

Installation and user manual



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A. Presentation

First of all, we would like to thank you for having bought this product, we are confident that this will provide you with many years of use with full satisfaction. Before installing the heater, please read the following instructions carefully.

The company is not responsible for any damage or problems resulting from incorrect installation. Once your heater is up and running, please store this manual in a safe place for future reference.

Recycling



When you no longer need this heater, please follow the European Directive 2012/19/UE as regards its disposal. This heater cannot be put out as normal rubbish. It must either be taken to a special tip or to a distributor offering to dispose for you. Recycling electrical appliances separately allows component parts to be re-used and limits the damage to the environment that would otherwise occur. Recycling saves power and resources. To encourage this, the heater bears a symbol showing it cannot be put into a normal bin. For further information, get in touch with your local council, or the supplier who you purchased this product.

Very Important!

It is possible that the radiator may make slight sounds during the first days of operation. This is quite normal in radiators and can occur when the aluminium elements expand and contract. Please note there is no danger to the user.

Children under 3 years old should be kept out of reach of the appliance unless they are constantly supervised. Children under 8 must only turn on / off the device provided in normal position and only if they have received instruction concerning use of the equipment in a safe way and understand the risks.

Caution: some parts of this product may become very hot and cause burns. Please take special care when children and vulnerable people are present. The device must not be covered and air circulation must be allowed at all times.



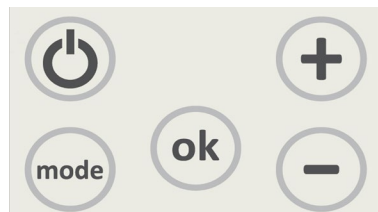
B. How to use electric radiator

Setting the transmitter in programming mode, will allow you to assign temperatures at different times of the day, for each day.

Understanding the full programming potential of your radiator will help to reduce energy consumption.

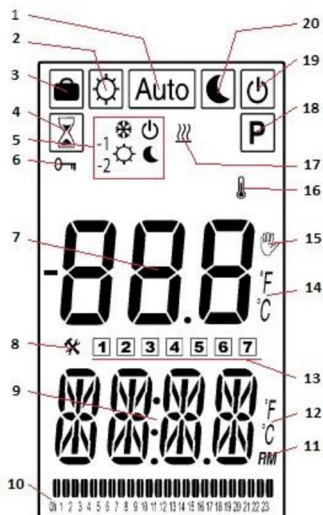
Keyboard:

- Left/right navigation and return key (mode)
- ON/OFF key (⏻)
- Minus key (-)
- Plus key (+)
- Validation/Accept key (OK)



Display:

- 1 Auto Mode (framed if active)
- 2 Comfort Mode (framed if active)
- 3 Antifreeze/holidays Mode (framed if active)
- 4 Timer/boost Mode (framed if active)
- 5 Pilot wire order
- 6 Key lock indicator
- 7 Temperature
- 8 User parameter menu
- 9 Hour / text / indications
- 10 Program of the current day (the current time bar blinks)
- 11 AM/PM
- 12/14 Temperature unit
- 13 Days of the week (current day is framed)
- 15 Temporary override function activated
- 16 Measure indicator (active if the current measure is showed)
- 17 Heating indicator
- 18 Program Mode (framed if active)
- 19 Off indicator
- 20 Economic Mode (framed if active)



C. Installation

Before installing

Installation and startup of this appliance is extremely simple, however, you should read all the instructions and recommendations detailed in this instruction manual and recommendations carefully, as the manufacturer will not be held liable for damage caused by non-compliance.

Once the appliance is unpacked, the packaging must be removed responsibly since all the elements have been designed for recycling. If on unpacking, you discover any damage whatsoever, please get in touch with your supplier prior to installation. For assembly and installation, please follow the instructions as set out in this manual. For safety reasons, this heater should never be installed in close proximity to a bath or shower i.e. that you could touch the controls whilst in the bath or shower. The radiator should not be placed below a socket. If the cable has been damaged, it can only be replaced by the manufacturer, through its aftersales team, or by a qualified person. This ensures the user will not be in any danger. At the end of the manual, you will find a Guarantee, please check that this has been completed correctly, dated and stamped.

Connecting electricity supply

- If the radiator that you have purchased does not have a plug on the supply cord, installation should be carried out by a qualified electrician.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules of the country where it is to be installed.
- Before connecting, check the supply is switched off.
- Before connecting the appliance to the fixed wiring check that the voltage of supply is inside the rated values indicated in the marking plate 220 - 240V.
- The appliance must be connected to the fused system of fixed wiring.
- Any problem arising from not following the instructions above will invalidate your guarantee.
- When wiring up, please follow the colours of wires.

Power supply

Connect the electric radiator with the switch installed for this function. When the thermostat is switched on for the first time, you will be asked to make some necessary selections (Clock, etc.). The batteries inside the thermostat will need to be charged for a minimum of 24 hours in order to have maximum time saving capacity.

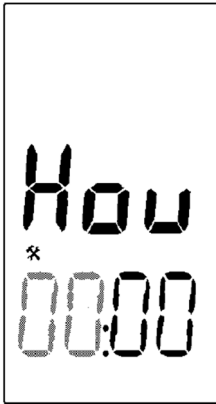
D. First installation

Time and Date adjustment

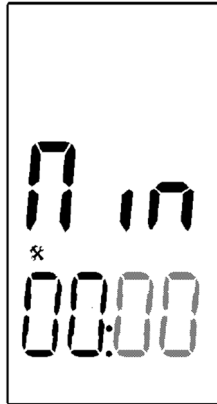
Presented below, progress of the adjustments:
 (OK) button to validate and go to the next step.
 (mode) button to return to the previous step.

Time and day

- Hours setting:



- Minutes setting:



- Day of week setting:

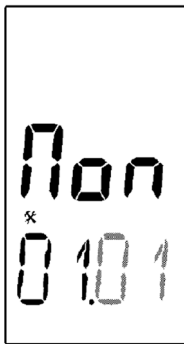


Date

- Day setting:



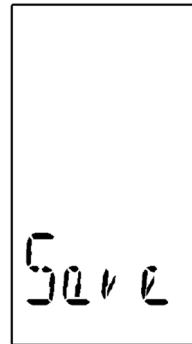
- Month setting:



- Year setting:



- Save the settings:



You can access the time and date adjustment in the user parameter menu (Point H, user menu, P.9).

Starting

The first working mode will be Comfort with a set point of 21°C.

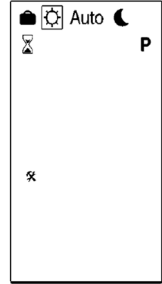
E. Working mode

Your thermostat has several working modes to allow you to adjust your unit according to your life habits.

Press navigation keys (**mode**) to display the working mode line:

Move the frame cursor with navigation keys to select a working mode.

Press (**OK**), (**+**) or (**-**) to enter in the operating mode you have chosen.



Comfort mode ☀



In this mode, the comfort setting will be followed all the time. You can adjust the temperature setting by pressing (**+**) or (**-**) and validating with (**OK**).

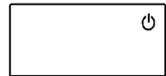
You can switch between displaying the temperature measured and the set point by pressing (**OK**). The measure is indicated with the thermometer indicator. The temperature selected in this mode will be the comfort temperature for all preset and user programs in automatic mode.

Reduced economic or night mode ☾

In this mode, the reduced setting will be followed all the time. You can adjust the temperature setting by pressing (**+**) or (**-**) and validating with (**OK**). As the comfort mode you can also switch between displaying the temperature measured and the set point by pressing (**OK**). The temperature selected in this mode will be the reduced temperature that is used for all preset and user programs in the Automatic mode.

Off mode ⏻

By pressing the (**⏻**) button, you switch off your product. In this mode, the backlight is off, the off indicator is on and no frost protection is provided but the microcontroller will continue to work.

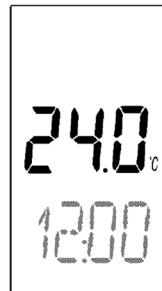


Timer/boost mode ⌚



The timer mode allows you to temporarily set the thermostat at the set temperature. The display will show the image on the left.

The next step is to adjust the time by pressing the (**OK**), (**-**) or (**+**) buttons from 15 minutes to 44 days. After 24 hours, adjustment will change to numbers of day (image on the right).



Press **(OK)** to save the time and go to the next step, the setting of the temperature. Use **(-)** or **(+)** buttons to adjust the temperature.

Press **(OK)** to save the temperature and start the function. The remaining time is displayed and the timer indicator is blinking until the end of the period. If you want to stop or modify the holiday function before the end of the duration, adjust the day period to zero (No).

At the end of the period, you return to the precedent mode.




Automatic mode **Auto**

In this mode, the clock will follow the chosen program (integrated or defined by the user) according to the time. The display will show the current temperature, the current mode (eco or comfort) and the current time. A bar graph will indicate the composition of the program (bar on indicate a comfort period and bar off indicate a eco one) and the current time is blinking.



Press **(OK)** to switch with the display of the current set point and the running program. You can easily override temporarily the program by pressing the **(-)** or **(+)** keys ----->

Confirm your choice by pressing **(OK)**.

When a manual override is made, the symbol will be displayed .



The override will end at the next time period.


To permanently override the program, select Comfort mode  or reduced mode .

Holiday/Antifreeze mode

A frost protection is provided and a minimum temperature of 5.0°C will be maintained. However, this temperature can be changed by adjusting this value in the installer menu. (P.10)

Keyboard lock function

Use this function to prevent changes to the settings:

- To activate the lock function, press simultaneously the two navigation keys **(+)** and **(-)** for few seconds.
- The logo  will now be displayed on the screen.
- Repeat with the same procedure to unlock the keyboard.

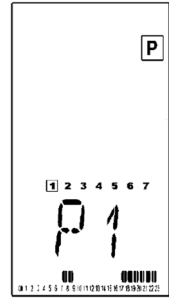
F. Selecting or viewing a Pre/set Program P1 to P9

There are 9 pre-set programs P1 – P9. To select a pre-set program, use the navigation keys **(mode)** to move the cursor to **P1**. Use the **(-)** or **(+)** keys to choose **P1** to **P9** or **U1** to **U4** (User Defined Programs). Select and validate with a short click on **(OK)** and return to the Auto mode **Auto** or press **(OK)** for few seconds to view the selected program. In the viewing mode, use the **(-)** or **(+)** keys to change the hour, use **(mode)** key to go to the previous day and the **(OK)** key

to go to the next one. After the 7th day or with a long press on (OK) you will return to the program selection menu.

The “P” programs (preset) are set at the factory and can not be modified. You can see the preset hours in each program by entering **P**, but you can only see the ones that are set for Monday [1], unless you give (OK), you can see the current day’s program settings.

Anyway, below we detail the information of each one of the pre-established programs for all the days of the week.



- P1, Comfort Mode in:
 - o Weekdays: from 07:00 to 09:00 h and from 17:00 to 23:00 h.
 - o Weekends: from 08:00 to 23:00 h.

- P2, Comfort Mode in:
 - o Weekdays: from 07:00 to 9:00 h, from 12:00 to 14:00 h and from 18:00 to 23:00 h.
 - o Weekends: from 08:00 to 23:00 h.

- P3, Comfort Mode in:
 - o Weekdays: from 06:00 to 23:00 h.
 - o Saturdays: from 07:00 to 24:00 h.
 - o Sundays: from 00:00 to 01:00 h and from 07:00 to 23:00 h.

- P4, Comfort Mode in:
 - o Weekdays: from 15:00 h to 23:00 h.
 - o Saturdays: from 07:00 to 24:00 h.
 - o Sundays: from 00:00 to 01:00 h and from 07:00 to 23:00 h.

- P5, Comfort Mode in:
 - o Weekdays: from 06:00 to 08:00 h and from 21:00 to 23:00 h.
 - o Saturday: from 07:00 to 09:00 h and from 18:00 to 24:00 h.
 - o Sunday: from 07:00 to 09:00 h and from 18:00 to 23:00 h.

- P6, Comfort Mode in:
 - o Weekdays: from 06:00 to 08:00 and from 14:00 to 21:00 h.
 - o Weekends: from 07:00 h to 21:00 h.

- P7, Comfort Mode in:
 - o Weekdays: from 07:00 to 19:00 h.
 - o Weekends: Inactive (ECO mode).

- P8, Comfort Mode in:
 - o Weekdays: from 08:00 h to 19:00 h.
 - o Saturday: from 8:00 h to 18:00 h.
 - o Sunday: Inactive (ECO mode).

- P9, Comfort Mode in:
 - o Monday: from 00:00 to 7:00 h.
 - o Tuesday - Thursday: Inactive (ECO Mode).
 - o Friday: from 13:00 h to 24:00 h.
 - o Weekends: from 00:00 to 24:00 h.

G. User defined Programs U1 to U4

Selecting user defined programs

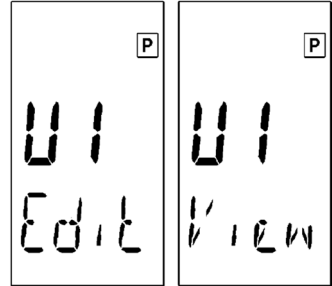
To select a user program, use the navigation keys (**mode**) to move the cursor to **P**.

Use the (-) or (+) keys to choose **P1** to **P9** or **U1** to **U4**.

Select any of **U1** to **U4** and press (**OK**) key to select it. If the selected program is already created, it will return to the Auto mode and run the user selected program.

If the program is clear, a selection menu is show. For an already created program, make a long click on (**OK**) to access to it.

Use the (-) or (+) keys to choose between “Edit” (or Create) and “View” and validate with (**OK**). The viewing works as well as for a Pre-set program.



Modifying or creating a user defined programs

If you have selected “Edit” a user defined program, display will show----->

Toggle the mode (between comfort and eco) of the current half-hour by pressing (**mode**).

The Comfort and Eco temperatures will be those that were previously marked.

With the (+) (**OK**) keys, the time will increase and the selected mode will be applied.

At any time, click (**mode**) to change the mode.

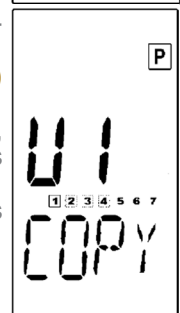
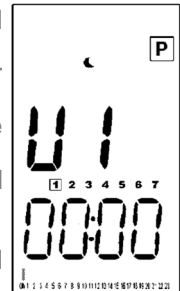
With the key (-) the time will decrease and the mode of the selected time period will be applied.

When the first day is completed, the “Copy” menu will be displayed ----->

You can select the number of days to be copied with the (-) or (+) and (**OK**) keys to validate.

If they are copied every day or when the last day is completed, the product will mechanically go into automatic mode with this complete program.

If you have one or more days left, you should program them as well as the first day.



H. User menu

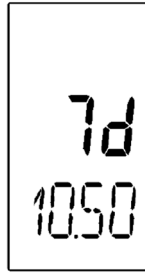
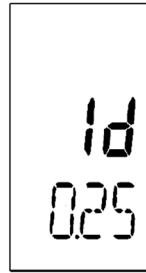
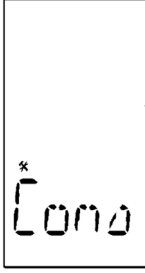
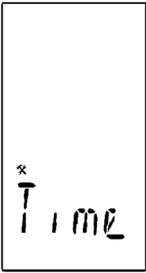


To access to the user menu, select **X** in the selection menu.

In this menu, you can choose to adjust the time (as well as a first start) or see the consumption (according to the power of the heater).

In the consumption menu, you can view the power consumption of the heater for the current day, the last 7 days and the last 30 days by clicking on (+) or (-) keys.

The power is displayed in kWh.



I. Probe connections

The connector is a 2 points SMD Molex connector.
If this sensor is disconnected, an error will be displayed.

J. Installer menu

There is a hidden menu that can be accessed by pressing and holding the button (OK) approximately 5 s, and navigating with the Mode key.

The installer menu can be used to set a number of user preferences, such as the 12-hour or 24-hour clock display, degC or degF temperature readings, and to adjust various operational settings of the unit.

00 PROG WITH OR WITHOUT PROGRAMMING.

- YES (default value): Allows the daily / weekly programming of the equipment.
- No: The user can only switch between Comfort and Economy modes without programming.

01 DEG UNIT OF TEMPERATURE MEASUREMENT

- ° Centigrade (Default value) / • ° Fahrenheit

02 AmPm 24THE CLOCK UNIT SELECTION

- 24H: (Default value) 24 hours (24:00) / • 12H: 12 hours (12:00 AM / PM)

03 DST DAYLIGHT SUMER TIME (SUMMER TIME SETTING)

- yEs: (default value): the automatic time change between summer and winter is automatically activated with the date.
- no: There is no automatic change of summer / winter time.

04 AnFr VACATION MODE / ANTIFREEZE

- Press OK and then the “+” or “-” keys if you wish to increase the temperature value (Adjustable from 0.5 to 10.0 ° C the factory default is 5.0 ° C).

05 AOFF CALIBRATION OF THE INTERNAL PROBE

- This adjustment, if necessary, should be carried out after a day of normal operation of the thermal emitter at constant temperature, following the following steps:
- Put a thermometer (calibrated) in the room or room, placing it in the center of the room and at an approximate height of 1.5m. After 1 hour check the temperature of your thermometer.

Once the previous steps have been completed and the actual temperature of the room is known, you can enter this menu parameter. When entering this parameter,

the temperature detected by its thermal emitter is displayed. If there is any difference between the temperature of the room and that which the thermal emitter actually detects, it will suffice to put here the actual temperature measured by your thermometer.

- Use the (-) or (+) keys to set the actual temperature value of the room. Then press (OK) to confirm.
- If any modification of this parameter has been made by pressing the OK key, the correction value will be displayed.
- If you need to delete a calibration already done, press the “+” or “-” keys to increase or decrease the value of the temperature read by the transmitter, in the interval that appeared when pressing the OK key.

06 ITCS: THE INTELLIGENT TEMPERATURE CONTROL SYSTEM.

- no (default value): The device is activated according to the programmed time.
- yES: The new equipment incorporates the innovative ITCS intelligent temperature control system. This system activates the start-up of the equipment before the scheduled time (2 hours maximum), to ensure that the desired temperature is achieved at the time indicated and following the weekly schedule established. This automatic control system works in the following way: when the equipment is connected for the first time, the processor measures the time it has taken to reach the desired temperature. From this moment on, depending on the ambient temperature and the setpoint temperature, the transmitter is able to know the time at which it has to connect to reach the temperature and time programmed.

07 Wind: OPEN WINDOWS FUNCTION

- no (default value): The device does not detect that a window has been opened.
- yES: The open windows detection function is activated (see section on special functions OPEN WINDOWS FUNCTION).

08 Chil SECURITY FOR CHILDREN

- Adjusting this parameter can modify the electrical power of the equipment from 100% (default value), 75%, 50% and 25%. This achieves that the surface temperature of the equipment decreases and therefore increasing safety in the case of children present.

09. POW ADJUSTMENT OF THE POWER OF THE ELECTRIC RADIATOR.

- In this menu, you can choose the value of the power of your electric radiator to adjust the calculation of the consumption of your radiator. Default: 900 W. To do this, use the “+” and “-” keys to select the value according to the power of the equipment.

10 Clr: RESET FACTORY SETTINGS

- Press the OK key for 10 seconds, if you want to restart the equipment and return to the factory default settings of the equipment. The set temperatures, the programming and the parameters configured by the user will be lost. Make sure you have all the necessary information before making this Reset.

11 INTERNAL INFORMATION

- The software version is indicated on the display, this parameter can be useful to the manufacturer in case of error.

12 END: DEPARTURE FROM THE PARAMETER MENU

- Press the (OK) key in this parameter to exit the configuration menu and return to normal operation mode.

Menu N°	Display	Description	Default	Option
00	PROG	Choose between using only Confort and Eco mode or all the feature	Yes	Yes/No
01	DEG	Temperature Display	°C	°C/°F
02	AmPm	Clock Display	24H	12H/24H
03	Dst	Automated clock change for Daylight Saving time	Yes	Yes/No
04	AnFr	Antifrost temperature setting	5°C	From 5°C to 10°C by 0.5°C From 41°F to 50°F by 0.5°F
05	AOFF	Calibration of temperature probe	no	Displays temperature
06	Itcs	Internal Thermal Control System	No	Yes/No
07	Wind	Open Window detection	No	Yes/No
08	Chil	Power level	100%	25%/50%/75%/100%
09	Pow	Power of the heater	900W	450/500/600/750/800/ 900/950/1000/1200/ 1250/1450/1500/1750/ 1800/2000 W
10	CLr	Restore factory Default settings		Press (OK) during 5s
11		Software Version		None
12	End	Return to main screen		Press (OK)

K. Technical specifications

Measured Temperature Precision :	0.1 °C
Environmental	
Operating temperature:	0°C – 40°C
Sipping and storage temperature:	-10°C to +50°C
Setting Temperature Range	
Comfort/Eco/Timer:	5°C to 30°C by 0.5°Cstep
Anti-freeze:	5°C to 10°C by 0.5°Cstep
Regulation Characteristics:	PI
Electrical protection:	Class II – IP30
Power supply:	230VAC

L. Assembly instructions

Very important!

- Read the installation manual prior to installation of this unit!
- Read the user manual before putting this unit in operation!
- The room you are installing the radiator in must adhere to the ventilation requirements!
- Installation must be by an authorised person only!
- The screws provided are not suitable for all types of walls, it's the installers responsibility to ensure the correct screws are used for the type of wall the radiator is being fixed to.



Warranty

The manufacturer produces high quality products for international markets. The company provides a guarantee for the period of 5 years and 2 years on electrical and electronic components. For this warranty to be valid you must present the original invoice, delivery note or receipt.

- The guarantee only covers manufacturing defects and/or any problem occurring from such defects. All problems arising from installing an undersized heater (not enough heat, improper installation, etc) are not covered by this guarantee.
 - This heater is for domestic & light commercial use only; installation in any another environment voids this guarantee.
 - PremSpec Electrical Products Limited reserves the right to decide whether to repair or replace any defective part or to replace the entire heater.
 - All costs arising from any damage caused by incorrect usage, transport, electrical supply are not covered by this guarantee, nor are any malicious damage.
- This guarantee does not provide compensation for incidental or consequential damage or injuries.

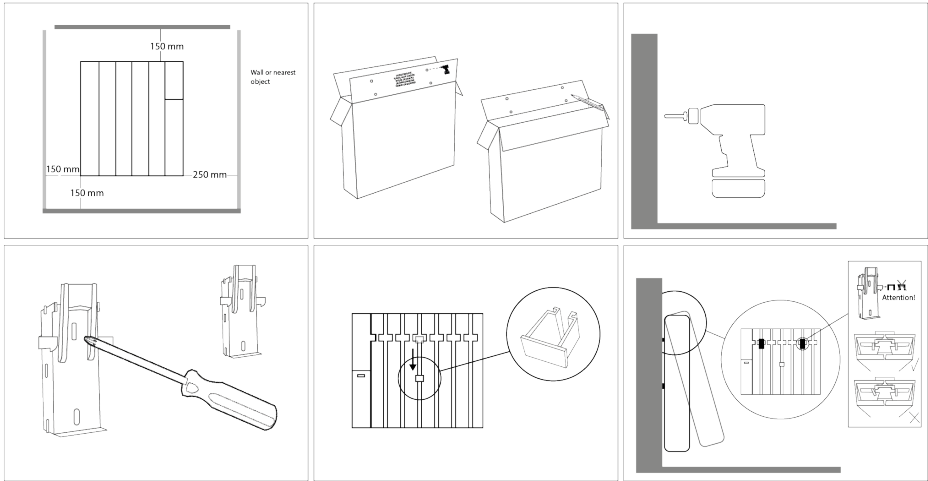
Wall mounting

Together with the issuer, we provide an installation kit consisting of the following elements:

- Screws, brackets, cardboard guide (remove from the top of the box the radiator comes in).

Follow the following steps (images are attached according to the type of emitter, to facilitate fixing to the wall):

1. Remove the radiator from its packaging (unpack at the top) and choose where to hang it taking into account the minimum distances required around the emitter.
2. Use the guide on the top of the box to place it at the correct height. It is necessary to previously perforate the template in the marks.
3. Using the holes as a guide, mark the necessary holes. We suggest you use a level to ensure that the radiator is positioned correctly (the height to which it is placed if guided by the template is higher, if you want to place it lower respect the minimum distances).
4. Using a drill, drill the holes for the plugs appropriate to the type of wall.
5. Screw the fixing brackets to the wall.
6. Place the radiator on the brackets.



M. ECO-DESIGN

Information common to all radiators:

Item	Unit
Type of heat output/room temperature control (select one)	
Single stage heat output and no room temperature control	no
Two or more manual stages, no room temperature control	no
With mechanic thermostat room temperature control	no
With electronic room temperature control	no
Electronic room temperature control plus day timer	no
Electronic room temperature control plus week timer	yes
Other control options (multiple selections possible)	
Room temperature control, with presence detection	no
Room temperature control, with open window detection	yes
With distance control option	no
With adaptive start control	yes
With working time limitation	yes
With black bulb sensor	no
Contact details: See back cover	

Information for radiator power:

Data			Value				
			Fluid				
Item	Symbol	Unit	500W	750W	1.000W	1.500W	1.800W
Heat output							
Nominal heat output	P_{nom}	kW	0,5	0,75	1,0	1,5	1,8
Minimum heat output (indicative)	P_{min}	kW	0	0	0	0	0
Maximum continuous heat output	$P_{max,c}$	kW	0,5	0,75	1,0	1,5	1,8
Auxiliary electricity consumption							
At nominal heat output	$e_{l,max}$	kW	0,5	0,75	1,0	1,5	1,8
At minimum heat output	$e_{l,min}$	kW	0	0	0	0	0
In standby mode	$e_{l,SB}$	kW	0,0012	0,0012	0,0012	0,0012	0,0012



T: 029 2071 3920 F: 029 2071 3921 M: 07989 108 908 W: premspecelectrical.com
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-United Kingdom-