W2S130-AA25-51

AC axial compact fan

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

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Nominal data

Type	**W2S130-AA25-51**
Motor	**M2S052-CA**

Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL 2111
Speed (rpm)	min^{-1}	2800	3250	3250
Power consumption	W	41	38	40
Current draw	A	0.56	0.47	
Max. back pressure	Pa	80	120	120
Max. back pressure	inH2O	0.32	0.48	0.48
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	50	70	70

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	1.1 kg
Fan size	130 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Die-cast aluminum, painted black
Number of blades	7
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed monitoring Hall IC (with basic insulation)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	With plug
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (if protective earth is connected by customer to the housing's connection point)
Conformity with standards	EN 60335-1; CE
Approval	UL 507; CSA C22.2 No. 113

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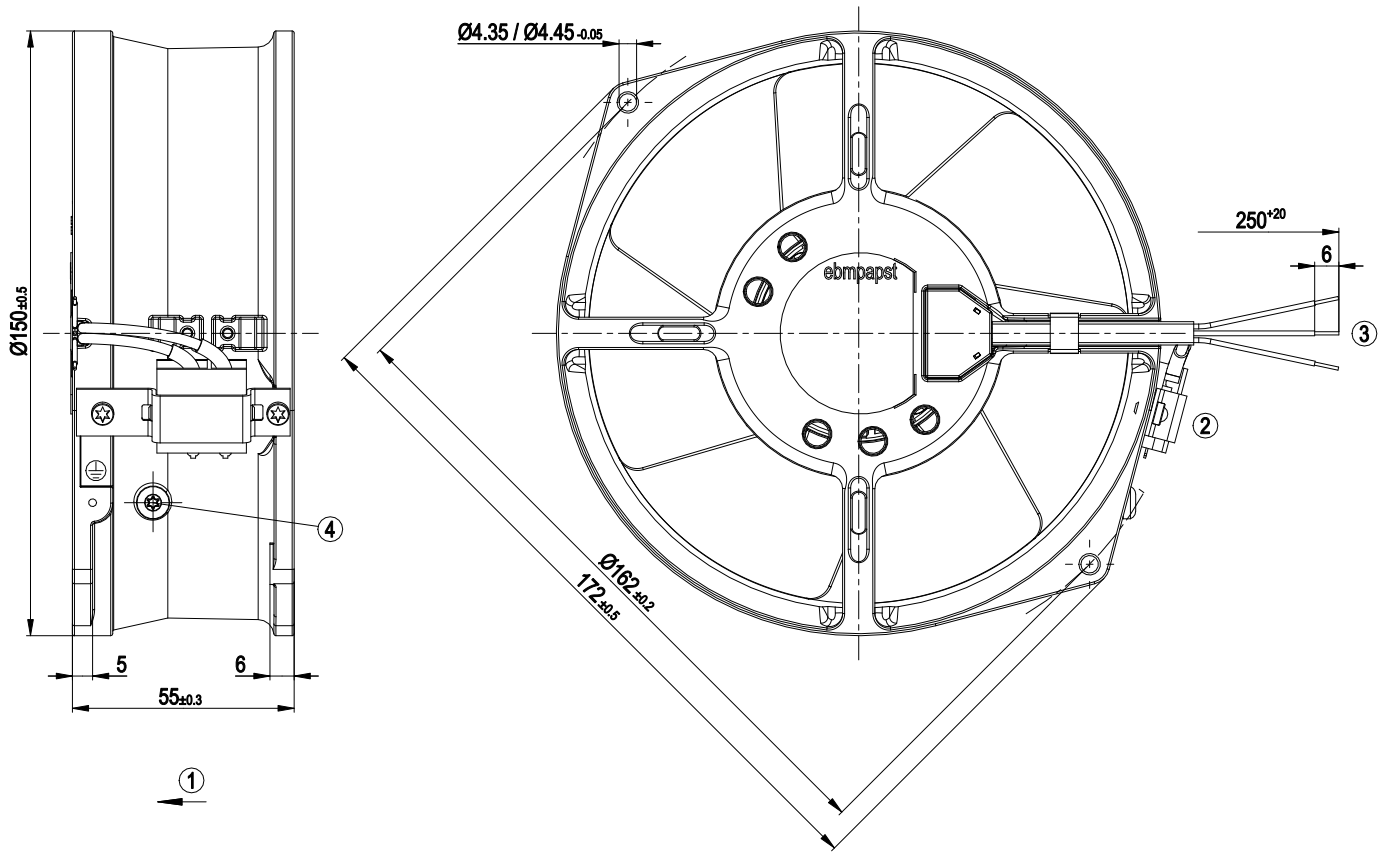
Product drawing



1	Direction of air flow "V"
2	2-pole connector housing, 2x flat plug 2.8 x 0.5
3	Cable PVC AWG26, tin-plated wire ends
4	M4 screw for fastening ground connector

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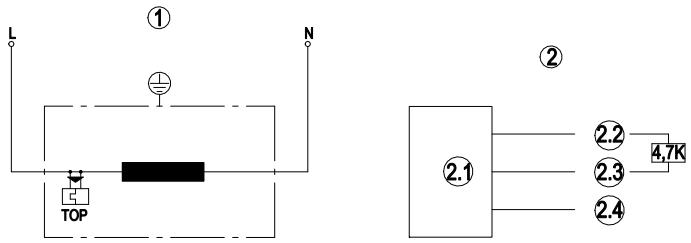
Connection diagram



1	Fan connection diagram
L	black
N	black
TOP	Thermal overload protector
2	Hall IC circuit
2.1	Hall IC
2.2	red (+5 V)
2.3	white (out)
2.4	black (0 V)

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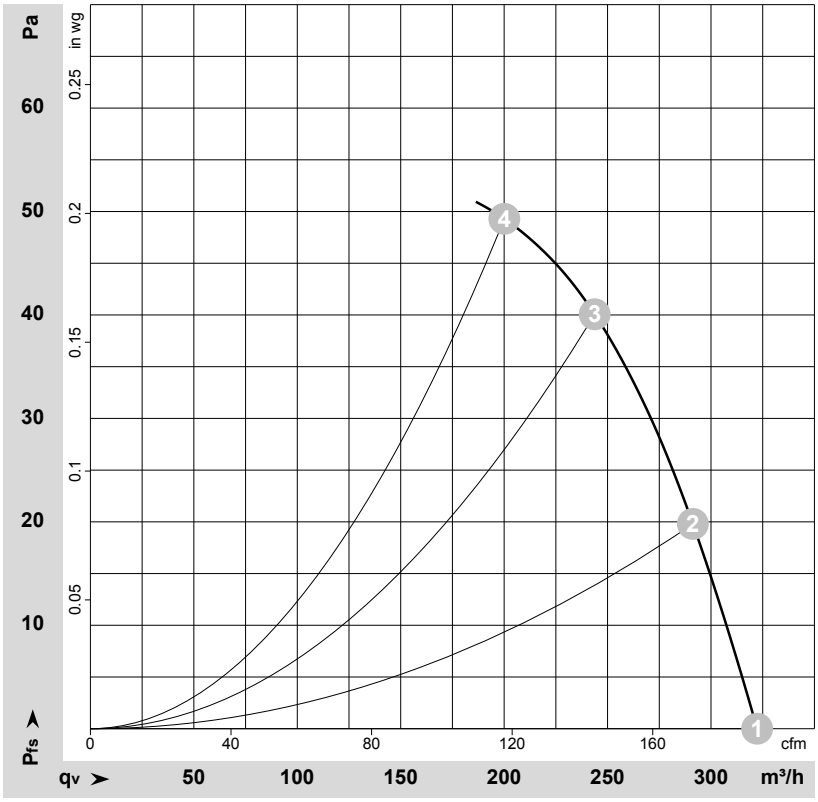
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-58320-1

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	115	50	2800	41	0.56	320	0	190	0.00
2	115	50	2800	42	0.56	290	20	170	0.08
3	115	50	2790	43	0.57	245	40	145	0.16
4	115	50	2790	42	0.56	200	50	120	0.20

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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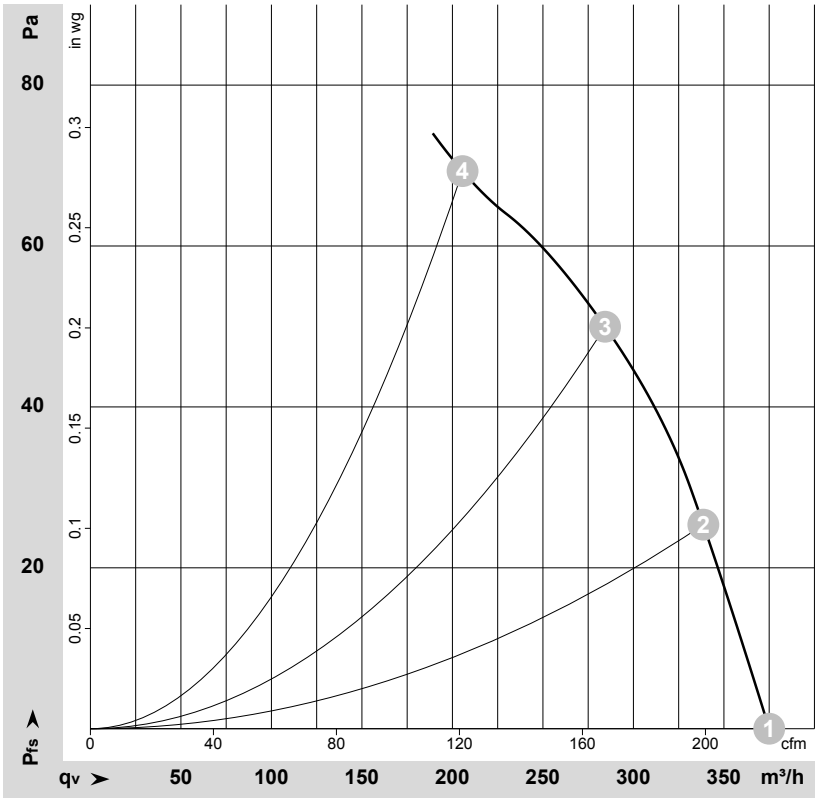
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-58323-1

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	115	60	3250	38	0.47	375	0	220	0.00
2	115	60	3210	40	0.48	340	25	200	0.10
3	115	60	3180	41	0.48	285	50	165	0.20
4	115	60	3185	41	0.48	205	70	120	0.28

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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