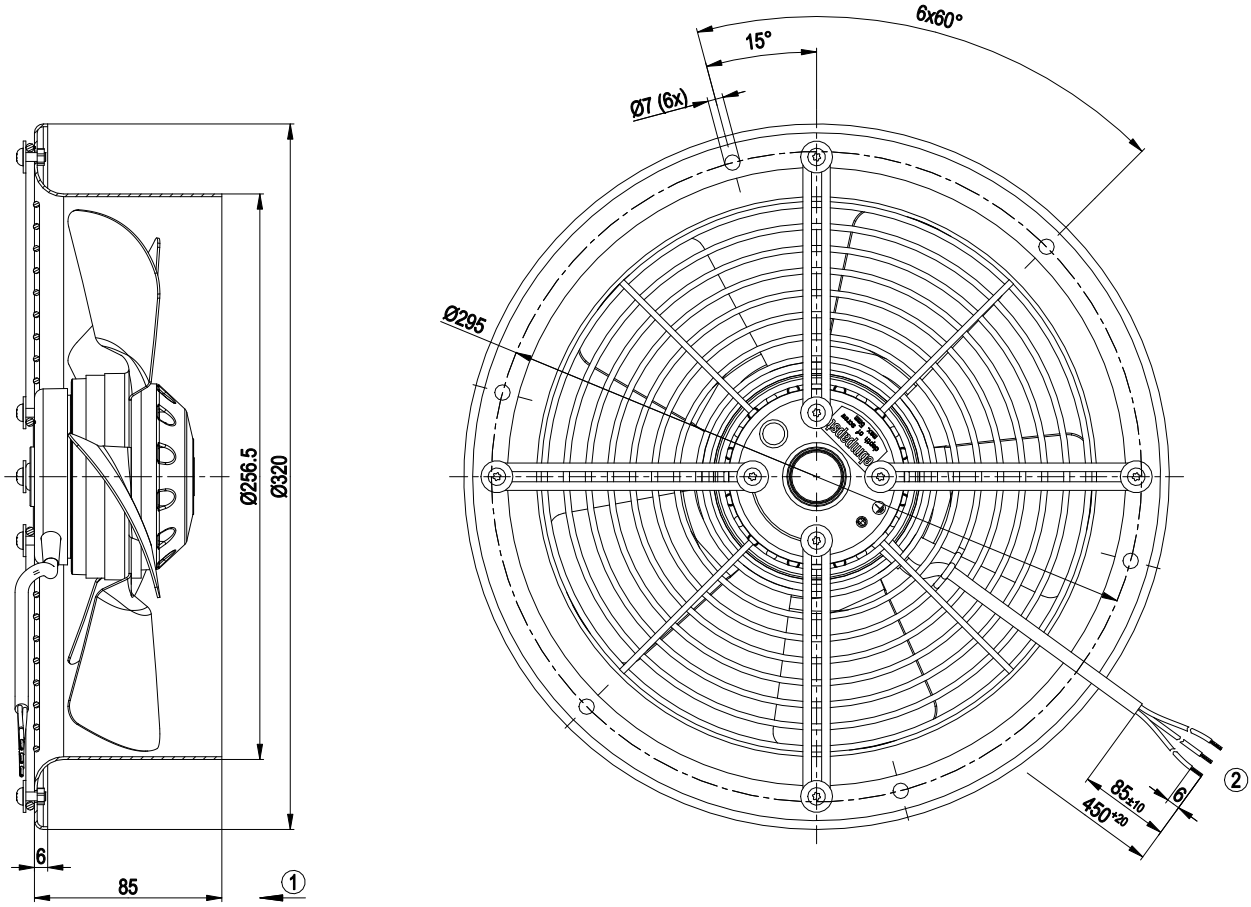
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Product drawing



1	Airflow direction "V"
2	Cable PVC 3G 0.5 mm², 3x crimped splices

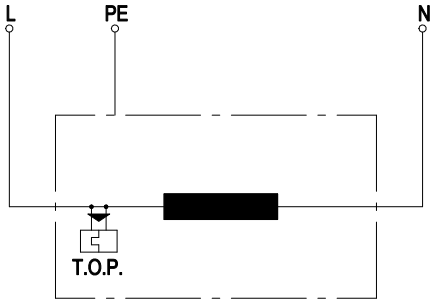
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Connection diagram



L	= blue
PE	= green/yellow
N	= black
TOP	= thermal overload protector

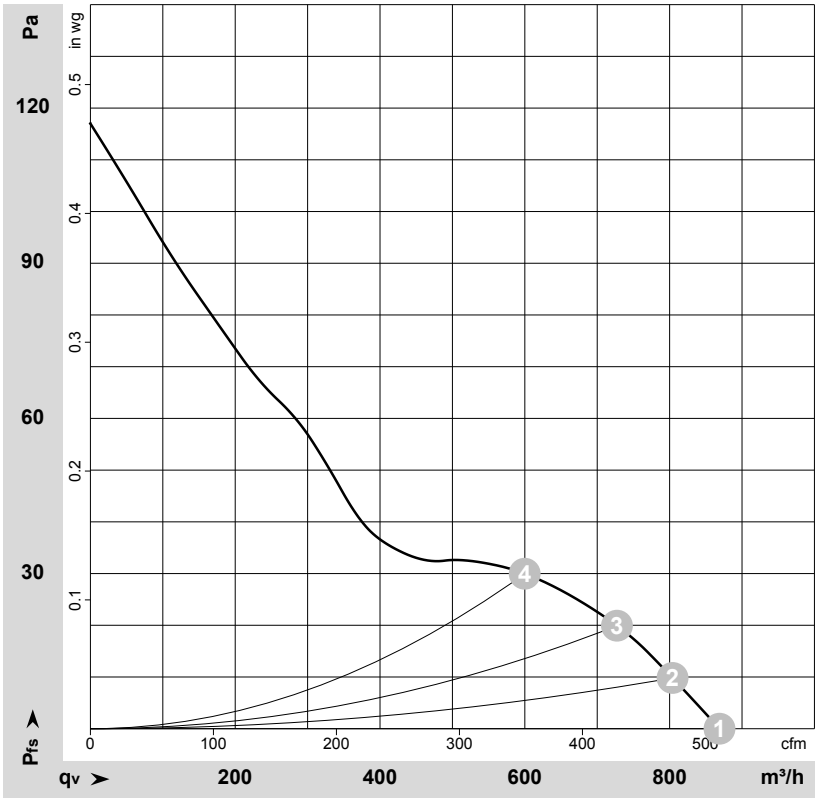
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-16243-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1400	72	0.53	870	0	510	0.00
2	230	50	1400	70	0.52	805	10	475	0.04
3	230	50	1400	70	0.52	725	20	430	0.08
4	230	50	1390	70	0.52	600	30	355	0.12

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

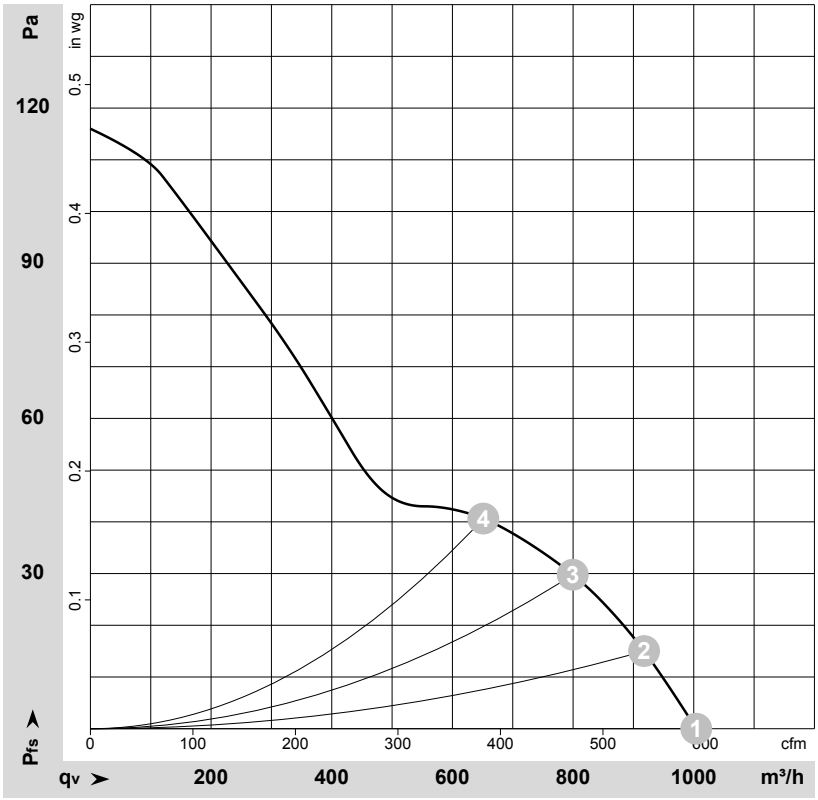
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-16244-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	60	1620	67	0.46	1005	0	590	0.00
2	230	60	1610	66	0.45	920	15	540	0.06
3	230	60	1605	67	0.46	800	30	470	0.12
4	230	60	1600	67	0.46	650	40	385	0.16

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

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