

RF205 Series  
Programmable RF room thermostat

RF205 BM(EN) V1 2016-11-15

RF205-TS programmable room thermostat (**transmitter**)T55 (**Receiver**)

## 1. General

The RF205-TS is a radio controlled room thermostat which requires no wiring and is designed to be fitted in a conventional household installation, at a maximum 30 metres range of the T55 “boiler module”, which is a boiler-mounted modular receiver.

The T55 receiver must be installed by a qualified installation engineer. Do not place it too close to objects which might interfere with the radio signal. It is preferable to mount the receiver such that an imaginary straight line between it and the transmitter thermostat is not obscured by the boiler or any other large metal objects such as kitchen appliances. When installing these devices, please avoid touching the PCB as static damage can occur.

The RF205 control set has already been commissioned, or matched, in the factory. Just connect power to the receiver / put batteries in the transmitter, and the set will communicate. If for any reason you wish to verify the RF link please refer to the fourth option under section **7. Configuration Setting**

## 2. Technical data

Operating voltage: receiver: 230VAC  $\pm$  10%; transmitter: 3.0V  $\pm$  0.2 V DC

Time regulation: < 3s/Day

Transmitter power supply: 2 x AA alkaline

Consumption: <0.06W

Set-point range: 5.0°C - 35.0°C

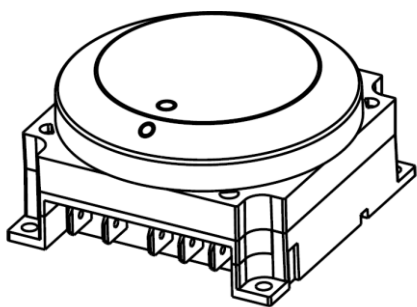
Accuracy:  $\pm$ 0.5°C

Load current: 2A

Thermostat size: 136mm x 90mm x 30mm

Receiver size: 60mm x 60mm x 32mm

## 3. T55 receiver fitting and wiring



Transmitter link via RF Frequency: 433MHz

LED indicator for matching/output status

Recessed button for RF matching

Connections:







1 – Neutral input

2 – Live input











3 – Common input

4 – Normally open output

#### 4. Installation instructions

|  |   |
|--|---|
|  <p>1) Loosen the screws on the underside of the RF205-TS.</p>  |  <p>2) Release the top half of the housing (there is a small clip adjacent to the battery compartment) and open the device. Be careful not to touch the PCB, in case of static discharge.</p> |
|  <p>3) Please use two screws (provided) to fasten the rear housing of the LCD unit on the wall or box. Several fixing points are provided, including two on 60mm pitch for a standard wall box.</p> |  <p>4) Replace the top housing of the device.</p>  |
|  <p>5) Press lightly to close, and tighten the screws.</p>  |  <p>6) Put two AA batteries into the compartment, observing the polarity markings, and slide the cover into position.</p>   |

#### 5. Keys and function instruction



- “  ”: Power on/off – press briefly to switch the device ON or OFF
- “  ”: Manual Mode.
- “  ”: Programme Run Mode.
- “  ”: Economy – press briefly for Economy mode. Press  to restore Programme Run Mode
- “  ”: Time adjustment. Press the key in sequence: minute-hour-day.
- “  ”: Programme entry Mode - Press the key to access programme setting.
- “  ”: Confirm. Press the key to confirm the setting parameters.
- “  ”: In Programme Run and Manual mode: temperature increase. In Programme Entry Mode: hour, minute or temperature increase.
- “  ”: In Programme Run and Manual mode: temperature decrease. In Programme Entry Mode: hour, minute or temperature decrease.

## 6. Menu & setting

### 6.1. Temperature setting.

Press ▲ or ▼ once, the backlight will turn on. Then Press ▲ to increase the set temperature, or press ▼, to reduce the set temperature. From Programme Run Mode, this will initiate **Temporary Manual Mode**, which will revert to Programme Run Mode at the next timed setting. **See 6.4 below.**



### 6.2. Manual mode setting

Switch to manual mode by pressing . The hand symbol  will be displayed on the LCD screen. Having selected Manual mode you can set a fixed temperature. Manual Mode is a permanent selection.

### 6.3. Weekly Programme Run mode setting


Switch to Programme Run Mode by pressing . The  symbol will be displayed on the LCD screen and the automatic programme will operate.

### 6.4. Temporary manual mode setting


During Programme Run Mode, press ▲ or ▼ once to turn on backlight (to prevent misoperation), and press ▲ or ▼ again to check the set-point in the current period of Weekly programming mode. Then press ▲ or ▼ to set the desired temperature for the Temporary Manual Mode. If both   symbols are visible in the display, the device is in Temporary Manual Mode.

The thermostat runs according to the manually set temperature during Temporary Manual Mode, and returns to Weekly Programme Run Mode at the next period start time (the temperature set in Temporary Manual Mode is not stored).




### 6.5. Confirmation key

At any time while programming, press  to confirm programming, changed data is stored, and the device will revert to Weekly Programme Run Mode.

### 6.6. Economy key


Press the 'moon' button to switch to economy mode. The moon symbol will show in the display. In Economy mode you can set the temperature value to a lower 'economy' level to suit your requirements – e.g. 8 / 10 / 12 degrees – using the ▲ or ▼ buttons. Press the  button to go back to the normal Programme Run mode.

### 6.7. Clock Setting

Press  to set minute, hour and week. Press ▲ and ▼ to change the flashing value. Press  to move to the next step, or press  to confirm.


### 6.8. 5+2 Day programmable schedule setting

Press **P** to enter the Weekly programming mode setting. Press ▲ and ▼ to adjust the parameters. After setting each parameter, press **P** to store your change and select the next parameter.

Programming is in the following sequence: (icons representing the six available programme spaces can be seen at each step on the right-hand side of the screen) – for example: 

Start time (hours, then minutes) setting of 1<sup>st</sup> period of Monday to Friday morning →

Temperature setting of 1<sup>st</sup> period of Monday to Friday morning →.....→

Continue with the same sequence to set the remaining time / temperature requirements for Monday to Friday. You will then reach Saturday / Sunday settings. Continue until you complete the temperature setting of 6<sup>th</sup> period of Saturday & Sunday. Or if you have completed programme changes mid-way through the sequence, press  to confirm changes and return to Run mode.

Please follow the sequence below to view and (if required) adjust each time and temperature set-point.


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| Period Indication | Weekday(Mon.–Fri.)               |       | Weekend(Sat.–Sun.)               |       |
|-------------------|----------------------------------|-------|----------------------------------|-------|
|                   | time                             | Temp. | time                             | Temp. |
| 1 Morning Wake Up | 06:00                            | 20°C  | 06:00                            | 20°C  |
| 2 Morning out     | 08:00                            | 15°C  | 08:00                            | 20°C  |
| 3 Noon Home       | 11:30                            | 15°C  | 11:30                            | 20°C  |
| 4 Noon Out        | 13:30                            | 15°C  | 13:30                            | 20°C  |
| 5 Night Home      | 17:00                            | 22°C  | 17:00                            | 20°C  |
| 6 Night Sleep     | 22:00                            | 15°C  | 22:00                            | 20°C  |
|                   | The first period of the next day |       | The first period of the next day |       |

## 7. Configuration Setting

Enter into Configuration Setting by pressing **P** briefly during Power-off Status. Then press **P** sequentially to view and amend (if required) parameters noted below.

You can confirm any changed parameters by pressing **←**. Press the Power Button  to exit configuration.

| Display symbols | Options Properties   | Remark   |
|-----------------|--|--|
| 01              | Inside sensor temperature correction                         | Range: -9 to +9°C<br>Press ▲ or ▼ for adjustment.  |
| 02              | Temperature differential                                     | Range: 1 – 5 °C    Press ▲ or ▼ for adjustment.  |
| 03              | 5+2 days, 6+1 days or 7 days programmable schedule selection | A1: 5+2 days programmable<br>A2: 6+1 days programmable<br>A3: 7 days programmable<br>Press ▲ or ▼ to select A1, A2 or A3.  |
| 00 or AA        | Display IP address XX XX                                     | To refresh the RF matching. When power is connected, press and hold the Recessed button in receiver for 5 seconds, the LED indicator will be flickering for 10 seconds. During the period of flicker, select OO / AA configuration display (Keep transmitter close to receiver), press <b>←</b> for matching.<br>OO: waiting for match. AA: matched already.<br>The receiver's IP code (printed on the side of the receiver) is shown in the lower right-hand corner of the LCD. |
| RS              | Reset to factory setting                                     | Press <b>←</b> for 5 seconds to reset schedule   |

## 8. Warranty

This product has 12 months warranty from purchase date. Malfunctions due to mis-use or mis-application are not covered by the warranty.

## 9. ErP Directive (EU regulation no. 811/2013)

**ErP Class I : Contribution to system energy efficiency: 1%** On/off room thermostat: A room thermostat that controls the on/off operation of a heater. Performance parameters are determined by the thermostat's mechanical construction.