The Herz 3 F800 50 wireless thermostat

The Herz 3 F800 50 is a wireless thermostat. It serves for the measuring and regulation of temperature. The temperature is set by the knob. The thermostat regulates a preset temperature 24 hours per day.

The thermostat can be locked against unwanted manipulation, as well as the regulation of temperature.
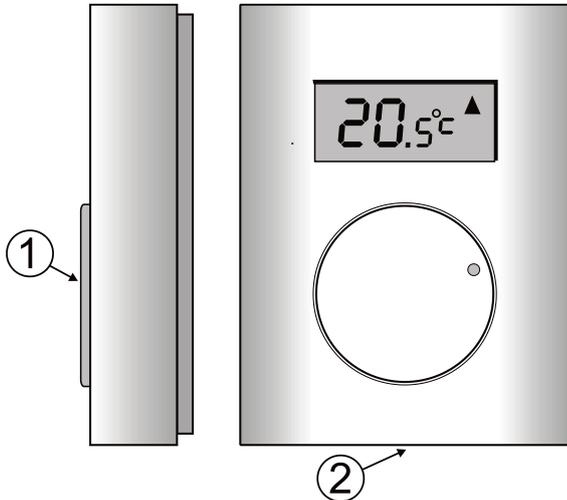

Figure 1: 1 - knob; 2 - tab

Installation

The Herz 3 F800 50 should be mounted in a dry indoor location. Choose a mounting location about 1.5 meters above the floor in an area with good air circulation. Avoid places with draughts, dead air spots and radiant heat from the sun or appliances. It should not be installed close to any metal structure or other objects that may obstruct radio signal transmissions.

1. Release the upper cover by pressing the plastic tab on the bottom side of the housing.
2. Mount the back part on the desired location
3. If the thermostat was purchased as a kit along with a receiving unit, connect the detector's battery (pull out the red tape to activate the battery). Otherwise see section "Mounting the receiving unit"
4. Close the thermostat

Mounting the receiving unit

Install and connect the receiving unit to the heating system. If the receiving unit was purchased separately then thermostat have to be enrolled - enter enrolment mode on the receiving unit (see its manual) and connect the battery to the thermostat.

Settings and programming

Do the complete settings using the knob. The programming mode is entered by pressing the knob for two seconds.

General rules for programming:

1. Flashing of any icon on the LCD allows changing the option(s) or choosing a next item.
2. Perform choosing or changing by turning the knob
3. Confirm the selection or change by briefly pressing the knob
4. When the value of an item has been changed, then after this briefly press the knob and changes are saved. Then thermostat goes to the next item in the programming menu

5. After the setting of the selected items, choose the parameter "OK" in the menu. By short pressing the system returns back to previous menu.
6. If there is no manipulation of the knob for 30 seconds, it returns you back to the previous menu automatically.

The basic menu has four groups of settings:

LO_C	Locking the thermostat
OF_F	Switching off the thermostat
SE_{t3}	Service menu
OK	Saving the parameters and leaving the menu

LO_C - Locking thermostat

To protect thermostat against unwanted manipulation you can lock thermostat. Enter the menu and press the knob on item LO_C, the options ON/OFF appear. "ON" enables the function OFF and blocks thermostat control. The thermostat is unlocked by the option OFF. Locking the thermostat is indicated on the LCD by the ⊶ Symbol.

OF_F - Switching off the thermostat

The thermostat is switched off by the OFF-option. Enter the menu and press the knob on the item OFF, the options ON/OFF appear. ON enables the function OFF, and switches off thermostat. This is indicated on the LCD by the text OFF. Although thermostat has been switched off, it still measures and detects the antifreeze temperature. To turn thermostat on enter the menu and choose the option OFF.

SEt3 - Service menu

The service parameters can be reprogrammed here. In a normal mode it is not necessary to change those parameters. The Service menu includes eight items. Items are modified by scrolling and pressing the knob.

Hysteresis is the accuracy to which the temperature is regulated. The setting is done via the HYst item in the adjustment menu. Turning the knob lets select you one of the following accuracy ranges: ±0.1°C to ±1°C (factory setting: ±0.2°C)

Example: If the accuracy is adjusted to ±0.5°C and the temperature is set to 24°C, the thermostat switches the heating on when the temperature drops below 23.5°C and switches it off if the temperature goes above 24.5°C. In reality the temperature scatter can be slightly higher because of the temperature persistence of the room.

Warning: Too high accuracy can cause the heating to turn on and off to frequently.

St by	The item Stby sets the temperature which will be kept in the case of switching off ther thermostat (item OFF). The Stby temperature is always at least 3°C higher than ALLo. The value of the Stby temperature does not have to be set higher than the t Lo tmperature.
t Lo	The t Lo item is the lower limit to which economical temperature can be set.
t Hi	The t Hi item is the upper limit to which the comfort temperature can be set.
AL Lo	AL Lo is the lower critical temperature. When the temperature drops under the preset value, the thermostat sends an alarm report to the receiver and this state is indicated by a permanently lit (!) symbol. The ALLo - temperature is always at least 3°C lower than t Lo.
AL Hi	AL Hi is the upper critical temperature. When the temperature increases above the preset value, the thermostat sends an alarm report to the receiver and this state is indicated by a permanently lit (!) symbol. The ALHi temperature is always at least 3°C higher than tHi.
Res	The reset function allows you to reset the device to factory settings (listed in table). You can perform reset by selecting Res in the menu and pressing the knob and choosing the menu Res.
OK	By pressing the OK item you are leaving the service menu and return to the basic thermostat menu

Specification

Power supply:	2x AA 1.5 V alkaline battery
Battery lifetime:	typically 1 year
Temperature measurement:	+6°C to +40°C
Temperature accuracy:	±0.1°C to ±1°C
Freeze alarm (Panic alarm):	configurable from -9°C to +20°C
Fire alarm:	configurable from 30°C to 70°C
Operational frequency:	868.1 MHz, Flexi protocol
Operational radio range:	100m (open area)
Operational temperature:	-10°C to +70°C (low humidity)
Dimensions:	65 x 88 x 20 mm
According to:	ERC REC 70-03

Range of temperature settings

Settings item	Range	Factory settings	Description
HYst	0.1°C to 1°C	0.2°C	Hysteresis
t Lo	+6°C to +40°C	6°C	lower limit of temperature
t Hi	+6°C to +40°C	40°C	upper limit of temperature
AL Lo	-9°C to +20°C	3°C	Panic Alarm
AL Hi	+30°C to +70°C	60°C	Fire alarm

Adjustment ranges as depicted on a coordinate axis:

Temperature regulation range