

#### **Data Sheet**

# **RET & TP**

# Electronic Room Thermostats

# **Application**







**RET1001** 

**RET2001** 

TP5001

RET & TP room thermostats are typically used in conjunction with a boiler and wall hung radiator heating systems. However, 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 are boiler plus compliant, providing Load Compensation control to gain accurate temperature control and improved boiler efficiency. It is also possible to select simple on/off control mode instead of load compensated

### **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 mini mal 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.

#### **Additional features:**

 Max. and min. temperature limit settings via mechanical limiting facility

#### **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)
- · Standby button

# Programmable Room Thermostats, TP5001

The TP5001 offers all the features from the RET variants in addition it has full heating schedule control. A schedule can be set to suit the user's heating demands, this can significantly reduce the cost of heating the home by only heating the building when necessary.

The TP5001 can be set to 5-2Day schedule or 24Hr depending on user preference. If required, the 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
- Boiler service interval timer (400days)

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 voltage	Output	Code no.
RET1001M - V2	Dial Room Thermostat	230 V AC	V/F Relay	087N6461
RET2001M - V2		230 V AC	V/F Relay	087N6476
RET2001B	Digital Room Thermostats	3 V DC	V/F Relay	087N6471
RET2001RF		3 V DC*	433.92Mhz RF*	087N6473
RET2001RF+RX1-S - V2		3 V DC*	433.92Mhz RF*	087N6477
RX1-S-V2**	RF Receiver with relay	230 V AC	V/F Relay	087N7775

<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-V2	RET2001M-V2	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	-			0.5 - 30m	
Switch rating	3 A (1) at 230Vac			-	
Switch type	1x SPDT Type 1B			-	
Battery life	- Mir		Min 2	2 years	
Power supply	230 V AC ±10 %, 50/60 Hz			3 V DC Battery 2 x AA alkaline)	
IP class	IP30 (installed)				
ErP class	Class IV (efficiency gain 2%)				
Approval	CE marking, EN 60730				
Control polution situation	Degree 2				
Rated impulse voltage	4kV				
Software classification	A				
Storage conditions	Relative Humidity 5 - 95% Ambient (storage and shipping) -10 to 60°C				

# **Wiring connections**

#### RET1001M / RET2001M - V2 RET2001B RX1-S - V2 $\oplus$ $\oplus$ ELECTRONICS Internally Linked Link for 230 V ~ L 230 V ~ 230v switching no link for Link for 230 V ~ 230v $\oplus$ $\oplus$ switching COM no link for 2 COM volt free NC - OFF volt free switching NC - OFF 3 NO - ON $\oplus$ switchingNO - ON 0 NO - ON 4 NC - OFF $\oplus$

<sup>\*\*</sup> Compatible with TPOne RF, TP5001 RF and RET2001 RF thermostats only.



### **Ordering**

Product	Туре	Supply voltage	Output	Code no.
TP5001M - V2	Digital Programmable Room Thermostats	230 V AC	V/F Relay	087N7935
TP5001B		3 V DC	V/F Relay	087N7931
TP5001RF		3 V DC*	433.92Mhz RF*	087N7933
TP5001RF+RX1-S - V2		3 V DC*	433.92Mhz RF*	087N7936
RX1-S - V2	RF Receiver with relay	230 V AC	V/F Relay	087N7775

<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-V2	TP5001B	TP5001RF	RX1-S V2
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	Volt free		Volt free
Max RF Range in building		-		30m
Switch rating	3 A (1) a	3 A (1) at 230Vac		3 A (1) at 230Vac
Switch type	1x SPDT	1x SPDT Type 1B		1x SPDT Type 1B
Battery life	-	Min 2 years		-
Power supply	230 V AC ±10 %, 50/60 Hz	3 V DC Battery 2 x AA alkaline)		230 V AC ±10 %, 50/60 Hz
IP class	IP30 (installed)			
Industry standard back plate				Yes
ErP class	Class IV (efficiency gain 2%) -			-
Approval	CE marking, EN 60730			
Control polution situation	Degree 2			
Rated impulse voltage	4kV			
Software classification	A			
Storage conditions	Relative Humidity 5 - 95% Ambient (storage and shipping) -10 to 60°C			

# **Wiring connections**

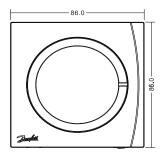
TP5001M - V2 TP5001B RX1-S - V2  $\oplus$ ELECTRONICS Internally Linked Link for 230 V ~ L 230 V ~ Link for 230v switching no link for 230 V ~ 230v Ф  $\oplus$ switching volt free switching no link for 2 COM NC - OFF volt free switching NC - OFF 3 NO - ON  $\oplus$  $\oplus$ NO - ON NO - ON 4 NC - OFF 

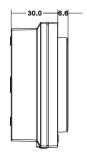
<sup>\*\*</sup> Compatible with TPOne RF, TP5001 RF and RET2001 RF thermostats only.

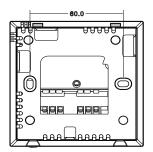


#### **Dimensions**

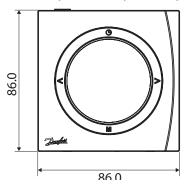
#### RET1001M - V2

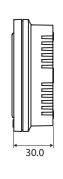


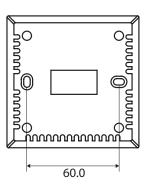




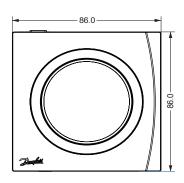
#### RET2001B, RET2001RF, TP5001B, TP5001RF

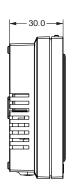


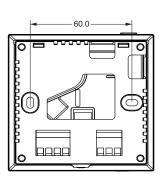




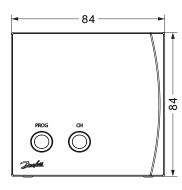
RET2001M - V2, TP5001M - V2

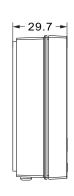


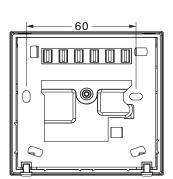




#### **RX1-S V2**







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