

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	W2S130-AA25-65			
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
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	in. wg	0.32	0.48	0.48
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	90	90

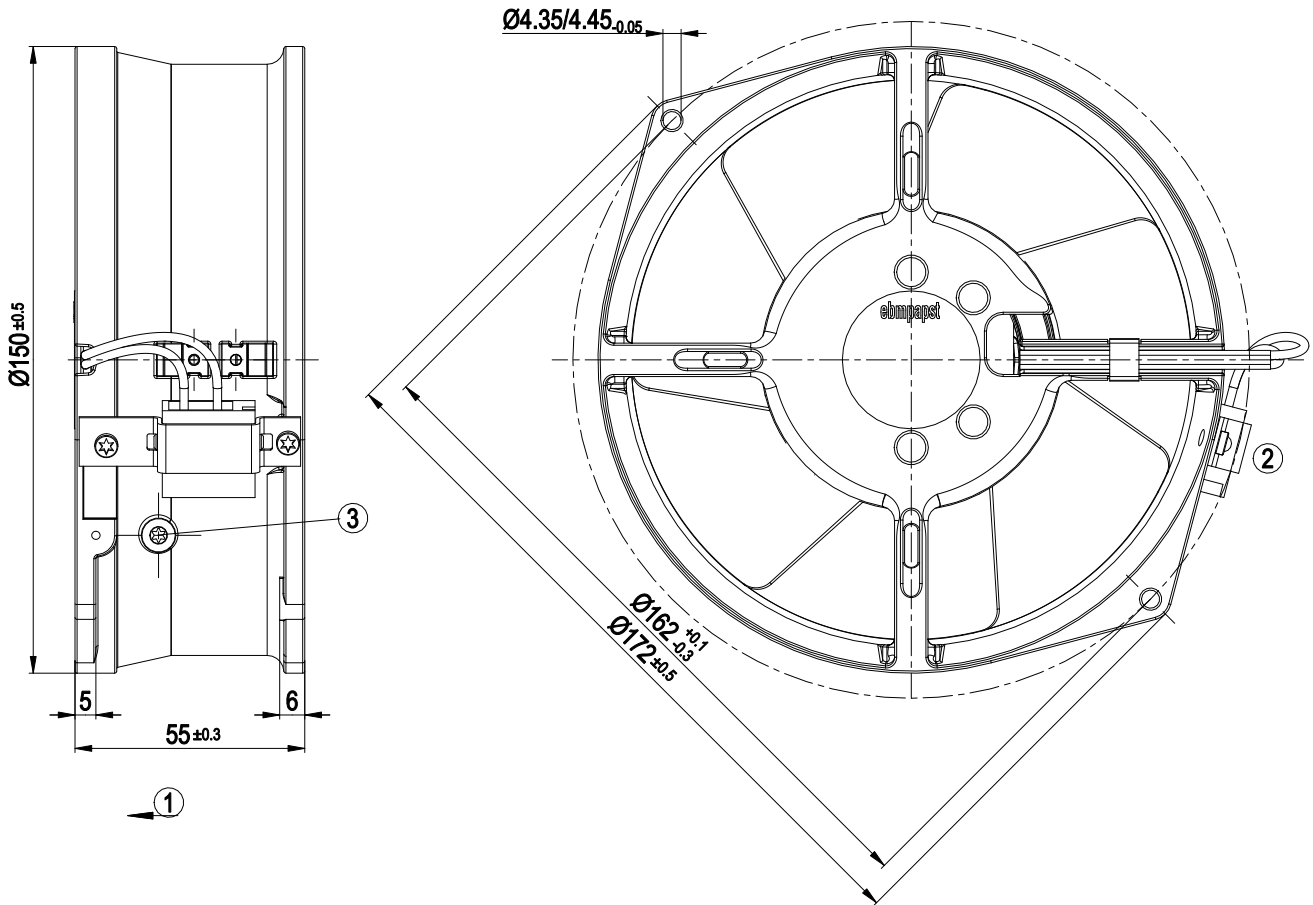
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

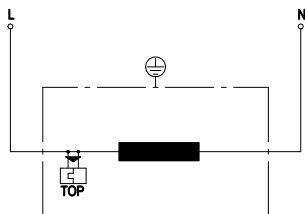
Weight	1.05 kg
Size	130 mm
Motor size	52
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Die-cast aluminum, painted black
Number of blades	7
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
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	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	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	CSA C22.2 No. 113; VDE; UL 507

Product drawing



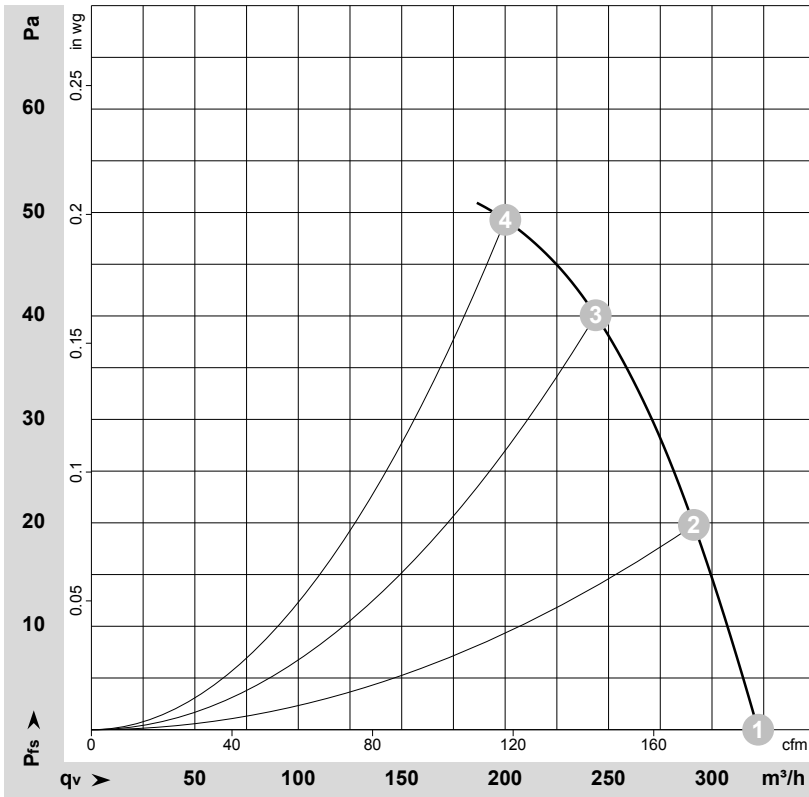
1	Direction of air flow "V"
2	2-pole connector housing, 2x flat plug 2.8 x 0.5
3	M4 screw for fastening ground connector

Connection diagram



L	= white
N	= white
TOP	= thermal overload protector

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-58320-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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.

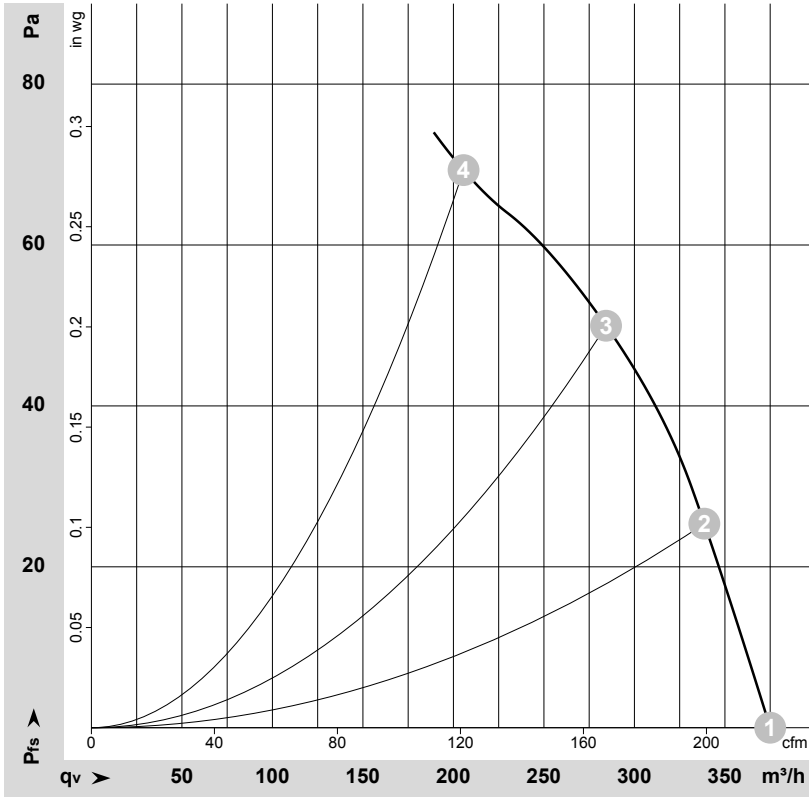
Measured values

	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
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 = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-58323-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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	q _v	P _{fs}	q _v	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
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 = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase

