

#### **Data Sheet**

# **RET & TP**

## Electronic Room Thermostats

#### **Application**







**RET1001** 

**RET2001** 

**TP5001** 

RET & TP room thermostats are used typically in gas boiler and wall hung radiator heating systems. They can also be used in other heating systems where reference room temperature is used to switch the heat source either directly or via zone valves.

All the products featured in this datasheet include Load Compensation control to gain more acurate temperature control and improved boiler effiency as well as option to select simply on/off control.

#### **Functions**

Room Thermostat, RET1001

By turning the dial to the desired setpoint temperature, optimal thermal comfort in the room is achieved. The thermostat setting scale also includes a frost protect setting allowing for minimal energy consumption while avoiding damage from freezing temperatures and a standby/off position.

When a temperature is chosen a green LED confirms that the device is powered and operational. The LED turns red when there is a demand for heat and the output relay is on.

#### Room Thermostats, RET2001

With RET2001, temperature selection is digital from the setting ring that circles the large easy to read backlit display. Like the dial product RET2001 includes frost protection feature as well as holiday mode with setback temperature for energy saving while you are away.

### Additional features:

- Max. and min. temperature limit settings
- User selectable frost and holiday temperatures
- RF Wireless control with receiver (RF variant only)

Programmable Room Thermostats, TP5001
The TP5001 adds full heating schedule control to the features offered in the RET variants. By selecting a schedule to suit their daily heating demand the user can significantly reduce cost of heating the home and avoid wasting energy when away from the home or at night.

The TP5001 can be set to 5-2Day schedule or 24Hr depending on user preference and if required schedule can be deactivated and the device can be used manually like a room thermostat. 4 event times can be selected (2 heating periods) for morning and evening.

#### Additional features:

- Optimised and Delayed Start
- Clock in 12-hour or 24-hour format
- Service Interval Timer (installer feature only)

The RET & TP room thermostats combine modern design with efficient heating control, ease of operation and high quality construction to help provide reliable home comfort.



### **Ordering**

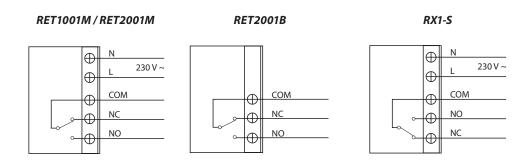
| Product         | Туре                        | Supply<br>voltage | Output        | Code no. |
|-----------------|-----------------------------|-------------------|---------------|----------|
| RET1001M        | Dial Room Thermostat        | 230 V AC          | V/F Relay     | 087N6460 |
| RET2001M        |                             | 230 V AC          | V/F Relay     | 087N6470 |
| RET2001B        | Digital Room<br>Thermostats | 3 V DC            | V/F Relay     | 087N6471 |
| RET2001RF+RX1-S |                             | 3 V DC*           | 433.92Mhz RF* | 087N7474 |

<sup>\*</sup> For RF variants supply voltage and output above relates to the thermostat. Each device is supplied with a single channel receiver which requires 230 V AC supply voltage and has a V/F Relay output

## **Technical specifications**

| Feature                     | RET1001M                      | RET2001M                                       | RET2001B | RET2001RF    |
|-----------------------------|-------------------------------|--|----------|--------------|
| Туре                        | Dial with LED indicator       | LCD display with push buttons                  |          |              |
| Setting temperature range   | 5 - 30° C                     | 5 - 35° C                                      |          |              |
| Operating temperature range | 0 - 40° C                     |  |          |              |
| Fault indication            | -                             | Yes  |          |              |
| LCD backlight               | -                             | Yes  |          |              |
| Output                      | Volt free                     |  |          | RF 433.92Mhz |
| Max RF Range in building    | -                             |  |          | 30m          |
| Switch rating               | 3 A (1) at 230Vac             |  |          | -            |
| Switch type                 | 1x SPDT Type 1B -             |  |          | -            |
| Battery life                | - Min 2                       |  | years    |              |
| Power consumption           | tbc                           | tbc  | tbc      | tbc          |
| Power supply                |                               | 230 V AC ±10 %, 3 V DC B<br>50/60 Hz 2 x AA al |          |              |
| IP class                    | IP30 (installed)              |  |          |              |
| ErP class                   | Class IV (efficiency gain 2%) |  |          |              |
| Approval                    | CE marking, EN 60730          |  |          |              |
| Control polution situation  | Degree 2                      |  |          |              |
| Rated impulse voltage       | 2.5kV                         |  |          |              |
| Ball pressure test          | 75°C                          |  |          |              |
| Software classification     | A                             |  |          |              |

### **Wiring connections**



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## Ordering

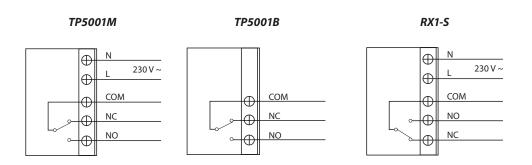
| Product        | Туре  | Supply<br>voltage | Output        | Code no. |
|----------------|---|-------------------|---------------|----------|
| TP5001M        | Digital<br>Programmable Room<br>Thermostats | 230 V AC          | V/F Relay     | 087N7930 |
| TP5001B        |   | 3 V DC            | V/F Relay     | 087N7931 |
| TP5001RF+RX1-S |   | 3 V DC*           | 433.92Mhz RF* | 087N7934 |

<sup>\*</sup> For RF variants supply voltage and output above relates to the thermostat. Each device is supplied with a single channel receiver which requires 230 V AC supply voltage and has a V/F Relay output

## **Technical specifications**

| Feature                     | TP5001M                       | TP5001B | TP5001RF             | RX1-S                       |
|-----------------------------|-------------------------------|---------|----------------------|-----------------------------|
| Туре                        | LCD display with push buttons |         |                      | RF Receiver                 |
| Setting temperature range   | 5 - 35° C                     |         |                      | -                           |
| Operating temperature range | 0 - 40° C                     |         |                      |                             |
| Fault indication            | Yes                           |         |                      | -                           |
| LCD backlight               | Yes                           |         |                      | -                           |
| Output                      | Volt free                     |         | RF 433.92Mhz         | Volt free                   |
| Max RF Range in building    | -                             |         | 30                   | )m                          |
| Switch rating               | 3 A (1) at 230Vac             |         | -                    | 3 A (1) at 230Vac           |
| Switch type                 | 1x SPDT Type 1B               |         | -                    | 1x SPDT Type 1B             |
| Battery life                | - Min 2 years                 |         | -                    |                             |
| Power consumption           | tbc                           | tbc     | tbc                  | tbc                         |
| Power supply                | 230 V AC ±10 %,<br>50/60 Hz   |         | Battery<br>alkaline) | 230 V AC ±10 %,<br>50/60 Hz |
| IP class                    | IP30 (installed)              |         |                      |                             |
| ErP class                   | Class IV (efficiency gain 2%) |         |                      | -                           |
| Approval                    | CE marking, EN 60730          |         |                      |                             |
| Control polution situation  | Degree 2                      |         |                      |                             |
| Rated impulse voltage       | 2.5kV                         |         |                      |                             |
| Ball pressure test          | 75°C                          |         |                      |                             |
| Software classification     | A                             |         |                      |                             |

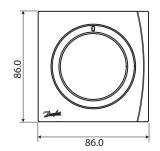
### **Wiring connections**

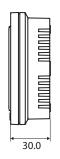


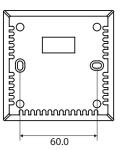


#### **Dimensions**

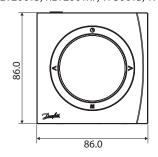
RET1001M

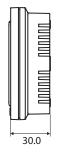


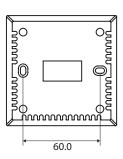




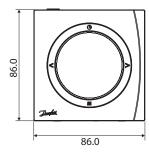
RET2001B, RET2001RF, TP5001B, TP5001RF

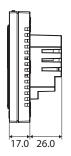


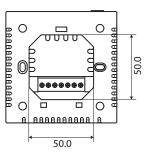




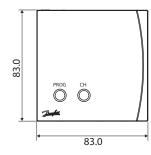
RET2001M, TP5001M

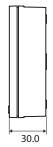


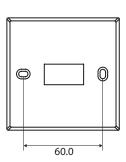




RX1-S







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