

**K2E220-RA38-11**  
 BOSCH VULCANO (PT)  
 P/N 8 738 703 137

# AC centrifugal module - RadiCal®

backward curved, single inlet  
 with housing



K2E220-RA38-11 ebmpapst Datasheet  
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Limited partnership · Headquarters Muldingen  
 County court Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen  
 County court Stuttgart · HRB 590142

## Nominal data

<b>Type</b>	<b>K2E220-RA38-11</b>		
<b>Motor</b>	<b>M2E068-BF</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	2100	2050
Power input	W	88	107
Current draw	A	0.39	0.47
Motor capacitor	µF	2	2
Capacitor voltage	VDB	450	450
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	60
Starting current	A	0.51	0.52

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	220 mm
Surface of rotor	Coated in black
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 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
Electrical leads	With plug
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

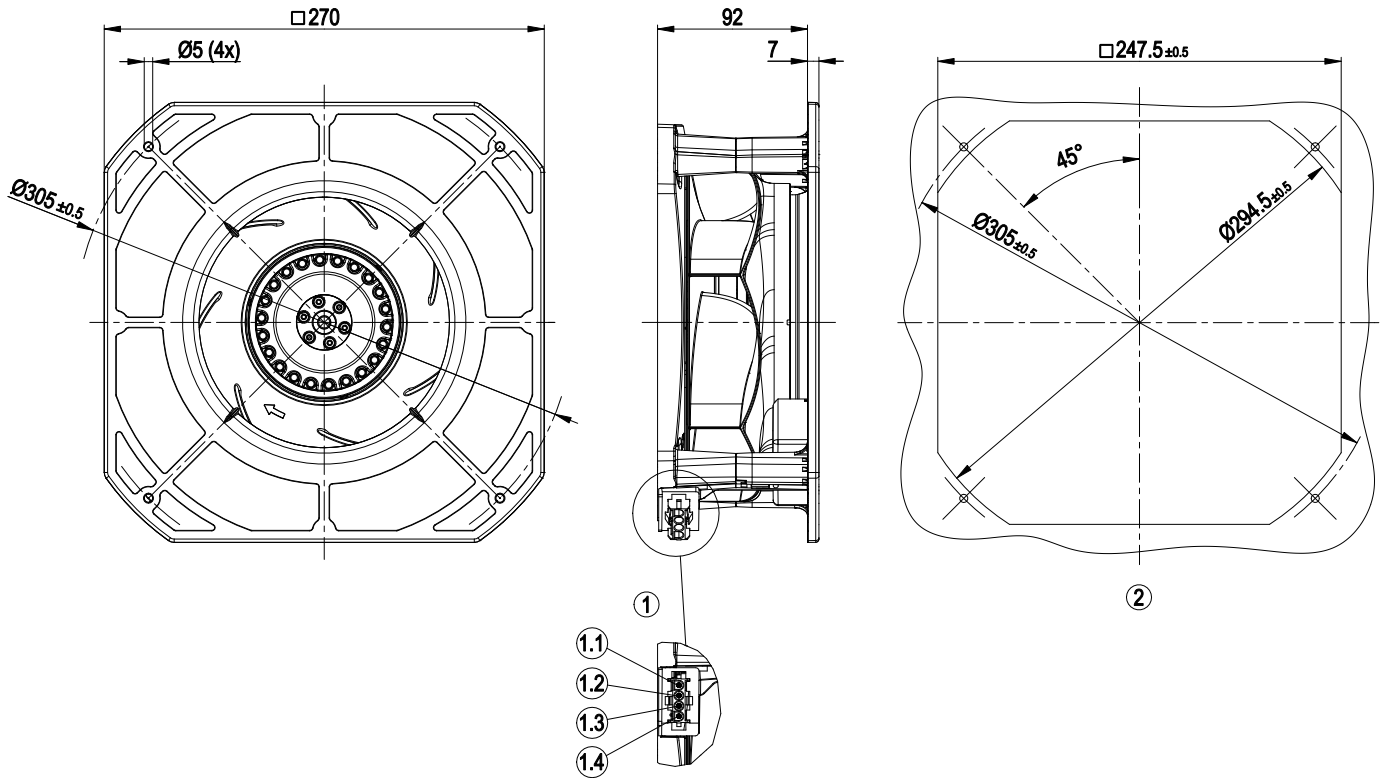


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## Product drawing



1	Coded plug system Tyco
	Connector housing 4-pole Tyco 1586845-1
	4x plug pin Tyco 926 885-1
	Mating connector (not included in standard scope of delivery):
	Connector housing 4-pole Tyco 926298-6
	4x female connector Tyco 926 884-1
1.1	PE
1.2	L
1.3	N + capacitor
1.4	Capacitor
	(Capacitor wired internally)
2	Mounting dimensions

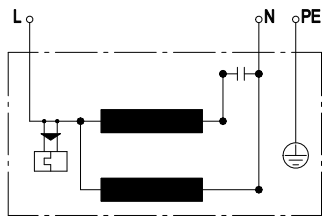


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## Connection screen



L	blue	N	black	PE	green/yellow
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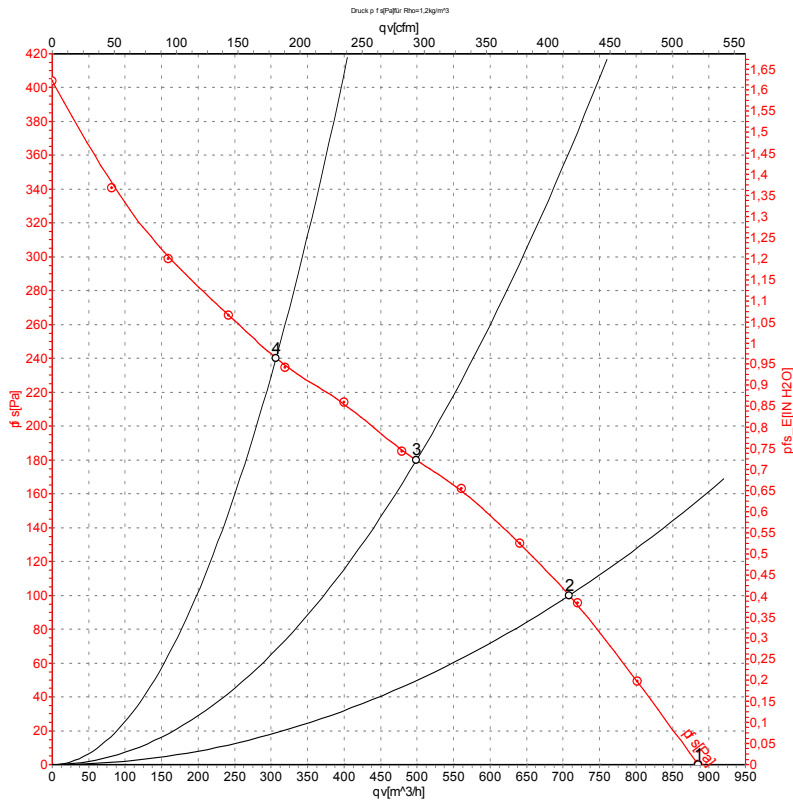


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## Charts: Air flow 50 Hz



Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	Pe	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	ps
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	50	2350	80	0.36	59	68	885	0
2	230	50	2240	86	0.38	54	62	710	100
3	230	50	2100	88	0.39	51	60	500	180
4	230	50	2185	86	0.38	54	63	305	240

U = Supply voltage · f = Frequency · n = Speed · Pe = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · qv = Air flow  
 ps = Pressure increase

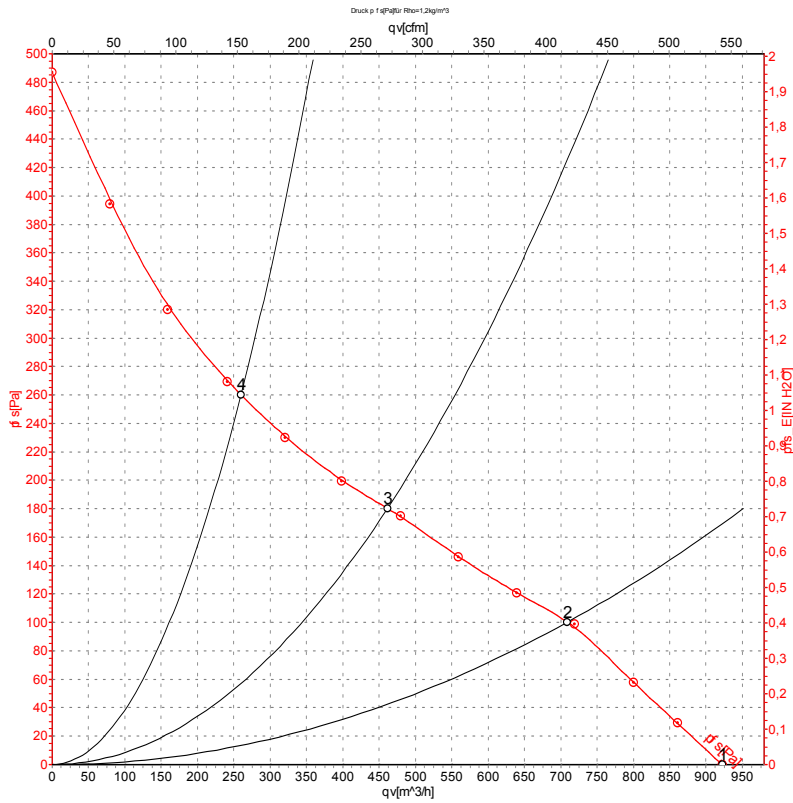


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## Charts: Air flow 60 Hz



Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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 <sub>e</sub>	I	L <sub>pA<sub>in</sub></sub>	L <sub>wA<sub>in</sub></sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	60	2450	102	0.46	60	69	920	0
2	230	60	2220	106	0.46	54	62	710	100
3	230	60	2050	107	0.47	51	60	460	180
4	230	60	2215	105	0.46	56	65	260	260

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · L<sub>pA<sub>in</sub></sub> = Sound pressure level inlet side · L<sub>wA<sub>in</sub></sub> = Sound power level inlet side · qv = Air flow  
 p<sub>fs</sub> = Pressure increase

