

AC axial fan

straight blades (A series)

A2E170-AA47-51 ebmpapst Datasheet
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Nominal data

Type	A2E170-AA47-51		
Motor	M2E068-BF		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2550	2950
Power consumption	W	46	48
Current draw	A	0.45	0.43
Capacitor	µF	6	6
Capacitor voltage	VDB	220	220
Capacitor standard		S0 (CE)	S0 (CE)
Max. ambient temperature	°C	50	70

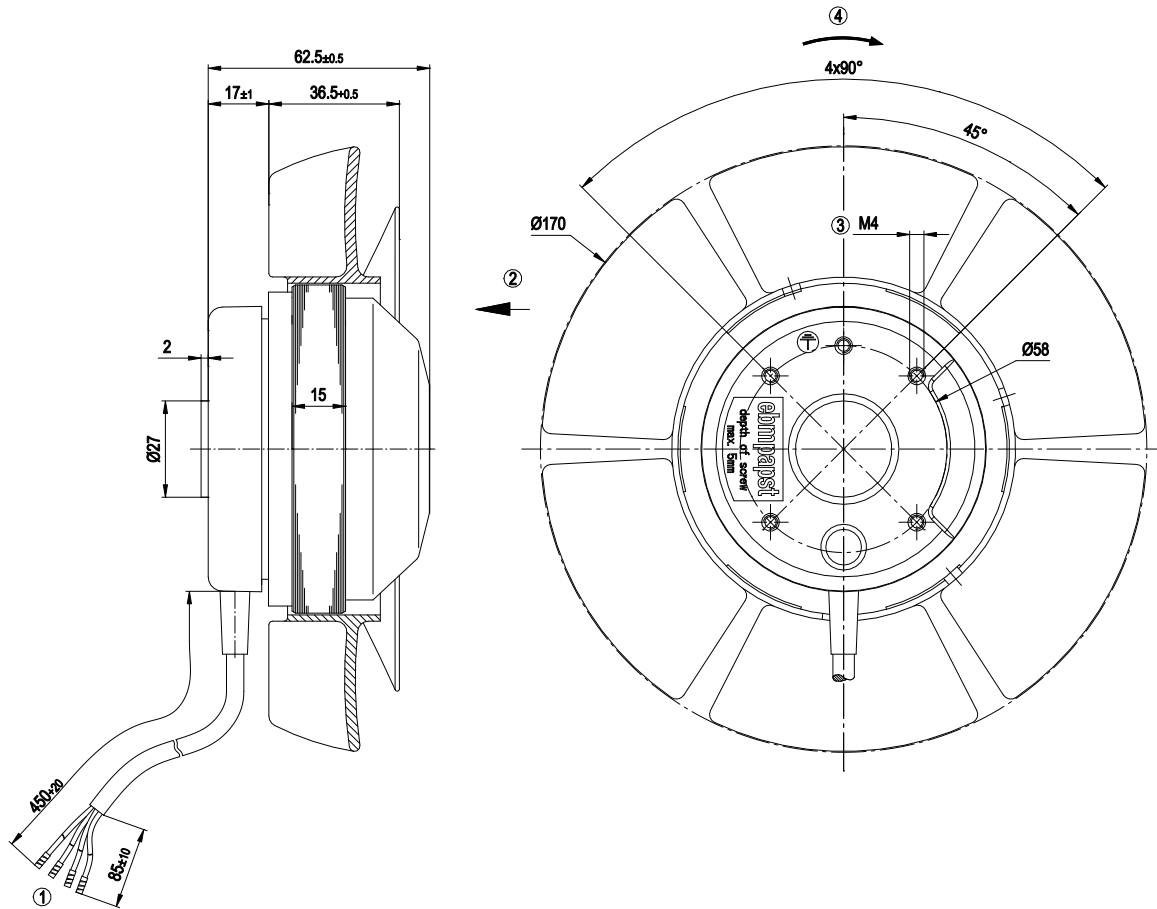
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
 Subject to change



Technical description

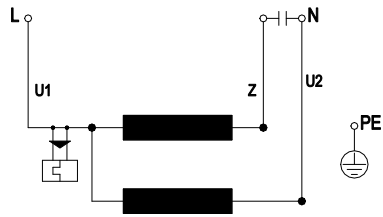
Weight	1.25 kg
Fan size	170 mm
Rotor surface	Painted black
Blade material	Die-cast aluminum
Number of blades	6
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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
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
Approval	CSA C22.2 No. 113; UL 507

Product drawing



1	Cable PVC, 4x crimped splices
2	Direction of air flow "V"
3	Max. clearance for screw 5 mm
4	Direction of rotation counterclockwise, viewed toward rotor

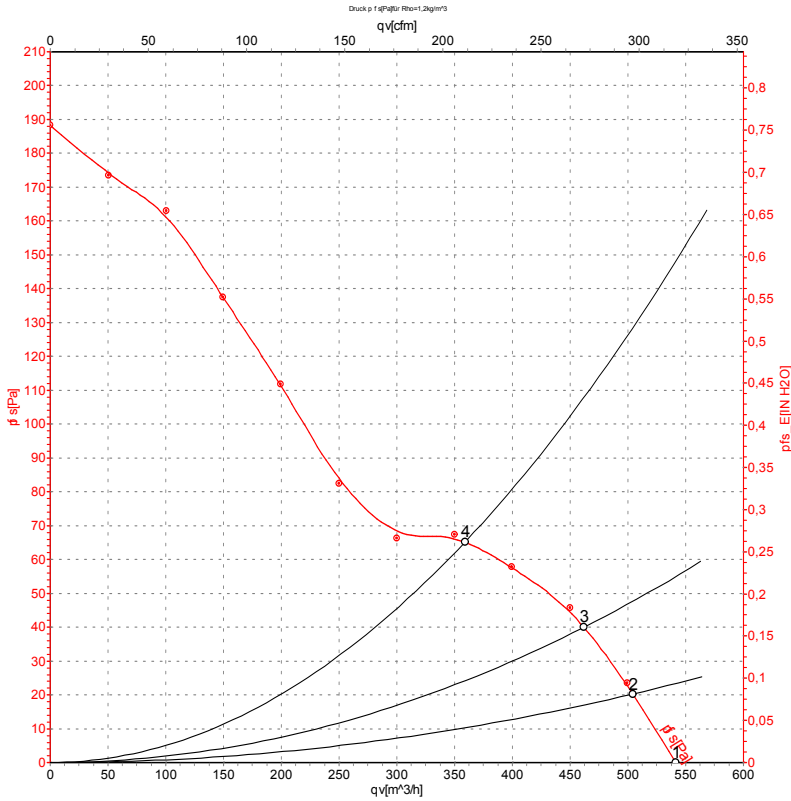
Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



Curves: Air performance 60 Hz



Measurement: LU-114962-1

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	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	115	60	2980	48	0.43	540	0	320	0.00
2	115	60	2945	50	0.43	505	21	295	0.08
3	115	60	2905	51	0.44	460	40	270	0.16
4	115	60	2855	53	0.46	360	66	210	0.26

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

