AC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	**R2E133-RA03-01**
Motor	**M2E042-CA**

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}	2700	3100
Power input	W	26	27
Current draw	A	0.12	0.14
Motor capacitor	µF	1.5	1.5
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	45	60
Starting current	A	0.2	0.21

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

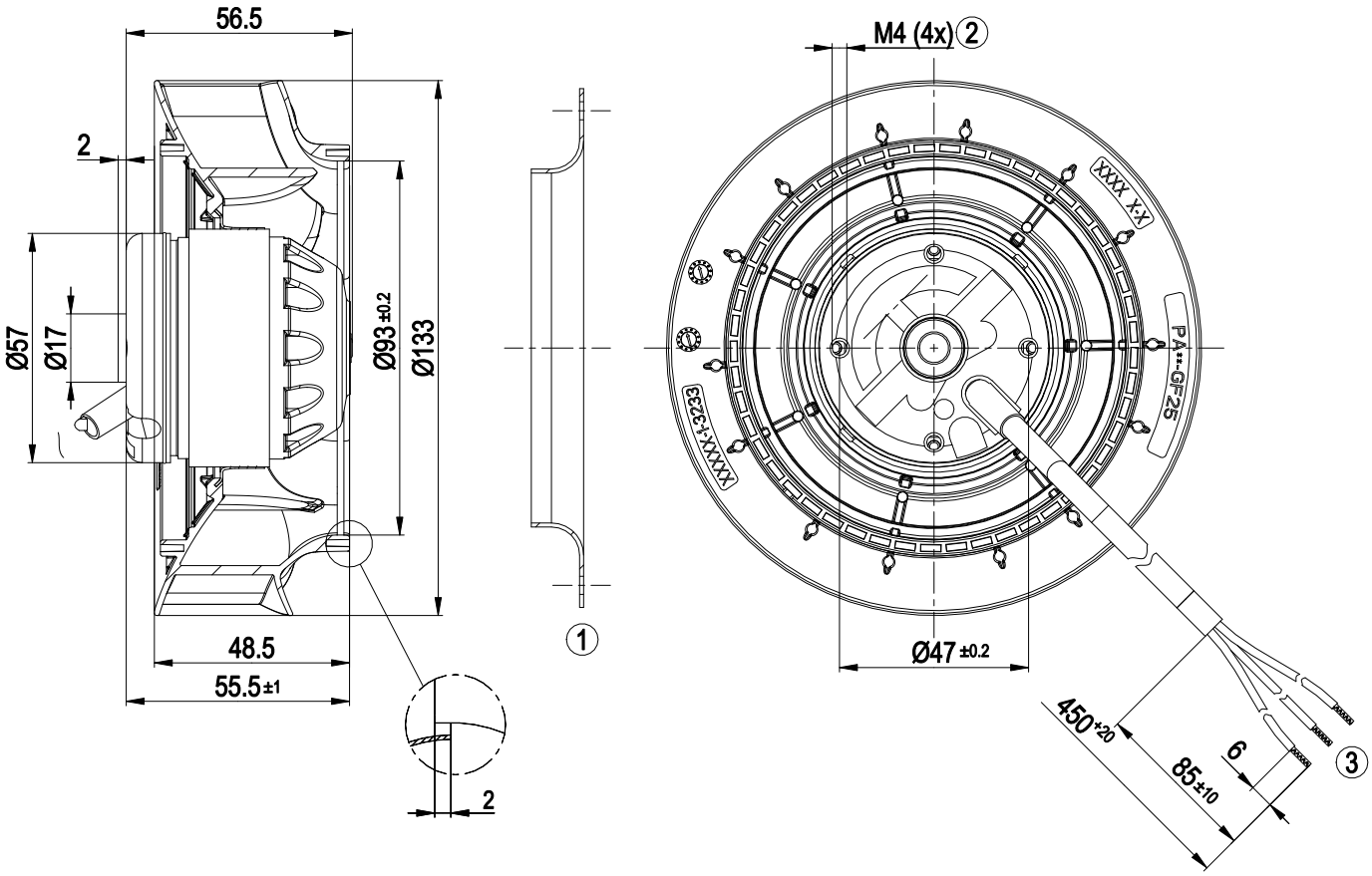
Mass	0.59 kg
Size	133 mm
Motor size	42
Surface of rotor	Coated in black
Material of impeller	Plastic PA6, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Protection rating	IP42
Insulation class	"B"
Humidity (F) / environmental protection class (H)	F1-2; H0+
Max. 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
Condensation drainage 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	Built-in component designed with basic insulation, protection class classification is available after installation according to intended use
Product conforming to standard	EN 60335-1; CE
Approval	EAC; CCC

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Product drawing



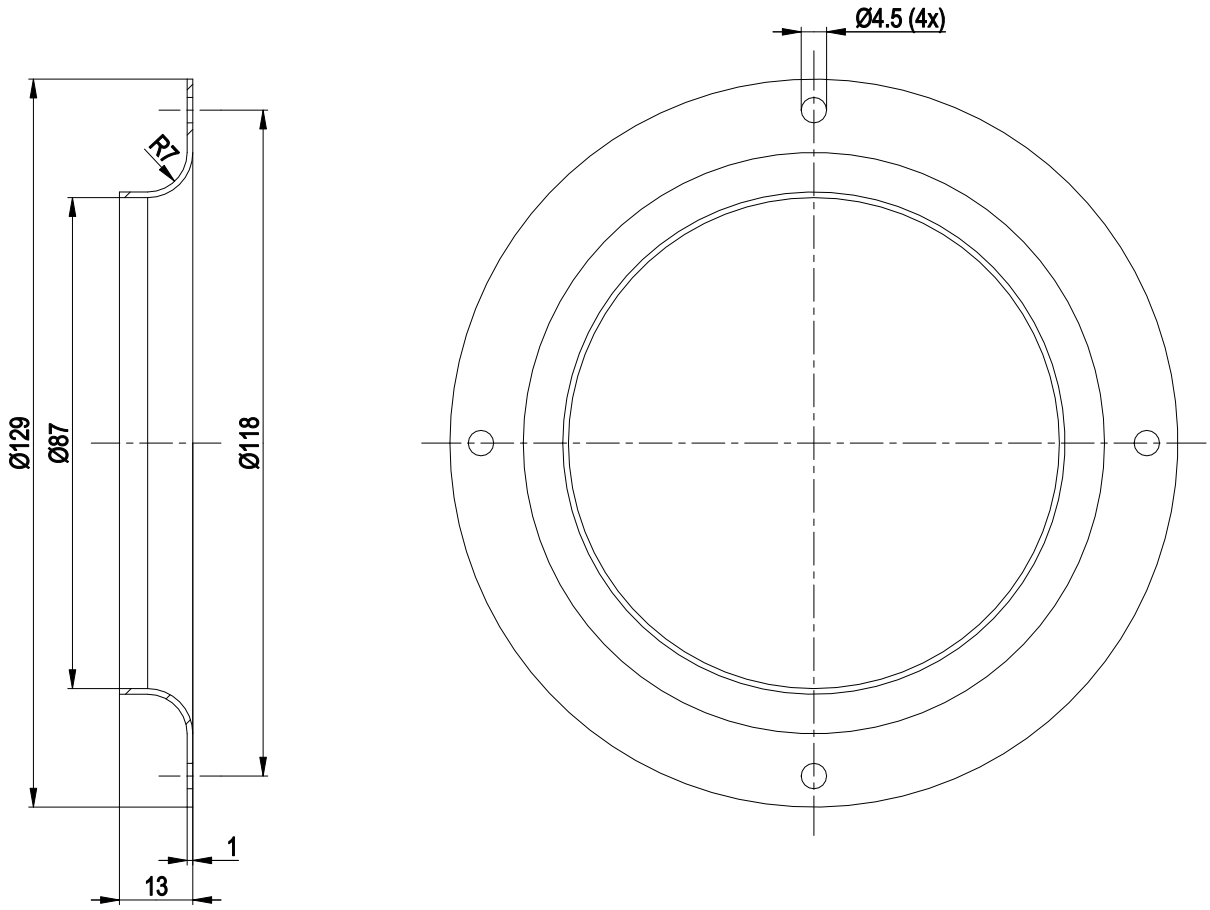
1	Accessory part: Inlet nozzle 09566-2-4013, not included in scope of delivery
2	Thread reach max. 4 mm
3	Connection line PVC 3x 0.25 mm², 3x lead tips crimped

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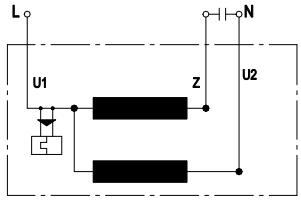
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Accessory part



1	Accessory part: Inlet nozzle 09566-2-4013 not included in scope of delivery

Connection screen



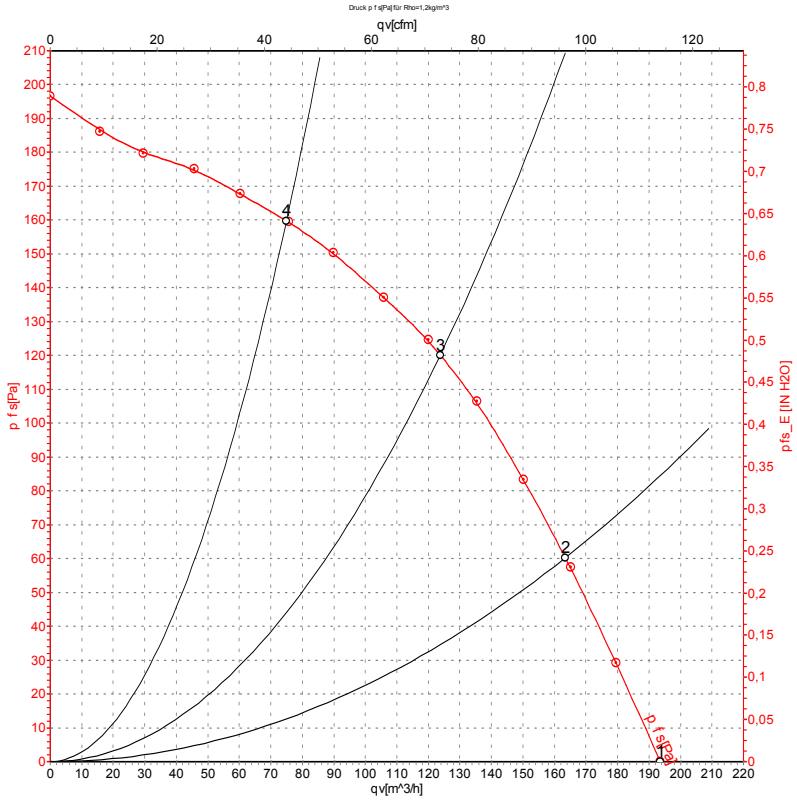
U1	Blue	Z	brown	U2	black

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Charts: Air flow 50 Hz



Measurement: LU-131804-1

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	in. wg
1	230	50	2750	25	0.11	49	58	195	0	115	0.00
2	230	50	2725	25	0.11	47	56	165	60	95	0.24
3	230	50	2700	26	0.12	44	53	125	120	75	0.48
4	230	50	2730	24	0.11	48	57	75	160	45	0.64

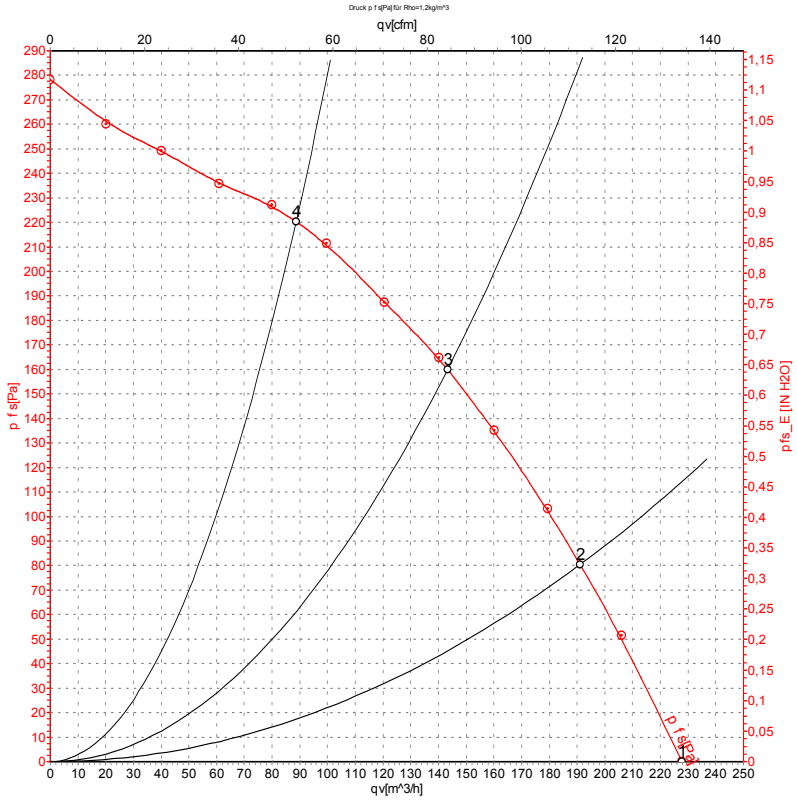
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-131805-1

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	in. wg
1	230	60	3200	25	0.13	53	62	230	0	135	0.00
2	230	60	3175	26	0.13	51	59	190	80	110	0.32
3	230	60	3100	27	0.14	48	57	145	160	85	0.64
4	230	60	3185	26	0.13	51	60	90	220	50	0.88

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
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