

DIGITAL ELECTRIC RADIATORS LOW CONSUMPTION

K Series

HIGH
QUALITY

OPTIMIZER[®]
energy plus



10 Guarantee
2 years
Electric and
Electronic components

60% EQUIVALENT RATIO
OF NO CONSUMPTION

40% EQUIVALENT RATIO
OF CONSUMPTION

100%
Nominal
Power



7 days / 24 hours
PROGRAMMABLE

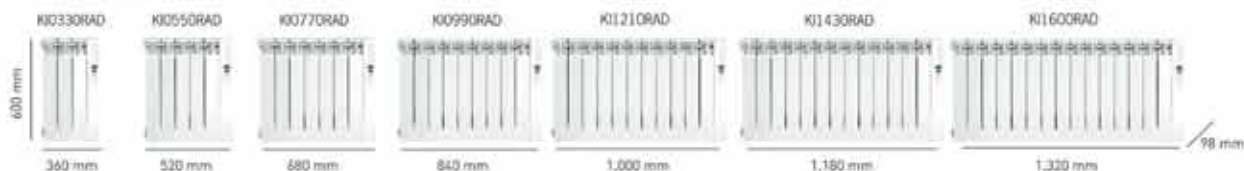
K SERIES CHARACTERISTICS

MODELS	KI0330RAD	KI0550RAD	KI0770RAD	KI0990RAD	KI1210RAD	KI1430RAD	KI1600RAD
No. of elements	3	5	7	9	11	13	15
RECOMMENDED SIZING ACCORDING TO RTC IN M² / M³							
Mild weather RTC 0,75 m ² / 0,23 m ³	Up to 4 m ² / 15 m ³	Up to 7 m ² / 23 m ³	Up to 10 m ² / 32 m ³	Up to 12 m ² / 41 m ³	Up to 15 m ² / 50 m ³	Up to 18 m ² / 58 m ³	Up to 20 m ² / 67 m ³
Cold weather RTC 0,80 m ² / 0,26 m ³	Up to 4 m ² / 13 m ³	Up to 6 m ² / 21 m ³	Up to 9 m ² / 28 m ³	Up to 11 m ² / 36 m ³	Up to 14 m ² / 44 m ³	Up to 16 m ² / 51 m ³	Up to 19 m ² / 59 m ³
Very cold weather RTC 0,85 m ² / 0,30 m ³	Up to 4 m ² / 11 m ³	Up to 6 m ² / 18 m ³	Up to 8 m ² / 25 m ³	Up to 11 m ² / 31 m ³	Up to 13 m ² / 38 m ³	Up to 15 m ² / 45 m ³	Up to 18 m ² / 51 m ³
Extra cold weather RTC 0,90 m ² / 0,33 m ³	Up to 3 m ² / 10 m ³	Up to 6 m ² / 16 m ³	Up to 8 m ² / 22 m ³	Up to 10 m ² / 28 m ³	Up to 12 m ² / 34 m ³	Up to 15 m ² / 40 m ³	Up to 17 m ² / 46 m ³
ELECTRICAL CHARACTERISTICS							
Nominal power (W)	330	550	770	990	1,210	1,430	1,600
Effective power (W)*	132	220	308	396	484	572	640
Voltage (V)	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Current (A)	1.5	2.4	3.4	4.3	5.3	6.2	7.0
DIMENSIONS							
Width (mm)	360	520	680	840	1,000	1,180	1,320
Height (mm)	600	600	600	600	600	600	600
Depth (mm)	98	98	98	98	98	98	98
Installed depth (mm)	113	113	113	113	113	113	113
MECHANICAL CHARACTERISTICS							
Steel heating element	✓	✓	✓	✓	✓	✓	✓
High purity aluminium	✓	✓	✓	✓	✓	✓	✓
Thermal oil	✓	✓	✓	✓	✓	✓	✓
ASA/PC Control Panel	✓	✓	✓	✓	✓	✓	✓
Weight (kg)	10	14	18	22	26	30	34
RAL Colour	9010	9010	9010	9010	9010	9010	9010
Protection Grade	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21	IP 21
PERFORMANCE AND SAFETY							
Optimizer Energy Plus™	✓	✓	✓	✓	✓	✓	✓
Temperature stability (°C)	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25
Air speed (m/sec)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Power per element (W/element)	110	110	110	110	110	110	110
Safety thermostat	✓	✓	✓	✓	✓	✓	✓
Average surface temp. during steady state (°C)**	40°C	40°C	40°C	40°C	40°C	40°C	40°C
INSTALLATION							
Template, installation kit and safety bracket	✓	✓	✓	✓	✓	✓	✓
CERTIFICATIONS							
2004/108/CE Electromagnetic Compatibility	✓	✓	✓	✓	✓	✓	✓
2006/95/CE Electrical Safety	✓	✓	✓	✓	✓	✓	✓

* Effective power is the real power needed under predetermined parameters for heating a 12m² room with the temperature set to 21°C, according to tests developed by independent laboratories.

** Surface temperature achieved when the room temperature is set to 21°C.

RANGE OF PRODUCTS



HOW DO THEY WORK?

POWER COMPARISON BETWEEN FOUR DIFFERENT HEATING SYSTEMS

In the following graphs we compare the nominal power needed for a 20 m² dwelling according to the recommendation of the manufacturers:



The manufacturers of panel heaters and storage heaters recommend combining both systems to heat a house. A manufacturer's example: storage heater for living/dining rooms, kitchens and offices and panel heaters for bedrooms.

With the Rointe Digital System, any type of project can be heated entirely without having to complement it with another system.

The calculation of all these systems, is based on a climatic zone with a thermal coefficient of 436 Btu/m²

ANNUAL RUNNING COST COMPARISON

AREA UP TO (m ²)	ROINTE DIGITAL SYSTEM				PANEL HEATER		BOILER SYSTEM		STORAGE HEATER		
	MODELS	NOMINAL POWER	% RATIO OF CONSUMPTION	EFFECTIVE POWER	RUNNING COST	NOMINAL POWER	RUNNING COST	NOMINAL POWER	RUNNING COST	NOMINAL POWER	RUNNING COST
4		330 W	40%	132 W	£22.31	750 W	£126.79	664 W	£37.09	1,700 W	£114.95
7		550 W	40%	220 W	£37.19	1,000 W	£169.05	1,162 W	£64.90	1,700 W	£114.95
10		770 W	40%	308 W	£52.07	1,500 W	£253.58	1,661 W	£92.78	2,550 W	£172.43
12		990 W	40%	396 W	£66.94	2,000 W	£338.10	1,993 W	£102.53	2,550 W	£172.43
15		1,210 W	40%	480 W	£81.14	2,000 W	£338.10	2,491 W	£139.14	3,400 W	£229.91
18		1,430 W	40%	572 W	£96.70	3,000 W	£507.15	2,990 W	£167.02	5,100 W (2 x 2,550 W)	£344.86
20		1,600 W	40%	640 W	£108.19	3,000 W	£507.15	3,322 W	£185.56	5,950 W (3,400+2,550 W)	£402.34
Set to 21°C				Set to 18°C		Set to 21°C		Set to 21°C			

Thanks to our Optimizer Energy Plus technology, and according to the results of tests performed on our products by independent laboratories, we can guarantee that —with a correct sizing and installation of our products— you can save up to 60% of the Rointe running cost, as shown in the table here.

Comparison is made according to the following calculations:

- ROINTE: Normal Electricity Tariff (£0.115) x 7 hours a day x 7 days a week x 30 weeks
- PANEL HEATER: Normal Electricity tariff (£0.115) x 7 hours a day x 7 days a week x 30 weeks
- STORAGE HEATER: Economy 7 Tariff (£0.046) x 7 hours a day x 7 days a week x 30 weeks
- BOILER: Normal Gas Tariff (£0.038) x 7 hours a day x 7 days a week x 30 weeks
Reconversion = Total BTU ÷ 3.42 = Total W + heat loss transmission of 30%.