

RET B Battery Powered Room Thermostat

Features



The RET B is a battery powered room thermostat that combines the benefits of a conventional analogue setting knob and an LCD display to show temperature and thermostat status. All models in the range are available in hard-wired and wireless versions.

Styled on the RMT and RET thermostat range, the RET B provides accurate electronic temperature control without the need for an external power supply. This makes it an ideal solution for system upgrades when replacing conventional electro-mechanical two-wire thermostats.

The RET B utilises a micro-processor which, in addition to providing accurate temperature control, also drives a small LCD display. During normal operation, this LCD displays actual room temperature and changes momentarily to show set temperature whenever the setting dial is moved. The LCD is also used to display output relay state and to indicate when the batteries require changing.

The micro-processor also provides other added features not normally found in such thermostats.

These features include:

- Selection of either on/off or chrono-proportional control
- Cycle rate adjustment if chrono-proportional control is selected
- Selection of heating or cooling control
- Selection of compressor delay timer if cooling operation is selected
- Selection of Fahrenheit or Centigrade scaling

Common Features

- Battery powered for ease of installation
- Ideal replacement for conventional 2-wire thermostat
- Voltage free outputs, can switch mains and low voltage control circuits
- Micro-processor control provides added functionality
- Analogue setting for ease of use
- LCD display shows temperature and thermostat status
- Suitable for heating or cooling systems
- Available in hard-wired and RF versions

The range comprises three models:

RET B - Basic thermostat with Analogue setting and LCD display.

RET B-LS - Thermostat with analogue setting and LCD display, plus a manual Auto/Off switch to turn the thermostat output off during periods when it's operation is not required. When set to Off the LCD clearly shows that the thermostat has been turned off.

RET B-MSB - Thermostat with analogue setting and LCD display, plus a manual Day/Night switch which, when set to Day position, controls at the temperature set on the dial. When Night is selected, the thermostat controls at a temperature 4°C lower than the set temperature.

Installer Settings

Thermostat configured for heating operation

Sw No	Setting	Function
1	<input checked="" type="checkbox"/>	Heat
2	<input checked="" type="checkbox"/>	On/Off
3	<input checked="" type="checkbox"/>	Not active
4	<input checked="" type="checkbox"/>	°C (change for °F)
Or 1	<input type="checkbox"/>	Heat
2	<input checked="" type="checkbox"/>	Chrono
3	<input checked="" type="checkbox"/>	3 cycles per hour
4	<input checked="" type="checkbox"/>	°C (change for °F)
Or 1	<input type="checkbox"/>	Heat
2	<input checked="" type="checkbox"/>	Chrono
3	<input checked="" type="checkbox"/>	6 cycles per hour
4	<input checked="" type="checkbox"/>	°C (change for °F)

Thermostat configured for cooling operation

Sw No	Setting	Function
1	<input checked="" type="checkbox"/>	Cool
2	<input checked="" type="checkbox"/>	No compressor delay
3	<input checked="" type="checkbox"/>	Not active
4	<input checked="" type="checkbox"/>	°C (change for °F)
Or 1	<input checked="" type="checkbox"/>	Cool
2	<input checked="" type="checkbox"/>	Compressor delay active
3	<input checked="" type="checkbox"/>	2 min compressor delay
4	<input checked="" type="checkbox"/>	°C (change for °F)
Or 1	<input checked="" type="checkbox"/>	Cool
2	<input checked="" type="checkbox"/>	Compressor delay active
3	<input checked="" type="checkbox"/>	4 min compressor delay
4	<input checked="" type="checkbox"/>	°C (change for °F)

Datasheet

RET B Battery Powered Room Thermostat

Specification and Ordering Details

Features	RET B (RF)	RET B-LS (RF)	RET B-NSB (RF)
Hard wired - Code number	087N725100	087N725500	087N725900
Wireless (RF) - Code number	087N727000	087N727200	087N727400
Temperature range	5 - 30°C		
Setting knob & LCD display	●	●	●
Auto / Off selector switch		●	
Day / Night selector switch (4°C set-back)			●
Low battery indicator	●	●	●
Contact rating (hard-wired model)	10 - 230 Vac, 3 (1) A		
Contact type (hard-wired model)	SPDT Type 1B		
Transmitter frequency (RF model)	433.92 MHz		
Transmitter range (RF model)	30m max		
Switching differential	±1°C		
Power supply	2 x AA/MN1500 alkaline batteries		
Dimensions (mm)	85 wide x 86 high x 42 deep		

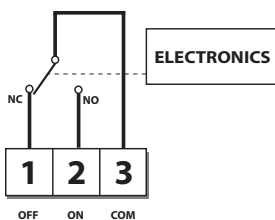
Receiver (RF models) Features	RX1	RX2	RX3
Order codes	087N747600	087N747700	087N747800
Single zone receiver	●		
Two zone receiver		●	
Three zone receiver			●
Power supply	230 ± 15% Vac, fused at 3A		
Contact details	1-SPDT	1-SPDT, 1-SPST	1-SPDT, 2-SPST
Contact rating	24-230 Vac, 3 (1) A		
Dimensions (mm)	138 wide x 88 high x 32 deep		

ErP Class

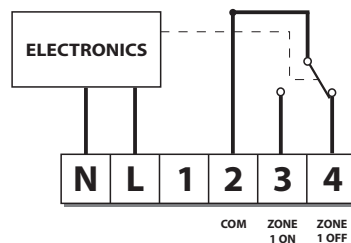
ERP Class		
The products represented within this document are classified according to, and allow completion of, the Energy Related Product (ErP) Directive System Package fiche and the ErP system data label. ErP Labelling obligation is applicable from 26th September 2015.		
ErP Class	Product Function and ErP Description	Additional efficiency gain
<p>IV</p>	<p>TPI Room Thermostat, for use with on/off output heaters An electronic room thermostat that controls both thermostat cycle rate and in-cycle on/off ratio of the heater proportional to room temperature. TPI control strategy reduces mean water temperature, improves room temperature control accuracy and enhances system efficiency.</p>	2%

Wiring

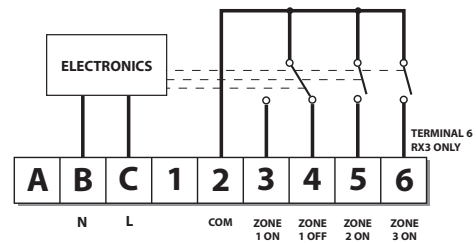
RET B, RET B-LS, RET B-NSB



RX1



RX2 & RX3



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