

Datasheet

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-NSB - 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 type="checkbox"/>	Heat
2	<input type="checkbox"/>	On/Off
3	<input type="checkbox"/>	Not active
4	<input type="checkbox"/>	°C (change for °F)
Or 1	<input type="checkbox"/>	Heat
2	<input type="checkbox"/>	Chrono
3	<input type="checkbox"/>	3 cycles per hour
4	<input type="checkbox"/>	°C (change for °F)
Or 1	<input type="checkbox"/>	Heat
2	<input type="checkbox"/>	Chrono
3	<input type="checkbox"/>	6 cycles per hour
4	<input type="checkbox"/>	°C (change for °F)

Thermostat configured for cooling operation

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

Datasheet

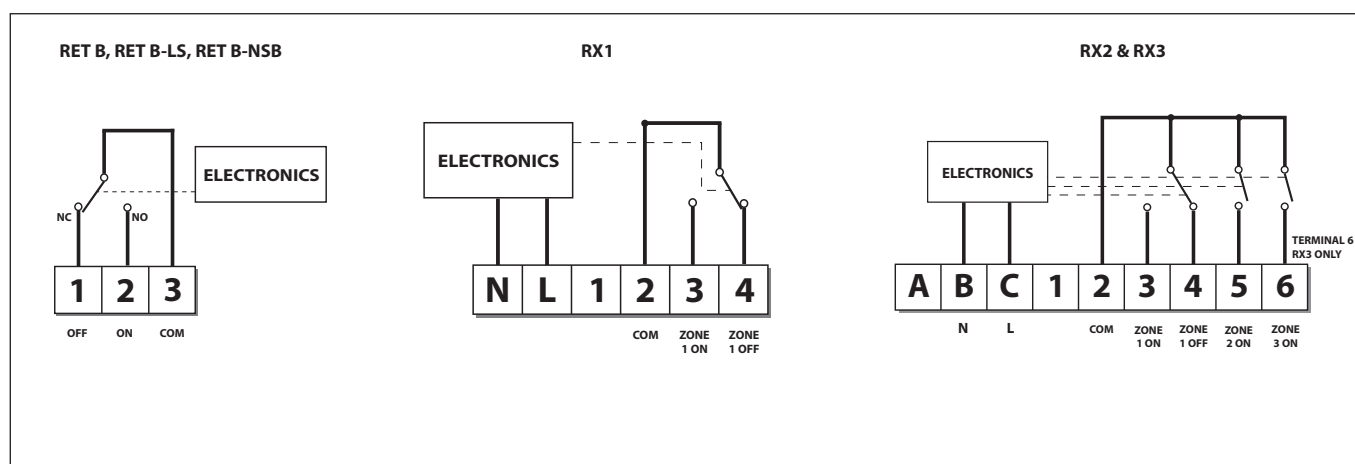
RET B Battery Powered Room Thermostat

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		

Wiring



Danfoss can accept no responsibility for possible errors in catalogues, brochures, and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.



Danfoss Ltd.
 Ampthill Road
 Bedford MK42 9ER
 Tel: 01234 364621
 Fax: 01234 219705
 Email: ukheating@danfoss.com
 Website: www.heating.danfoss.co.uk