R2E250-AW50-13

AC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R2E250-AW50-13**
Motor	**M2E068-EC**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Type of data definition		fa	fa	fa
Valid for approval / standard		-	-	UL 2111
Speed	min^{-1}	2650	2870	2870
Power input	W	185	260	275
Current draw	A	0.81	1.14	1.16
Motor capacitor	µF	6	6	6
Capacitor voltage	VDB	400	400	400
Capacitor standard				UL
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	70	55	55

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

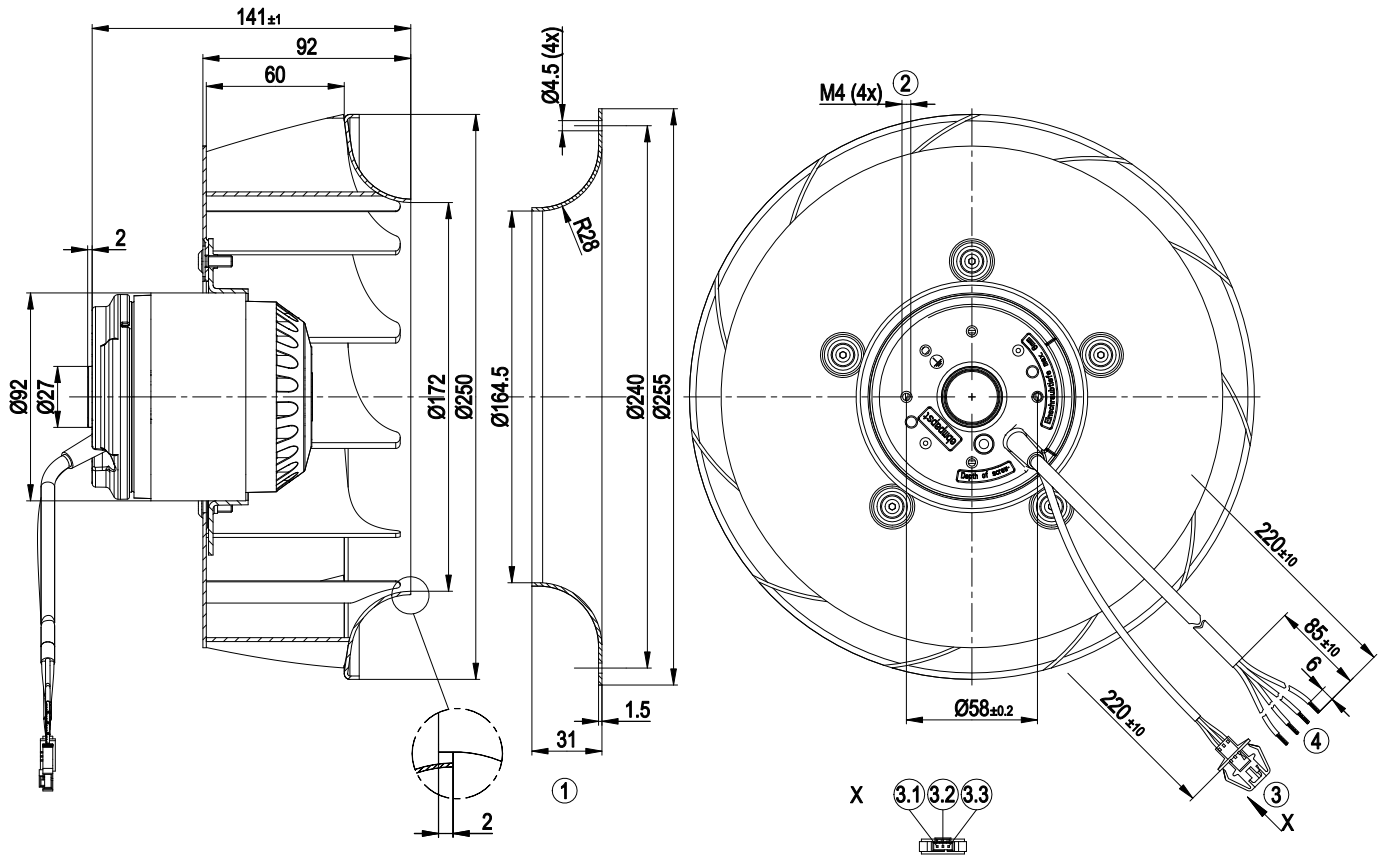
Mass	3 kg
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	Aluminium sheet
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F1-1
Max. permissible ambient 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
Approval	UL 2111; CSA C22.2 Nr.77

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Product drawing



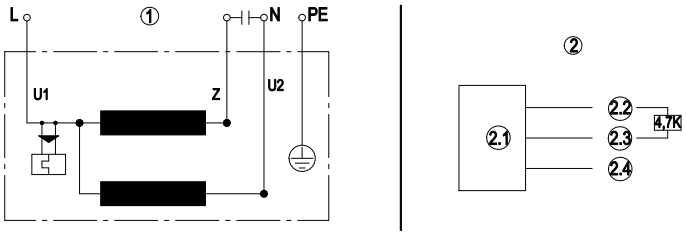
1	Accessory part: inlet nozzle 96359-2-4013, not included in scope of delivery.
2	Depth of screw max. 6 mm
3	Hall IC connection line Raychem 3X AWG24, connector housing Molex no. 70107-0037 with 3x plug pin Molex no. 16-02-0078 crimped
3.1	red
3.2	white
3.3	black
4	Connection line PFA 4G AWG20, 4x lead tips crimped
	Capacitor 99285-4-7320 (6µF 400VDB) is included separately

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Connection screen



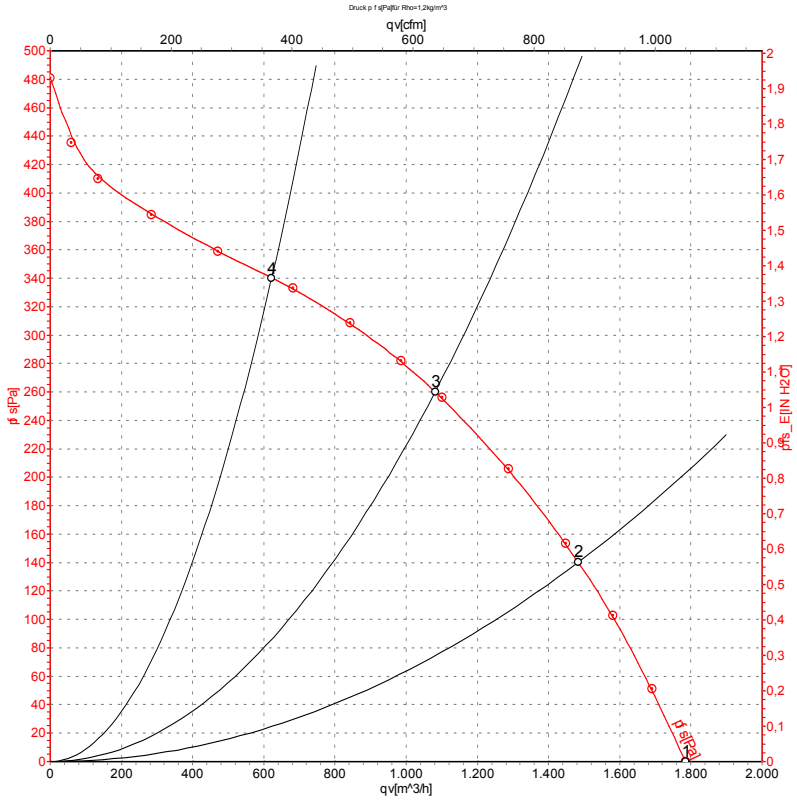
1	Fan connection diagram
U1	Blue
Z	brown
U2	black
PE	green/yellow
2	Hall IC circuit
2.1	Hall IC
2.2	Red (+5V)
2.3	White (out)
2.4	Black (0V)

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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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2650	185	0.81	1785	0
2	230	50	2550	210	0.91	1485	140
3	230	50	2500	222	0.96	1080	260
4	230	50	2575	201	0.87	620	340

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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