

R2E180-AH05-32

AC circulation blower for hot air

backward-curved

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

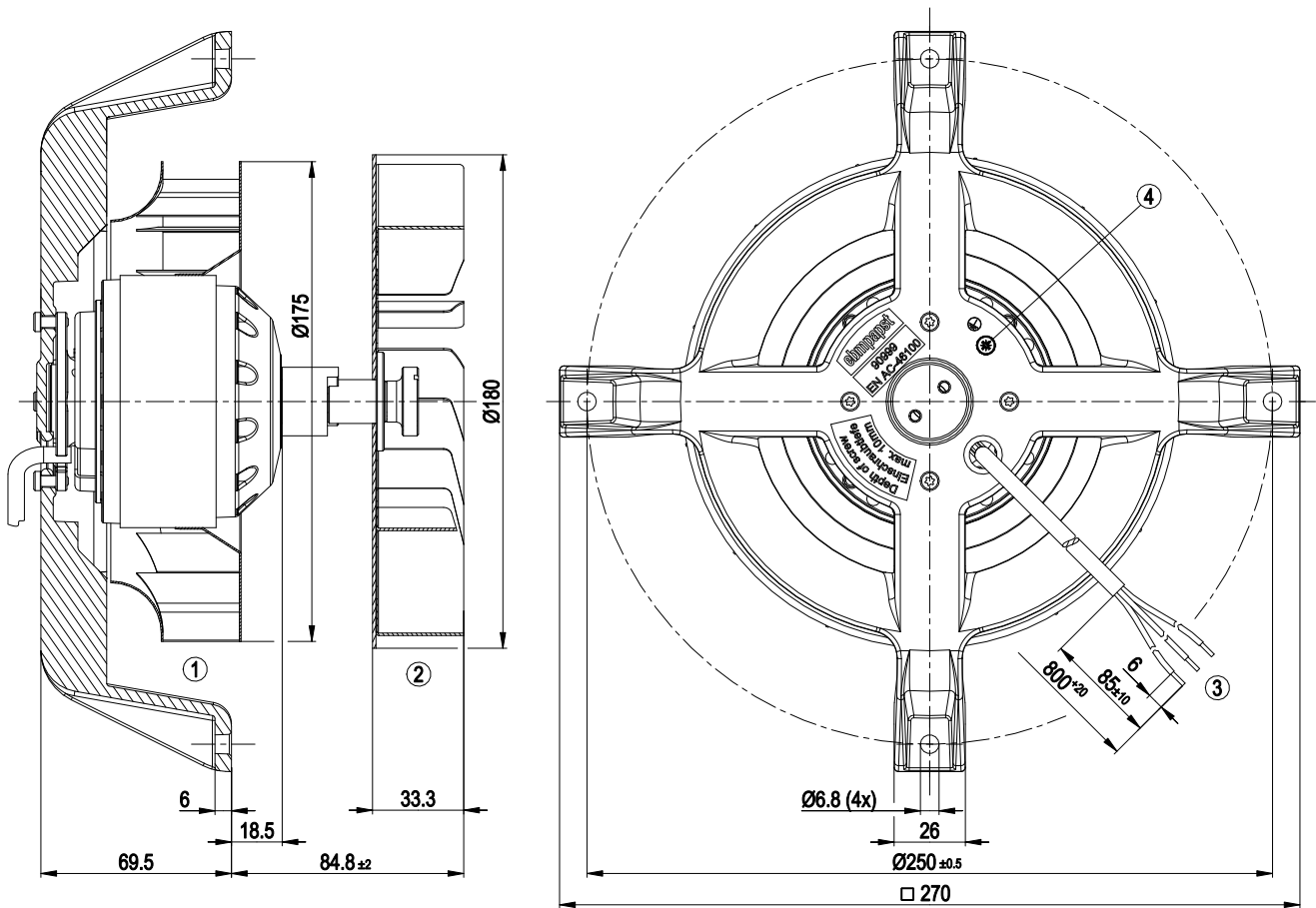
Type	R2E180-AH05-32			
Motor	M2E068-DF			
Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL
Speed (rpm)	min ⁻¹	2600	2850	2850
Power consumption	W	115	155	165
Current draw	A	0.51	0.68	0.7
Capacitor	μF	3	3	3
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	S0 (CE)	UL
Min. back pressure	Pa		0	0
Min. back pressure	in. wg		0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	75	75

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

Technical description

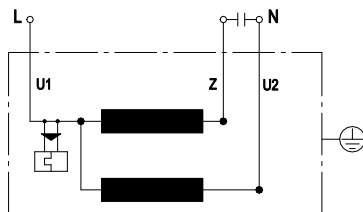
Weight	3.1 kg
Size	180 mm
Motor size	68
Rotor surface	Unpainted
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (if the protective earth is connected by the customer to the marked PE connection point)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 1004-3

Product drawing



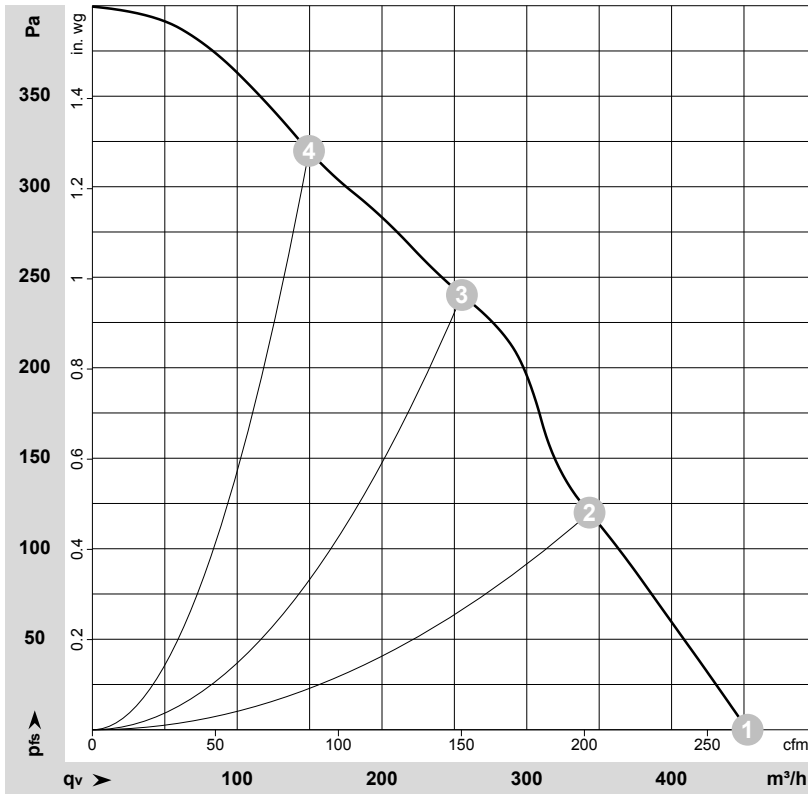
1	Centrifugal fan impeller (sheet steel, galvanized)
2	Centrifugal fan impeller (sheet steel, rust- and acid-resistant)
3	Cable PVC AWG20, stripped wire ends
4	M4 screw for fastening ground connector
	Max. clearance for screw 5 mm

Connection diagram



U1	blue	Z	brown	U2	black
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Curves: Air performance 50 Hz


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

Measurement: LU-156453-1

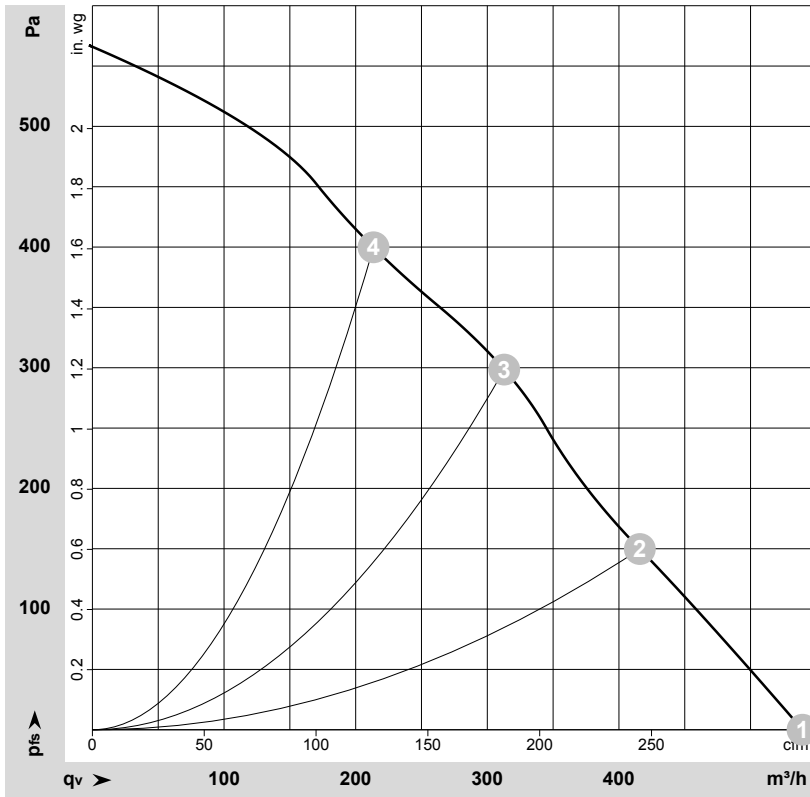
Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the 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_{ts} = Pressure increase

Curves: Air performance 60 Hz


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

Measurement: LU-10720-1

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	60	2850	155	0.68	540	0	315	0.00
2	1~	230	60	2915	152	0.66	415	150	245	0.60
3	1~	230	60	2975	146	0.63	315	300	185	1.20
4	1~	230	60	3015	142	0.61	215	400	125	1.61

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