



## HEATIT Z-Wave thermostat

### Installation and operating instructions

#### HEATIT Z-WAVE THERMOSTAT - SETUP

This manual describes the most essential functions and technical specifications of the thermostat.

These instructions should help the user to control the thermostat, and the electrician to install and set up the thermostat.

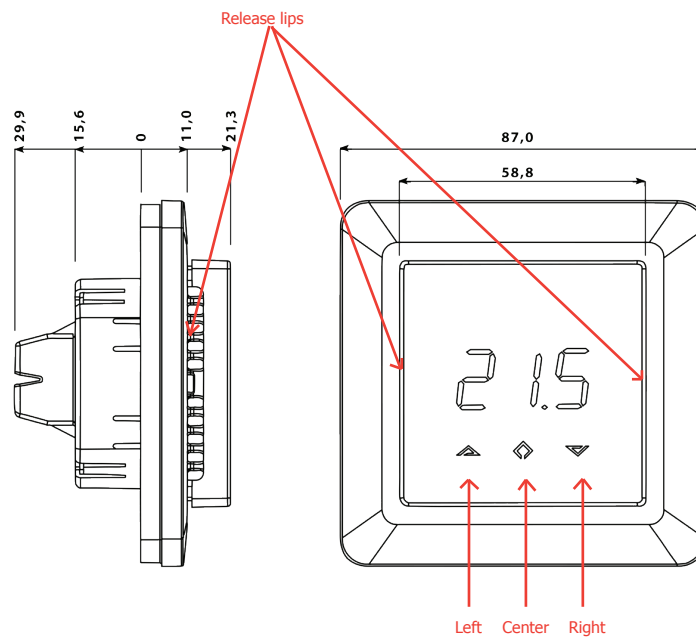
#### INSTALLATION

Installation must be done by a qualified electrician in accordance with wiring and building regulations.

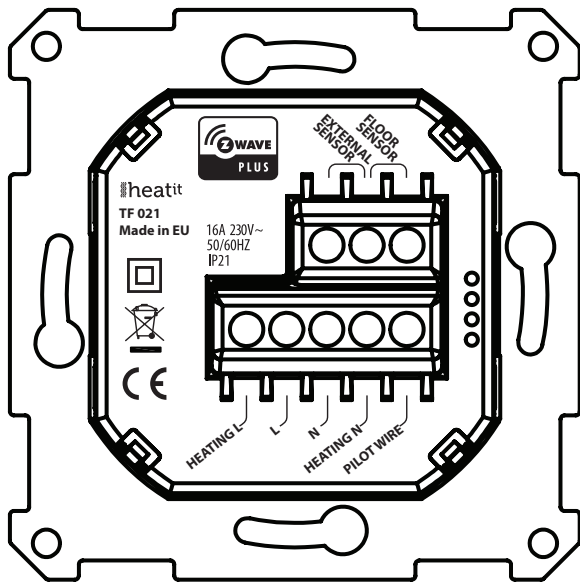
Before installation, disconnect any power to the thermostat's mains.

During installation of the thermostat, power to the thermostat must be disconnected or isolated AT ALL TIMES!

Start by carefully removing the front cover by pushing the release lips.



Use e.g. a small slotted screwdriver. The front cover and the frame can now be removed.



Now connect the wires to the thermostat's terminals:

<b>HEATING (N)</b>	Heating Cable connection (Neutral)
<b>N</b>	Power connection (Neutral)
<b>L</b>	Power connection (Live)
<b>HEATING (L)</b>	Heating Cable connection (Live)
<b>PILOT</b>	230V Pilot signal
<b>FLOOR SENSOR</b>	NTC type (10, 12, 15, 33 or 47kΩ). Default 10kΩ
<b>EXTERNAL SENSOR</b>	NTC type (10, 12, 15, 33 or 47kΩ). Default 10kΩ

Next, position the thermostat and fasten it onto the wall's mounting box using 2-4 screws. Position the frame, then position and carefully press the front cover until it snaps in place. Check that the front cover has snapped in place properly on both the left and the right side. The front cover should now be firmly fixed on all sides.

### STARTUP

AFTER CONNECTING THE POWER TO THE THERMOSTAT FOR THE FIRST TIME, ALL PARAMETERS WILL BE CHANGED TO DEFAULT SETTINGS.

### CONTROL

The thermostat is controlled by three touch sensitive capacitive buttons. You only need to **touch lightly** to activate the buttons.

- Left (Up)
- Center (Confirm)
- Right (Down)

### INCLUSION/EXCLUSION

To include the thermostat to your home automation gateway, press Center (confirm) for 10 seconds. The display will show OFF. Press Right (down) 4 times till you see Con in the display.

Now start add device in your home automation software. Start inclusion mode by pressing Center (confirm) for approximately 2 seconds. The inclusion/exclusion icon will appear in the display. Confirmation will show Inc/EcL in the display. If inclusion fails, Err (error) will appear.

Leave programming mode by choosing ESC in menu. Your thermostat is ready for use with default settings.

### PROGRAMMING YOUR THERMOSTAT

To activate the programming mode, press Center (confirm) for 10 seconds. The display will show OFF. You are now in programming mode. To scroll up and down in the menu use buttons left and right to navigate. To enter submenu press Center (confirm). Always confirm your setting by pressing Center (confirm) for 2 seconds.

Menu:

- OFF:** Turns the thermostat off
- A:** Sensors:
  - A** Air sensor
  - AF** Air+Floor sensor
  - A2** External sensor
  - P** Power regulator
  - FP** Floor sensor + Power regulator
  - F** Floor sensor

<b>Sen:</b>	Select the right Ohm value for your external/floor sensor. NTC type (10, 12, 15, 33 or 47kΩ). Default 10kΩ.
<b>CAL</b>	Calibration of displayed temperature.
<b>br1</b>	Brightness of display can be adjusted in this menu.
<b>Con</b>	Activation of inclusion/exclusion mode.
<b>diF</b>	Hysteresis
<b>ALo</b>	Setting lowest allowed temperature (limitation). (Air sensor)
<b>AHI</b>	Setting highest allowed temperature (limitation). (Air sensor)
<b>Flo</b>	Setting lowest allowed temperature (limitation). (Floor sensor)
<b>FHI</b>	Setting highest allowed temperature (limitation). (Floor sensor)
<b>ESC</b>	Escape – exit the programming menu.

## CHOOSING A SENSOR

The thermostat has a range of choices when it comes to sensors. To get to the menu you have to press Center (confirm) for 10 seconds, then press Right (down) once and an A shows in the display. Then press Center (confirm) again and you can choose one of these modes, while moving up and down with buttons Left or Right.

<b>A</b>	Air sensor
<b>AF</b>	Air+Floor sensor
<b>A2</b>	External sensor
<b>P</b>	Power regulator
<b>FP</b>	Floor sensor + P regulator
<b>F</b>	Floor sensor

When you have decided on the sensor mode you want to use, press Center (confirm) button. If you choose F or AF and there is no floor sensor installed, Err will display in the screen.

## SELECTING THE RIGHT OHM VALUE FOR YOUR EXTERNAL/FLOOR SENSOR

The following values are available: NTC type (10, 12, 15, 33 or 47kΩ). Default 10kΩ. The function is only active when an external sensor is connected. Confirm with Center (confirm) button.

## CALIBRATION

In this mode you are able to adjust the displayed temperature. If the thermostat or sensor for some reason is not calibrated properly you are able to make minor changes to the temperature. You are able to raise/lower the set point by up to 4°C. Confirm with Center (confirm) button.

## BRIGHTNESS

Use Left and Right (up and down) button to adjust the brightness between 0-9. Confirm with Center (confirm) button.

## INCLUSION/EXCLUSION

To include the thermostat to your home automation gateway, press Center (confirm) for 10 seconds. The display will show OFF. Press Right (down) 4 times till you see Con in the display.

Now start add device in your home automation software. Start inclusion mode by pressing Center (confirm) for approximately 2 seconds. The inclusion/exclusion icon will appear in the display. Confirmation will show Inc/ECL in the display. If inclusion fails, Err (error) will appear.

Leave programming mode by choosing ESC in menu. Your thermostat is ready for use with default settings.

## HYSTERESIS (DIF)

In this mode you are able to make changes to the hysteresis in the thermostat. This means that you can changes the hysteresis from 0,2C up to max 3,0C. Confirm with Center (confirm) button.

## MIN/MAX TEMPERATURE SETTINGS

<b>FLO</b>	- Min Floor temperature
<b>FHI</b>	- Max Floor temperature
<b>ALO</b>	- Min Air temperature
<b>AHI</b>	- Max Air temperature
<b>PLO</b>	- Min temperature in Power Reg Mode

Confirm with Center (confirm)

## ESC

Leaving programming mode. Confirm with Center (confirm) button.

## STANDBY AND MAIN SCREEN

When the thermostat remains untouched for a while, it will automatically go to standby screen. Standby screen shows the actual temperature in the room in a low density screen. By pressing Left or Right (up or down) button, the set point will be shown in the display.

## DISPLAY ON/OFF - don/doF

Activate by pressing Left and Center (up and confirm) button for 10 seconds. In case doF is activated, the screen will be totally black (can be used if installed where people are sensitive to the light of the display).

## CHILD LOCK - LOC

By pressing Left and Right (up and down) buttons for 10 seconds, child lock will be activated and no changes can be made. Trying to make changes causes the LOC text to appear in the display. Child lock can be deactivated by pressing Left and Right (up and down) buttons for 10 seconds. OPn will appear in the display.

## FACTORY RESET - RES

By pressing buttons Left and Center (up and confirm) for 20 seconds, the thermostat will perform a complete factory reset.  
*NB! Please use this procedure only when the primary controller is missing or otherwise inoperable.*

## CO/ECO MODE

The thermostat has 2 main programs, CO – comfort mode and ECO - economy mode. When Center (confirm) button is pushed for 2 seconds you switch between the 2 modes. You would normally have 2 different set-points for the different modes.

CO – mode: Is used for normal use. Example: 22°C.

ECO – mode: Is a setback mode that you can use if the thermostat is installed in a room or a house that is rarely used. The ECO-mode can also be activated by the pilot wire if this is connected. Example: 15°C.

Some gateways also support switching between CO/ECO mode.

## ASSOCIATIONS

Association enables the thermostat to control a device e.g a relay or a wallplug, that is included in your z-wave network. With this function the thermostat can control other heating devices such as an electric radiator or an electric fan. Remember to use association group 2, when you enable the associations. Maximum 8 devices per thermostat.

## TECHNICAL SPECIFICATIONS

Display	LED-display 3x 7-Seg 13.2mm CA white
Power supply	230V - 50/60Hz
Maximum load	16A (resistive)
Temperature range	+5°C/+40°C
Displayed temperature	-30°C .... 60°C
Floor min. limit	5°C (5°C...35°C)
Floor max. limit	35°C (5°C...35°C)
Air min. limit	5°C (5°C...40°C)
Air max. limit	35°C (5°C...40°C)
Regulator min. limit	0 (0...9)
CO set point	21°C (5°C...40°C)
ECO set point	18°C (5°C...40°C)
Power regulator	P02 (P00...P10) cycle of 30 minutes
Temperature setback	Adjustable within temperature range.
Temperature setback activation	Pilot wire/Z-Wave user interface
IP class	IP21
Standard Color	White RAL 9003 – Black RAL 9011
Approvals	CE – FIMKO - Z-Wave Plus

Note: Wooden floor requires that a floor sensor is connected. Thus, floor temp is limited to 27°C.

In order to run some schedule or week program, the gateway (controller) should be responsible for controlling the thermostat using those selected command classes.

## CLASSES

GENERIC\_TYPE\_THERMOSTAT  
SPECIFIC\_TYPE\_SETPOINT\_THERMOSTAT

COMMAND\_CLASS\_BASIC  
COMMAND\_CLASS\_THERMOSTAT\_SETPOINT\_V3  
COMMAND\_CLASS\_THERMOSTAT\_SETBACK  
COMMAND\_CLASS\_SENSOR\_MULTILEVEL  
COMMAND\_CLASS\_VERSION  
COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC  
COMMAND\_CLASS\_ASSOCIATION  
+ All other mandatory classes for selected device type