AC centrifugal fan

backward curved, single inlet

R2E250-RA48-25 ebmpapst Datasheet
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Nominal data

Type	**R2E250-RA48-25**
Motor	**M2E068-EC**

Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	UL 2111
Speed	min^{-1}	2540	2660	2660
Power input	W	210	285	300
Current draw	A	1.84	2.5	2.52
Motor capacitor	µF	25	25	25
Capacitor voltage	VDB	250	250	250
Capacitor standard				UL
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	75	40	40
Starting current	A	3.37	3.31	

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	2.8 kg
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic, galvanised round sheet-metal plate
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	UL 2111; CSA C22.2 Nr.77

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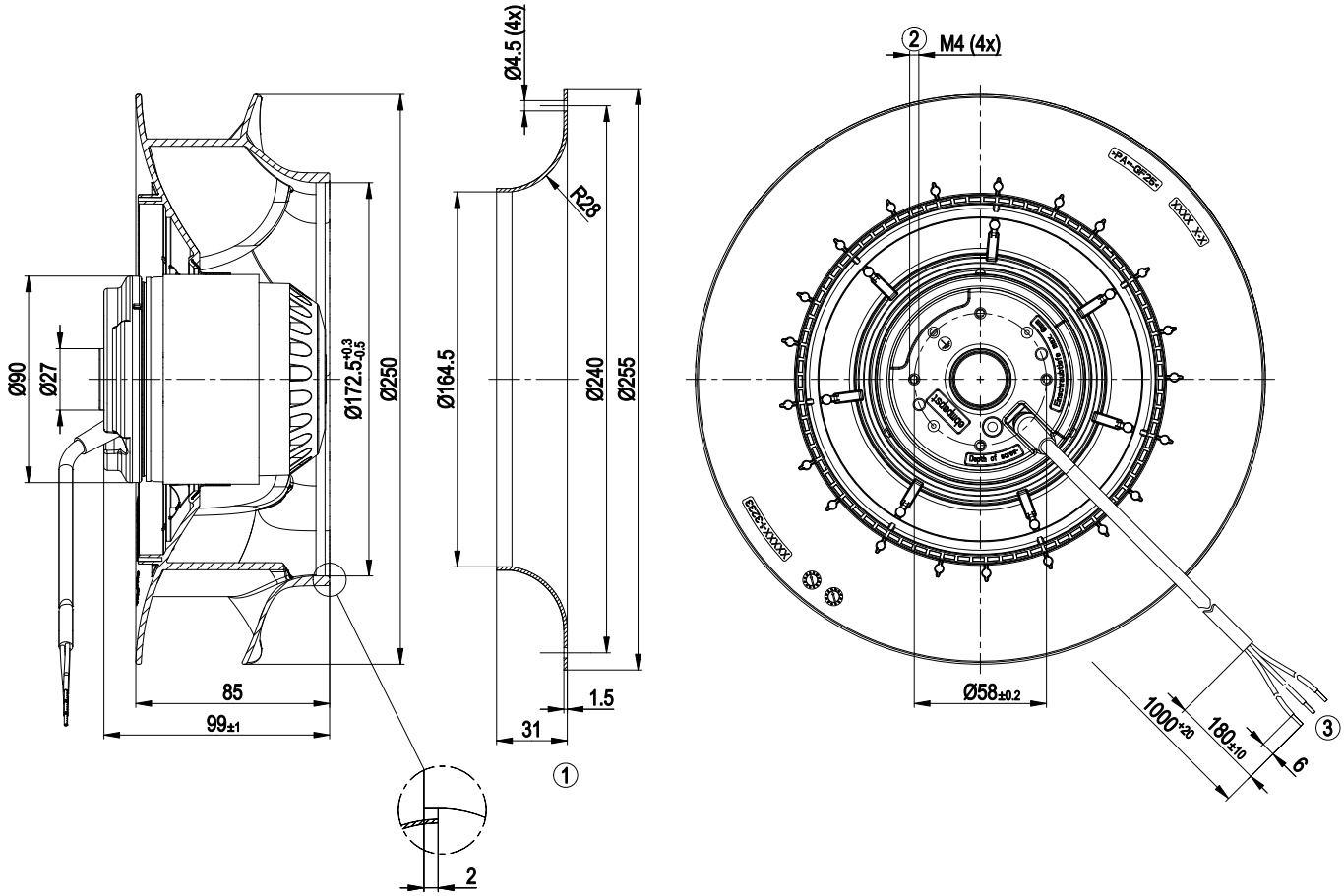
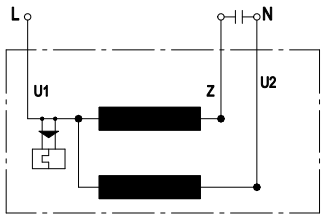
Product drawing



1	Accessory part: Inlet nozzle 96359-2-4013 not included in scope of delivery
2	Depth of screw max. 6 mm
3	Connection line PFA AWG20, 3x lead tips crimped

Connection screen



U1	Blue	Z	brown	U2	black

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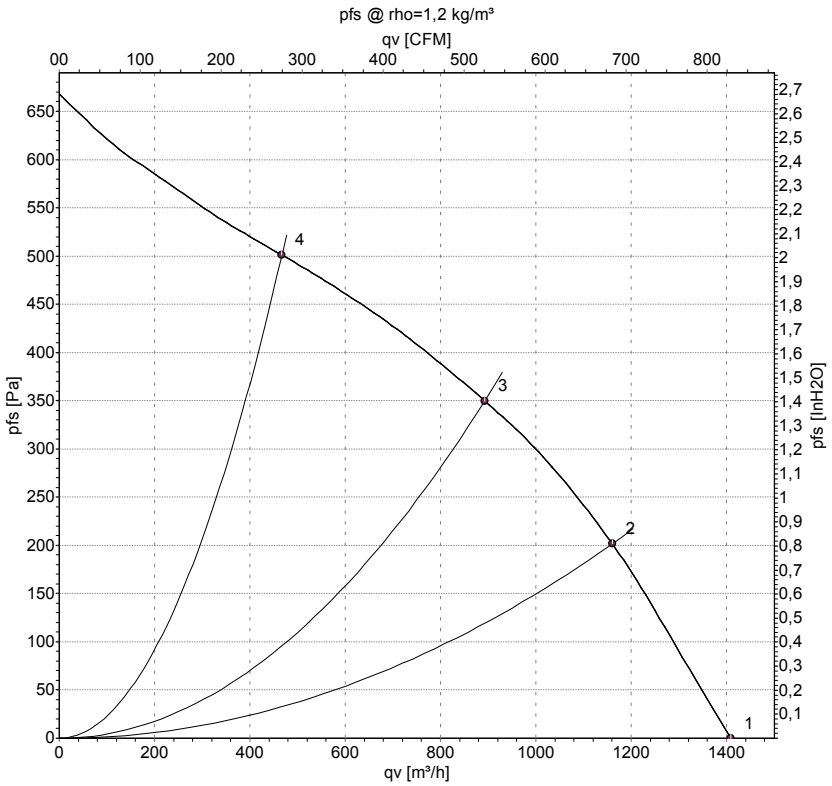
Charts: Air flow 50 Hz



Measurement: LU-147755

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	115	50	2665	176	1.53	1410	0
2	115	50	2590	197	1.71	1160	200
3	115	50	2540	210	1.86	890	350
4	115	50	2610	191	1.65	465	500

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

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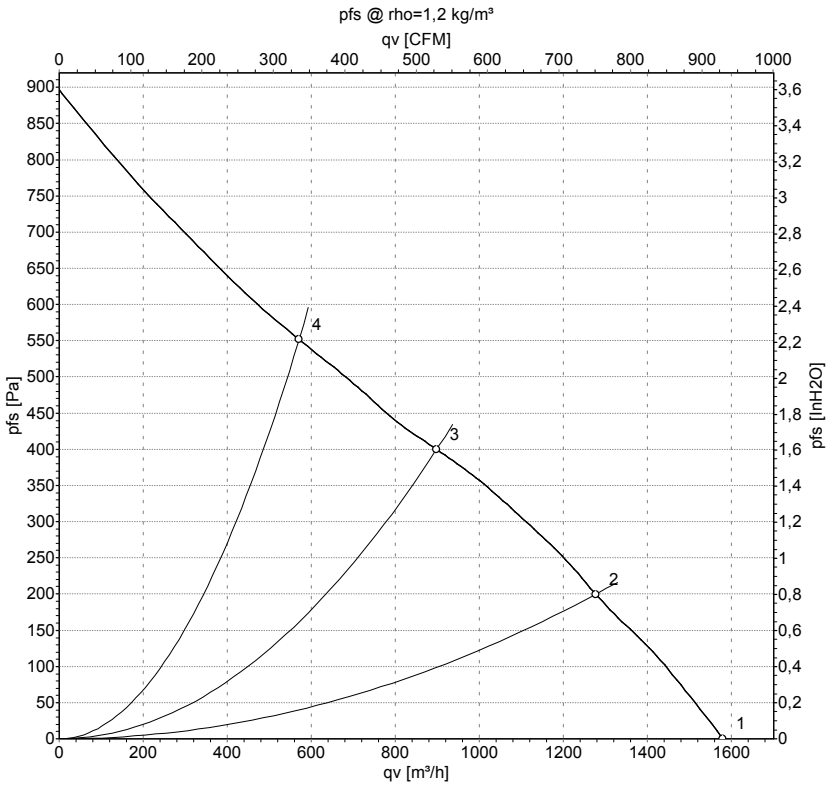
Charts: Air flow 60 Hz



Measurement: LU-147757

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	115	60	2940	251	2.21	1580	0
2	115	60	2760	274	2.40	1275	200
3	115	60	2660	285	2.50	900	400
4	115	60	2780	272	2.37	570	550

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