W2D250-CH12-14

AC axial fan

sickle-shaped blades (S series)

Fan housing with guard grille

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Nominal data

Type	**W2D250-CH12-14**
Motor	**M2D068-CC**

Phase		3~	3~
Nominal voltage	VAC	440	440
Wiring		Δ	Y
Frequency	Hz	60	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2700	1850
Power consumption	W	140	75
Current draw	A	0.2	0.11
Max. back pressure	Pa	0	0
Max. back pressure	inH2O	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	45	45

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	3.2 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Stainless steel
Guard grille material	Stainless steel
Number of blades	9
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F2-2
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °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 with low-temperature lubricant
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

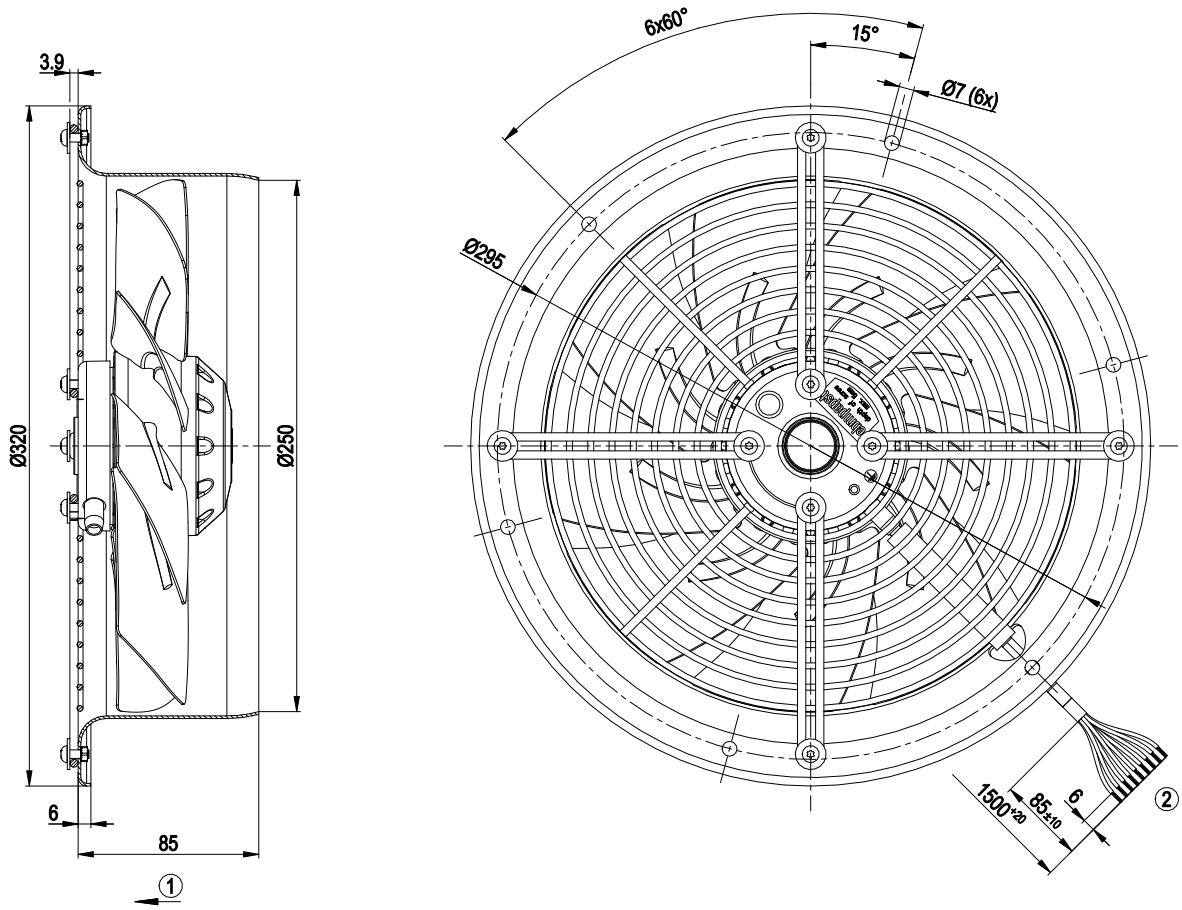
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Product drawing



1	Direction of air flow "V"
2	Cable halogen-silicone-free 9G 0.5 mm², 9x crimped splices

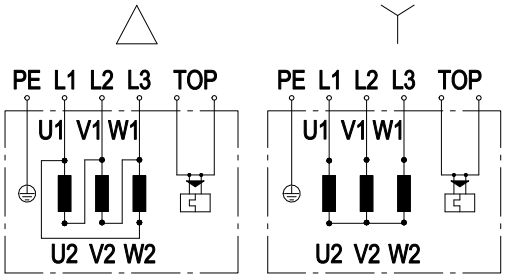
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Connection diagram



Note: Change of rotation direction by reversing two phases

Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2x gray
PE	green/yellow				

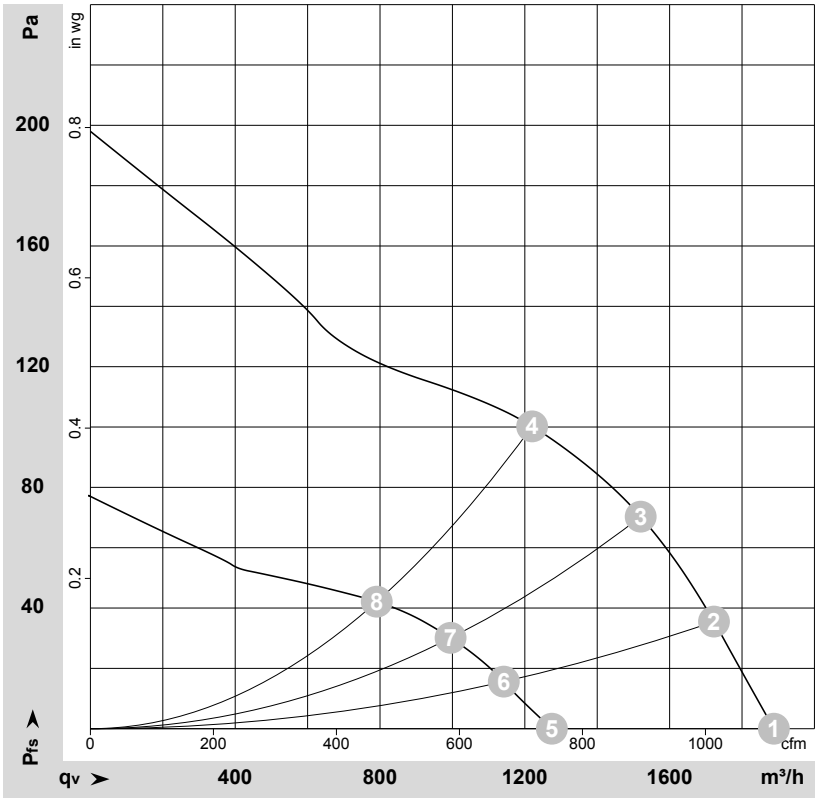
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-33404-1
Measurement: LU-33402-1

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	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	Δ	440	60	2700	140	0.20	1890	0	1110	0.00
2	Δ	440	60	2635	147	0.20	1725	35	1015	0.14
3	Δ	440	60	2540	157	0.22	1520	70	895	0.28
4	Δ	440	60	2445	166	0.23	1220	100	720	0.40
5	Y	440	60	1850	75	0.11	1275	0	750	0.00
6	Y	440	60	1775	77	0.11	1140	16	670	0.06
7	Y	440	60	1680	79	0.11	995	30	585	0.12
8	Y	440	60	1590	81	0.11	790	42	465	0.17

Wired = Wiring · 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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