

Rointe Digital Integral Heating System

Energy smart **heating system**.





Rointe Digital Integral System

A unique system which covers all your heating and domestic hot water requirements

radiator + towel-rails + water heater

The **KYROS** digital integral heating system is...

COMFORT AND WELL-BEING

The Rointe Integral Digital System covers the 3 essential parameters to ensure true well-being in a comfortable environment:









LOW CONSUMPTION TECHNOLOGY

Tests carried out in independent laboratories prove that the low consumption "Fuzzy Logic Energy Control" helps the products to achieve a **a co-efficient of non-consumption of 62**% of the nominal power.



ADVANCED CONTROL VIA MENUS

Rointe introduces this 2016/17 season the new access menus in all its range of KYROS products. These menus have been designed using easily recognizable icons which improves and makes the accessibility to all its advanced functions much more easier.

PRE-PROGRAMS THAT MAKES LIFE EASIER

It is now easier to program your heating and D.H.W. KYROS includes **4 different pre-programs** especially designed for the 4 most common lifestyles in our country. You can program your installation according to your daily heating needs by simply selecting one from the menu.

NEW BASIC REMOTE CONTROL

This new remote control makes the use and programming of the KYROS heating system even easier. It has 4 buttons with the 4 pre-programms mentioned above allowing you to perfectly program the system in the quickest and easiest way by simply pressing a button.











integral digital system

The ability to provide integral heating and domestic hot water to homes, hotels, student residence... makes the Rointe KYROS Digital Integral System the only viable alternative to the old combustion boiler systems.





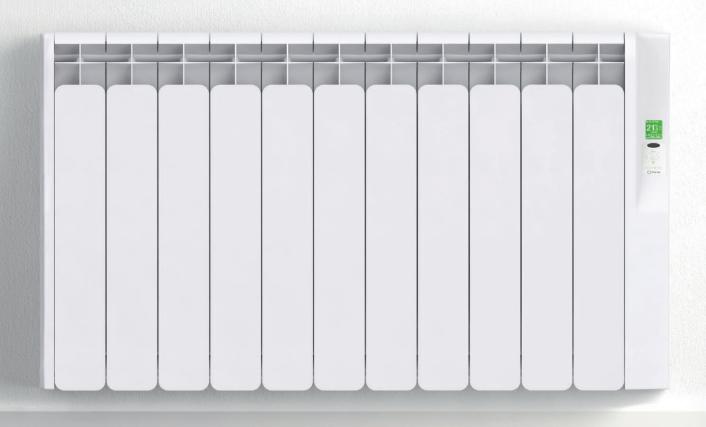








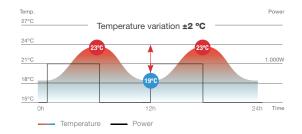






Chronological evolution · Rointe's energy optimizing technologies

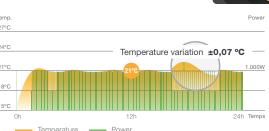
1985: On/Off Technology



This technology uses mechanical relays to control the temperature which make annoying noises when they are working. The resistor switches on during a long period of time to reach the desired temperature which produces temperature variations which can be as much as ±2 °C reducing the user's comfort.

Consumption: 50% effective power

2010: Optimizer Energy Plus



Technology tested in independent laboratories which works by generating thousands of tiny stops in the energy consumption of the resistor. This maintains a stable temperature with a temperature variation of only ±0.25°C.

This technology helps us obtain a ratio of consumption of 40% of the nominal power.

Consumption: 40% effective power





Fuzzy Logic Energy Control

Our latest advance n becoming

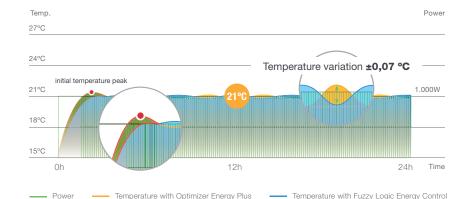
energy smart

Fuzzy Logic Energy Control is the new low power technology developed by the Rointe R & D department for the Rointe KYROS range of products. This technology improves the management of the energy needed to keep within ± 0.25°C of the established temperature, analyzing fluctuations and transmitting electrical micro pulses to the element, allowing 100% heat transfer to the environment through the thermal fluid and high purity aluminium.



2015: Fuzzy Logic Energy Control





Upon initial start-up this technology predicts the amount of energy required at every moment until it reaches the desired temperature (21°C in this case). Fuzzy Logic Energy Control proportionally reduces the energy demand required to reach the required temperature smoothing the initial curve and favouring the subsequent stabilization of the curve.

Consumption: 38% effective power

^{*}Value obtained by independent technology centres testing in a climatic chamber comparing 2 Rointe radiators, one with Optimizer Energy Plus technology and one with Fuzzy Logic Energy Control under the same parameters as defined in the report of the test.



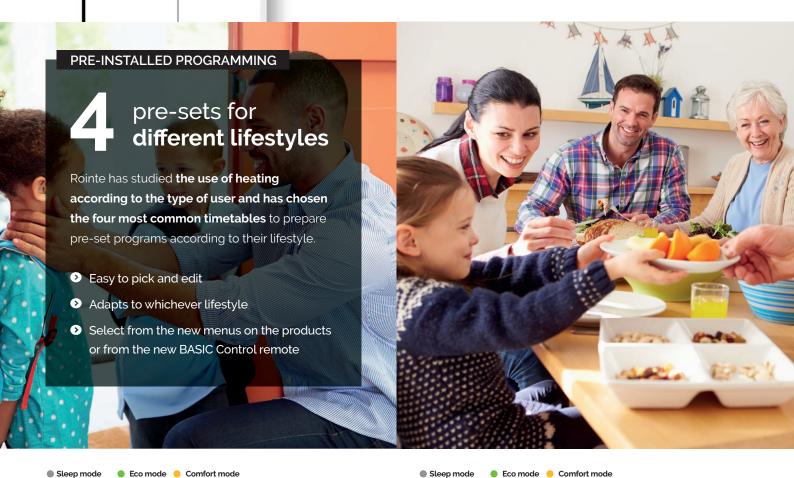
NEW!

Preprograms

The easiest way to program your products

The new generation KYROS products include preinstalled programs which allows the user choose the program which best suits their needs, based on their lifestyle, quickly and at the touch of a button.

In this way, Rointe helps the user choose the correct and most efficient programming so they don't have to go through the, sometimes tedious, process of programming the products.









NEW!

BASIC Control

The new easy-programming remote



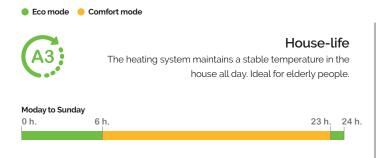
Rointe launches Basic Control onto the market. It is a BASIC remote control with **4 buttons**, **one for each program** specially designed to control the heating more easily.

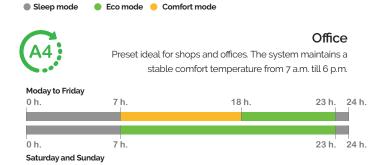
This new Basic remote control has been launched especially to make it easier for anyone to program our system. It is suitable for whichever user who wants to program their system easily and without complications by

using the pre-set programs without having to spend time programming the product.

Although these are pre-set programs, they can be customized and modified to adapt to your lifestyle.







Energy smart radiators









Optimized design for maximum heat dissipation

SMD Electronics with ULP8 mcu, lithium battery and triac

Optimum balance with 110 W/element

S Four different pre-installed programs

High contrast 1.77" TFT screen for optimal viewing from any angle

User Mode: possibility of assigning working temperatures range

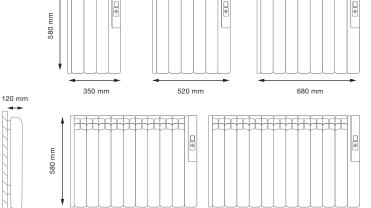
Wireless communication via infrared

Total control from integrated control panel

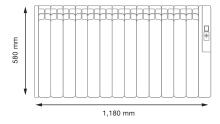
Product functionality accessible through visual menus

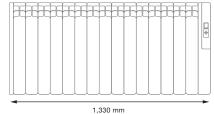
"Open window" energy smart function

20 year warranty on aluminium and 3 on electronics



840 mm





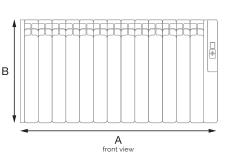
1,010 mm













Available accessories for KYROS radiator on page 14

MODELS	KRI0330RAD2	KRI0550RAD2	KRI0770RAD2	KRI0990RAD2	KRI1210RAD2	KRI1430RAD2	KRI1600RAD2
N° of elements	3	5	7	9	11	13	15
DIMENSIONS							
A (mm) - Width	350	520	680	840	1,010	1,180	1,330
B (mm) - Height	580	580	580	580	580	580	580
C (mm) - Depth	98	98	98	98	98	98	98
D (mm) - Installed depth	120	120	120	120	120	120	120
MECHANICAL CHARACTERISTICS							
Armoured steel heating element	•	•	•	•	•	•	•
High purity aluminium	•	•	•	•	•	•	•
Thermal oil	•	•	•	•	•	•	•
PC/ABS panel with keypad	•	•	•	•	•	•	•
Both sides cover PC/ABS	•	•	•	•	•	•	•
Weight (Kg)	7.7	12.2	16.4	20.4	24.1	25.9	32.1
Weight with packaging (Kg)	8.8	13.3	17.5	21.5	25.2	27.0	33.2
Finish			-	White RAL 9010			
ELECTRICAL CHARACTERISTICS							
Nominal power (W)	330	550	770	990	1,210	1,430	1,600
Effective power (W)*	125	209	293	376	460	543	608
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
FUNCTIONALITY							
TFT screen (1.77")	•	•	•	•	•	•	•
Manual / Automatic function	•	•	•	•	•	•	•
Eco / Comfort mode / Antifrost	•	•	•	•	•	•	•
Pre-installed programming	•	•	•	•	•	•	•
Access Menus	•	•	•	•	•	•	•
New User mode	•	•	•	•	•	•	•
Open windows function	•	•	•	•	•	•	•
Screen brightness control	•	•	•	•	•	•	•
Nominal and effective power	•	•	•	•	•	•	•
Programmable 24/7 using keyboard, AIR Control or BASIC Control	•	•	•	•	•	•	•
PERFORMANCE AND SECURITY							
Fuzzy Logic Energy Control	•	•	•	•	•	•	•
Rointe ULP8 Microcontroller	•	•	•	•	•	•	•
Wireless communications				Two-way infrared			
Temperature stability (°C)	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25	±0.25
Air velocity (m/s)	< 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 the steady period (°C)**	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
Protection grade	IP21	IP21	IP21	IP21	IP21	IP21	IP21
INSTALLATION							
Template & Installation kit	•	•	•	•	•	•	•
CERTIFICATIONS							
2004/108/CE Electromagnetic Compatibility	•	•	•	•	•	•	•
2006/95/CE Electronic Security	•	•	•	•	•	•	•
·							0.4000.4504.005
EAN CODE	8436045913296	8436045913302	8436045913319	8436045913326	8436045913333	8436045913340	8436045913357

In tests carried out by independent laboratories under the same test conditions comparing a radiator with Fuzzy Logic Energy Control and another with Optimizer Energy Plus (the first Rointe energy control technology) there was a difference of 6.3% in the energy consumed. This saving means that the radiators with Fuzzy Logic Energy Control use an average of only 38% of their nominal power. This is what we define as the equivalent ratio of consumption. We obtain the effective power by multiplying the nominal power by the equivalent ratio of consumption. Average surface temperature obtained with the radiator temperature set to 21°C.

KYROS Conservatory

Energy smart radiators









Optimized design for maximum heat dissipation

SMD Electronics with ULP8 mcu, lithium battery and triac

Optimum balance with 100 W/element

Four different pre-installed programs

High contrast 1.77" TFT screen for optimal viewing from any angle

User Mode: possibility of assigning working temperatures range

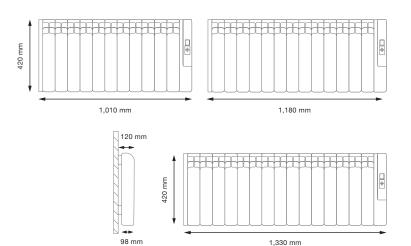
Wireless communication via infrared

Total control from integrated control panel

Product functionality accessible through visual menus

"Open window" energy smart function

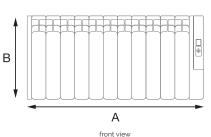
20 year warranty on aluminium and 3 on electronics

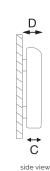












Available accessories for KYROS Conservatory radiator on page 14

MODELS	KRI1100RADC2	KRI1300RADC2	KRI1500RADC2
N° of elements	11	13	15
DIMENSIONS			
A (mm) - Width	1,010	1,180	1,330
B (mm) - Height	420	420	420
C (mm) - Depth	98	98	98
D (mm) - Installed depth	120	120	120
MECHANICAL CHARACTERISTICS			
Armoured steel heating element	•	•	•
High purity aluminium	•	•	•
Thermal oil	•	•	•
PC/ABS panel with keypad	•	•	•
Both sides cover PC/ABS	•	•	•
Weight (Kg)	17.9	21.4	24.8
Weight with packaging (Kg)	19.3	22.5	25.9
Finish		White RAL 9010	
ELECTRICAL CHARACTERISTICS			
Nominal power (W)	1,100	1,300	1,500
Voltage (V)	230 V ~	230 V ~	230 V ~
Current (A)	4.8	5.7	6.5
FUNCTIONALITY			
TFT screen (1.77")	•	•	•
Manual / Automatic function	•	•	•
Eco / Comfort mode / Antifrost	•	•	•
Pre-installed programming	•	•	•
Access Menus	•	•	•
New User mode	•	•	•
Open windows function	•	•	•
Screen brightness control	•	•	•
Nominal and effective power	•	•	•
Programmable 24/7 using keyboard, AIR Control or BASIC Control	•	•	•
PERFORMANCE AND SECURITY	•	•	•
Fuzzy Logic Energy Control	•	•	
	•	•	•
Rointe ULP8 Microcontroller Wireless communications		Two-way infrared	•
Temperature stability (°C)	±0.25	±0.25	±0.25
	±0.25 < 0.1	±0.25 < 0.1	±0.25 < 0.1
Air velocity (m/s)			
Power per element (W/element)	100	100	100
Safety thermostat	40.90	40.90	
Average surface temp. during the steady period (°C)*	40 °C	40 °C	40 °C
Protection grade	IP21	IP21	IP21
INSTALLATION To the Advantage of the Adv			
Template & Installation kit	•	•	•
CERTIFICATIONS	_		
2004/108/CE Electromagnetic Compatibility	•	•	•
2006/95/CE Electronic Security	•	•	•
EAN CODE	8436045914293	8436045914309	8436045914316

 $^{^{\}star}$ Average surface temperature obtained with the radiator temperature set to 21 $^{\circ}\text{C}.$

lacktriangle incorporated lacktriangle not incorporated lacktriangle optional lacktriangle not applicable

Curved towel-rails







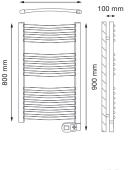
- © Optimal ratio between heating element and thermal fluid
- SMD Electronics with ULP8 microcontroller and lithium battery
- Total control from integrated control panel
- High contrast 1.77" TFT screen for optimal viewing from any angle
- Product functionality accessible through visual menus
- Available in two finishes and four different sizes
- Four different pre-installed programs
- Wireless communication via infrared
- User Mode: possibility of assigning working temperatures range
- 2 hour boost function

INFRARED

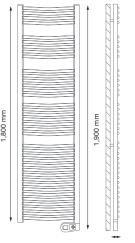
Class II | IP44

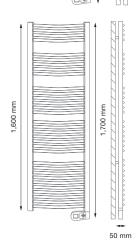
- (III) "Open window" energy smart function
- 20 year warranty on steel body and 3 on electronics





500 mm



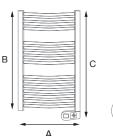


500 mm

1,200 mm

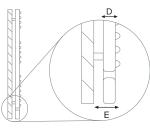
100 mm

,300



front view

side view

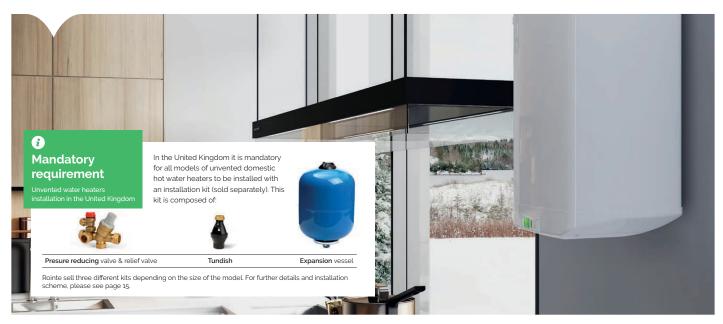


Available accessories for KYROS towel rails on page 14

MODELS	WHITE	KTI030SEB2	KTI050SEB2	KTI075SEB2	KTI100SEB2
WODELS	CHROME	KTI030SEC2	KTI050SEC2	KTI075SEC2	KTI100SEC2
DIMENSIONS					
A (mm) - Width		500	500	500	500
B (mm) - Height without control panel		800	1,200	1,600	1,800
C (mm) - Height with control panel		900	1,300	1,700	1,900
D (mm) - Depth		50	50	50	50
E (mm) - Installed depth		100	100	100	100
MECHANICAL CHARACTERISTICS					
Armoured steel heating element		•	•	•	•
Thermal fluid		•	•	•	•
PC/ABS control panel with keypad		•	•	•	•
Weight (Kg)		11	15	22	28
Finishes	White		RAL	9016	
Tillisties	Chrome		Chr	ome	
Design			Cur	ved	
ELECTRICAL CHARACTERISTICS					
Nominal power (W)	White	300	500	750	1,000
reoniniai power (vv)	Chrome	300	300	500	750
Voltage (V)		230 V ~	230 V ~	230 V ~	230 V ~
Ciurant (A)	White	1.3	2.2	3.3	4.4
Current (A)	Chrome	1.3	1.3	2.2	3.3
Class II		•	•	•	•
FUNCTIONS					
TFT screen (1.77")		•	•	•	•
Manual / Automatic function		•	•	•	•
Eco / Comfort mode / Antifrost		•	•	•	•
Pre-installed programming		•	•	•	•
Access Menus		•	•	•	•
New User mode		•	•	•	•
Open windows function		•	•	•	•
Screen brightness control		•	•	•	•
2 hr boost function		•	•	•	•
Programmable 24/7 using keyboard, AIR Control or	BASIC Control	•	•	•	•
PERFORMANCE AND SECURITY					
Rointe ULP8 Microcontroller		•	•	•	•
Wireless communications			Two-way	y infrared	
Fire proof cabling		•	•	•	•
Safety thermostat		•	•	•	•
Protection grade		IP 44	IP 44	IP 44	IP 44
INSTALLATION					
Template & installation kit		•	•	•	•
CERTIFICATIONS					
2004/108/CE Electromagnetic compatibility		•	•	•	•
2006/95/CE Electronic security		•	•	•	•
	WHITE	8436045913562	8436045913579	8436045913586	8436045913593
EAN CODE	CHROME	8436045913401	8436045913418	8436045913425	8436045913432
	WHITE	£ 272.00	£ 346.00	£ 391.00	£ 431.00
T.P.	CHROME	£ 433.00	£ 558.00	£ 696.00	£ 749.00

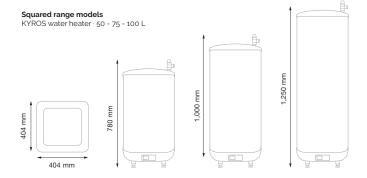
Energy smart water heaters

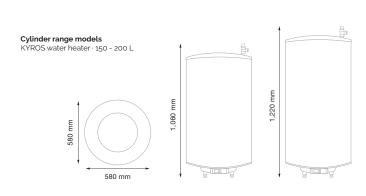




Water heater pipes, connections, T/P valve and installation kit not included in the images.

- Fuzzy Logic Energy Control: energy smart technology
- Enamelled tank: half mm enamel coating to protect against corrosion
- Two heating elements connected in parallel which work independently
- 3 cm thick rigid polyurethane foam that has a low thermal conductivity
- SMD Electronics with ULP8 mcu, lithium battery and triac
- High contrast 1.77" TFT screen for optimal viewing from any angle
- Product functionality accessible through visual menus
- Four different pre-installed programs
- Water heating progress function: shows the availability of hot water
- Periodical anti-legionaires' disease protection
- User Mode: possibility of assigning working temperatures range
- Wireless communication via infrared
- Advanced control panel with touch keyboard
- 5 year guarantee on the water heater body and 2 years on electronics



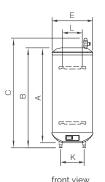


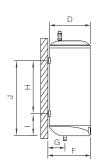












Available accessories for KYROS water heater on page 15

side view

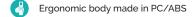
MODELS	KWI050DHW2	KWI075DHW2	KWI100DHW2	KWI150DHW2	KWI200DHW
Volume	50	75	100	150	200
DIMENSIONS					
A (mm) - Height	640	860	1,100	900	1,070
B (mm) - Height with connections	680	900	1,150	960	1,120
C (mm) - Total height with T/P valve	780	1,000	1,250	1,060	1,220
D (mm) - Width	404	404	404	580	580
E (mm) - Depth	404	404	404	580	580
F (mm) - Installed depth	420	420	420	620	620
G (mm) - Depth from the connections to the wall	120	120	120	178	178
H (mm) - Vertical distance between fixing holes	340	573	768	595	685
I (mm) - Vert. dist. lower fixing holes & connections	130	142	192	250	250
J (mm) – Vert. dist. upper fixing holes & connections	470	715	960	845	935
K (mm) – distance between connections	160	160	160	235	235
L (mm) - Horizontal distance between fixing holes	350	350	350	350	350
INSTALLATION					
Position			Vertical		
Water connection (inches)	1/2"	1/2"	1/2"	3/4"	3/4"
Electrolytic fittings	•	•	1/2		
Support Tripod (optional)	×	×	×		
MECHANICAL CHARACTERISTICS	^		^	<u> </u>	
	•	•	•	•	•
Control panel with touch keyboard					
Maximum working pressure (bar)	9	9	9	9	9
Enamelled steel tank	•	•	•	•	•
Magnesium anode protector	•	<u> </u>	•	• -	-
CFC free polyurethane insulation	•	•	•	•	•
Empty weight (kg)	18	25	32	44	56
Finish			White RAL 9016		
ELECTRICAL CHARACTERISTICS					
N° Heating Elements x Power (W)	2 x 1,200	2 x 1,200	2 x 1,200	2 x 1,200	2 x 1,200
Nominal power (W)	2,400	2,400	2,400	2,400	2,400
Voltage (V)	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Current (A)	10.4	10.4	10.4	10.4	10.4
FUNCTIONALITY					
TFT Screen (1.77")	•	•	•	•	•
Manual / Automatic functions	•	•	•	•	•
ECO / Comfort / Antifrost modes	•	•	•	•	•
New User mode	•	•	•	•	•
Anti-legionaires' disease function	•	•	•	•	•
Temperature evolution function	•	•	•	•	•
Screen brightness control	•	•	•	•	•
Nominal and effective power	•	•	•	•	•
Programmable 24/7 using keyboard or Remote Control	•	•	•	•	•
PERFORMANCE AND SECURITY					
Fuzzy Logic Energy Control	•	•	•	•	•
Rointe ULP8 Microcontroller	•	•	•		•
Wireless communication					
			Two-way infrared		
Cold water entry diffuser, safety valve & safety thermostat	•	1.0	1.1	1.0	0.0
Steady state consumption (kWh/24h)	1.1	1.2	1.4	1.9	2.3
Energy certification	В	В	В	В	B
Protection grade	IP X4	IP X4	IP X4	IP X4	IP X4
PROTECTION GRADE					
004/108/EC Support Electromagnetic	•	•	•	•	•
2006/95/EC Electronic Security	•	•	•	•	•
	8436045913654	8436045913661	8436045913678	8436045913685	84360459136
EAN CODE	0430043313034	0400040310001	0100010010010	0 1000 100 10000	

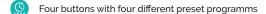
Infrared remote control

BASIC Control









SMD Electronics & Advanced technology

1.77" TFT screen

nfrared communication

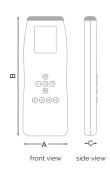
Compact silicone keyboard

Power by 1.5V AAA batteries

Glossy white and soft touch black finishes

2 year guarantee







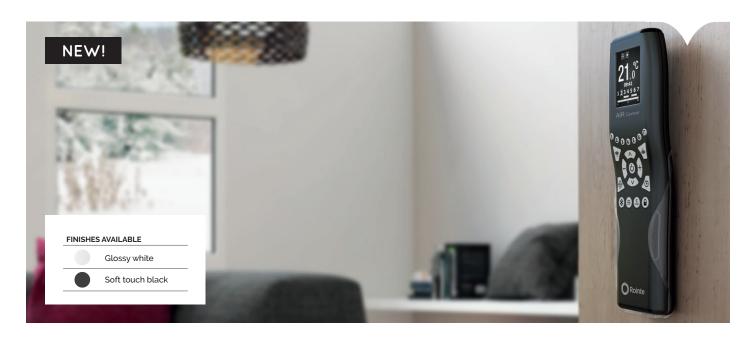
MODEL	BCMI100
DIMENSIONS	
A (mm) - Width	58
B (mm) - Height	155
C (mm) - Depth	16
MECHANICAL CHARACTERISTICS	
Weight (grs)	98
Finish	White RAL 901
Cover material	PC/ABS
Range operating temperature	-20 to 55 °C
ELECTRICAL CHARACTERISTICS	
Power	3Vdc
Battery type	2 x 1.5 AAA
COMUNICATION	
Wireless IR.	•
Transmitting - range (m)	3
Reception - range (m)	×
INSTALLATION	
Wall bracket	×
FUNCTIONALITY	
TFT screen (1.77")	•
24 hours / 7 days programmer	•
Manual / automatic function	•
Remote memory lock - heating and D.H.W	•
Pre-programmed keys	•
Erasing programming memory	•
Screen brightness control - On / Stand-by mode	•
Display nominal and effective power	•
ADVANCED FUNCTIONS	
Display consumption time, software version & battery level	•
Reset to initial default settings function	•
APPLICABLE REGULATIONS	
CE & ROHS	•
EAN CODE	843604591586
T.P.	£ 85.00

Two-way infrared remote control

AIR Contro

glossy white & soft touch black











1.77" TFT screen

Bi-directional infrared comunication

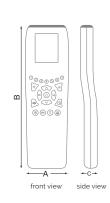
Compact mechanical keyboard

Power by 1.5V AAA batteries

Glossy white and soft touch black finishes

2 years guarantee





Accessories

wall bracket

The Rointe AIR Control remote includes a transparent, stylish and modern wall bracket.



MODEL	ACMI120	ACMIB120
DIMENSIONS		
A (mm) - Width	54	54
B (mm) - Height	177	177
C (mm) - Depth	21	21
MECHANICAL CHARACTERISTICS		
Weight (grs)	115	115
Finishes	White RAL 9010	Black soft touch
Cover material	PC/ABS	PC/ABS
Range operating temperature	-20 to 55 °C	-20 to 55 °C
ELECTRICAL CHARACTERISTICS		
Power	3Vdc	3Vdc
Battery type	2 x 1.5 AAA	2 x 1.5 AAA
COMUNICATION		
Wireless IR.	•	•
Transmitting - range (m)	3	3
Reception - range (m)	1	1
INSTALLATION		
Wall bracket	•	•
Installed depth with support (mm)	25	25
FUNCTIONALITY		
TFT screen (1.77")	•	•
24 hours / 7 days programmer	•	•
Manual / automatic function	•	•
Remote memory lock - heating and D.H.W.	•	•
Erasing programming memory	•	•
Screen brightness control - On / Stand-by mode	•	•
Display nominal and effective power	•	•
ADVANCED FUNCTIONS		
Display consumption time, software version & battery level	•	•
Reset to initial default settings function	•	•
APPLICABLE REGULATIONS		
CE & ROHS	•	•
EAN CODE	8436045914286	8436045914569
T.P.	£ 135.00	£ 150.00

Security accessories





Protective grill for KYROS and KYROS conservatory radiators ____ KYROS Conservatory

	_				-				- ,
MODELS	RKY0550	RKY0770	RKY0990	RKY1210	RKY1430	RKY1600	RKY1100	RKY1300	RKY1500
Compatible with	KRI0550RAD2 KRI0330RAD2	KRI0770RAD2	KRI0990RAD2	KRI1210RAD2	KRI1430RAD2	KRI1600RAD2	KRI1100RADC2	KRI1300RADC2	KRI1500RADC2
DIMENSIONS									
A (mm) - Width	600	760	920	1,090	1,260	1,410	1,090	1,260	1,410
B (mm) - Height	660	660	660	660	660	660	500	500	500
C (mm) - Depth	150	150	150	150	150	150	150	150	150
MECHANICAL CH	ARACTERISTICS	S							
Weight (Kg)	8.1	9	10.6	11.8	13.1	14.4	10.8	12.1	13.4
Finish				1	White RAL 9010)			
EAN CODE	8436045914392	8436045914408	8436045914415	8436045914422	8436045914439	8436045914446	8436045914453	8436045914460	8436045914477
T.P.	£ 89.00	£ 97.00	£ 107.00	£ 119.00	£ 131.00	£ 133.00	£ 110.00	£ 120.00	£ 130.00

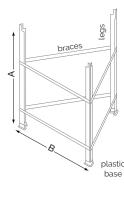




Support tripod for Rointe water heaters

The support tripod kit consists of an easily assembled metal tripod, designed primarily because of the high weight of the 150 and 200 litre models installation is particularly recommended for these models where the wall brackets are not sufficient or does not ensure product stability, as these models have a high weight when they are at 100% capacity. The tripod is designed to support up to 260 kgs ideal for the larger models. The use of this support does not exempt from mandatory fixing of the water heater to the wall as described in the instructions manual.

MODEL	TPKW001
COMPONENTS	
Legs(pcs)	3
Braces (pcs)	6
Plastic base (pcs)	3
CHARACTERISTICS	
Material	Metallic
Finish	White RAL 9016
Maximum supported weight (kg)	260
DIMENSIONS	
A (mm) - Height	625
B (mm) - Width	530
EAN CODE	8436045914323
T.P.	£ 80.00



Towel-rails accessories

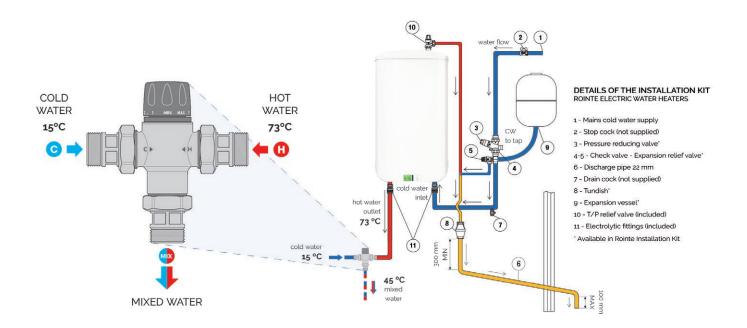
		SHELF	HANGER
MODELS	WHITE	RSRW001	RSHW001
WIODELS	CHROME	RSRC001	RSHC001
DIMENSIONS			
A (mm) - Width		410	35
B (mm) - Depth		150	70
Inner tube diameter (m	ım)	16	×
Outer tube diameter (n	nm)	22	×
CHARACTERISTICS			
Material		Steel	Steel
Finishes	White	RAL 9016	RAL 9016
rillishes	Chrome	Chrome	Chrome
Max. weight supported	d (Kg)	2	1
EAN CODE	WHITE	8436045916983	8436045917010
EAN CODE	CHROME	8436045916990	8436045917027
	WHITE	£ 60.00	£ 25.00
T.P.	CHROME	£ 65.00	£ 30.00





Accessories for Rointe water heaters Energy saving kit



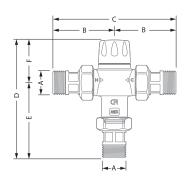


Energy saving kit

Rointe has an energy saving kit which consists of a mixing valve installed at the water heaters' hot water outlet. This valve mixes the hot water from the Rointe heater with cold water from the mains delivering thermally mixed water at your desired temperature to the point of use.

This energy saving kit saves energy by minimizing heat loss through the pipes due to transporting water at a lower temperature minimizing heat loss through the pipework.

Another advantage of this kit is the increased volume of hot water available in respect to the installed heat capacity. This amount of water is defined as equivalent volume. This represents the available volume of water at 45°C (in litres), assuming the cold water inlet temperature is 15°C and the hot water from the heater is 73°C.



MODELS	Volume (L)	Volume equivalent to 45°C (L)
KWI050DHW2	50	86
KWI075DHW2	75	133
KWI100DHW2	100	177
KWI150DHW2	150	266
KWI200DHW2	200	354

Installation kit

There are three kits available, depending of the size of the model. Its installation is mandatory for all models of unvented domestic hot water heaters in the UK.

•			
MODELS	KITKW01	KITKW02	KITKW03
Compatible with	50 / 100 L	100 / 150 L	200 L
CHARACTERISTICS			
Expansion vessel	8 litres (0.1 Mpa)	12 litres (0.1 Mpa)	18 litres (0.1 Mpa)
Tundish	15 - 25 mm	15 - 25 mm	15 - 25 mm
Pressure reducing valve	0.35 Mpa	0.35 Mpa	0.35 Mpa
Relief valve	0.60 Mpa	0.60 Mpa	0.60 Mpa
EAN CODE	8436045914330	8436045914347	8436045914354
T.P.	£ 218.00	£ 219.00	£ 227.00

MODELS	KWVAL1814	KWVAL1815			
CHARACTERISTICS					
Adjustment range	30÷	50°C			
Accuracy	± 2°C				
Maximum working pressure (static)	10	bar			
Maximum working pressure (dynamic)	5	bar			
Temp maximum input	85	5°C			
Input Temp advised to avoid limescale	≤ 6	5°C			
Relationship max. between inlet pressures (C / F or F / C)	2	:1			
Min. Temp. dif. betw. hot water inlet & mixed water outlet (to avoid burns)	15	5°C			
Min. flow rate to ensure stable temperature	4 l/min	6 l/min			
Connections	1/2" Male	3/4" Male			
DIMENSIONS					
A (inch)	1/2"	3/4"			
B (mm)	62.5	67			
C (mm)	125	134			
D (mm)	126.5	127			
E (mm)	81.5 82				
F (mm)	45 45				
MATERIALS					
Body: chrome alloy anti rust	EN 12165	CW602N			
Shutter	P	SU			
Springs	stainle	ss steel			
INSTALLATION					
Hot and cold water valves with entry filters	•	•			
SECURITY					
Scalad & regulation locking nut protection	•	•			
Temperature adjustment with hexagon screw top	•	•			
CERTIFICATIONS					
Standard NF 079	•	•			
EAN CODE	8436045914361	8436045914378			
T.P.	£ 150.00	£ 180.00			

Rointe Thermal Coefficient (R.T.C.)

and sizing

The **Rointe Thermal Coefficient** (RTC) is a coefficient developed by Rointe that serves to relate the number of elements necessary for a room with its floor area and the geographical area where it is located. With the correct sizing and using the right RTC, we will obtain a consistent consumption and effective power that is below the nominal power of the installation.

CLIMATE ZONE RATE

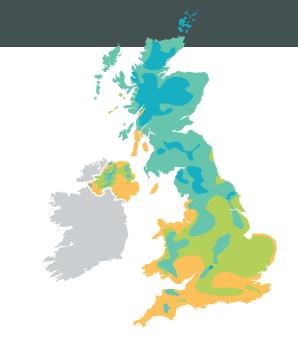
OUTPUT COEFFICIENT PER ELEMENT

To calculate the necessary radiators, we have to distinguish between m^2 and m^3 . For ceilings with a height less than 3 metres, we use the RTC (m^2) and for higher ceilings RTC (m^3).

R.T.C. m² ELEMENTS NEEDED

R.T.C. m³ ELEMENTS NEEDED

		Ceiling height less than 3 m	Ceiling height more than 3 m	
Climate	Climatic Coefficient		R.T.C. (m ²)	R.T.C. (m ³)
Mild	436 BTU/h m ²	139 BTU/h m ³	0.75 elm./m ²	0.23 elm./m ³
Cold	476 BTU/h m ²	159 BTU/h m ³	0.80 elm./m ²	0.26 elm./m ³
Very cold	516 BTU/h m ²	179 BTU/h m ³	0.85 elm./m ²	0.30 elm./m ³
Extra Cold	556 BTU/h m	198 BTU/h m ³	0.90 elm./m ²	0.33 elm./m ³



For example, if we want to obtain the R.T.C. of a cold zone ...

476 BTU/h m² = 0'80 elements/m²

Sizing KYROS radiators: reference tables

In the following tables you can find examples of calculations already made showing number of elements, room area and climate zone.

M² - Ceiling height lower than 3 meters

Climate	MILD	COLD	VERY COLD	EXTRA COLD	
BTU/h m²	436 BTU/h m²	476 BTU/h m ²	516 BTU/h m ²	556 BTU/h m ²	
R.T.C.	0.75 elm. / m ²	0.80 elm. / m ² 0.85 elm. /		0.90 elm. / m ²	
3 ele.	Up to 4 m ²	Up to 4 m ²	Up to 4 m ²	Up to 3 m²	
5 ele.	Up to 7 m ²	Up to 6 m ²	Up to 6 m ²	Up to 6 m ²	
7 ele.	Up to 10 m ²	Up to 9 m ²	Up to 8 m ²	Up to 8 m²	
9 ele.	Up to 12 m ²	Up to 11 m ²	Up to 11 m ²	Up to 10 m ²	
11 ele.	Up to 15 m ²	Up to 14 m ²	Up to 13 m ²	Up to 12 m ²	
13 ele.	Up to 18 m ²	Up to 16 m ²	Up to 15 m ²	Up to 15 m ²	
15 ele.	Up to 20 m ²	Up to 19 m ²	Up to 18 m ²	Up to 17 m ²	

Sizing KYROS Conservatory: reference tables

11 ele.	Up to 9 m ²	Up to 8 m ²	Up to 7 m ²	Up to 7 m ²
13 ele.	Up to 10 m ²	Up to 9 m ²	Up to 9 m ²	Up to 8 m ²
15 ele.	Up to 12 m ²	Up to 11 m ²	Up to 10 m ²	Up to 9 m ²

M³ - Ceiling height higher than 3 meters

Climate	MILD	COLD	VERY COLD	EXTRA COLD	
BTU/h m³	139 BTU/h m³	159 BTU/h m³	179 BTU/h m ³	198 BTU/h m³	
R.T.C.	0.23 elm. / m ³	0.26 elm. / m ³	0.30 elm. / m ³	0.33 elm. / m ³	
3 ele.	Up to 15 m³	Up to 13 m³	Up to 11 m³	Up to 10 m³	
5 ele.	Up to 23 m³	Up to 21 m³	Up to 18 m³	Up to 16 m ³	
7 ele.	Up to 32 m³	Up to 28 m³	Up to 25 m³	Up to 22 m ³	
9 ele.	Up to 41 m³	Up to 36 m³	Up to 31 m³	Up to 28 m³	
11 ele.	Up to 50 m³	Up to 44 m³	Up to 38 m³	Up to 34 m³	
13 ele.	Up to 58 m³	Up to 51 m³	Up to 45 m³	Up to 40 m ³	
15 ele.	Up to 67 m ³	Up to 59 m³	Up to 51 m³	Up to 46 m³	

11 ele.	Up to 27 m ³	Up to 24 m³	Up to 21 m ³	Up to 19 m ³
13 ele.	Up to 32 m³	Up to 28 m³	Up to 25 m ³	Up to 22 m ³
15 ele.	Up to 37 m ³	Up to 32 m ³	Up to 29 m ³	Up to 26 m ³

Water heater recommended according to use $\&\ number\ of\ people$

SIZE	USERS	USE
50 L	1-2	Laundry / Sink / Shower
75 L	2-4	Laundry / Sink / Shower
100 L	2-5	Laundry / Sink / Small Bath
150 / 200 L	3-6	Laundry / Sink / Shower / Small Bath

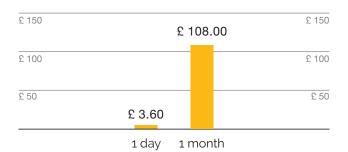
Towel rails recommended by area

		<i>,</i>	
AREA	POWER	SERIES	MODEL
Up to 3 m ²	300 W		KTI030SEB2
Up to 5 m ²	450 W	KYROS	KTI045SEB2
Up to 7 m ²	600 W	White	KTI060SEB2
Up to 10 m ²	750 W		KTI075SEB2
Up to 2 m ²	300 W		KTI030SEC2
Up to 4 m ²	300 W	KYROS	KTI045SEC2
Up to 6 m ²	450 W	Chrome	KTI060SEC2
Up to 8 m ²	600 W	•	KTI075SEC2

Calculation example

for a household of 80 m² in cold climate zone

Estimated calculation for an 80m² dwelling located within a cold area of the UK providing 12 hours/day-night maintaining the radiators' set temperature at 21°C.





In the case of stairs and corridors there is a high risk of heat loss, so it is recommended to increase the result of the calculations by 15%.

For kitchens, being areas with furniture and a much higher general temperature, we can reduce the output by as much as 10%.

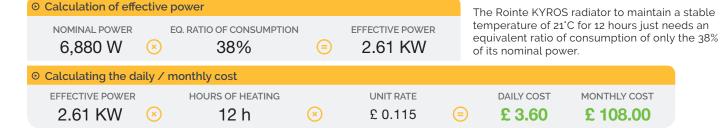
Avoid placing obstacles near radiators and distribute them in a balanced way. For example, if a room of 21 m² need 18 elements, ideally fit 2 radiators 9 elements each.



Sample calculation in m² (ceiling height less than 3 metres), well insulated and double glazed.

ROOM	M^2	RTC	N° OF ELEMENTS	PRODUCTS	NOM. POWER	CONSUMPTION COEFFICIENT RATIO	EFF. POWER
Living room	19	0.80	15	1 X KRI1600RAD2	1,600 W	38%	608.00 W
Kitchen	14	0.80	11	1 X KRI1210RAD2	1,210 W	38%	459.80 W
Hall	9	0.80	7	1 X KRI0770RAD2	770 W	38%	292.60 W
Bathroom	6	0.80	5	1 X KRI0550RAD2	550 W	38%	209.00 W
Bedroom 1	14	0.80	11	1 X KRI1210RAD2	1,210 W	38%	459.80 W
Bedroom 2	9	0.80	7	1 X KRI0770RAD2	770 W	38%	292.60 W
Bedroom 3	9	0.80	7	1 X KRI0770RAD2	770 W	38%	292.60 W
	80 m ²		63	7	6,880 W	38%	2,614.40 W

KYROS radiator : calculation of effective power



Remember that these are estimates and should be considered as an average. It is mandatory that a personalised study is carried out by a Rointe qualified installer or the Rointe technical team.

Terms and conditions of sale

1. DEFINITIONS

"Company" means ROINTE UK.

"Customer" means any person or organisation to whom the Company shall provide or contract to provide Goods.

"Goods" means goods sold by the Company to the Customer and including but not limited to those goods for which payment in full has not been received by the Company. "Contract" means the Contract between the Company and the Customer for the sale of Goods.

2. GENERAL APPLICATION

- 2.1. These conditions apply to all Goods supplied by the Company to the Customer and no alteration or qualification of these conditions shall be effective unless agreed by the Company in writing. No order shall be binding on the Company until accepted by the Company in writing.
- 2.2. The Customer who orders Goods from the Company shall be deemed to agree that any written or printed conditions attached to or referred to in such orders are only binding so far as they are not at variance with the Company's Terms and Conditions.
- 2.3. The Customer acknowledges these terms and conditions of sale having checked them in advanced and accepting them in full. (CTK16V1-UK)

3. PRICE AND PAYMENT

- 3.1. All Goods must be paid for at the time of ordering unless the Company has agreed to supply on credit terms in which case the following conditions apply:
 - a. Payment shall be due as per the invoice
 - b. Payment shall be made in full without deduction or set off.
 - c. The Customer shall indemnify the Company in respect of all costs incurred by the Company in recovery of the price from the Customer.
 - d. Payment may not be delayed under any circumstances.
- 3.2. Prices are subject to revision without notice and the prices payable by the Customer will be those in effect at the date of order.
- 3.3. Prices quoted in current price lists of the Company supersede all prices for similar goods in previous price lists.
- 3.4. Prices quoted are exclusive of V.A.T. which shall be charged at the rate applicable at the time.

4. CANCELLATION

- 4.1. No cancellation of any order from the Customer can be accepted without prior written agreement from the Company. If the Company provides written agreement to the cancellation any and all costs and expenses incurred by the Company will be paid by the Customer.
- 4.2. No cancellation of orders will be accepted under the following circumstances:
 - a. If the order has been dispatched.
 - b. If the order contains special units whose manufacturing has begun.

5. CUSTOMER RETURNS IN GOOD CONDITION

- 5.1. No customer returns can be accepted without prior written agreement from Rointe...
- 5.2. A handling charge of at least 15% of the original cost price will be payable to cover receipt, inspection and fault registration costs.
- 5.3. All carriage charges relating to returns made to Rointe are at the customers cost.
- 5.4. Any non-faulty product returned by the customer will only be accepted under the following conditions:
 - a. Goods returned for credit in less than 30 days from date of purchase will incur a 15% handling charge.
 - b. Goods returned for credit between 30 days and 3 months from date of purchase will incur a 20% handling charge. c. Goods returned for credit between 3 months and 12 months from date of purchase will incur a 25% handling charge
 - d. Goods returned for credit that were purchased over 12 months will incur a 30% handling charge.

6. DELIVERY

- 6.1. All times or dates given for the delivery of the Goods are approximate only and the Company shall not be liable for any delay in delivery of the goods howsoever caused.
- 6.2. The Company shall be entitled to delay or cancel delivery or to reduce the amount delivered if it is prevented from or delayed in manufacturing, obtaining or delivering the Goods through any circumstances beyond its control including but not limited to strikes, lockouts, accidents, war, fire, reduction in or unavailability of power at manufacturing plant, breakdown of plant or machinery or shortage of or unavailability of raw materials from normal sources of supply.
- 6.3. Minimum carriage paid: £1,000 net (excluding VAT). For less than this total amount there is a £30 carriage fee.
- 64. Next day orders will be £30. Next day delivery before 12.00 a.m. is £40. Next day delivery before 10.00 a.m. is £50. Saturday a.m. is £60. Spares, remote controls and grills are £5.
- 6.5. The Company reserves the right not to supply if the Customer has outstanding invoices and the payment is overdue. The customer in this case will be on stop.

7. DELIVERY CONDITIONS

- 7.1. The products are supplied packaged with brackets, screws and fixings the cost of which is included in the sale price. The goods are deemed to be delivered when they are placed on the lorry in the warehouses, except for offers with special conditions, and the Company's liability as a haulier ends at that point.
- 7.2. Confirmed orders may be supplied in partial deliveries. The Customer should check the goods and write "received pending checking" next to the signature in the haulier's delivery note.

8. GUARANTEE

8.1. All the materials are covered by the respective guarantees for any manufacturing faulty from the date of sale and acceptance of the fault by our Technical department will be required before the faulty product is returned to us. Please refer to our brochure to check all details.

9. DEBIT NOTES

- 9.1. The Company reserves the right not to accept debit notes received by the Customer.
- 9.2. No debit note from the Customer can be accepted without prior written agreement of the Company and the Company provides written agreement to process the debit note accordingly.

10. RISK AND TITLE

- 10.1. Risk in respect of any Goods connected with the Contract shall pass to the Customer at the time of delivery by the Company.
- 10.2. Title to the Goods shall not pass to the Customer until the Customer has paid the total price to the Company,
- 10.3. The Customer is not the agent of the Company for the purposes of any sale of the Goods and for the avoidance of doubt it is hereby declared that on no account has the Customer or its receiver or liquidator or trustee in bankruptcy any authority to sell the Goods when in receivership liquidation or bankruptcy or when the same is about to occur.

11. EXCLUSION OF LIABILITY

11.1. Except in respect of death or personal injury caused by the negligence of the Company or its agents, officials or employees (being negligence defined by Section 1 of the Unfair Contract Terms Act 1977) the Company shall not be liable to the Customer by reason of any representation implied warranty condition or other term or any duty at common law or under any contract or for any economic loss, loss of production, loss of bargain, loss of profit or any other costs expenses or other claims for consequential compensation whatsoever which arise out of or in connection with the Contract except as expressly provided in these conditions and PROVIDED ALWAYS that the maximum liability of the Company in relation to any loss or damage shall in no case exceed the price in the Contract.

12. REPRESENTATIONS

12.1. The Company's employees or agents are not authorized to make any representations concerning the Goods unless confirmed by the Company in writing.

13. SHORTAGES

- 13.1. Shortages should be identified at the time of delivery and noted on the face of proof of delivery document which should be signed by the Customer indicating acceptance of the delivery as specified or amended.
- 13.2. Failure to note alleged shortages at the time of delivery shall prevent the Customer from claiming under the Contract.
- 13.3. The customer cannot claim compensation under any circumstances.

14. BRITISH STANDARD

14.1. The Goods shall be supplied by the Company in accordance with the relevant British standard applying to such Goods.

15. WARRANTY

- 15.1. Where any Goods (or any part thereof) are shown to the reasonable satisfaction of the Company to be defective by reason of faulty material or workmanship within a period of twelve months from the date of installation in respect of domestic heaters or water heaters or twelve months from the date of delivery in the case of Goods supplied for use in homes or professional areas the Company shall at its sole option:
 - a. Deliver replacement Goods or any part or parts thereof free of charge.
 - b. The liability of the Company under these terms and conditions shall be accepted by the Customer in substitution for and to the exclusion of any other claims for direct loss which the Customer has or may have.
 - c. The Customer should revise the instructions manual and bear in mind the Company recommendations.

16. HEALTH AND SAFETY

- 16.1. All Goods are supplied by the Company to the Customer with appropriate fitting and other instructions relating to the fitting and installation of Goods. Certain goods are supplied accompanied by written recommendation from the Company that they should only be fitted or installed by expert and skilled workers and it shall be the responsibility of the Customer to ensure that where the Goods are sold on to a third party they are accompanied by all appropriate safety and fitting instructions.
- 16.2. Where the Customer fits and installs the Goods itself it shall ensure that the contents of all the safety and fitting instructions are specifically drawn to the attention of its employees.
- 16.3. The Customer hereby undertakes to take such measures as are communicated in writing to the Customer by the Company and to take such other steps which are sufficient to ensure, so far as is reasonably practicable, that the Goods will at all times be safe and without risk to health when properly used. The Goods shall not be regarded as properly used when they are used without regard to any relevant information or advice relating to their use which is communicated to the Customer by the Company.
- 16.4. The Customer shall indemnify and keep indemnified the Company in respect of all claims, actions, proceedings, costs, expenses, loss or damage (whether direct, indirect, economic or consequential) including without prejudice to the generality hereof any monetary penalty or fine in respect of or in connection with the Goods arising out of any one or more of the following:
 - a. under the Health and Safety at work Act 1974 as amended or any regulations orders or directions made thereunder.
 - b. Resulting from any breach of the Customer's obligations under this terms and conditions.
 - c. Under the Consumer Protection Act 1987 or any statutory replacement therefor in respect of Goods which were not defective at the time when they were supplied to the Customer.

17. SEVERANCE

17.1. In the event that for any reason any provision or provisions in these conditions or any part thereof is or is held to be void or unenforceable or otherwise invalid any Contract made which incorporates these conditions shall continue to be fully binding and the remainder of these conditions shall continue to be effective.

18. WAIVER

18.1. The rights and remedies of the Company under the Contract shall not be diminished waived or extinguished by the granting of any indulgence, forbearance or extension of time by the Company nor by any failure of or delay by the Company in asserting or exercising any such right or remedy.

19. JURISDICTION

- 19.1. The conditions in each and every Contract made pursuant hereto here shall be governed by and construed in all respects in accordance with the Laws of England and the Company and the Customer irrevocably submits to the exclusive jurisdiction of the English Courts.
- 19.2. These general terms of sale will apply to all trade relations between the Company and the Customers, and purchases accept these general conditions when making an order.

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