R4E310-RB20-11

AC centrifugal fan - RadiCal

backward curved

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Nominal data

Type	**R4E310-RB20-11**
Motor	**M4E074-EI**

Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	60
Type of data definition		ml
Valid for approval / standard		UL 2111
Speed (rpm)	min^{-1}	1640
Power input	W	225
Current draw	A	1.94
Motor capacitor	µF	20
Capacitor voltage	VDB	250
Capacitor standard		UL
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	65
Starting current	A	4.46

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

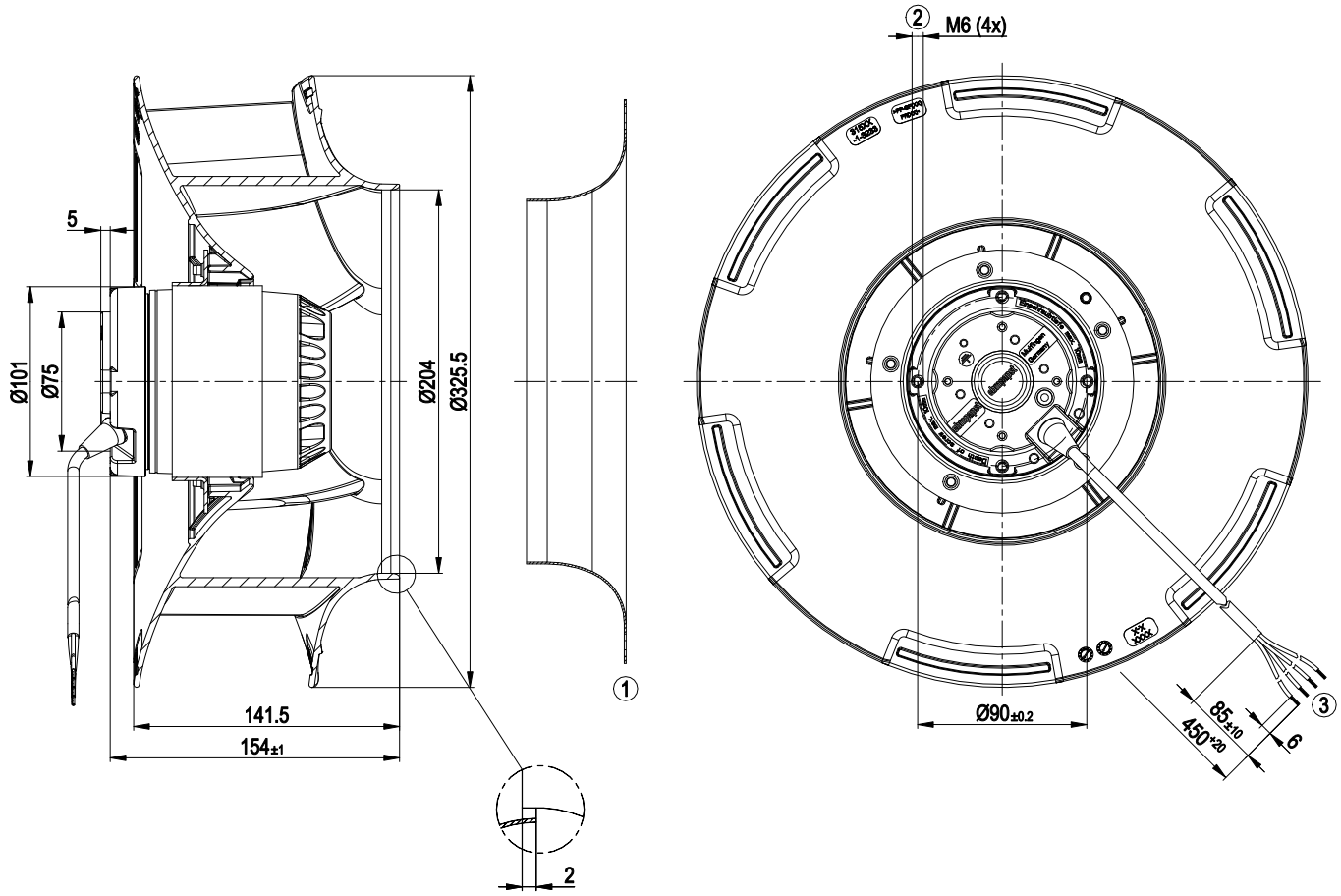
Mass	4.36 kg
Size	310 mm
Surface of rotor	Coated in black
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F)/environmental protection class (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	CSA C22.2 No.100; UL 1004-1

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Product drawing



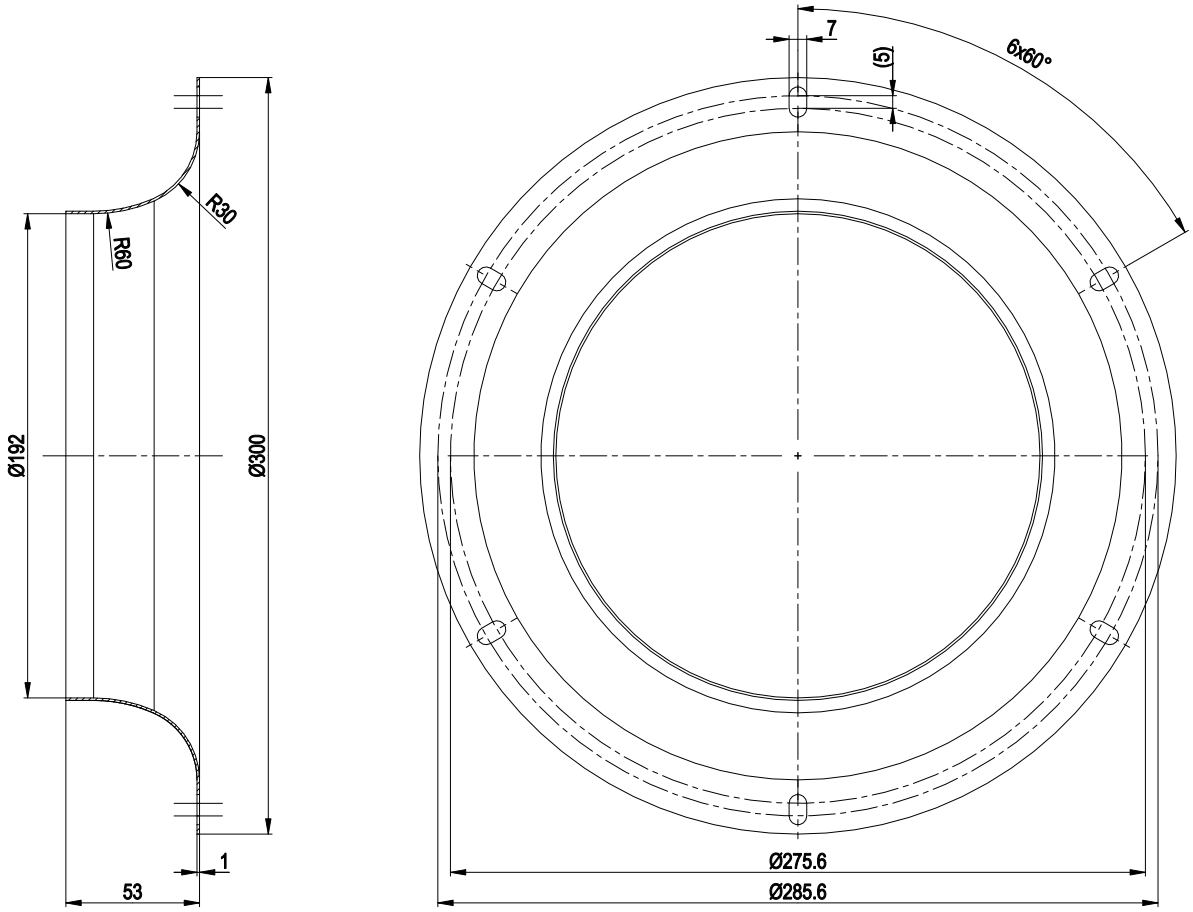
1	Accessory part: Inlet nozzle 97512-2-4013 not included in scope of delivery
2	Thread reach max. 10 mm
3	Connection line PFA AWG20, 4x lead tips crimped

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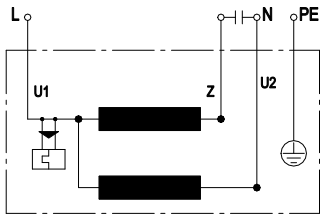
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Accessory part



	Accessory part: Inlet nozzle 97512-2-4013 not included in scope of delivery

Connection screen



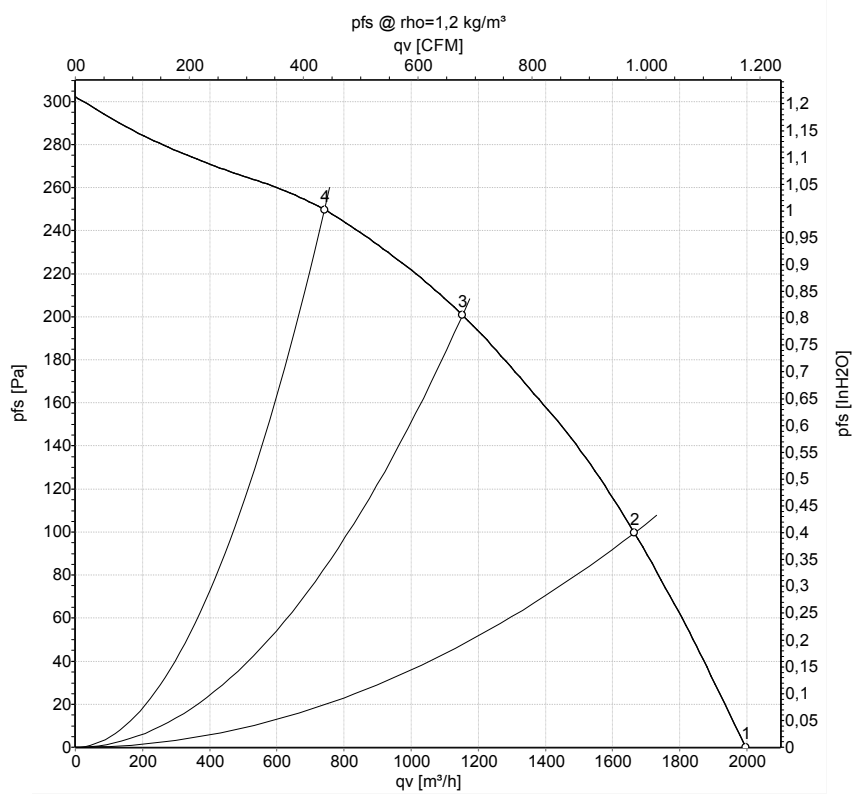
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-148359-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	115	50	1440	148	1.68	1995	0	1175	0.00
2	115	50	1425	163	1.74	1665	100	980	0.40
3	115	50	1420	165	1.75	1155	200	680	0.80
4	115	50	1430	158	1.71	740	250	435	1.00

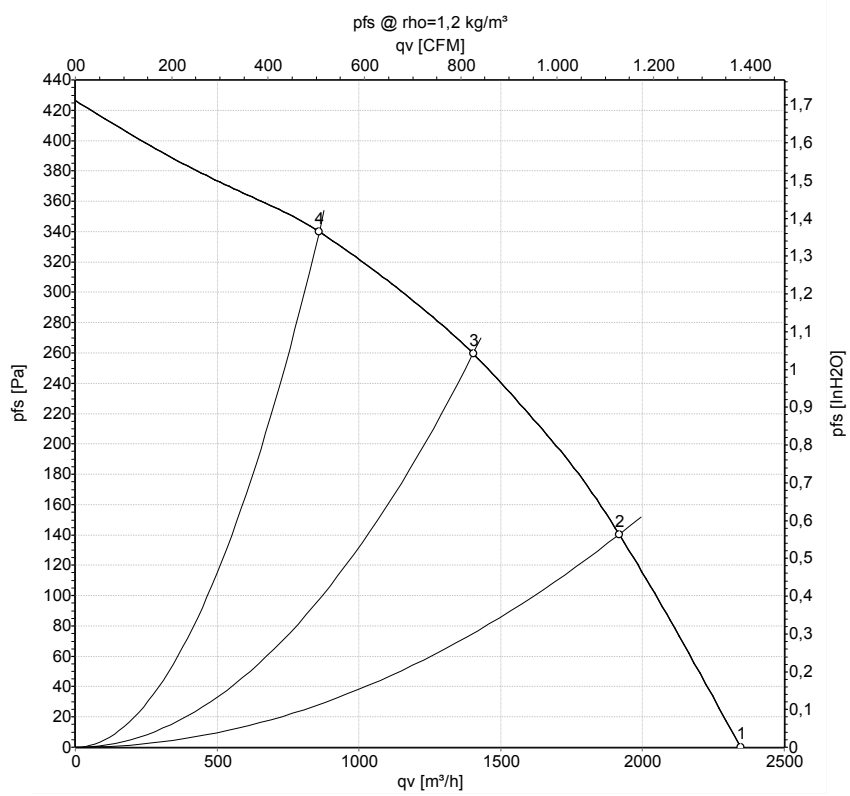
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-148353-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	115	60	1690	181	1.60	2345	0	1380	0.00
2	115	60	1660	206	1.82	1920	140	1130	0.56
3	115	60	1640	220	1.92	1405	260	825	1.04
4	115	60	1665	198	1.75	860	340	505	1.36

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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