

Datasheet

TP7001 Series Programmable Room Thermostats

Features



The TP7001 series combines the functions of a time clock and room thermostat into a stylish, easy to use controller with a large backlit display, which allows the user to programme different temperatures at different times of the day to match lifestyle demands. The TP7001 offers true 7-day programming, allowing each day to be set differently if so required. In addition, the unit can be set to 5/2-day mode allowing one set of programmes to be used for weekdays with a different set being available for the weekends.

TP7001 series offers up to six temperature changes each day and includes the option of programming an "Off".

TP7001 series offers several advanced features which can be selected by the installer at the time of installation, these include:

- Optimum start control: This feature uses internal temperature to calculate the time in advance of the programmed time that the system must switch on in order to ensure that programmed temperature is achieved by the programmed time.
- Chrono-proportional control: This feature defines the boiler cycle rate and the on/off times of the boiler within the cycle. This adds to comfort and improves boiler efficiency, particularly with condensing type boilers.
- Delayed Start: This feature enables you to hold off the heating for some time during mild days where the room temperature at the start of the event is close to the programmed temperature.

The range includes battery and mains powered versions in both built-in and remote sensor types, please refer to the data table for details and ordering codes.

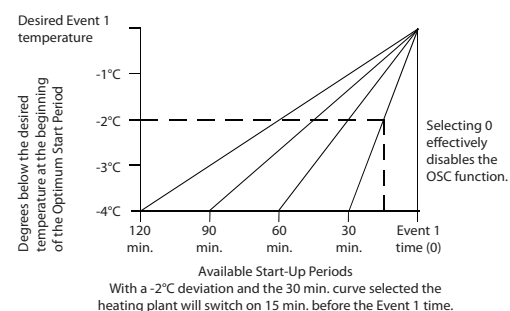
- 7-day or 5/2 day programming options
- Up to 6 time and temperature events per day
- Hard wired versions available for battery and mains operation
- Holiday programming mode and thermostat mode
- Many user overrides including programme extension

Installer Settings - DIL Switches

SW. No	OFF	ON
SW.1	Keyboard Disabled	Keyboard Enabled
SW.2	Reset Disabled	Reset Enabled

Installer Settings - Optimum Start Control

If the TP7001 has been set to Optimum start control enabled, the Optimum start control setting must be made within the user advanced programming mode. The graph to the right shows the calculated time before the programmed time that the first event of the day will commence, dependant upon the difference in room temperature and the programmed temperature for the first event. Setting options are 0:00, (OSC disabled), 0:15, 0:30, 0:45, 1:00, 1:15, 1:30, 1:45 or 2:00).



Datasheet

TP7001 Series - Programmable Room Thermostats

Thermostat Specification

Thermostat Features	TP7001	TP7001A	TP7001M	TP7001MA
	Built-in sensor	Remote sensor	Built-in sensor	Remote sensor
Default Time Zone	CET +1	CET +1	CET +1	CET +1
Order codes	087N8007	087N8013	087N8008	087N8014
Control type - On/Off or Chrono-proportional, 3/6/9/12 cycles per hour	Yes			
Hard wired thermostat	•		•	
Digital clock type	24 hour (can be set to AM/PM mode by user)			
Selectable 24 hour, 5/2 day, A/B day or 7 day operation	Yes			
Number of events per day	Up to 6			
Control temperature range	Off, 5-30°C (can be set to Fahrenheit by user)			
Total switching differential (On/Off mode)	0.1°C			
Factory pre-set programme	Yes			
Programmable holiday mode	Yes, up to a year			
Installer selectable optimum start control	Yes - Off, 0:15, 0:30, 0:45, 1:00, 1:15, 1:30, 1:45 or 2:00 minutes early switch on at set-point minus 4K			
Thermostat mode and frost mode	Yes, set to 5.0°C, but adjustable between 5-30°C			
Power supply	2 x AA/MN1500/LR6 alkaline batteries		230V, 50 Hz	
Memory back-up	Capacitor during battery change for 1 minute		3V battery (10 year lifetime)	
Switching action of output relay	SPDT			
Switch rating of relay contact, voltage and current	3 (1) A, 10-230 Vac			
Dimensions (mm)	140 wide x 91 high x 28 deep			
Pollution situation	Degree 2			
Rated impulse voltage	2.5Kv			
Ball pressure test	75°C			
Remote Sensor	087N774800			

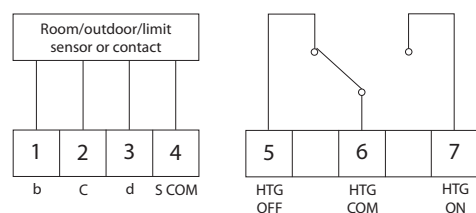
ErP Class



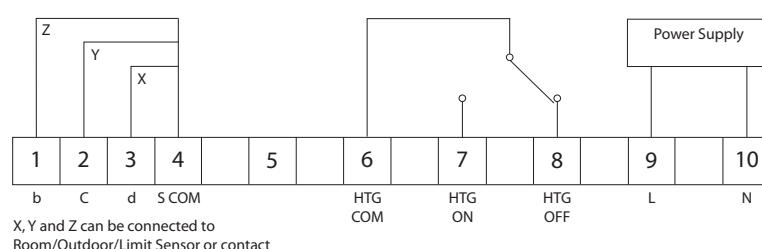
ERP Class		
The products represented within this document are classified according to, and allow completion of, the Energy Related Product (ErP) Directive System Package fiche and the ErP system data label. ErP Labelling obligation is applicable from 26th September 2015.		
ErP Class	Product Function and ErP Description	Additional efficiency gain
IV	TPI Room Thermostat, for use with on/off output heaters An electronic room thermostat that controls both thermostat cycle rate and in-cycle on/off ratio of the heater proportional to room temperature. TPI control strategy reduces mean water temperature, improves room temperature control accuracy and enhances system efficiency.	2%

Wiring Details

TP7001 & TP7001A



TP7001M & TP7001MA



Danfoss Ltd.

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

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.