

AC centrifugal fan - RadiCal

backward-curved, single-intake



Nominal data

Type	R2E225-RA92-10			
Motor	M2E068-DF			
Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	CE	UL 2111
Speed (rpm)	min ⁻¹	2500	2600	2600
Power consumption	W	155	210	225
Current draw	A	0.68	0.92	0.95
Capacitor	µF	3.5	3.5	3.5
Capacitor voltage	VDB	450	450	450
Capacitor standard				UL
Min. back pressure	Pa	0	0	0
Min. back pressure	in. wg	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	65	65
Starting current	A	1.25	1.2	

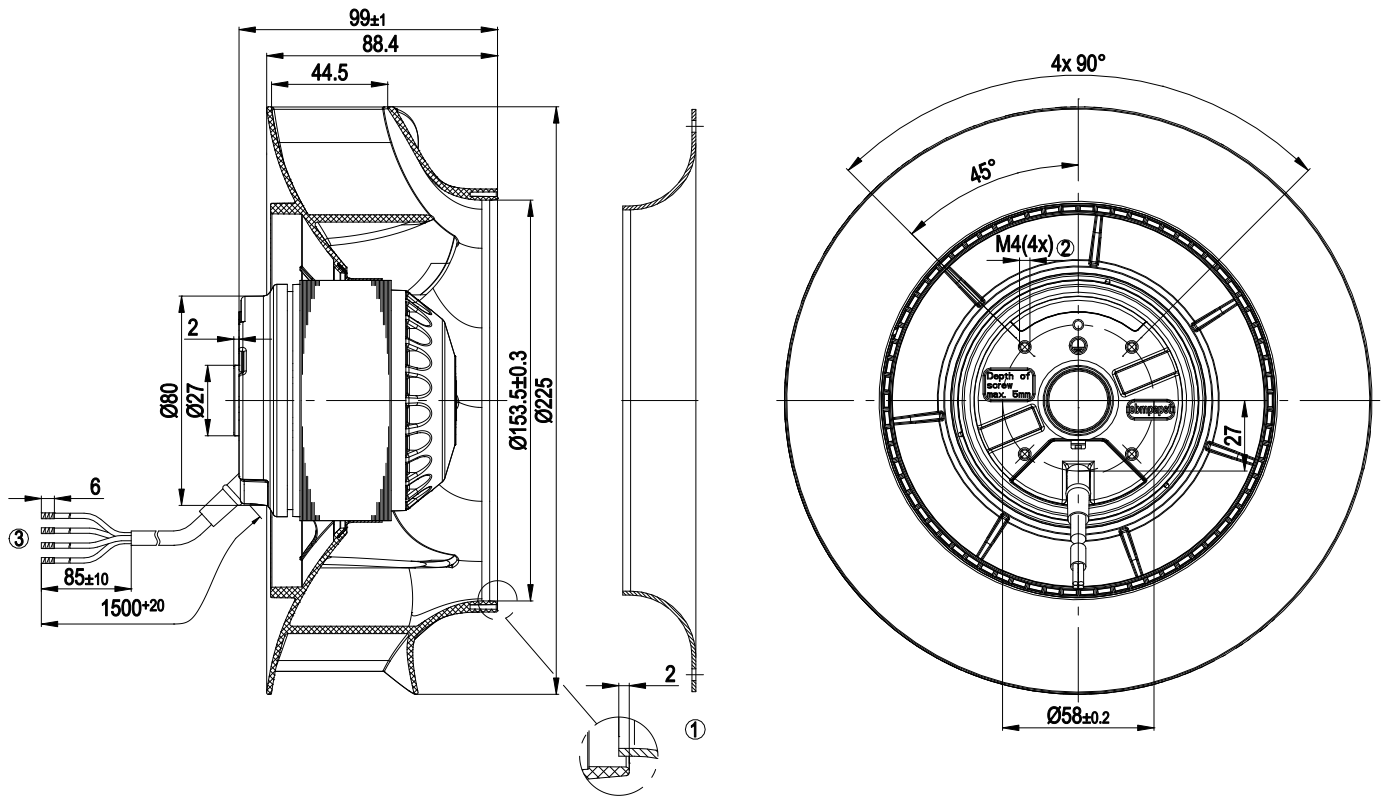
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

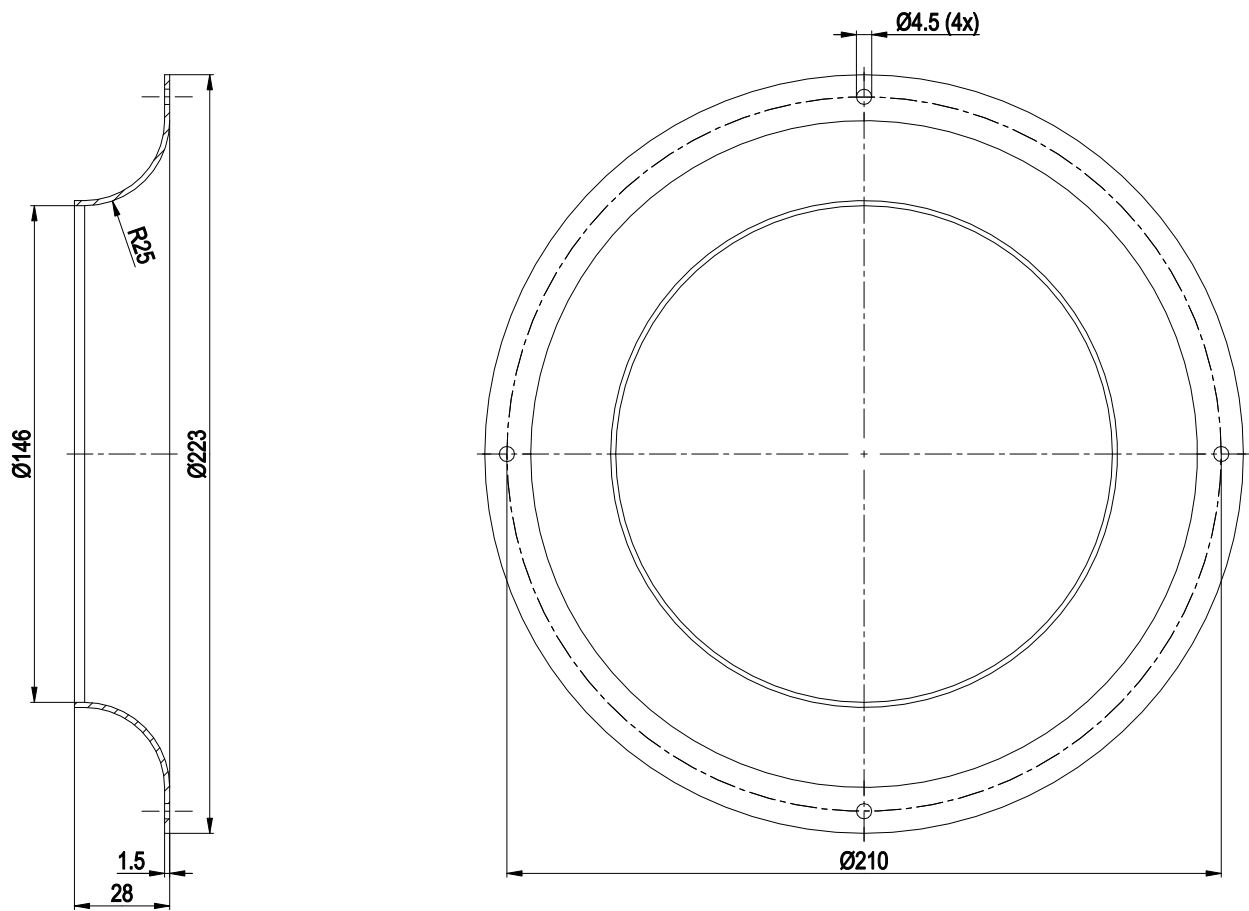
Weight	2.32 kg
Size	225 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA66 plastic, glass-fiber reinforced
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
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	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; EN 60335-2-31; CE; UKCA
Approval	CSA C22.2 No. 77; EAC; UL 1004-3
Comment	The device is intended for use in extractor hoods in which the associated power consumption of the fan or the total of all installed fans is below 280 W. For these reasons, the Ecodesign Directive 2009/125/EC is not applicable.

Product drawing



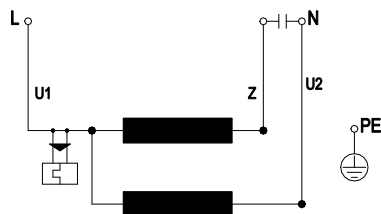
1	Accessory part: Inlet ring 96358-2-4013, not included in scope of delivery.
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20
	4x splice

Accessory part



Inlet ring 96358-2-4013

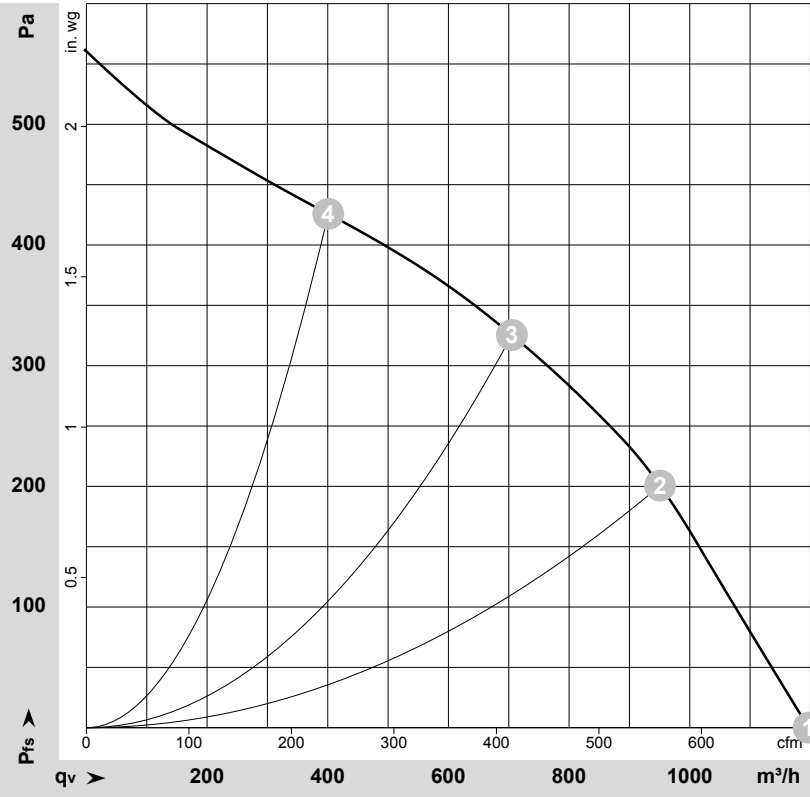
Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



Curves: Air performance 50 Hz



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

Measurement: LU-154575-1

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.

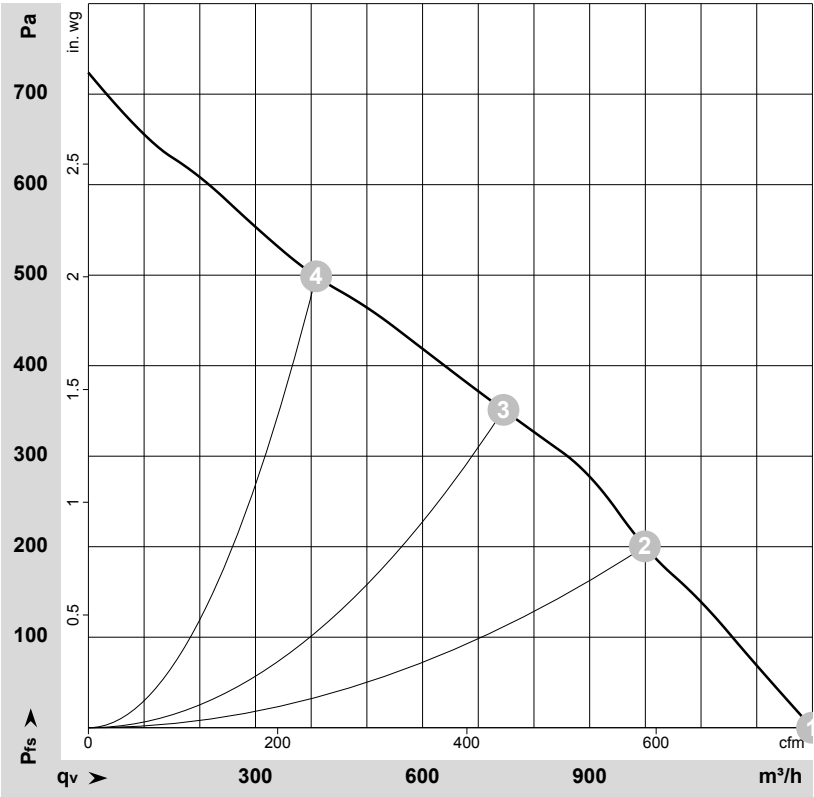
Measured values

	Wired	U	f	n	P _e	I	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	1~	230	50	2660	132	0.58	66	73	1195	0	705	0.00
2	1~	230	50	2500	155	0.68	63	70	950	200	560	0.80
3	1~	230	50	2555	150	0.66	58	66	705	325	415	1.30
4	1~	230	50	2625	138	0.60	63	70	400	425	235	1.71

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · p_{fs} = Pressure increase



Curves: Air performance 60 Hz



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

Measurement: LU-127148-1

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	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	1~	230	60	2930	187	0.81	69	76	1300	0	765	0.00
2	1~	230	60	2700	210	0.92	64	71	1000	200	590	0.80
3	1~	230	60	2700	207	0.90	60	68	745	350	440	1.41
4	1~	230	60	2860	192	0.83	67	75	410	500	240	2.01

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · p_{fs} = Pressure increase

