

R2E250-RB06-01

AC centrifugal fan - RadiCal®

backward curved, single inlet



Nominal data

Type	R2E250-RB06-01		
Motor	M2E074-EI		
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	min ⁻¹	2750	3100
Power input	W	250	390
Current draw	A	1.1	1.71
Motor capacitor	µF	5	5
Capacitor voltage	VDB	450	450
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	55
Starting current	A	3.15	3.0

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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = 1 + p_b / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	45	41	45
Efficiency grade N		62	58	62
Power input P _e	kW	0.24		
Air flow q _v	m³/h	900		
Pressure increase p _{fS}	Pa	439		
Speed n	min ⁻¹	2775		

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

LU-130850

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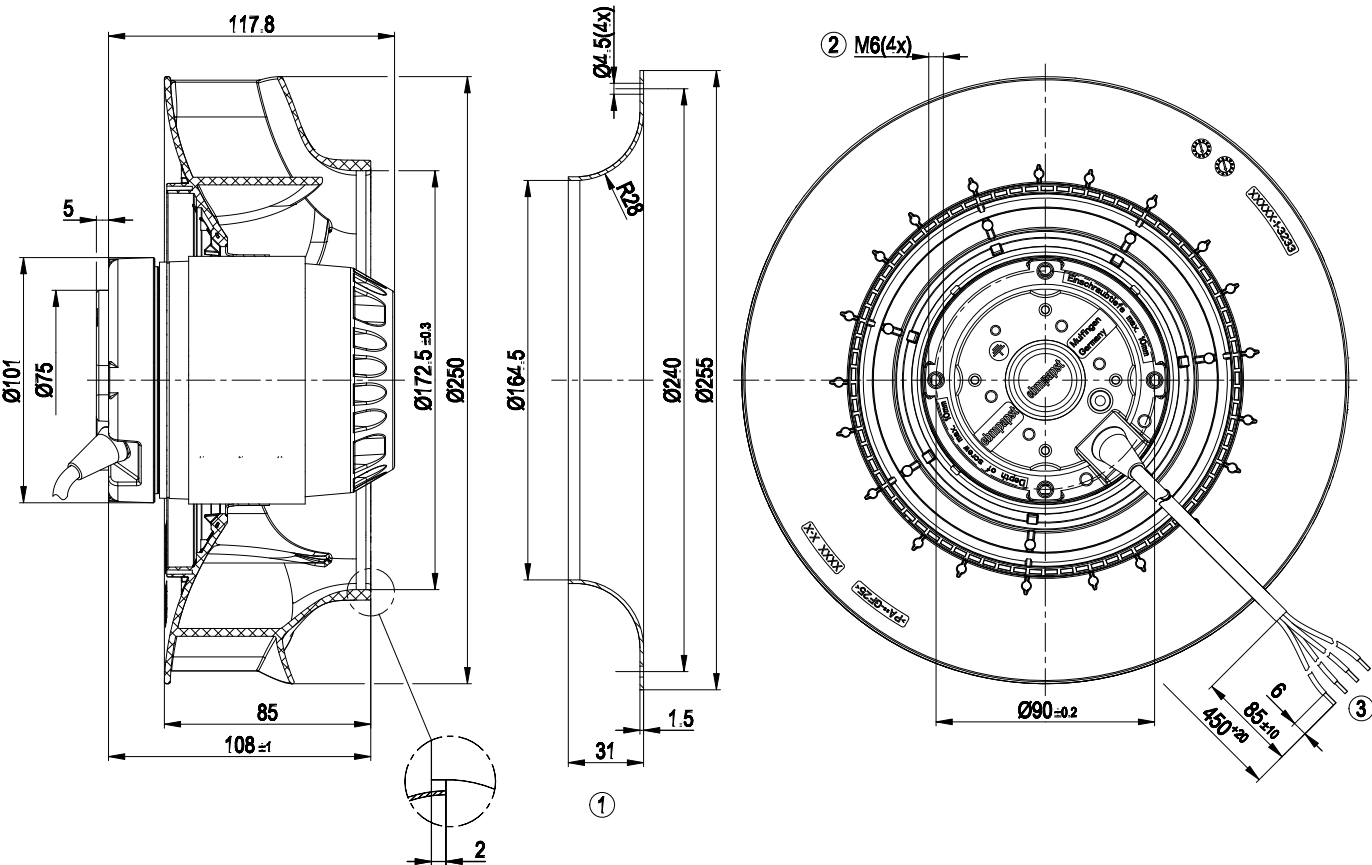
Technical features

Mass	4 kg
Size	250 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 class	F1-2
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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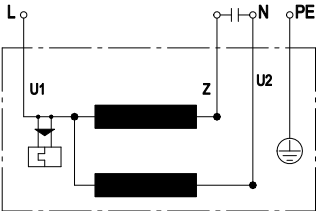
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Product drawing



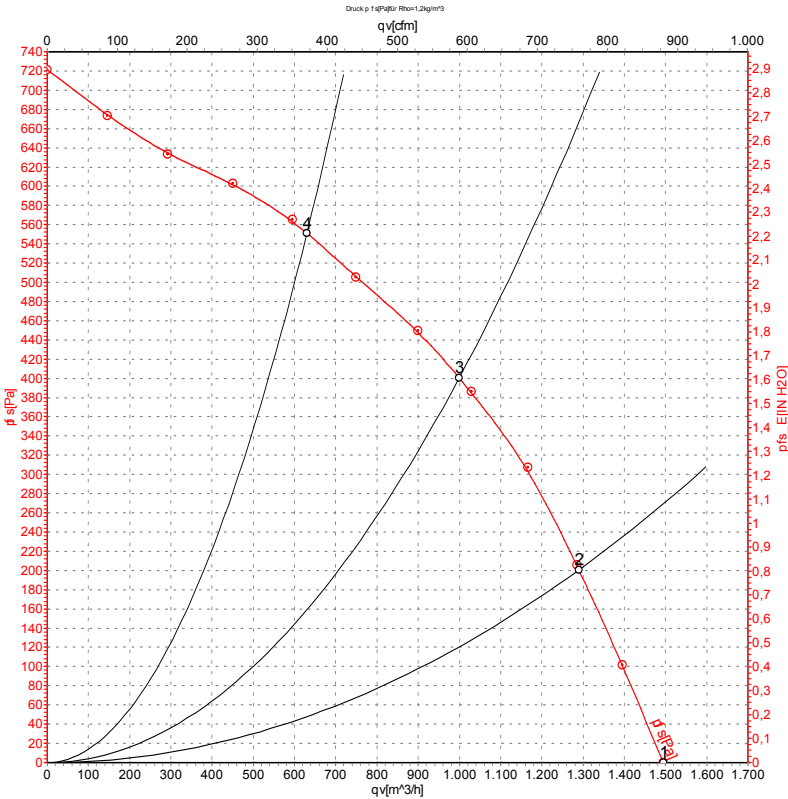
1	Accessory part: Inlet nozzle 96359-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 10 mm
3	Connection line silicone 4G 0.5 mm², 4x brass lead tips crimped

Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

Charts: Air flow 50 Hz



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.

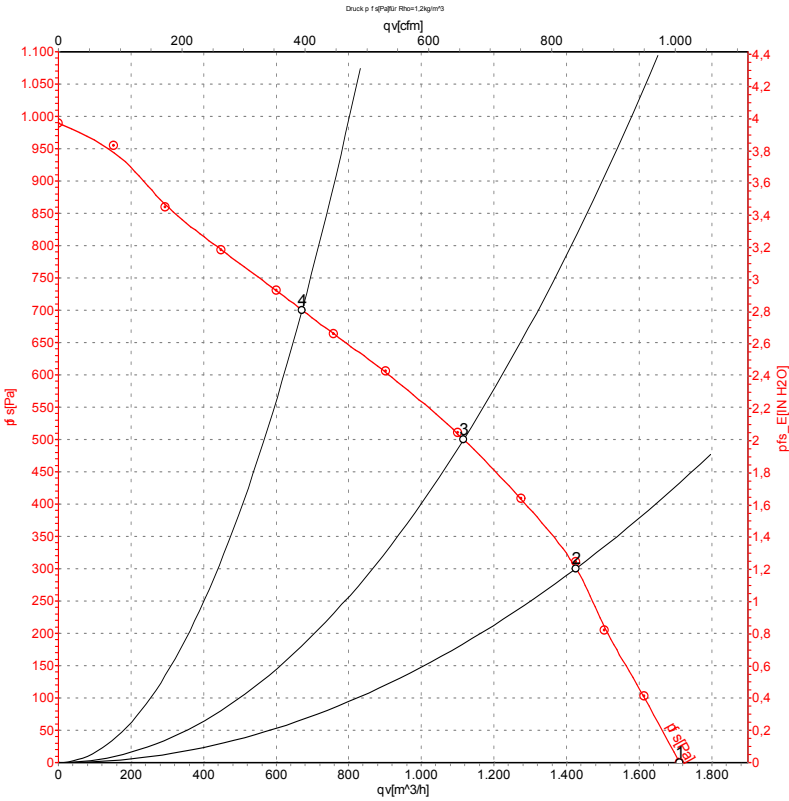
Measured values

	U	f	n	P _e	I	LpA _{in}	LwA _{in}	qv	p _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	230	50	2800	215	0.95	69	78	1495	0
2	230	50	2790	237	1.03	65	74	1290	200
3	230	50	2750	250	1.10	62	71	1000	400
4	230	50	2800	227	0.99	66	74	630	550

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



Charts: Air flow 60 Hz



Air performance measured as per ISO 5801
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Measured values

	U	f	n	P _e	I	L _{pA_{in}}	L _{wA_{in}}	qv	p _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	230	60	3200	345	1.51	73	81	1710	0
2	230	60	3155	364	1.59	67	76	1425	300
3	230	60	3100	390	1.71	65	73	1115	500
4	230	60	3150	365	1.59	70	80	670	700

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p_{ts} = Pressure increase