R2E175-RA54-20

AC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	**R2E175-RA54-20**
Motor	**M2E052-CA**

Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	60
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	2750
Power consumption	W	52
Current draw	A	0.47
Capacitor	µF	5
Capacitor voltage	VDB	220
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	0.57

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

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Technical description

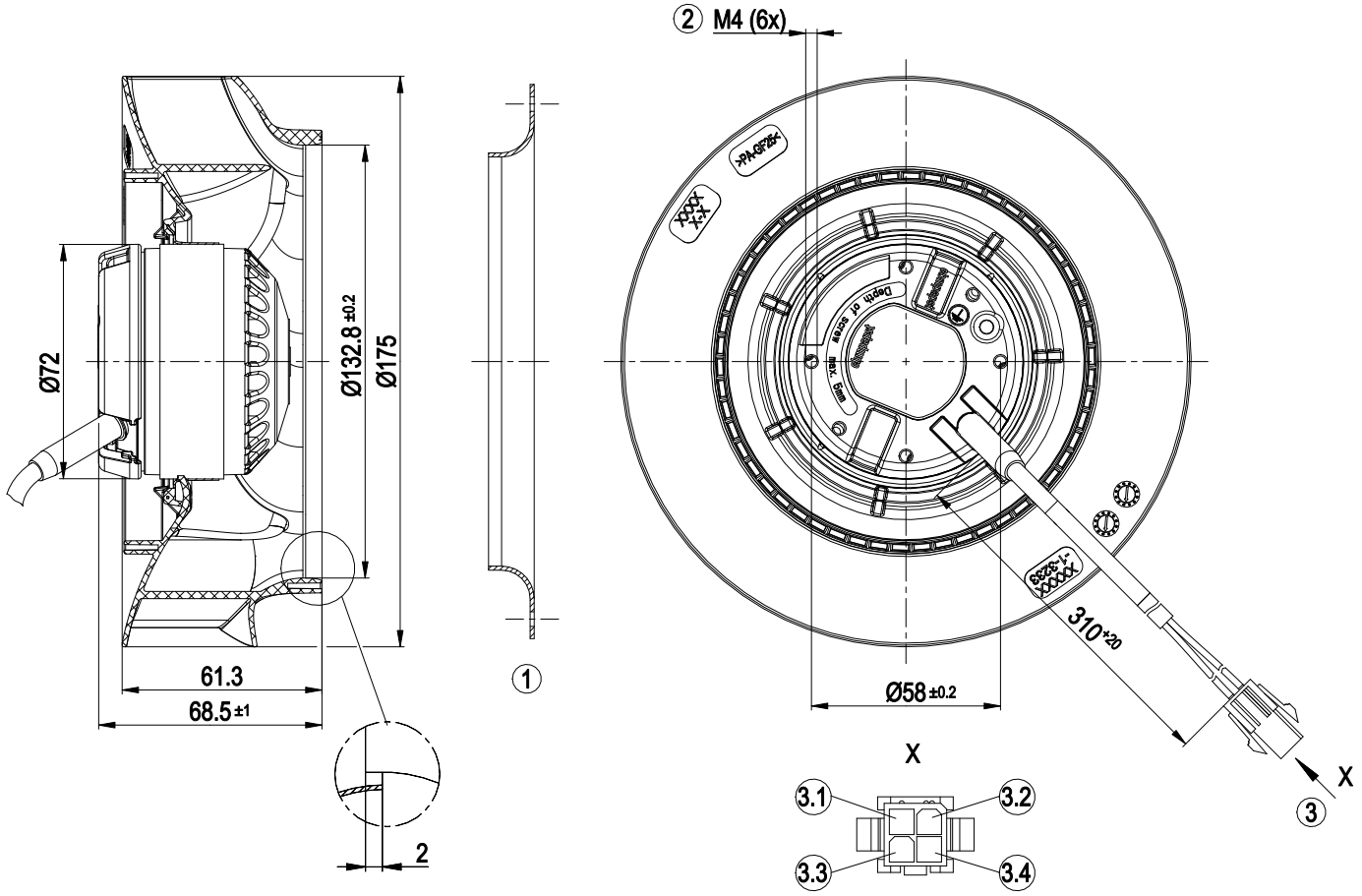
Weight	0.9 kg
Size	175 mm
Motor size	52
Rotor surface	Unpainted
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0; 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
Electrical hookup	Connector with cable
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

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Product drawing



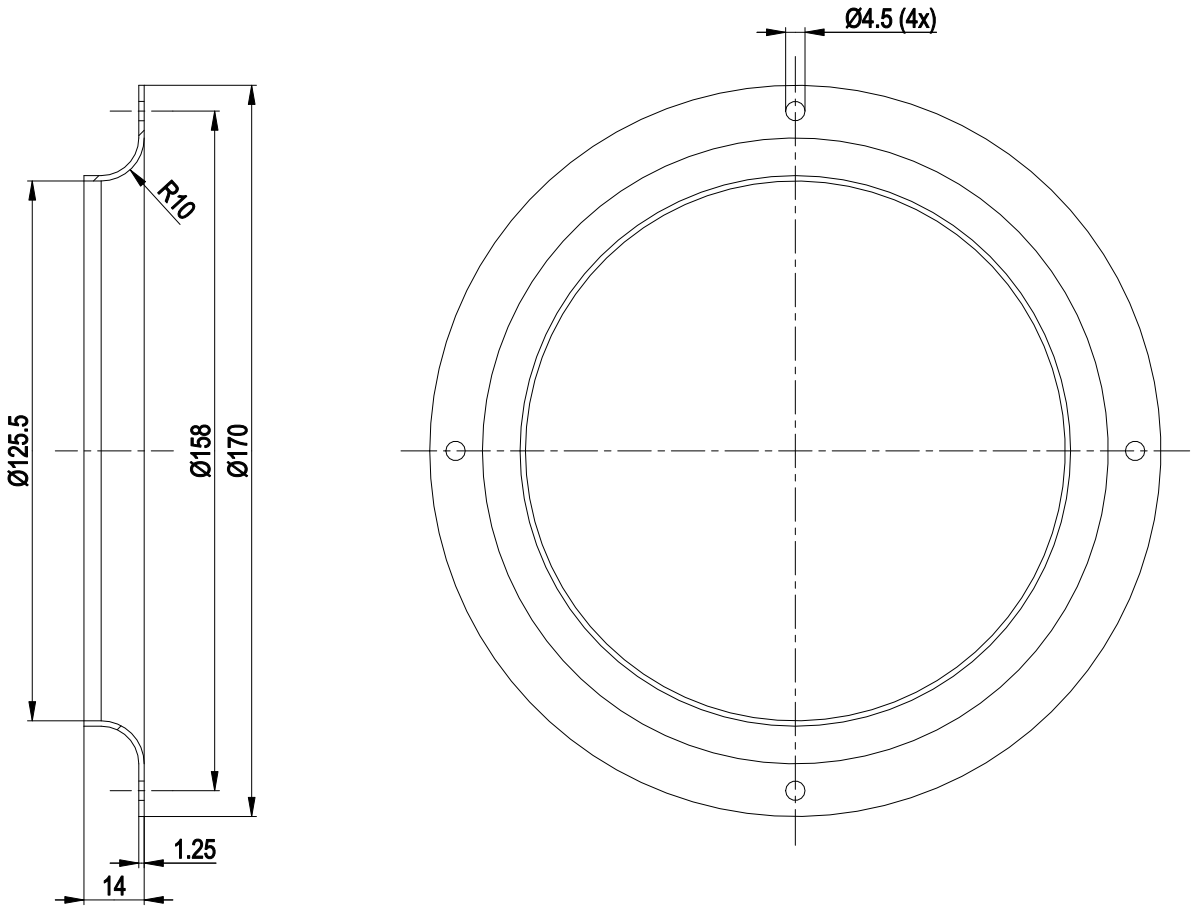
1	Accessory part: inlet ring 09576-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20
-	4-pole connector housing Molex 46993-0410
3.1	Z (brown)
3.2	L (blue)
3.3	N (black)
3.4	PE (green/yellow)

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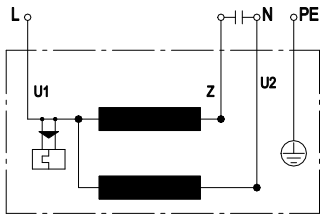
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Accessory part



1	Accessory part: inlet ring 09576-2-4013 not included in scope of delivery

Connection diagram



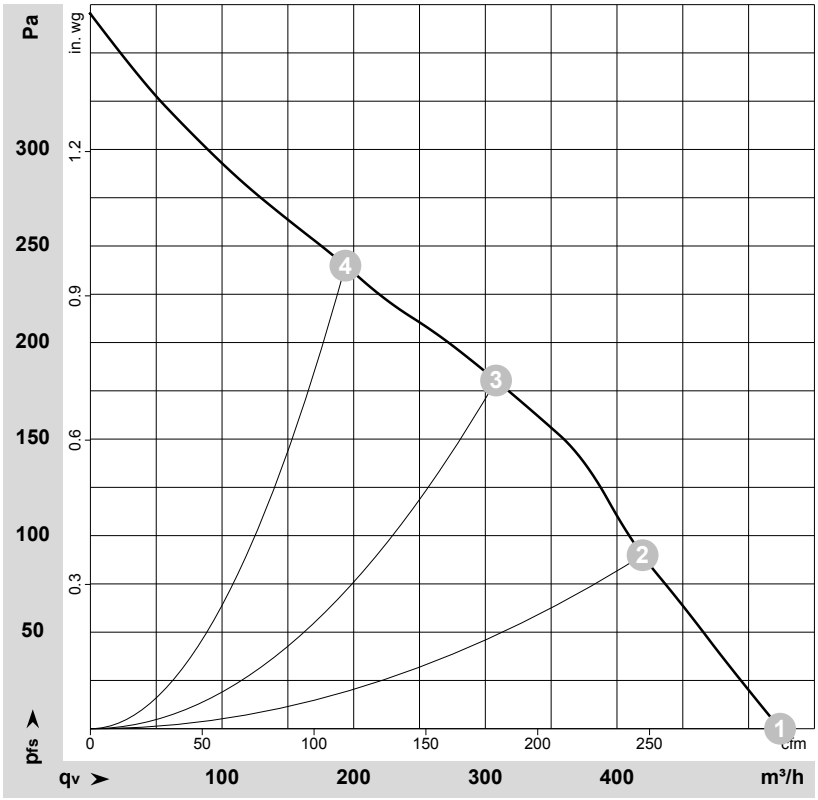
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-161229-1

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~	115	60	2970	45	0.39	525	0	310	0.00
2	1~	115	60	2795	49	0.43	420	90	245	0.36
3	1~	115	60	2750	52	0.47	310	180	180	0.72
4	1~	115	60	2805	49	0.43	195	240	115	0.96

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

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