Danfoss

User Guide

BasicPlus²
Room Thermostats for Floor Heating

1　Functional Overview

Symbols	Function description
⌂	Room temperature
🌡	Floor temperature
88.8℃	Temperature indication
SET	Set temperature
⌇⌇⌇	Floor heating, Active
❆	Frost protection, Active

Symbols	Function description
🛄	Away mode
🔒	Child safety lock
⏻	Power ON/OFF
🕐	Timer and program operation
M	Mode change/check floor temp./child safety lock/ parameters setting
< >	Up/down selectors
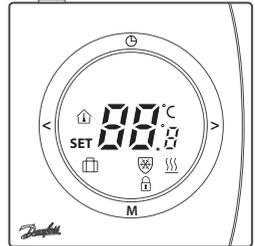
2　Power ON/OFF

Turn the thermostat ON or OFF by pressing ⏻.

3　Setting the Temperature

- Press **<** or **>** at any time to change the desired temperature value. **SET** is shown in the display.
- When releasing **<** or **>**, the display returns to showing the actual temperature.
- The adjustment step is 0.5° C.

4　Select Away Mode

- Press **M** to enter Away mode and 🛄 will be displayed.
- Press **<** or **>**. **SET** appears; set the Away mode setpoint.
- Press **M** again to exit Away mode.

5　Set Timer *(only for WT-P and WT-PR types)*

- Press 🕐; **hh** flashes. Press **<** or **>** to adjust hour.
- Press 🕐 again; **mm** flashes. Press **<** or **>** to adjust minute.
- Press 🕐 again; **week** flashes. Press **<** or **>** to adjust week.
- Complete all adjustments. Press any button to exit (automatic exit after 6 seconds with no operation).

6　Advanced Programmable Timer *(only for WT-P and WT-PR types)*

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.

The function consists of 2 programs:
P1 with 4 events in 5 days (Mon. Tue. Wed. Thu. Fri.)   **P2** with 4 events in 2 days (Sat. Sun.).

P1: Press ⏲ 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 time. 2. Press ⏲ to accept the setting. 3. Use **<** or **>** to select the temperature. 4. Press ⏲ to accept the setting.	**P2, Event 1:** 1. Use **<** or **>** to select the start time. 2. Press ⏲ to accept the setting. 3. Use **<** or **>** to select the temperature. 4. Press ⏲ to accept the setting.
P1, Event 2-4: Repeat the Event 1 procedure for programming Event 2-4.	**P2, Event 2-4:** Repeat the Event 1 procedure for programming Event 2-4.

The thermostat will continue the 4-event program based on the present time and day.

To set and change the room temperature temporarily:
1. Press **<** or **>** at any time to change the desired temperature value. **SET** is shown in the display.
2. When releasing the **<** or **>**, the display returns to showing the actual temperature. This temperature change is only temporary and will be maintained only until the next programmed setting!

A default program provides timer control if the customer does not create own programs:

Days	Event 1		Event 2		Event 3		Event 4	
	Start time	Temp.	Start time	Temp.	Start time	Temp.	Start time	Temp.
Mon - Fri	6:30	20° C *(27° C)**	8:30	15° C *(25° C)**	16:30	20° C *(27° C)**	22:30	15° C *(25° C)**
Sat - Sun	7:30	20° C *(27° C)**	9:30	20° C *(27° C)**	16:30	21° C *(28° C)**	22:30	15° C *(25° C)**

* Floor temperature control mode.

7   Check Floor Temperature

- Press **M** and hold. Press **<** within 6 seconds.
- 🌡 flashes and the current floor temperature is displayed. Operate again, then exit (automatic exit after 6 seconds with no operation).

8   Child Safety Lock

- Press **M** and hold. Press **>** within 6 seconds to lock all buttons.
- Press again to exit the child safety lock.

9   Set Control Parameters

Press **M** button for 6 seconds to enter the parameter setting mode. Press **M** for parameter selection and set the parameter range via **<** or **>**. Complete all adjustments.
To exit WT-P/PR, press ⏲, which is available for this purpose (automatic exit after 30 seconds with no operation).
To exit WT-D/DR, wait for automatic exit (30 seconds). The upper digits indicate the parameter number.

The digits indicate the set value as follows:

No.	Parameter settings	Settings range	Default	
			WT-D/DR	WT-P/PR
P01	Working mode	01: Manual 02: Advanced Programmable Timer	NA	02
P02	Temperature control mode	01: Only room temp.; 02: Room and floor temp.; 03: Only floor temp.	01	01
P03	High room temp. limit	5-35° C (only for 01 and 02 in P02)	30° C	30° C
P04	Low room temp. limit	5-35° C (only for 01 and 02 in P02)	5° C	5° C
P05	Floor temp. limitation mode	01: High temp. limitation; 02: Low temp. limitation (only for 02 in P02)	01	01
P06	Floor temp. limitation setpoint	20-45° C (only for 02 in P02)	35° C	35° C
P07	High floor temp. limit	20-45° C (only for 03 in P02)	35° C	35° C
P08	Low floor temp. limit	20-45° C (only for 03 in P02)	20° C	20° C
P09	Frost protection	01: Enable; 02: Disable	01	01
P10	Frost protection setpoint	5-17° C	5° C	5° C
P11	Timer display option	01: 24 h; 02: 12 h	NA	01
P12	Room temp. display option at shutdown	01: No display current temp.; 02: Display current temp.	01	01

P03 to P08 appear on relevant temperature control mode.

10   Error Messages

E1	Room sensor failure
E2	Floor sensor failure
EE	EEPROM failure
Lo	Temperature lower than 0° C
Hi	Temperature higher than 50° C

All relay output will be turned off in all cases.