R2E180-AH05-10

AC circulation blower for hot air

backward-curved

R2E180-AH05-10 ebmpapst Datasheet FansCo

sales@fansco.com

www.fansco.com

Nominal data

Type	**R2E180-AH05-10**
Motor	**M2E068-DF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	2600
Power consumption	W	115
Current draw	A	0.51
Capacitor	µF	3
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	95
Starting current	A	1.06

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	2.85 kg
Size	180 mm
Motor size	68
Rotor surface	Unpainted
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
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	Shaft horizontal
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
Electrical hookup	Terminal strip; Via terminal strip
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (if protective earth is connected by customer to the housing's connection point)
Conformity with standards	EN 60335-1; CE

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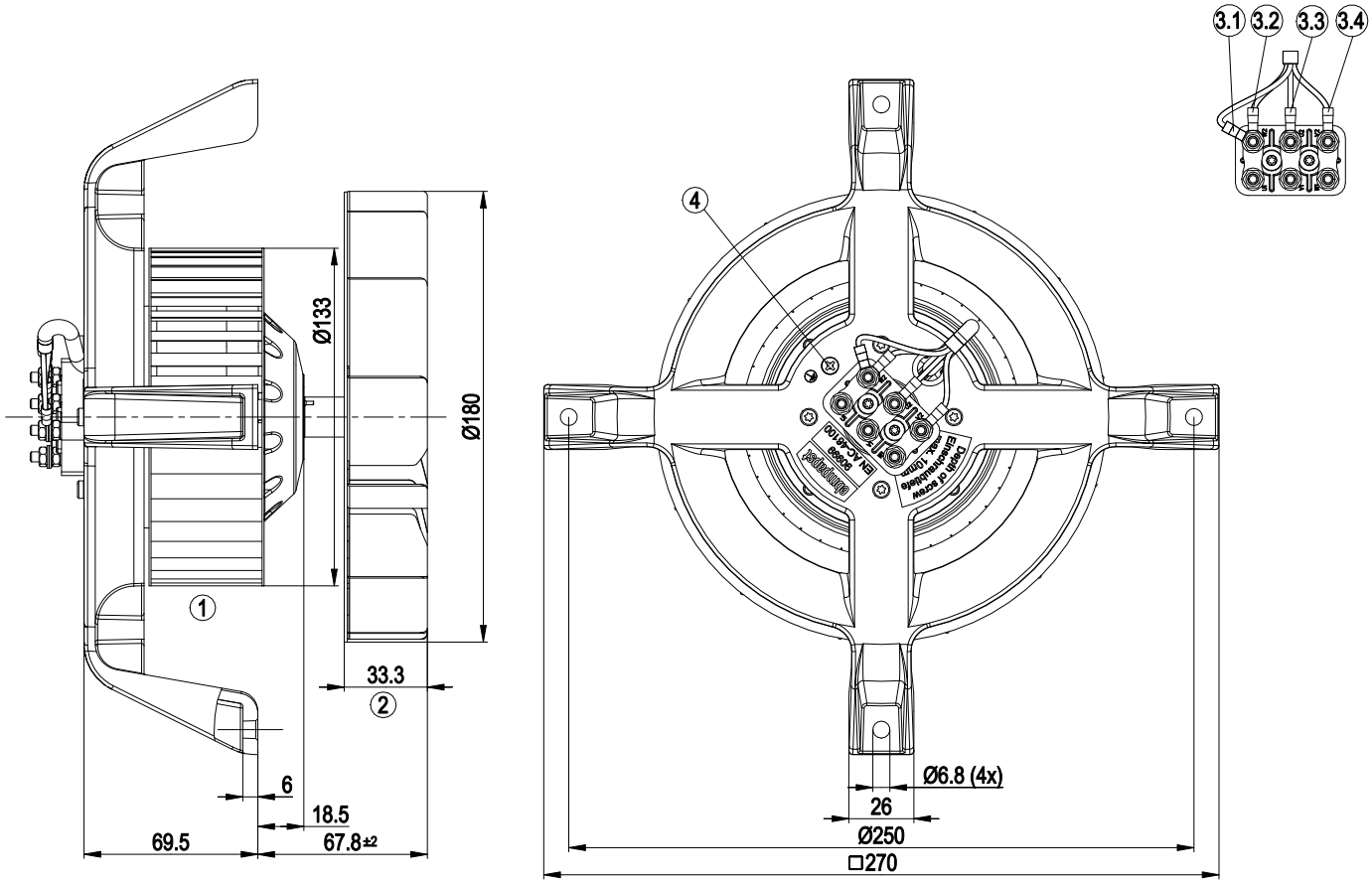
Product drawing



1	Centrifugal fan impeller (sheet steel, galvanized)
2	Centrifugal fan impeller (sheet steel, rust- and acid-resistant)
3.1	black
3.2	brown
3.3	blue
3.4	gray
4	M4 screw for fastening ground connector
	Max. clearance for screw 5 mm

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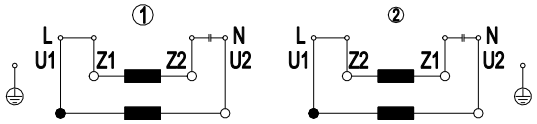
Connection diagram



Single-phase AC motor with motor run capacitor

1	Clockwise operation
2	Counterclockwise operation
U1	black
U2	gray
Z1	blue
Z2	brown

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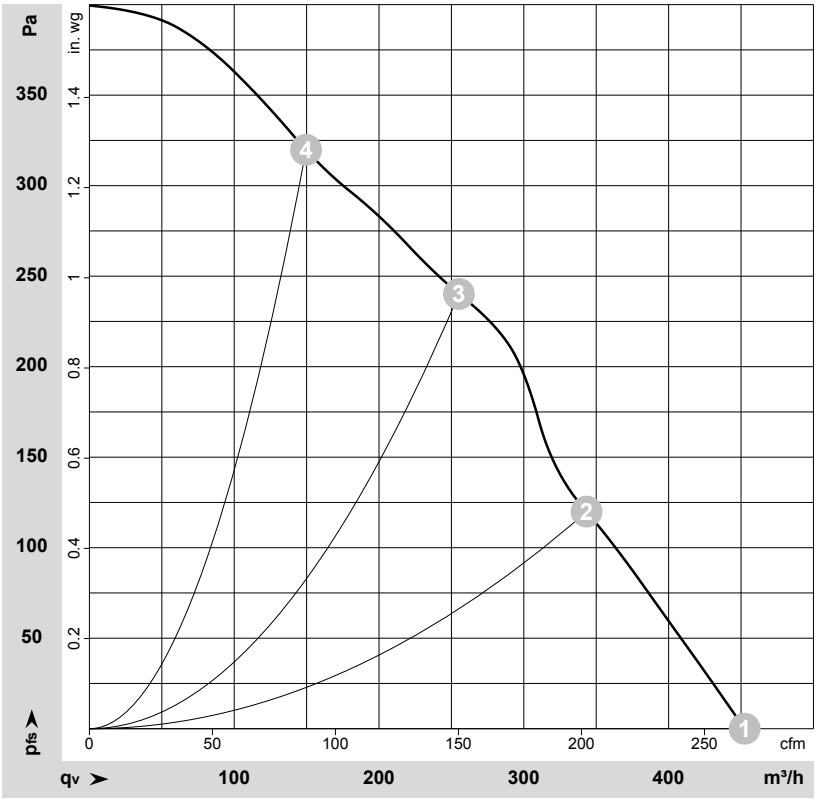
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-156453-1

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

	Wired	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	1~	230	50	2600	115	0.51	450	0	265	0.00
2	1~	230	50	2610	107	0.49	345	120	200	0.48
3	1~	230	50	2635	104	0.48	255	240	150	0.96
4	1~	230	50	2650	101	0.47	150	320	90	1.28

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