K2E220-RB14-12

AC centrifugal module - RadiCal

backward curved, single inlet

with housing

K2E220-RB14-12 ebmpapst Datasheet
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Nominal data

Type	**K2E220-RB14-12**
Motor	**M2E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml/cu
Valid for approval / standard		CE
Speed (rpm)	min^{-1}	2500
Power input	W	110
Current draw	A	0.48
Motor capacitor	µF	3
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	35
Starting current	A	0.89

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	2.4 kg
Size	220 mm
Surface of rotor	Uncoated
Material of impeller	PA plastic
Housing material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
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	Any
Condensate discharge holes	None
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

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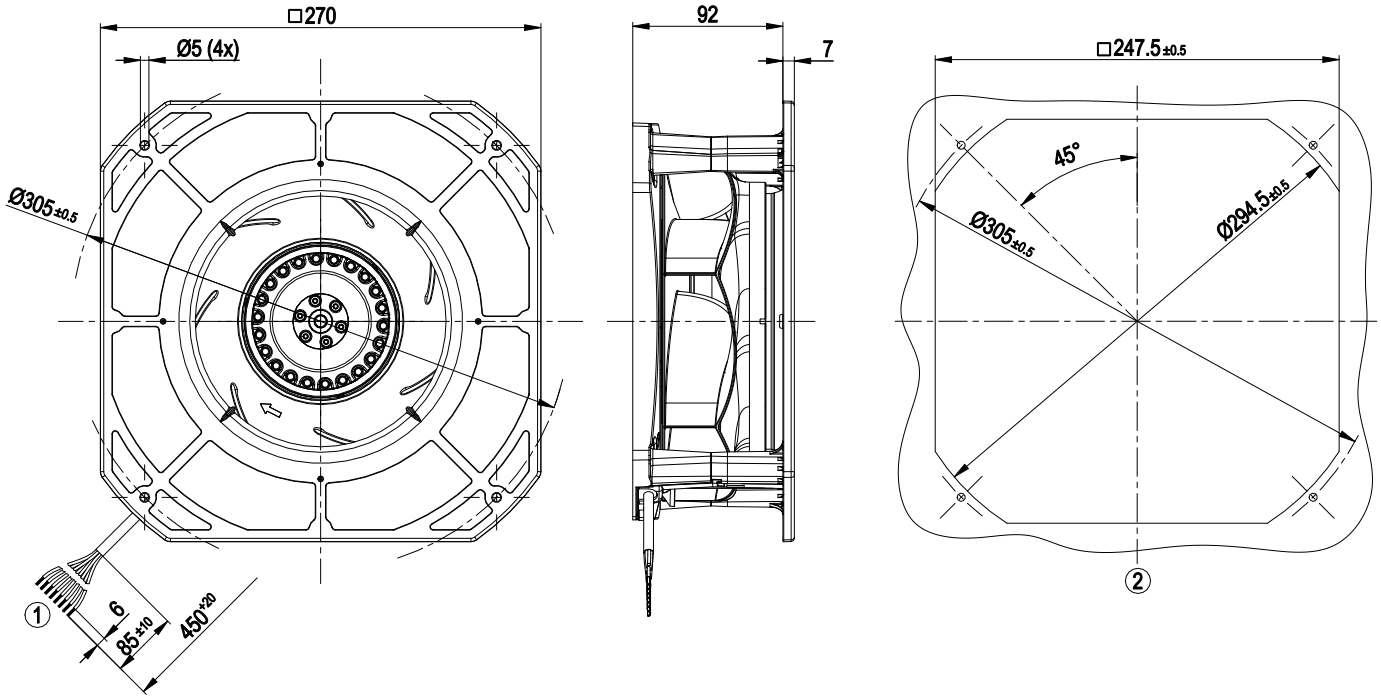
Product drawing



1	Connection line PFA AWG20 (green/yellow AWG18), 8x lead tips crimped
2	Mounting dimensions

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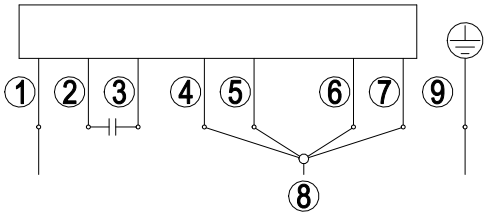
Connection screen



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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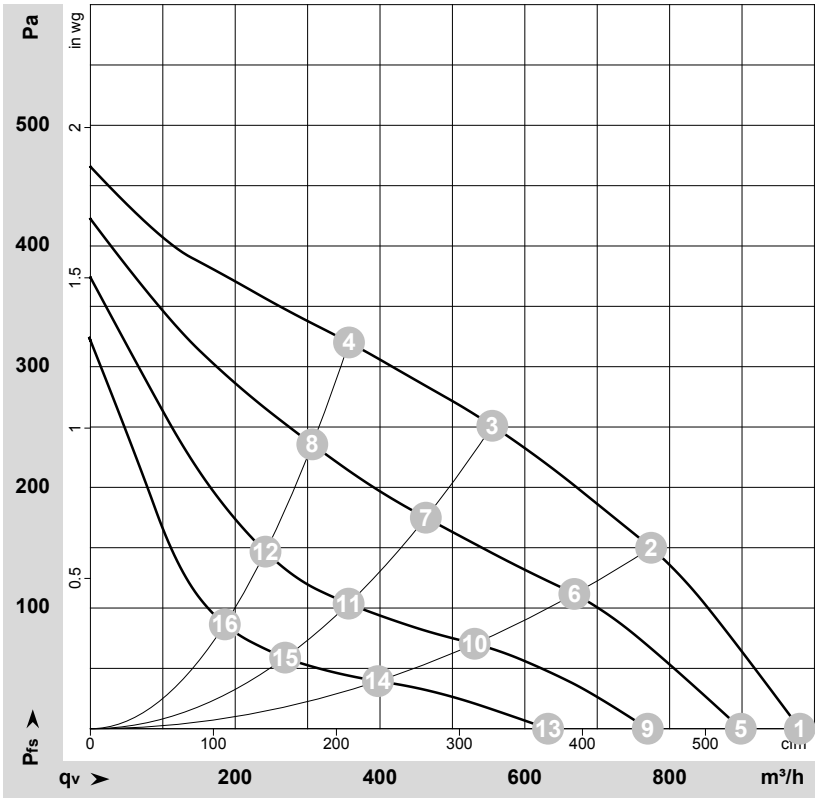
Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-176037-1
Measurement: LU-176082-1
Measurement: LU-176086-1
Measurement: LU-176088-1

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	2655	92	0.41	980	0	575	0.00
2	4	230	50	2560	103	0.45	775	150	455	0.60
3	4	230	50	2500	110	0.48	555	250	325	1.00
4	4	230	50	2550	104	0.45	355	320	210	1.28
5	3	230	50	2425	81	0.36	900	0	530	0.00
6	3	230	50	2215	94	0.42	670	112	395	0.45
7	3	230	50	2105	99	0.44	465	175	275	0.70
8	3	230	50	2185	94	0.42	305	235	180	0.94
9	2	230	50	2100	79	0.36	770	0	455	0.00
10	2	230	50	1755	90	0.40	530	70	315	0.28
11	2	230	50	1605	94	0.41	355	103	210	0.41
12	2	230	50	1730	90	0.40	240	147	140	0.59
13	1	230	50	1760	79	0.35	630	0	370	0.00
14	1	230	50	1350	86	0.38	395	39	235	0.16
15	1	230	50	1230	87	0.39	270	58	160	0.23
16	1	230	50	1310	85	0.38	185	83	110	0.33

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