

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

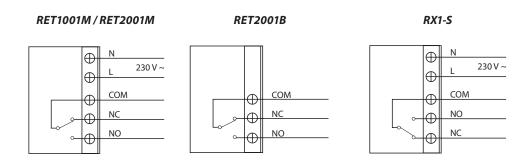
Product	Туре	Supply voltage	Output	Code no.
RET1001M	Dial Room Thermostat	230 V AC	V/F Relay	087N6460
RET2001M		230 V AC	V/F Relay	087N6470
RET2001B	Digital Room Thermostats	3 V DC	V/F Relay	087N6471
RET2001RF+RX1-S		3 V DC*	433.92Mhz RF*	087N7474

^{*} 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		2 years	
Power consumption	tbc	tbc	tbc	tbc	
Power supply	230 V AC ±10 %, 3 V DC 50/60 Hz 2 x AA a		Battery 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	2.5kV				
Ball pressure test	75°C				
Software classification	A				

Wiring connections



© Danfoss | ERC | 2019.05 VDSUL102



Ordering

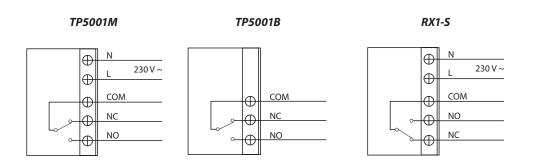
Product	Туре	Supply voltage	Output	Code no.
TP5001M	Digital Programmable Room Thermostats	230 V AC	V/F Relay	087N7930
TP5001B		3 V DC	V/F Relay	087N7931
TP5001RF+RX1-S		3 V DC*	433.92Mhz RF*	087N7934

^{*} 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	-		30m	
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 %, 50/60 Hz		Battery alkaline)	230 V AC ±10 %, 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			

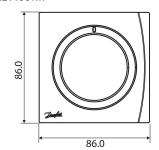
Wiring connections

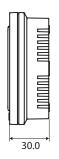


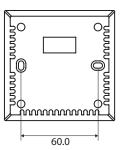


Dimensions

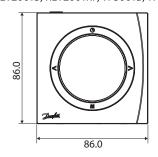
RET1001M

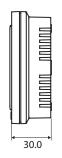


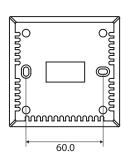




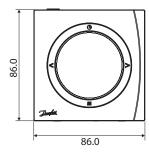
RET2001B, RET2001RF, TP5001B, TP5001RF

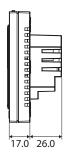


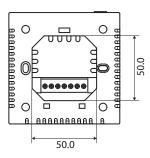




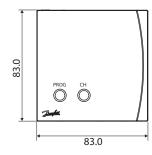
RET2001M, TP5001M



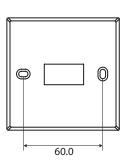




RX1-S







Danfoss Limited

Heating Segment • heating.danfoss.co.uk • +44 (0)330 808 6888 • E-mail: customerservice.uk@danfoss.com

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 subsequential changes being necessary in specifications already agreed.

All trademarks in this material are property of the respective companies. Danfoss and all Danfoss logotypes are trademarks of Danfoss A/S. All rights reserved.