K2E220-RA38-12

AC centrifugal module

backward curved, single inlet

with housing

K2E220-RA38-12 ebmpapst Datasheet
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County court Stuttgart · HRA 590344

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Nominal data

Type	**K2E220-RA38-12**
Motor	**M2E068-BF**

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 (rpm)	min^{-1}	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		S0 (CE)	S0 (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 (F)/environmental protection class (H)	F2-1
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
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)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Product conforming to standard	EN 60335-1; CE

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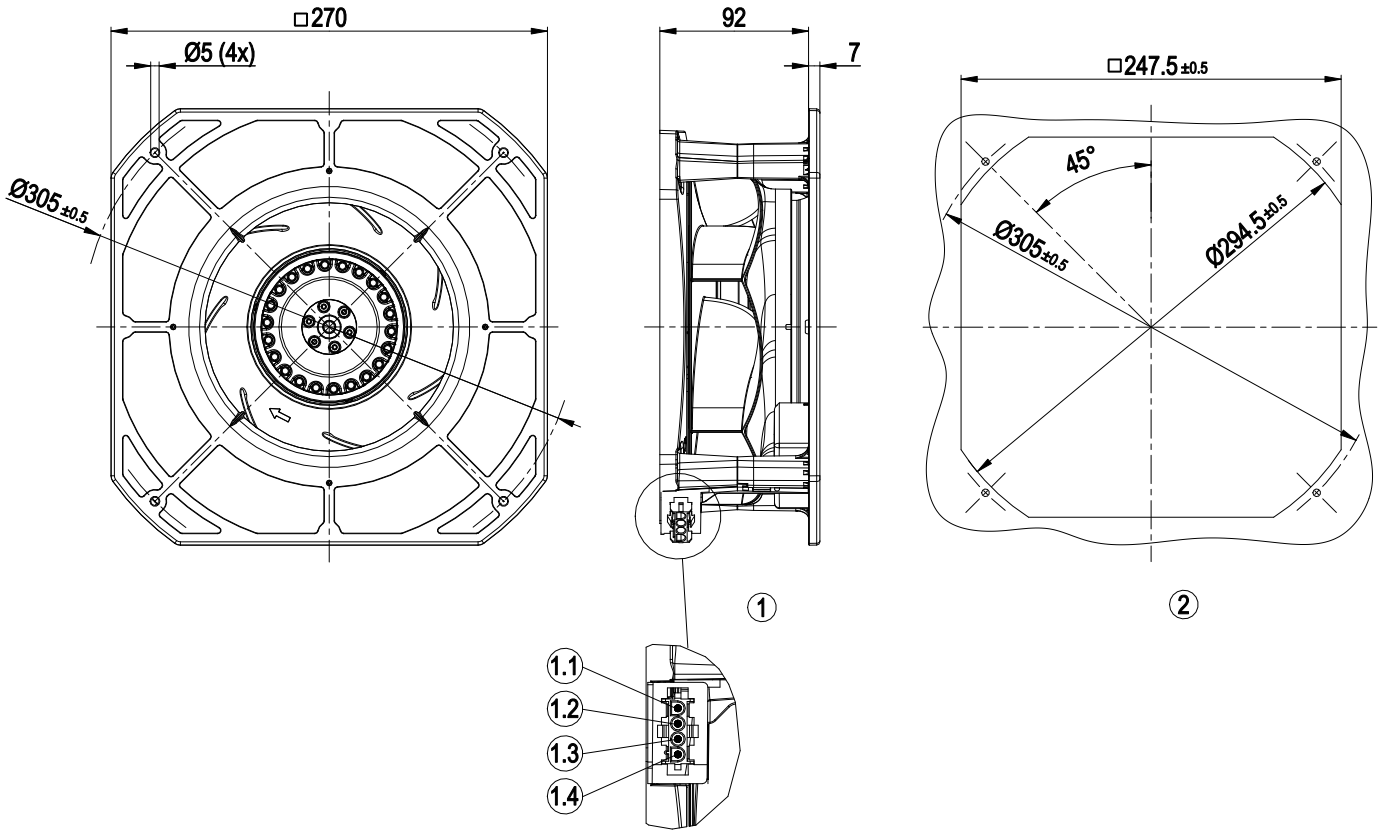
Product drawing



1	Coded plug system tyco
	4-pole connector housing tyco 926305-7 with seal
	4x plug pin tyco 926 885-1
	Mating connector (not included in scope of delivery):
	4-pole connector housing tyco 926298-6 with seal on both sides
	4x female connector tyco 926 884-1
1.1	PE
1.2	L
1.3	N + capacitor
1.4	Capacitor
	(Capacitor connected internally)
2	Mounting dimensions

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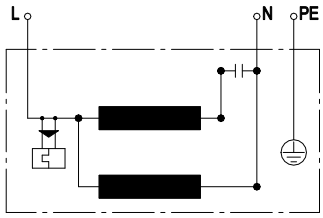
Connection screen



L	blue	N	black	PE	green/yellow

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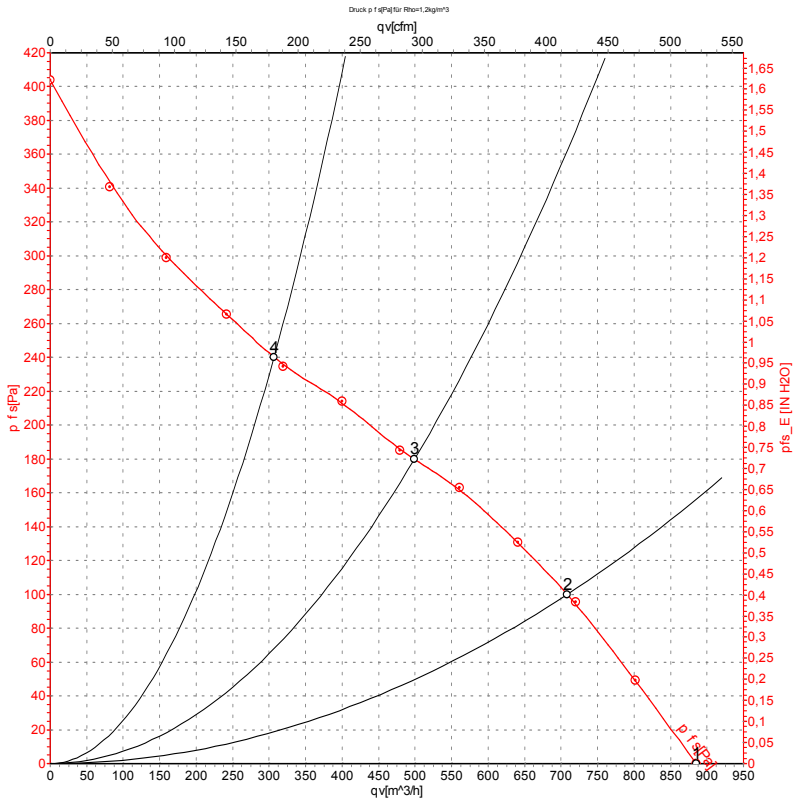
Charts: Air flow 50 Hz



Measurement: LU-130008-1

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

	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	2350	80	0.36	59	68	885	0	520	0.00
2	230	50	2240	86	0.38	54	62	710	100	415	0.40
3	230	50	2100	88	0.39	51	60	500	180	295	0.72
4	230	50	2185	86	0.38	54	63	305	240	180	0.96

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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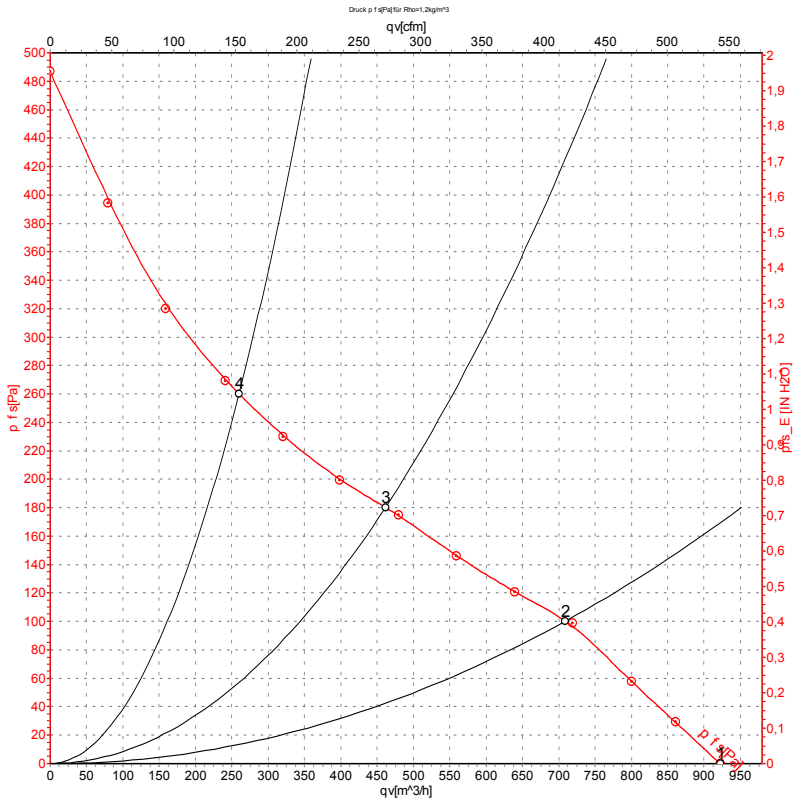
Charts: Air flow 60 Hz



Measurement: LU-130009-1

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

	U	f	n	P_e	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	60	2450	102	0.46	60	69	920	0	545	0.00
2	230	60	2220	106	0.46	54	62	710	100	415	0.40
3	230	60	2050	107	0.47	51	60	460	180	270	0.72
4	230	60	2215	105	0.46	56	65	260	260	155	1.04

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase