

# 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.

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

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)

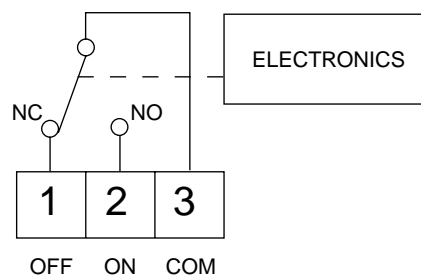
### Thermostat configured for cooling operation

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)

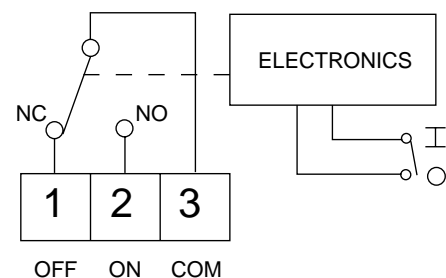
Specification & Ordering Details

Features	RET B	RET B-LS	RET B-NSB
Code number	087N725100	087N725500	087N725900
Temperature range	5 - 30°C		
Setting knob & LCD display	●	●	●
Auto / Off selector switch		●	
Day / Night selector switch (4°C set-back)			●
Low Battery indicator	●	●	●
Switched Voltage	10 - 230 Vac		
Switched Current	3 (1) A		
Temperature Accuracy	±1°C		
Max. Ambient Temperature	45°C		
Power Supply	2 x AA/MN1500 alkaline batteries		
Dimensions (mm)	88 wide x 87 high x 42 deep		
Contact Type	SPDT Type 1B		

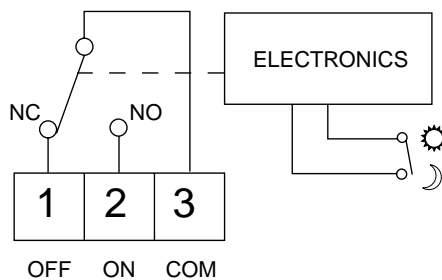
Wiring



RET B



RET B-LS



RET B-NSB

**Danfoss Randall Limited**