

AC axial fan

straight blades (A series), single-intake

A2D170-AA06-31 ebmpapst Datasheet

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Nominal data

Type	A2D170-AA06-31	
Motor	M2D068-BF	
Phase		3~
Nominal voltage	VAC	480
Wiring		Y
Frequency	Hz	60
Method of obtaining data		fa
Valid for approval/standard		-
Speed (rpm)	min ⁻¹	2800
Power consumption	W	50
Current draw	A	0.07
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	-

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



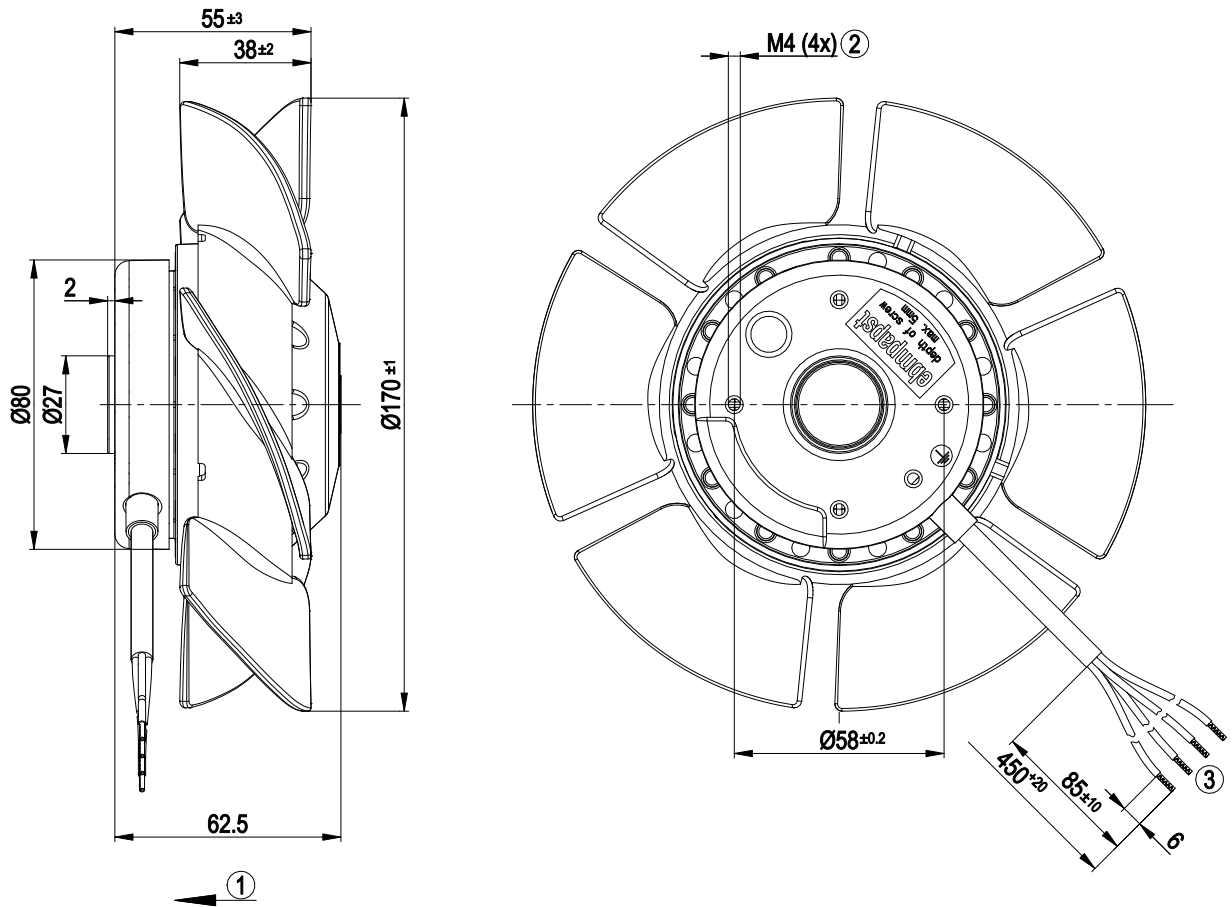
Technical description

Weight	1.3 kg
Fan size	170 mm
Rotor surface	Painted black
Blade material	Sheet aluminum
Number of blades	6
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
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
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; CE

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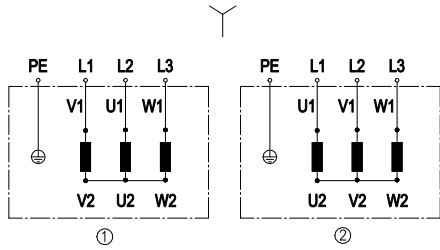
Product drawing



1	Direction of air flow "V"
2	Max. clearance for screw 5 mm
3	Cable PVC 4G 0.5 mm ² , 4x crimped splices



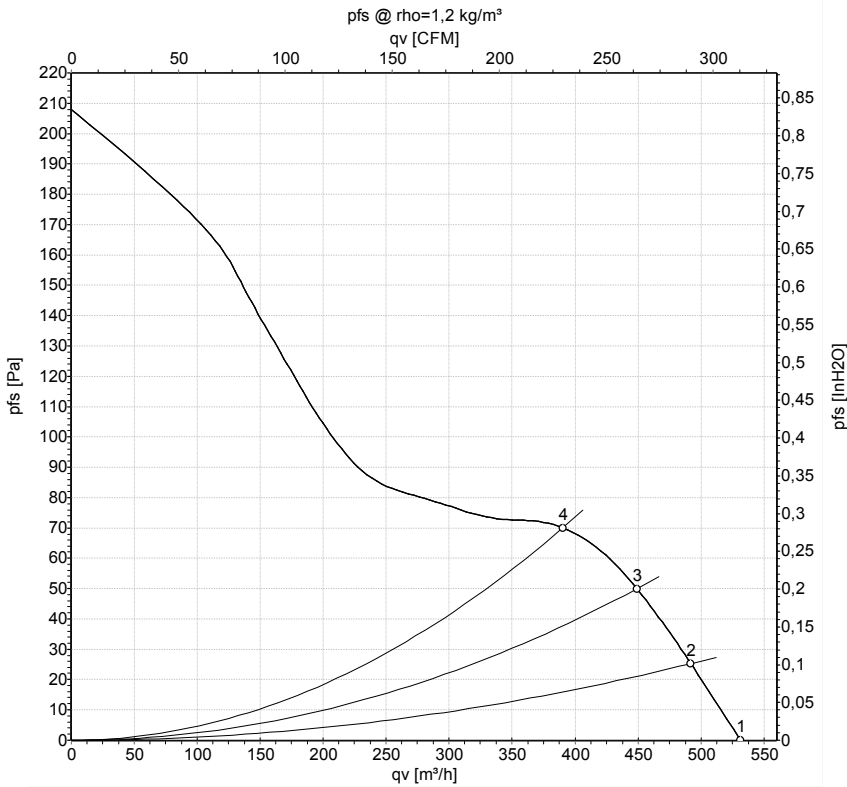
Connection diagram



Change of rotation direction by reversing two phases

	Three-phase motor
Y	Star connection
1	Counterclockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
PE	green/yellow

Curves: Air performance 60 Hz



Measurement: LU-21494-1

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	inH ₂ O
1	460	60	2985	35	0.06	530	0	315	0.00
2	460	60	2935	37	0.06	490	25	290	0.10
3	460	60	2890	38	0.06	450	50	265	0.20
4	460	60	2865	39	0.06	390	70	230	0.28

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

