R2E250-AD14-13

AC centrifugal fan

backward curved, single inlet

R2E250-AD14-13 ebmpapst Datasheet
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Nominal data

Type	**R2E250-AD14-13**
Motor	**M2E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	2100
Power input	W	135
Current draw	A	0.6
Motor capacitor	µF	3.5
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50
Starting current	A	0.8

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 kg
Size	250 mm
Surface of rotor	Uncoated
Material of impeller	PA plastic
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 (F)/environmental protection class (H)	H0 - dry environment
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
Speed steps	4
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

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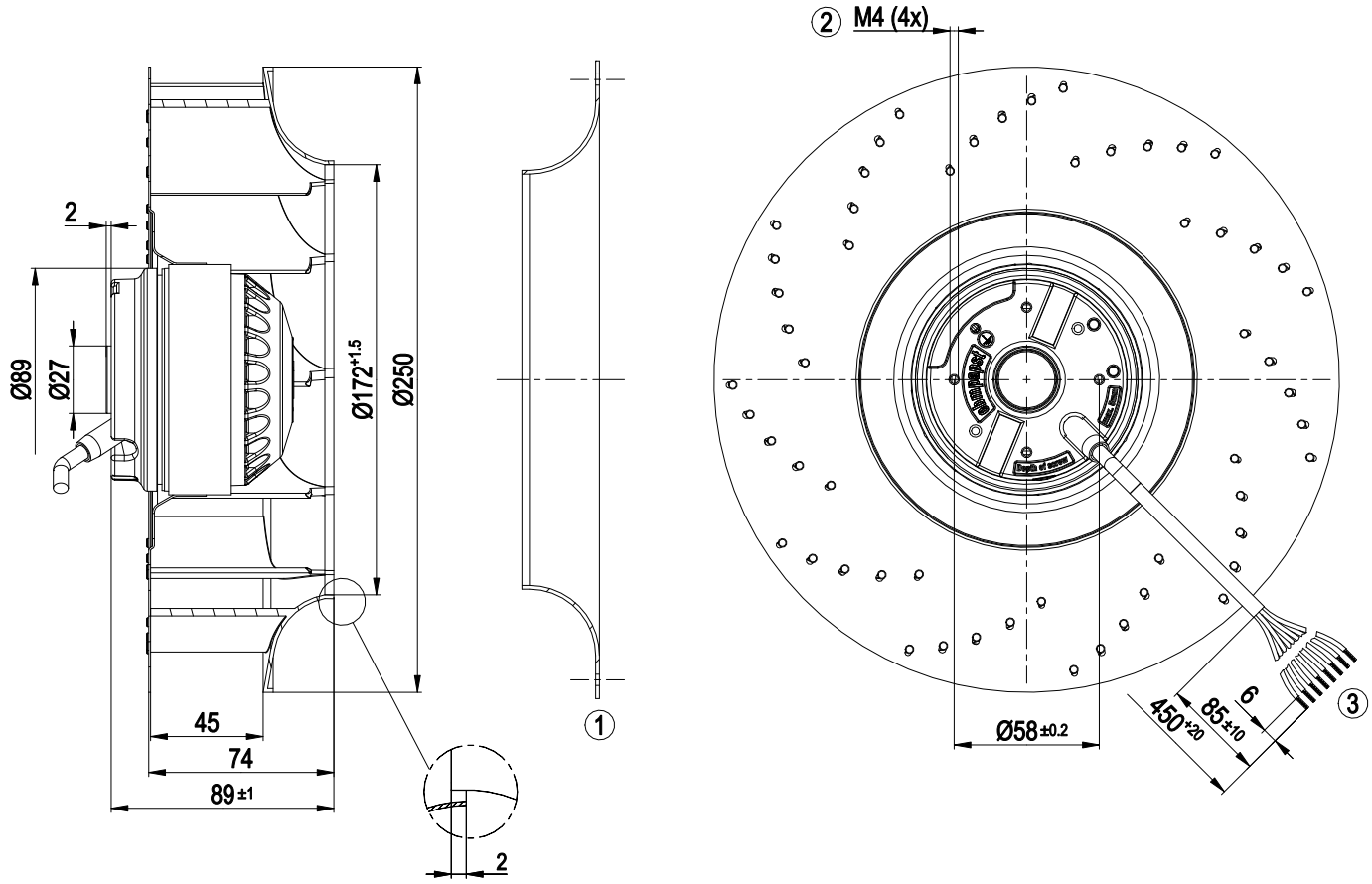
Product drawing



1	Accessory part: Inlet nozzle 96359-2-4013, not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line halogen and silicone-free 8G 0.5 mm², 8x lead tips crimped

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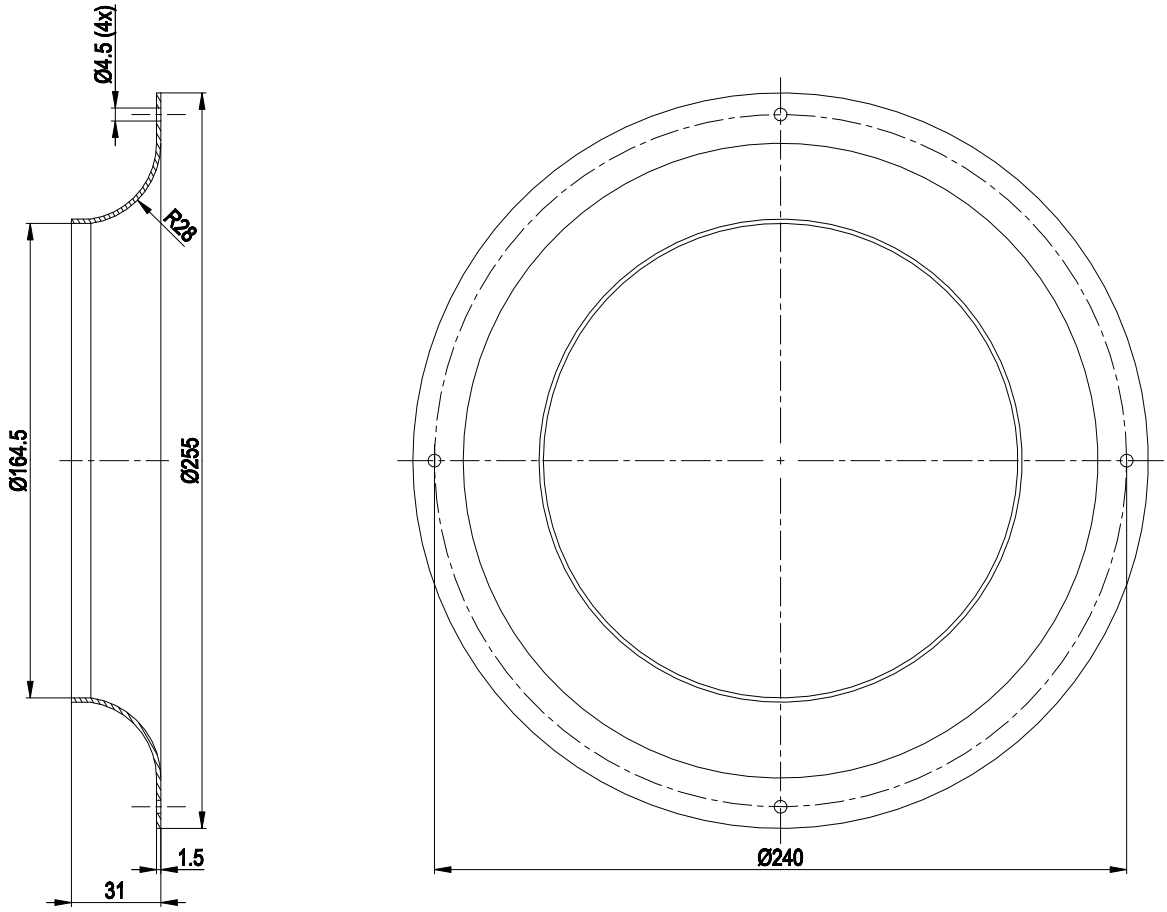
Accessory part



Accessory part: Inlet nozzle 96359-2-4013 not included in scope of delivery

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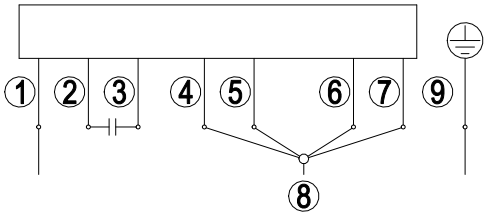
Connection screen



Note: fast speed (step IV); slow speed (step I); the switch must interrupt the circuit during the changeover.

1	N (blue)
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / grey
7	Step IV black 4 / black
8	L1
9	= PE = green / yellow

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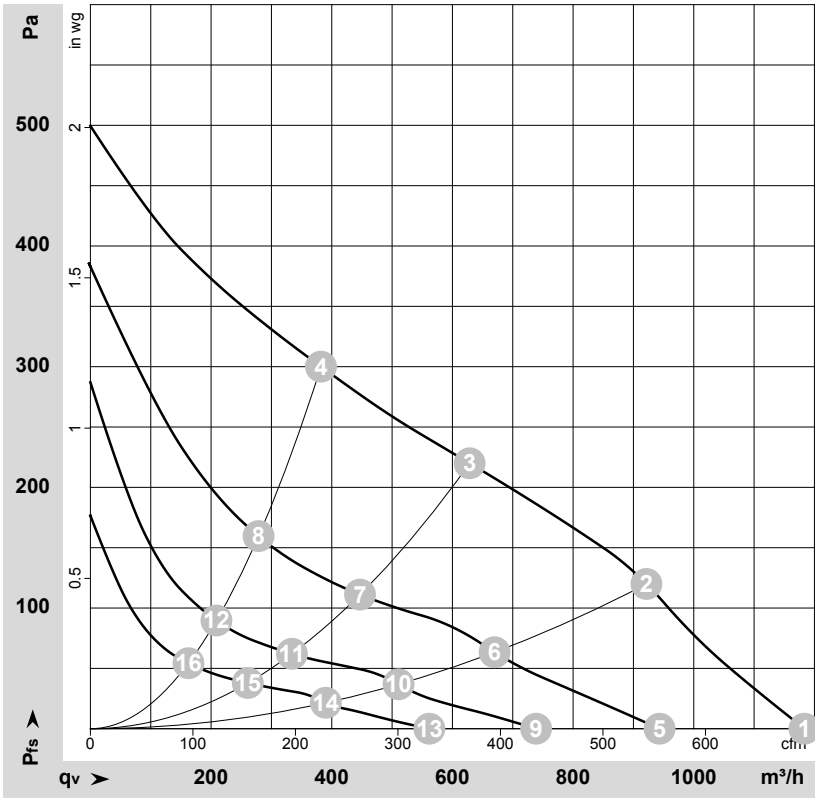
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-181398-1
Measurement: LU-181420-1
Measurement: LU-181421-1
Measurement: LU-181422-1

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

	Stage	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	4	230	50	2420	114	0.49	1185	0	695	0.00
2	4	230	50	2275	125	0.54	920	120	545	0.48
3	4	230	50	2100	135	0.60	630	220	370	0.88
4	4	230	50	2175	131	0.57	380	300	225	1.20
5	3	230	50	1940	90	0.42	945	0	555	0.00
6	3	230	50	1655	99	0.46	670	63	395	0.25
7	3	230	50	1515	102	0.47	445	111	265	0.45
8	3	230	50	1580	101	0.46	280	159	165	0.64
9	2	230	50	1530	84	0.39	740	0	435	0.00
10	2	230	50	1270	88	0.41	510	37	300	0.15
11	2	230	50	1145	89	0.41	335	62	195	0.25
12	2	230	50	1195	88	0.41	210	90	125	0.36
13	1	230	50	1200	76	0.36	560	0	330	0.00
14	1	230	50	985	78	0.37	390	21	230	0.08
15	1	230	50	895	79	0.37	260	38	155	0.15
16	1	230	50	925	78	0.37	165	54	95	0.22

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