K2E250-RC08-11

AC centrifugal module - RadiCal

backward curved, single inlet

with housing



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Nominal data

Type	**K2E250-RC08-11**
Motor	**M2E074-DF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	UL 2111
Speed (rpm)	min^{-1}	2650	2850	2850
Power input	W	230	340	350
Current draw	A	1.02	1.5	1.47
Motor capacitor	µF	5	5	5
Capacitor voltage	VDB	400	400	400
Capacitor standard				UL
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	65	50	50
Starting current	A	2.4	2.27	

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

		Actual	Request 2015
01 Overall efficiency η_{es}	%	44.8	44.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		62.2	62
05 Variable speed drive		No	

09 Power input P_e	kW	0.22
09 Air flow q_v	m^3/h	905
09 Pressure increase p_{fs}	Pa	405
10 Speed (rpm) n	min^{-1}	2670
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

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Technical features

Mass	4 kg
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Housing material	PA plastic
Material of guard grille	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)	H1
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
Approval	CSA C22.2 No.77; UL 2111

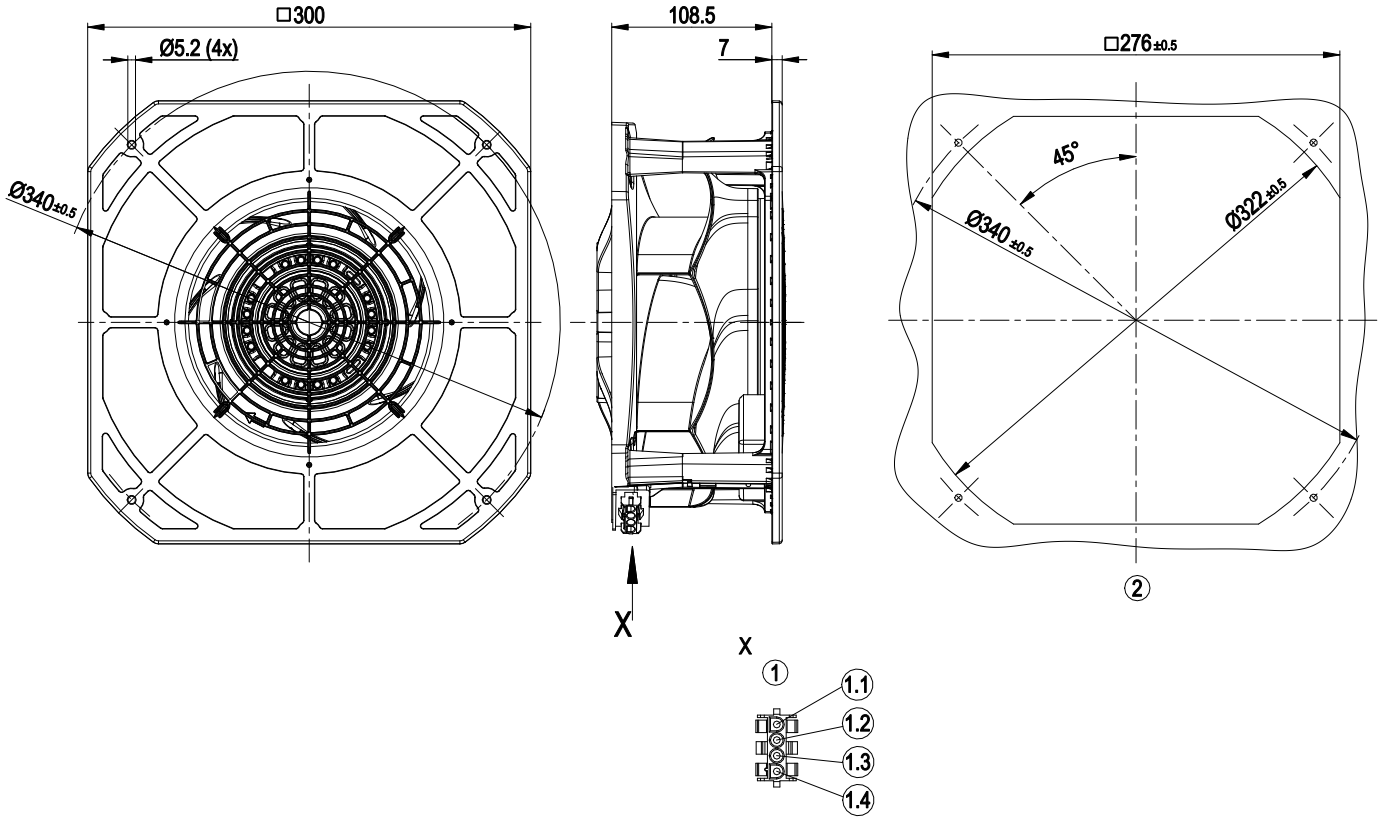
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Product drawing



1	Coded plug system tyco
	4-pole connector housing tyco 926305-7
	2x plug pin tyco 926885-1, 2x plug pin tyco 350218-1
	Mating connector (not included in 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 connected internally)
2	Mounting dimensions

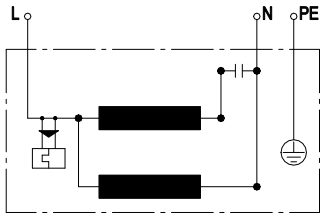
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Connection screen



L	blue	N	black	PE	green/yellow

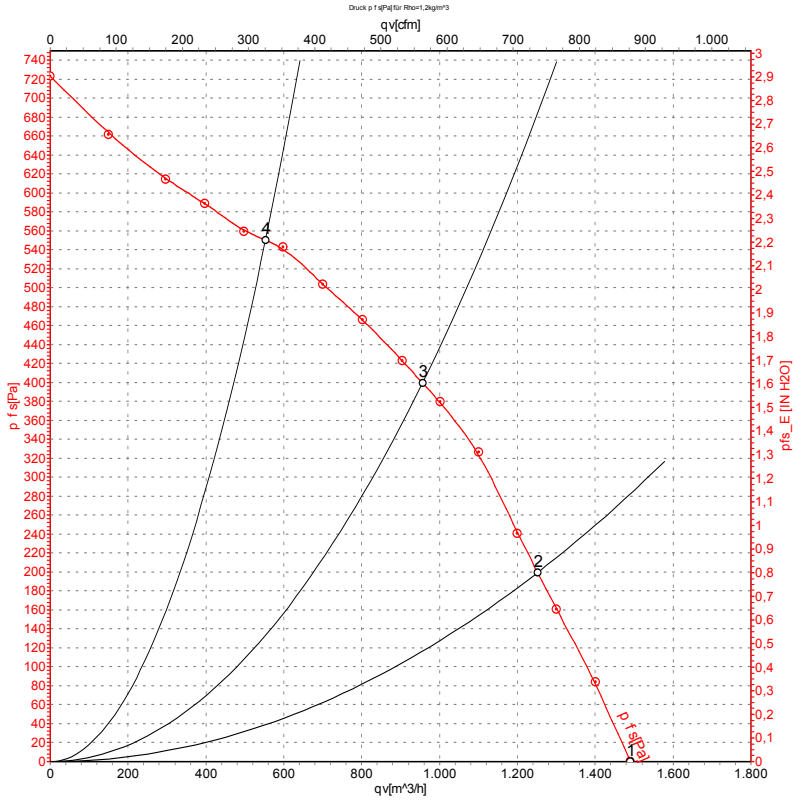
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Charts: Air flow 50 Hz



Measurement: LU-132660-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	2750	194	0.86	1490	0	875	0.00
2	230	50	2680	226	0.99	1250	200	735	0.80
3	230	50	2650	230	1.02	955	400	565	1.61
4	230	50	2715	208	0.92	555	550	325	2.21

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

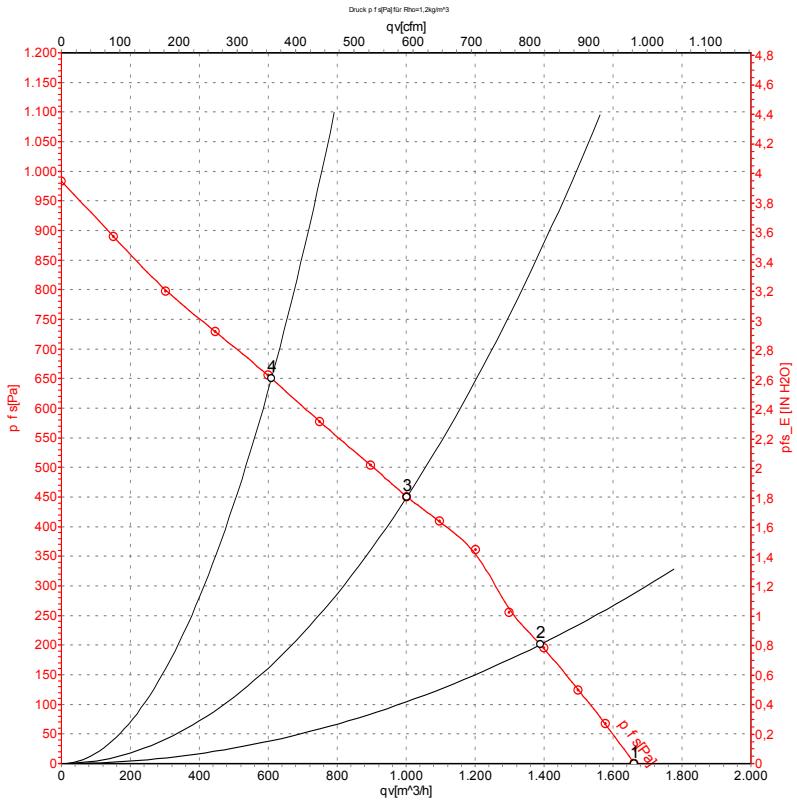
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Charts: Air flow 60 Hz



Measurement: LU-132662-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	60	3065	291	1.27	1660	0	980	0.00
2	230	60	2890	331	1.44	1390	200	820	0.80
3	230	60	2850	340	1.50	1000	450	590	1.81
4	230	60	2970	311	1.35	610	650	360	2.61

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

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