ENGINEERING
TOMORROW

Danfoss

Easy User Guide

TP5001
Programmable Room Thermostat

Display & Navigations

Symbols	Function description	Symbols	Function description
Mon – Sun	Current set day	🕐	Schedule mode
1 2 3 4	Current on/off period	⊞	Holiday mode
AM PM 00:00	Current set time / parameter number in setup	≡	RF Status (TP5001RF only)
🌡	Room temperature	🔋	Battery low indicator (TP5001B & TP5001RF only)
00°C	Temperature indication	⏻	Power on/off (Standby)
↓ SET	Set temperature	🕐	Timer and program operation / time and date setting
⦀	Heating active	M	Mode change / option setting
❄	Frost protect active	‹ ›	Temperature / option setting selectors

What is a programmable room thermostat?

A programmable thermostat allows you to set times at which you want your heating to be at a specific temperature. A room thermostat works by sensing the air temperature and switching on the heating when the air temperature falls below the thermostat setting, switching it off once this set temperature has been reached. The TP5001 programmable room thermostat has made intelligent heating control easier than ever before.

Setting Time and Date

a. Press 🕐 , the screen will change to show the current year.
b. Adjust using ‹ or › to set the correct year. Press 🕐 to accept. Repeat step b to set month, day, hour and minute settings.

Advanced Programmable Timer

The Advanced Programmable Timer mode enables the setting of a timer-controlled program for automatic comfort temperature, and an energy-saving lower setback temperature if standard room comfort temperature is not required.
Example below for 5/2 day setup, 4 Temperature settings
The function consists of 2 programs:
P1 with 4 events over weekdays (Mon. To. Fri.)
P2 with 4 events over weekends (Sat. Sun.).

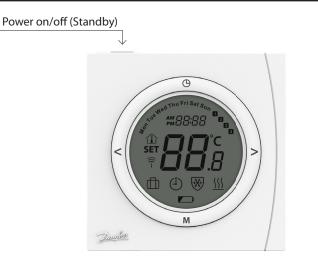|	
P1: Press any button once to illuminate the screen, if the screen is not illuminated already. Now, press 🕐 for 3 seconds to display Mo. Tu. We. Th. Fr.	**P2**: Sa. Su. are now shown in the display.
P1, Event 1: 1. Use ‹ or › to select the start hour. 2. Press 🕐 to accept the setting. 3. Use ‹ or › to set the minute. 4. Press 🕐 to accept the setting. 5. Use ‹ or › to select the temperature. 6. Press 🕐 to accept the setting.	**P2, Event 1**: 1. Use ‹ or › to select the start hour 2. Press 🕐 to accept the setting. 3. Use ‹ or › to set the minute. 4. Press 🕐 to accept the setting. 5. Use ‹ or › to select the temperature. 6. Press 🕐 to accept the setting.
P1, Event 2–4: Repeat the Event 1 procedure for programming Events 2–4.	**P2, Event 2–4:** Repeat the Event 1 procedure for programming Event 2–4.

If the working mode is set to 24hr, only P1 program will be available (same times each day of the week), to change this see the User settings section of this document.

Display and Navigation Details

Power on/off (Standby)

Setting/Changing the Temperature

a. Press ‹ or › at any time to change the desired temperature value. SET is shown in the display.
b. When releasing the ‹ or ›, after around 5 seconds, the display returns to showing the actual temperature. This temperature change is only temporary and will be maintained only until the next programmed setting.

Holiday Mode

Holiday Mode selects the comfort temperature typically when the home is unoccupied
a. Press **M** to enter into Holiday mode and ⊞ will be displayed.
b. Holiday mode temperature can be set in User settings, 07.
c. Press **M** again to exit Holiday mode.

Frost Protection Temperature and Reset

a. You can switch the thermostat in OFF(Standby) mode by alternately pressing ⏻. In OFF (Standby) mode the thermostat is set to Frost Protect temperature setting and will switch the output On if the measured temperature falls below the frost protection temperature setting.
b. ❄ and current temperature will be displayed.
c. At this point, if ⏻ is pressed for 10 seconds continuously, then the thermostat will reset.

User Settings

a. Press any button once to illuminate the screen, if the screen is not illuminated already. Now, press **M** for 6 seconds to enter the user setting mode. Press **M** for parameter selection and set the parameter range via ‹ or ›. Complete all adjustments.
b. To exit press 🕐, automatic exit after 20 seconds when no button is pressed.

No.	Parameter settings	Settings range	Default
01	Working mode	01: Manual 02: Schedule timer 5/2 day 03: Schedule timer 24hr	02
02	Heat control mode	01: On/off load compensation 02: On/off standard	01
03	Heat control start-up mode	01: Normal start control 02: Delayed start control 03: Optimised start control	01
04	Temperature limit high	Between low (05) and 35° C	35° C
05	Temperature limit low	Between 5° C and high (04)	5° C
06	Frost protect temperature	Between 5° C and 15° C	5° C
07	Holiday mode temperature	Between low (05) and high (04)	18° C
08	Timer display	01: 24hr 02: 12hr	24hr
09	Service due setup	Installer setting only	
10	RF Pairing (TP5001RF only)	00: RF pairing mode off 01: RF pairing mode on	00
11	Auto daylight saving	01: On 02: Off	01