AC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	**R2E220-RB06-01**
Motor	**M2E068-CF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed (rpm)	min^{-1}	2500	2650
Power input	W	102	135
Current draw	A	0.45	0.60
Motor capacitor	µF	2.5	2.5
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	75
Starting current	A	0.85	0.82

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

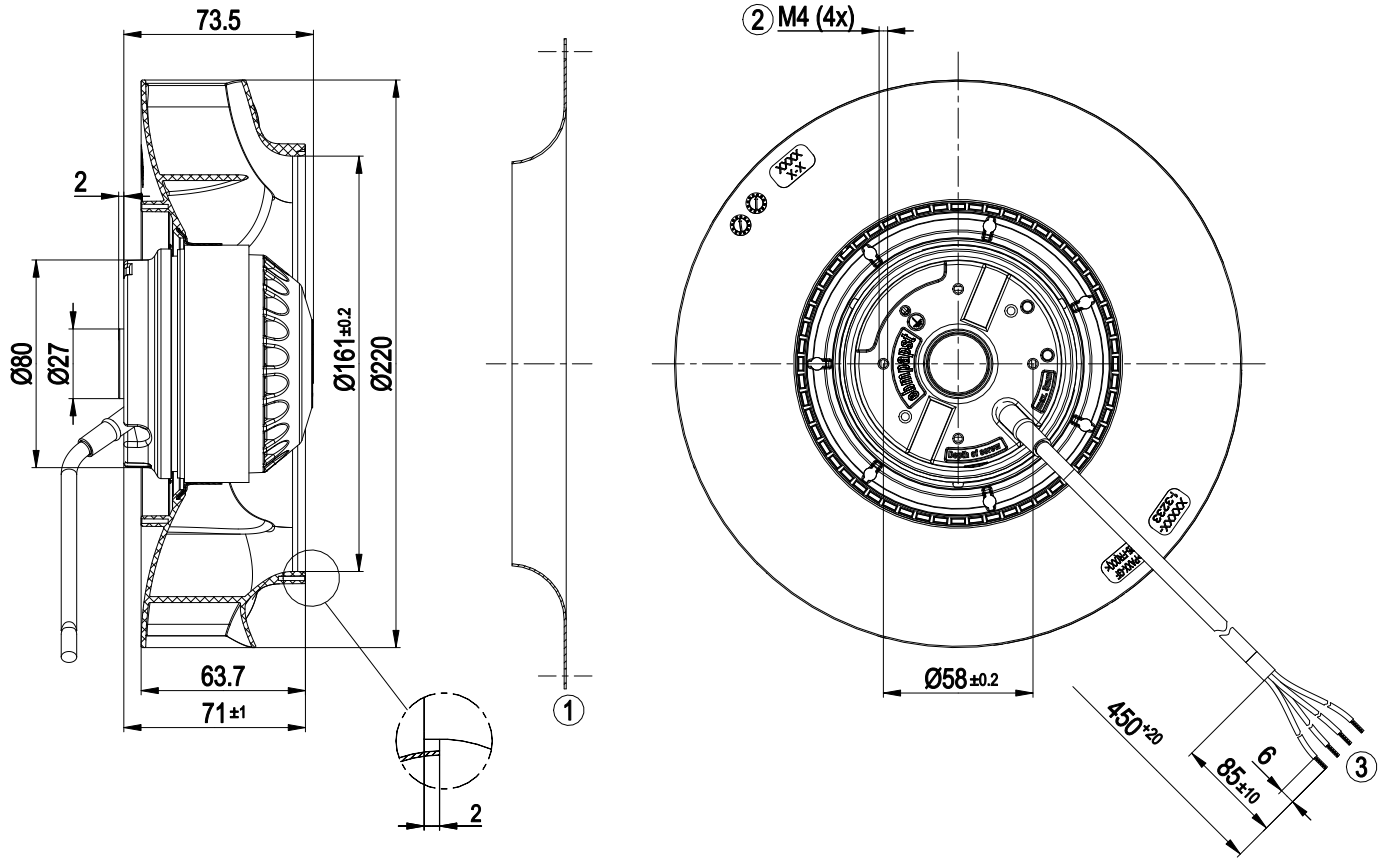
Mass	1.7 kg
Size	220 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC; EAC

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Product drawing



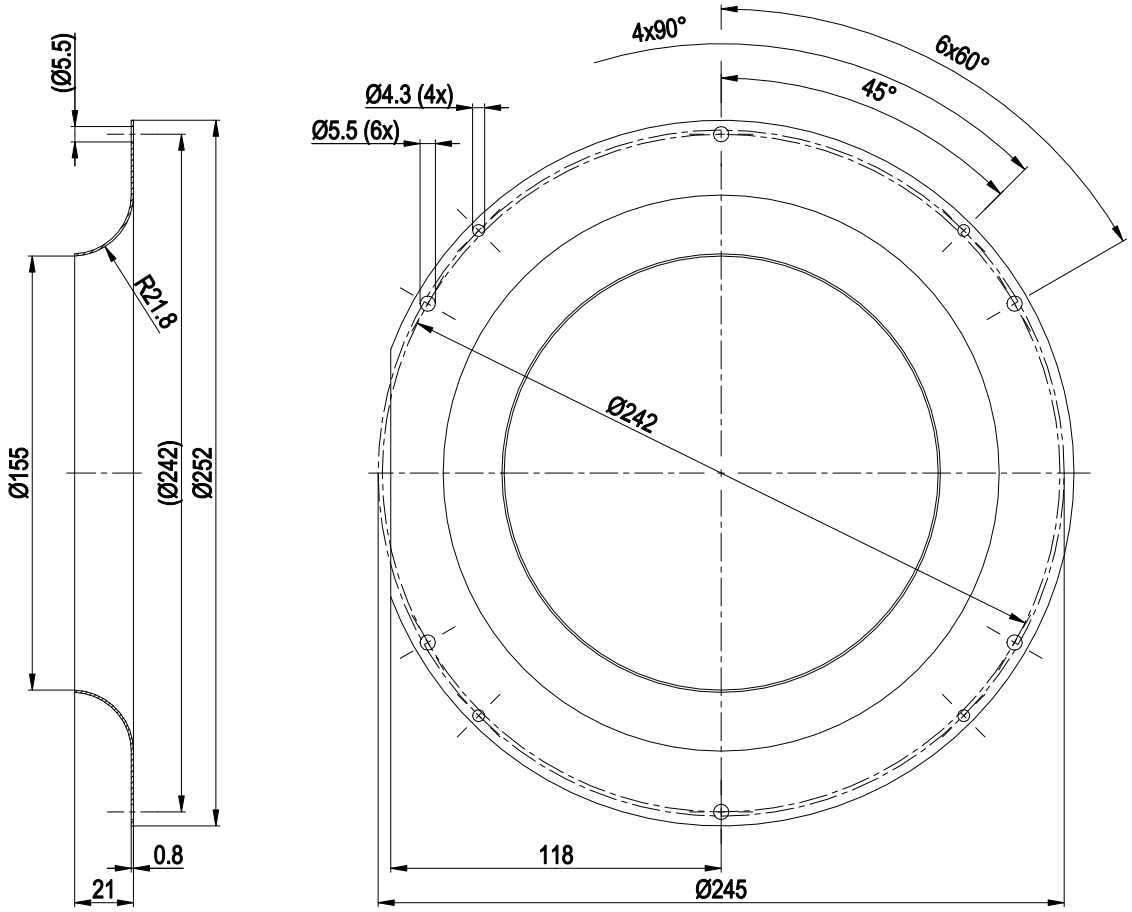
1	Accessory part: Inlet nozzle 09609-2-4013 not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line silicone 4G 0.5 mm², 4x lead tips crimped

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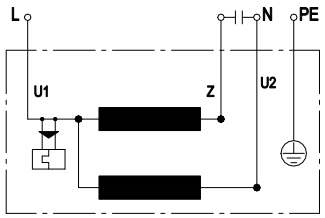
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Accessory part



	Inlet nozzle 09609-2-4013 not included in scope of delivery

Connection screen



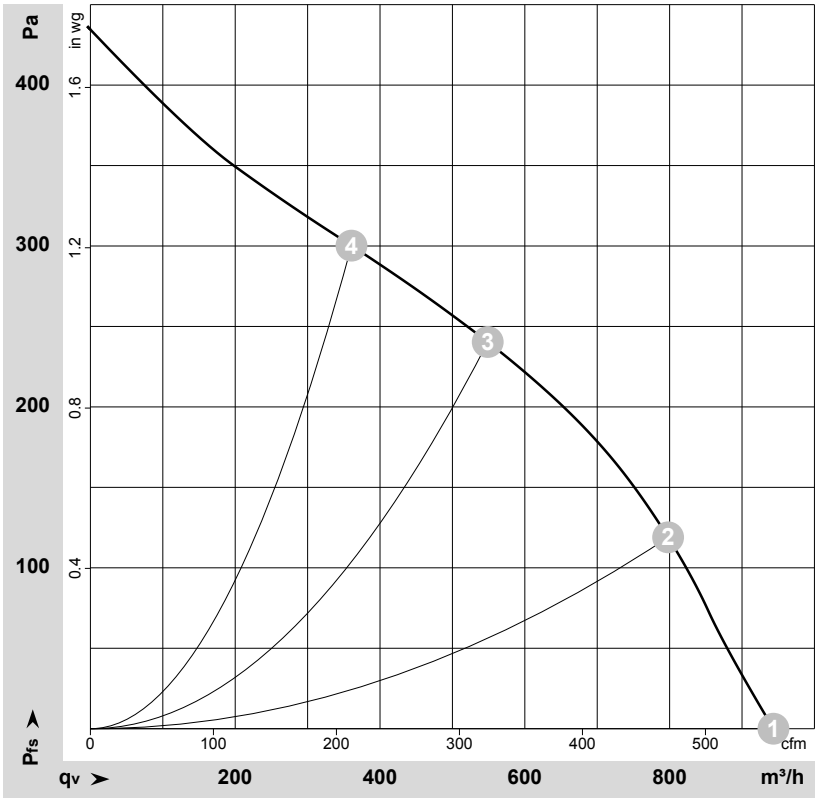
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-129486-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	2640	88	0.40	63	70	945	0	555	0.00
2	230	50	2580	95	0.42	59	67	800	120	470	0.48
3	230	50	2500	102	0.45	56	64	550	240	325	0.96
4	230	50	2560	97	0.43	58	66	360	300	210	1.20

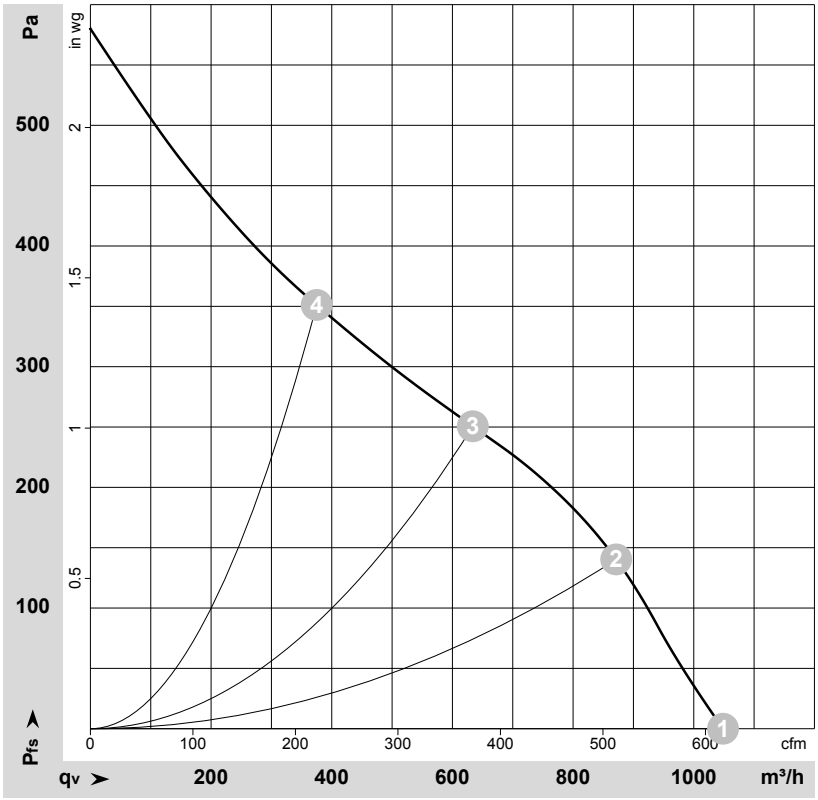
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-129487-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	60	2935	118	0.51	65	73	1050	0	615	0.00
2	230	60	2805	127	0.55	61	68	870	140	515	0.56
3	230	60	2650	135	0.60	58	66	635	250	375	1.00
4	230	60	2755	129	0.56	60	68	375	350	220	1.41

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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