K2E250-RB06-13

AC centrifugal module - RadiCal

backward-curved, single-intake

with housing

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Nominal data

Type	**K2E250-RB06-13**
Motor	**M2E074-EI**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	CE	UL 1004-3
Speed (rpm)	min^{-1}	2750	3100	3100
Power consumption	W	250	390	400
Current draw	A	1.1	1.71	1.68
Capacitor	µF	5	5	5
Capacitor voltage	VDB	450	450	450
Capacitor standard		S0 (CE)	S0 (CE)	UL
Min. back pressure	Pa	0	0	0
Min. back pressure	in. wg	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	75	65	65
Starting current	A	3.15	3.0	

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	45	45
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		62	62
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.24
09 Air flow q_v	m^3/h	905
09 Pressure increase p_{fs}	Pa	436
10 Speed (rpm) n	min^{-1}	2775
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-131718

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Technical description

Weight	4.6 kg
Size	250 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic, galvanized sheet-metal plate
Housing material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Plug
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 1004-3

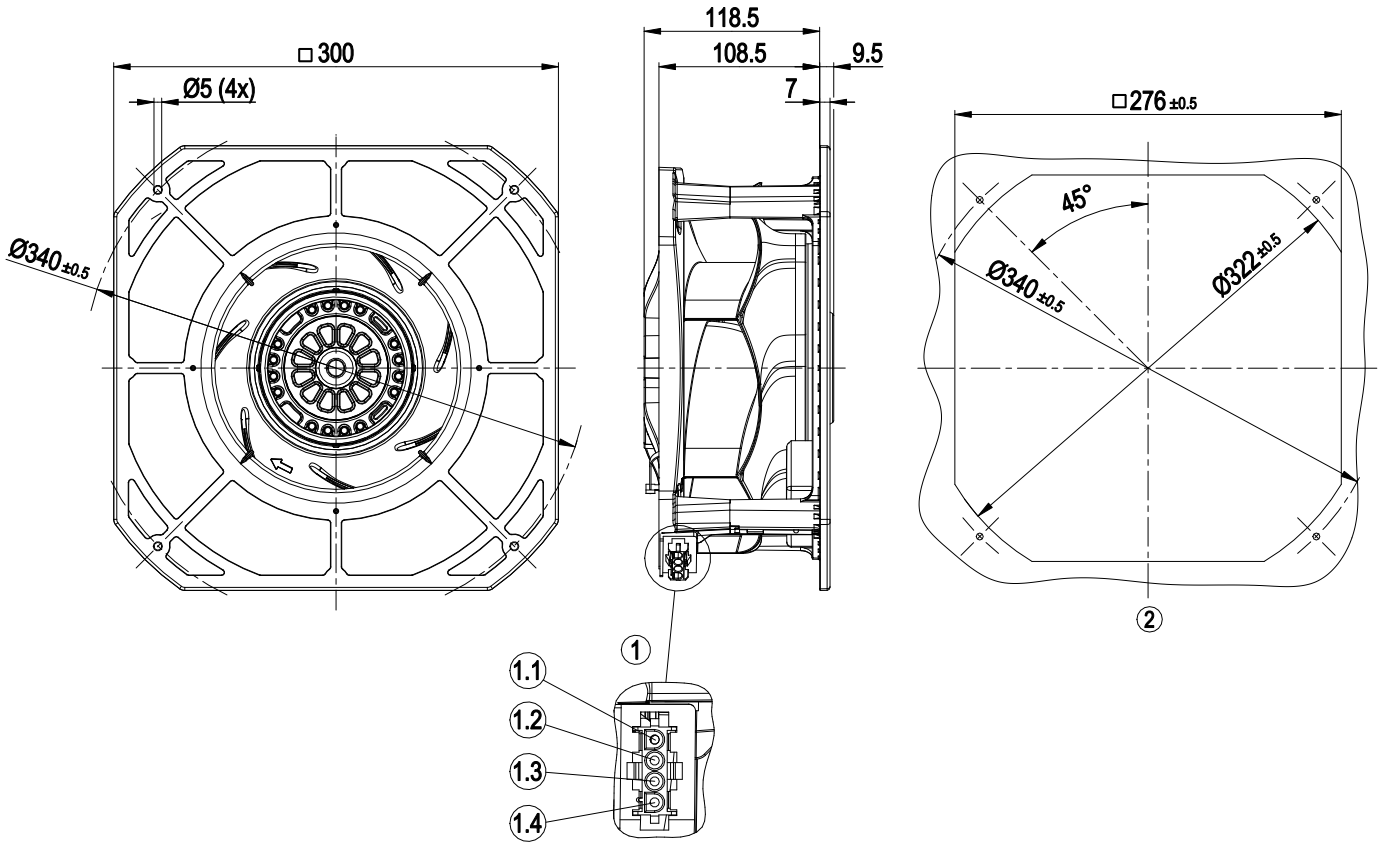
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Product drawing



1	tyco coded plug system
	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):
	4-pole connector housing tyco 926298-6
	4x socket tyco 926 884-1
1.1	PE (green/yellow)
1.2	L (blue)
1.3	N (black + capacitor)
1.4	Z (brown + capacitor)
	(capacitor wired internally)
2	Mounting dimensions

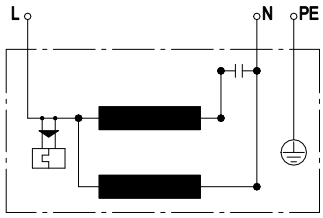
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Connection diagram



L	blue	N	black	PE	green/yellow

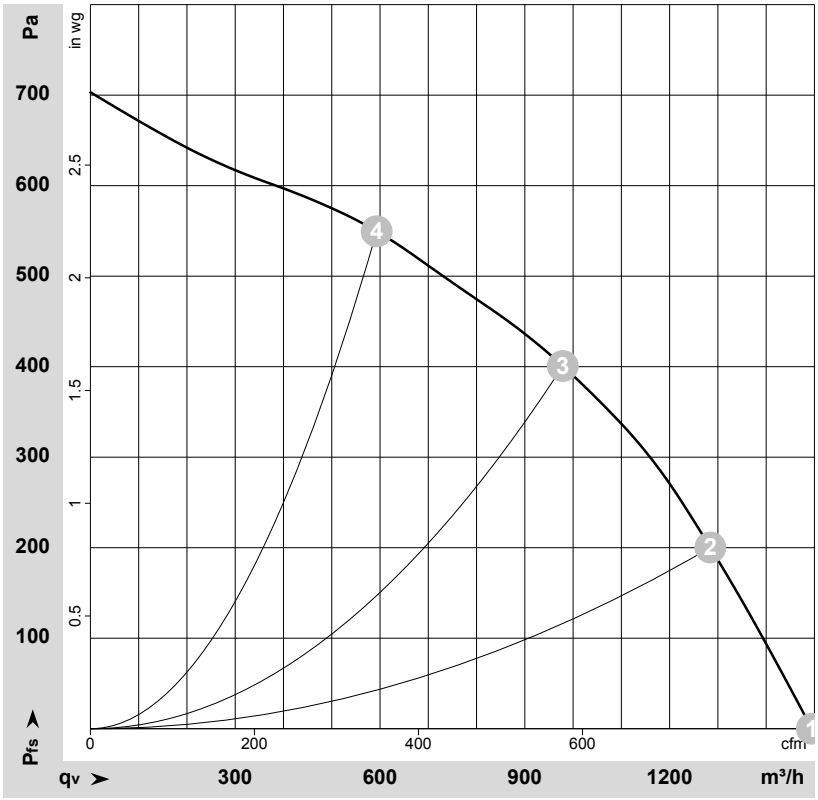
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-130850-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

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	in. wg
1	230	50	2820	212	0.93	69	78	1495	0	880	0.00
2	230	50	2790	237	1.04	65	74	1285	200	755	0.80
3	230	50	2750	250	1.10	62	71	980	400	575	1.61
4	230	50	2805	223	0.97	67	75	595	550	350	2.21

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

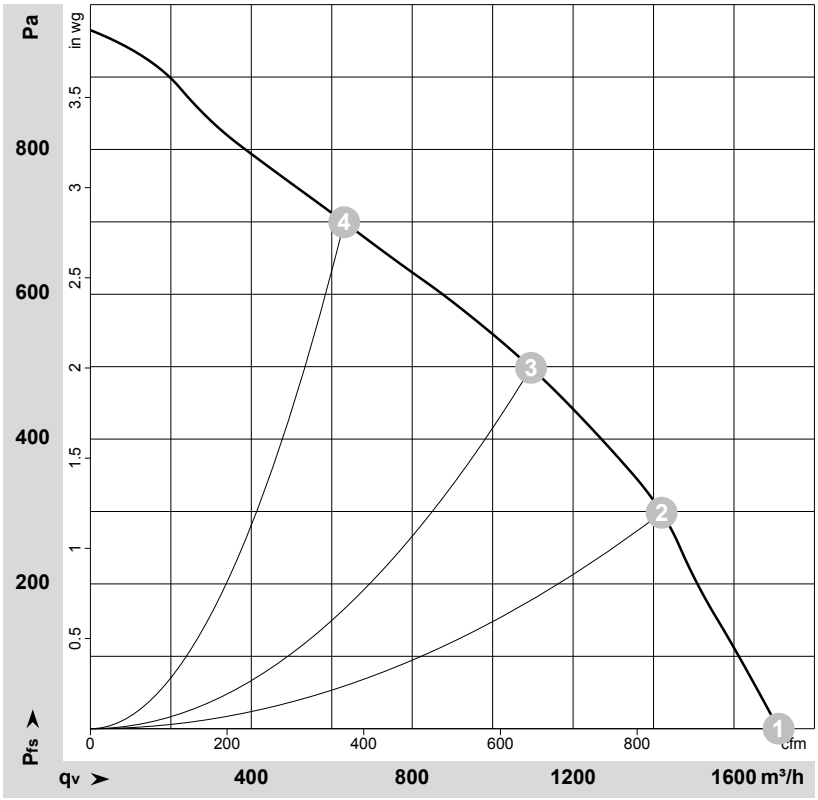
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-130856-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

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	in. wg
1	230	60	3225	336	1.48	73	81	1710	0	1005	0.00
2	230	60	3155	365	1.59	67	76	1420	300	835	1.20
3	230	60	3100	390	1.71	65	73	1095	500	645	2.01
4	230	60	3165	360	1.57	70	81	630	700	370	2.81

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

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