R2E250-AW50-14

AC diagonal fan

backward curved



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R2E250-AW50-14**	
Motor	**M2E068-EC**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	2650
Power input	W	185
Current draw	A	0.81
Motor capacitor	µF	6
Capacitor voltage	VDB	400
Capacitor standard		P0 (CE)
Min. back pressure	Pa	0
Max. ambient temperature	°C	50
Starting current	A	1.8

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_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		34.6	29.4	32.4
Efficiency grade N		52.2	47	50
Power input P_e	kW	0.21		
Air flow q_v	m^3/h	1060		
Pressure increase p_{fs}	Pa	251		
Speed n	min^{-1}	2550		

Data established at point of optimum efficiency

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Technical features

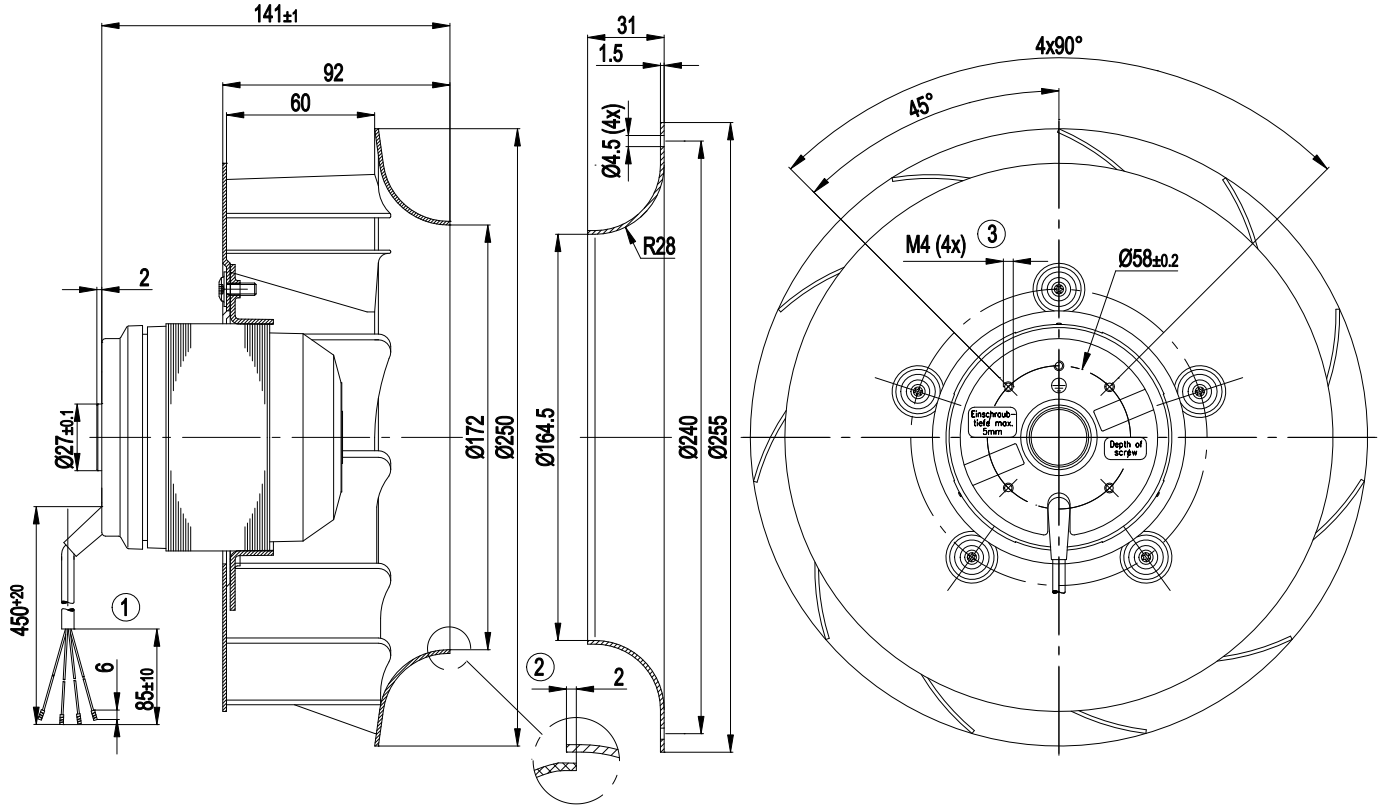
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	Aluminium sheet, coated in black
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F5
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible 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

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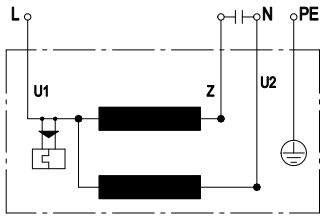
backward curved

Product drawing



1	Connection line PVC 4G 0.5 mm², 4x brass lead tips crimped
2	Accessory part: Inlet nozzle 96359-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 5 mm

Connection screen



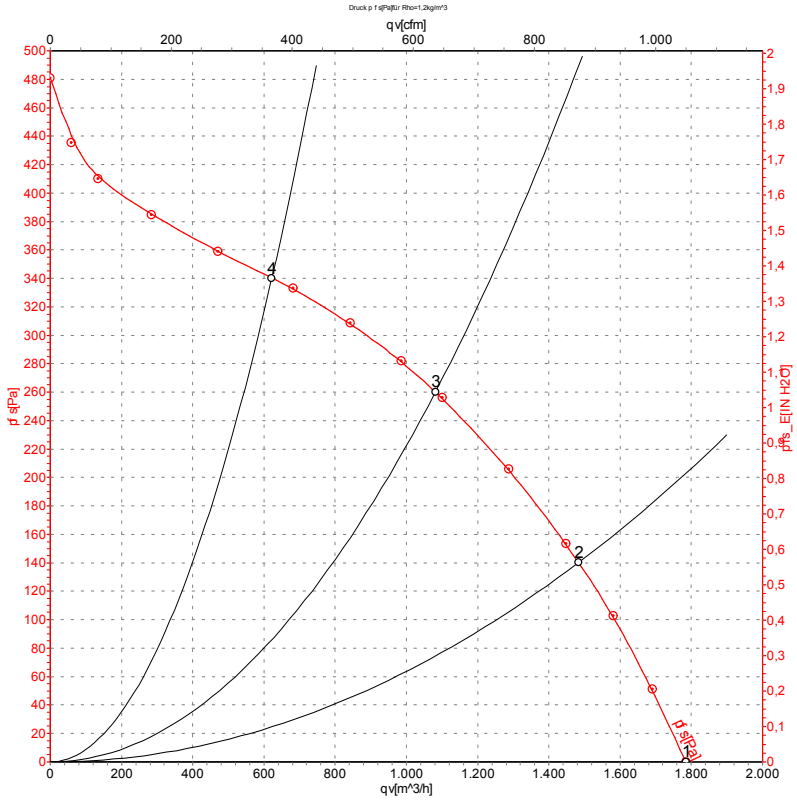
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-50465

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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