AC axial compact fan

sickle-shaped blades (S series), single-intake

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W2D208-BA14-52**
Motor	**M2D068-CF**

Phase		3~	3~	3~
Nominal voltage	VAC	400	400	460
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	CE
Speed (rpm)	min^{-1}	2750	3100	3200
Power consumption	W	59	80	88
Current draw	A	0.15	0.14	0.15
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	70	70
Starting current	A	0.47	0.48	0.53

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

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Technical description

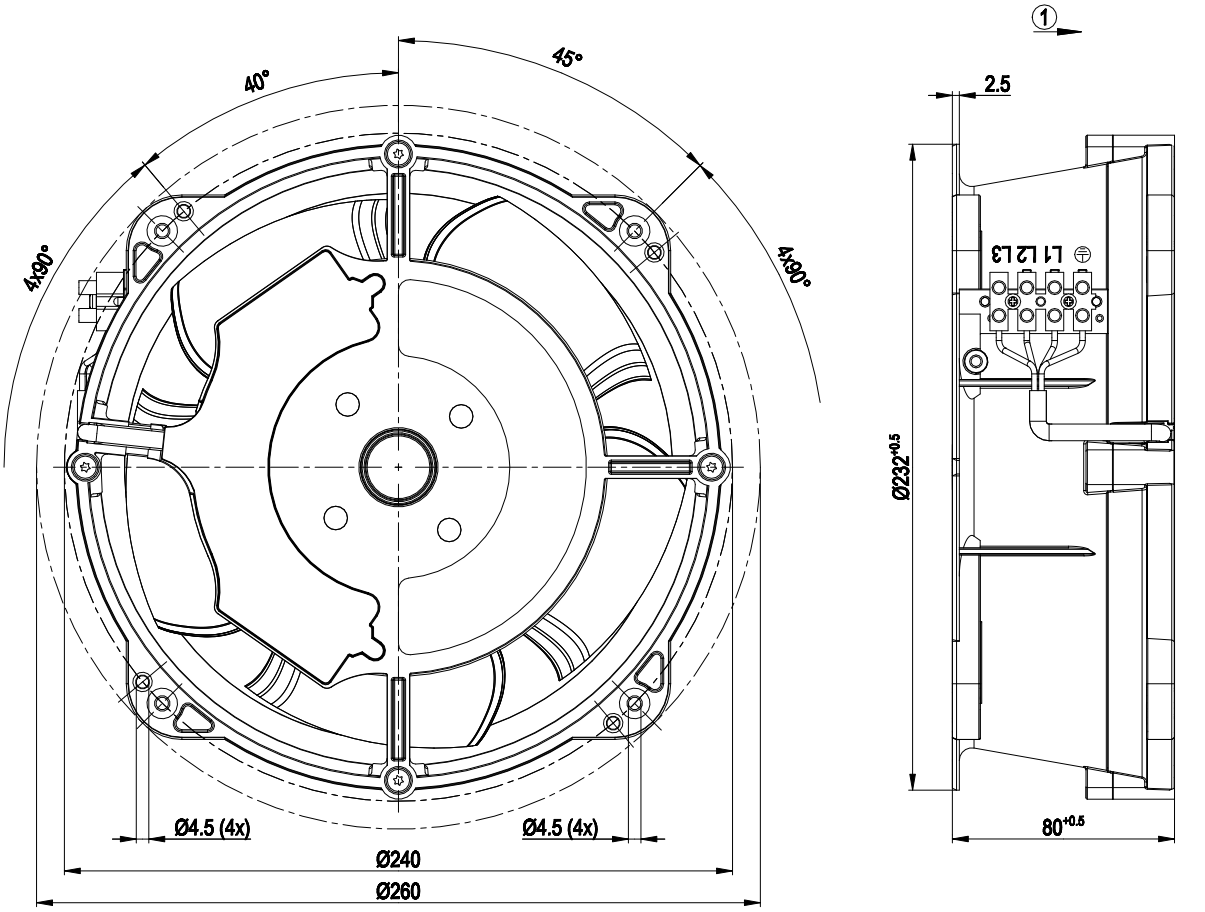
Weight	2.8 kg
Fan size	208 mm
Rotor surface	Painted black
Impeller material	PA plastic
Fan housing material	Die-cast aluminum, painted black
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F2-2
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
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection
Approval	UL 1004-1; CSA C22.2 No. 100

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Product drawing



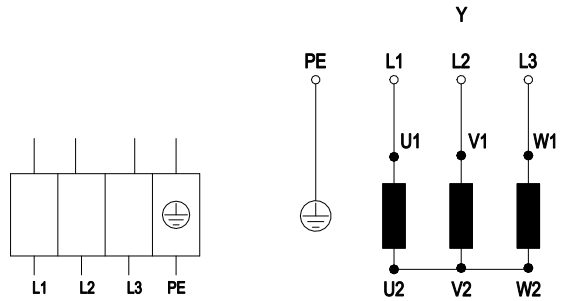
1	Direction of air flow "V"

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Connection diagram



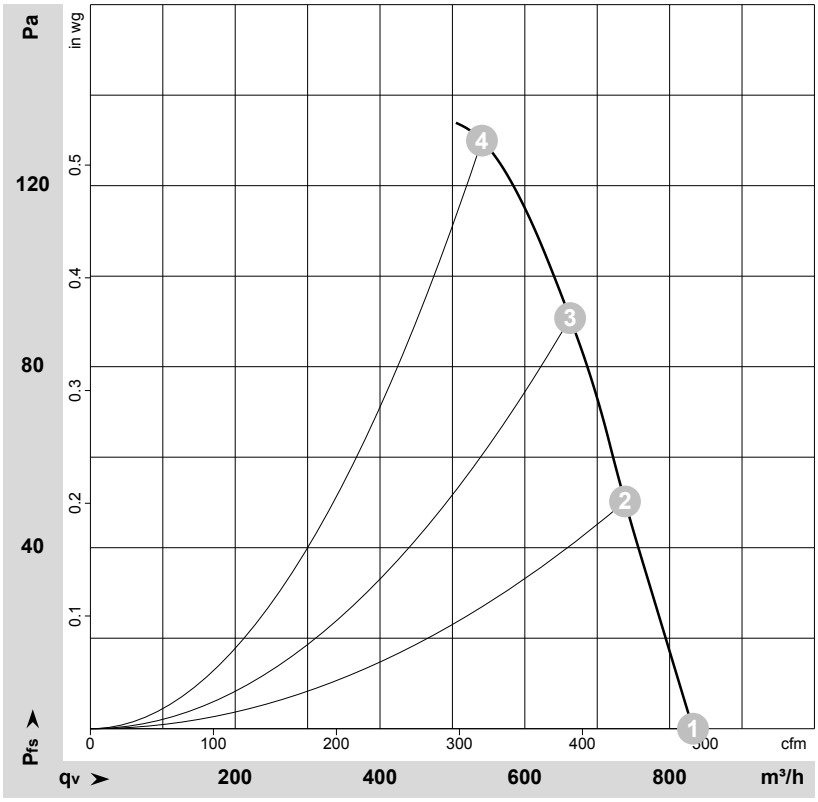
Y	Star connection	L1	black	L2	blue
L3	brown	PE	green/yellow		

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112975-1

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	400	50	2750	59	0.15	830	0	490	0.00
2	400	50	2710	66	0.15	740	50	435	0.20
3	400	50	2690	69	0.15	665	90	390	0.36
4	400	50	2680	70	0.15	540	130	320	0.52

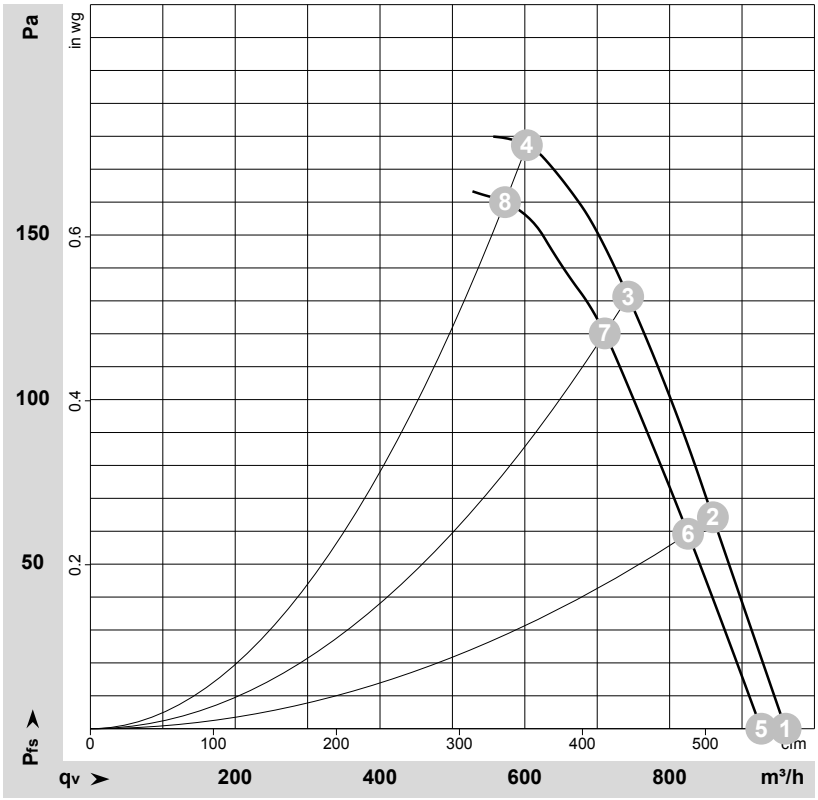
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112978-1
Measurement: LU-112976-1

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	460	60	3200	88	0.15	960	0	565	0.00
2	460	60	3155	97	0.16	860	64	505	0.26
3	460	60	3110	104	0.17	745	131	435	0.53
4	460	60	3105	104	0.17	605	179	355	0.72
5	400	60	3100	80	0.14	925	0	545	0.00
6	400	60	3020	88	0.15	825	60	485	0.24
7	400	60	2965	95	0.16	710	120	420	0.48
8	400	60	2970	94	0.16	575	160	335	0.64

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