Wireless sensor
Thermo clock/hygrostat
FUTH65D/230 V with display

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

---

valid for devices from production week 01/18 (see bottom side of housing)

**Wireless thermo clock/hygrostat with display pure white glossy for single mounting 84x84x14 mm or mounting into the E-design
65 switching system. Installation depth 33 mm. With adjustable day and night reference temperatures and relative humidity. Illuminated display. Preset ready to operate. Power supply 230 V. Only 0.5 watt standby loss. Smart Home sensor.**

With adjustable day and night reference temperatures and relative humidity.
Preset ready to operate.
Power supply 230V. Ca. 7 days power reserve.

Mounting: screw the mounting plate.
Then put up the frame and attach the front panel with the display.

Up to 60 timer memory locations are freely assigned to the channels. With date and automatic summer/winter time changeover.

The wireless clock thermo hygrostat sends a message to the Eltako wireless network every 50 seconds when there is an actual temperature change of minimum 0.3°C or a change in humidity of 5%. A change in reference temperature or relative humidity is sent with 50 seconds. If there is no change, a status
report is sent every 10 minutes.

Queries of a wireless small actuator FKS which are received approximately every 10 minutes will be answered immediately.

Settings are made with the buttons MODE and SET and can be locked.

A complete switching programme is preset and can be very easily changed.
Day setpoint temperature 22°C monday to thursday from 6 a.m. to 22 p.m., friday from 6 a.m. to 23 p.m., saturday from
7 a.m. to 23 and sunday from 7 a.m. to 22 p.m.. The factory setting for night setpoint temperature is 18°C.

* Set language: Every time the power supply is applied, press SET within 10 seconds to set the language german or english and press MODE to confirm. The normal display then appears: Weekday, date, time, **actual temperature** from 0°C to +40°C to one decimal point and relative humidity. To adapt the sensor to the ambient conditions, the internal sensor can be adjusted to the actual room temperature and humidity according to the operating instructions. If the settings are locked, the reference temperature *settemp.* can be displayed and changed here from +8°C to +40°C in steps of 0.5°C by pressing MODE followed by SET.

Rapid scroll: In the following settings, the numerals scroll rapidly when you press and hold down Enter. Release then press and hold down to change the scroll direction.

Set time: Press MODE and then press SET to search for **function *clock***. Select by pressing MODE. Press SET to select the hour and press MODE to confirm. Proceed in the same way as for minutes.

Set date: Press MODE and then press SET to search for the **function *date***. Select by pressing MODE. Press SET to select the year and press MODE to confirm. Proceed in the same way as for month and day. The final setting in the sequence is the weekday which is selected by pressing SET.
Press MODE and SET to switch the display lighting on.

20 seconds after pressing MODE or SET, the menu returns automatically to normal display and the display lighting is switched off.

The FKS-H or FKS-MD15, FKS-MD10 and FKS-E wireless small actuators can be taught in. FTR and a PC on which GFVS software is installed can also be taught in.

This clock thermostat teaches in FTK window/door contacts and Hoppe window handles

---

for FKS and TF61R (FR62), otherwise teach-in takes place in the actuators listed above.

When FTK window/door contacts or HOPPE window handles are taught-in, the temperature is lowered to frost protection temperature 8°C as long as one or several windows are open.

The FUTH65D/230V can be taught-in in TF61R (FR62), FHK (wireless heating/cooling relay), FKS (wireless small actuator) and in actuators.

Programs:
After pressing MODE to confirm, P01 appears in the display. Press SET to select the program you want to edit and press MODE to confirm. Then press SET to select either **inactive** or **active.**

If you press MODE to confirm *inactive*, the normal display appears. If you press MODE to confirm *active*, press SET to select either Temperature or Humidity.

If you press MODE to confirm **temp.** (setpoint temperature), then press SET to select either Nighttemp., Daytemp. or Free tmp., then press MODE to confirm.
- The Nighttemp. and Daytemp. are taken over automatically in all programs.
- You can enter Free Tmp. individually for each program.
Then press SET to set the setpoint temperature.
Press MODE to confirm and then press SET to select the hour.
Press MODE to confirm and then press SET to select the minutes.
Press MODE to confirm, then press SET to activate the whole week or each single week day and press MODE to confirm your choice.
After completing your input, the menu returns to normal display.

If you press MODE to confirm *humidity*, press SET to select either Fixedvalue1, Fixedvalue2 or Value and press MODE to confirm your choice.
- The Fixedvalue1 and Fixedvalue2 entered are automatically taken over in all programs.
- You can enter each of the values separately in each program.
Then press SET to set the humidity.
Press MODE to confirm and then press SET to select the hour. Press MODE to confirm and then press SET to select the minutes.
Press MODE to confirm, then press SET to

---

activate the whole week or each single week day and press MODE to confirm your choice. After completing your input, the menu returns to normal display.

Press MODE for longer than 2 seconds to exit the menu at any point.

The parameter changes are saved and the menu returns to normal display.

Learn:
Press MODE to confirm and then press SET to select either **heating** or **hygrostat.**

If you press MODE to confirm *heating,* press SET to select either *room (1-8), pump, GFVS* or *FKS-MD10.*

If you press MODE to confirm **room1**, press SET to select either *FKS (1-5), FHK, TF61R (FR62)* or *FTK (1-4)* and press MODE to confirm your choice.

If you press MODE to confirm **Room2-8,** press SET to select either *FKS (1-5), FHK, FTR* or *FTK (1-4)* and press MODE to confirm your choice.

- When you select *FKS* and press MODE to confirm, *save* appears in the display. When you press MODE to confirm *save*, *wait for telegram* appears. One of the FKS devices must then send a teach-in telegram. When the telegram is received, *get telegram* appears in the display. Press MODE to confirm this.
- When you select *FHK* or TF61R (FR62) and press MODE to confirm, *send telegram* appears in the display. Press SET to send a teach-in telegram and teach in an actuator which is prepared for teach-in.
- When you select *FTR* and press MODE to confirm, *save* appears in the display. When you press MODE to confirm *save, wait for telegram* appears. One of the FTR devices must then send a teach-in telegram. When the telegram is received, *get telegram* appears in the display. Press MODE to confirm this.
- When you select *FTK* and press MODE to confirm, *save* appears in the display. When you press MODE to confirm *save, wait for telegram* appears. One of the FTK devices must then send a teach-in telegram. When the telegram is received, *get telegram* appears in the display. Press MODE to confirm this.
When you press MODE to confirm **pump,** press SET to select either *on* or *off* and then

---

press MODE to confirm your choice.
Press SET to send the pushbutton telegram and teach in an actuator prepared for teach-in as central pushbutton.

When you press MODE to confirm **GFVS,** save appears in the display. When you press MODE to confirm *save, wait for telegram* appears in the display. A teach-in telegram must then be sent from the GFVS software installed on a PC.
When the telegram is received, *get telegram* appears in the display. Press MODE to confirm this.

When you press MODE to confirm **FKS-MD10,** press SET to select FKS-MD10 (1-8) and press MODE to confirm. *Save* appears in the display. When you press MODE to confirm *save, wait for telegram* appears. One of the FKS-MD10 devices must then send a teach-in telegram. When the telegram is received, *get telegram* appears in the display. Press MODE to confirm this.

When you press MODE to confirm **hygrostat**, press SET to select either *sensor, on* or *off.*
- When you press MODE to confirm *sensor*, press SET to send a teach-in telegram and teach in an actuator prepared for teach-in.
- When you press MODE to confirm *on* or *off*, press SET to send a pushbutton telegram and teach in an actuator prepared for teach-in as central pushbutton.

A sensor ID cannot be taught-in several times in the FUTH65D/230 V.

You can only exit teach-in mode by pressing the MODE pushbutton for longer than 2 seconds. The normal display then appears.

When a **FKS-H** device is taught in (wireless small actuator SmartDrive MX from Hora), the menu option *setvalues* appears in addition in front of the menu option Programs.

When a FKS-H device is taught-in in Rooms 2-8, the options FHK and FTR are omitted from the Learn menu for each of the rooms.

The actual temperature is measured by the FKS-H and sent to the FUTH65D/230V.

If the settings were not locked, press SET to display the actual and setpoint temperatures in the display separately for each room.

If several FKS-H devices are located in one room, the last received actual temperature is displayed.

Clear:
After you press MODE to confirm, press SET to select either **all programs, all IDs, one room** or **one ID** and then press MODE to confirm your choice.

- When you press MODE to confirm *all programs* or *all IDs, press SET to erase* appears in the display. When you press SET to start this, *erasing finished* appears in the display when the clearing process has ended. Then press MODE to confirm. When you press MODE to confirm *press SET to erase, erasing cancelled* appears in the display and the menu then returns to normal display after 2 seconds.

- When you press MODE to confirm a room, press SET to select the room. After pressing MODE to confirm, *press SET to erase* appears in the display. When you press SET to start this, *erasing finished* appears in the display when the clearing process has ended. Then press MODE to confirm. When you press MODE to confirm *press SET to erase, erasing cancelled* appears in the display and the menu then returns to normal display after 2 seconds.

- When you press MODE to confirm *one ID, wait for telegram* appears in the display. The sensor to be cleared must then send a teach-in telegram. When it is received, *get telegram* appears in the display. When you press MODE to confirm this, press SET to select either *don't erase ID* or *erase ID.* After pressing MODE to confirm, the normal display appears.

Exit the clear mode by pressing MODE for longer than 2 seconds. The normal display then appears.

Summer/winter time switchover: Press MODE and the press SET to search for **function summer/wintertime automatic** and press MODE to select. Then press SET to select either *active* or *inactive*. If you select *active,* switchover is automatic.

Hystereses:
Press MODE and then press SET to search for **function *hystereses*** and select by pressing MODE. When the *hygrostat hystereses* is reached, press SET to select the required hysteresis 5%, 10%, 15% or **20%** and press MODE to confirm. The display then shows *thermostat hystereses* in the display. Press SET to select the required hysteresis 0.5°C, **1.0°C**, 1.5°C or 2.0°C. Press MODE to

confirm. The normal display then appears.

Adapt sensor to ambient conditions:
Press MODE and then press SET to search for **function *sensor adjustment*** and select by pressing MODE. At **temp. adjustment,** press SET to adjust the temperature measurement between ±5.0 K in steps of 0.5 K.
After pressing MODE to confirm, press SET at **humidity adjustment** to adjust the humidity measurement between ±10% in steps of 1%. After pressing MODE to confirm, the normal display appears.

Setpoints (only when FKS-H is already taught-in):
After pressing MODE to confirm, the menu option *Room1* appears.

Press SET to select Room 1-8 and press MODE to confirm.

- If you select Room 1, *FKS-cycle* appears in the display. Press SET to set the cycle time of the telegram request between the FKS-H and the FUTH65D/230 V from
10 seconds to 25 minutes (factory setting 10 minutes). After pressing MODE to confirm, *control set-temp.* appears in the display. Press SET to select either *UTH+FKS* or *UTH.* If you press MODE to confirm *UTH+FKS,* you can set the setpoint temperature on FUTH65D/230V and FKS-H; if you press MODE to confirm *UTH,* you can only set the setpoint temperature on FUTH65D/230 V.

- If you select Room 2-8, the menu option *day-temp.* appears in the display before the menu option FKS-cycle. Press SET to select the required day setpoint temperature and press MODE to confirm. Then *night-temp.* appears in the display. Press SET to select the required night setpoint temperature and press MODE to confirm.

Base ID:
The *base ID* of the FUTH65D/230 V appears in the display.

Switch on/off night reduction manually:
Press MODE and SET together for 4 seconds. At ON, **C** appears in the display.

Switch on/off control:
Press MODE and SET together for 10 seconds. At OFF, **O** appears in the display.

- The operating mode acts equally on all rooms, i.e. night mode and OFF mode refer to

all rooms, whereby OFF always has priority.
- If the night temperature is executed via the clock program, the other rooms switch to night mode at their individual night temperature.
- If one of maximum seven FTR65HS devices is set to OFF or NIGHT, this setting is applied in the related room.
- With Rooms 2-8, data transfer only works if an associated FTR telegram is received.
- The data for Room 1 are generated by the internal sensor (actual temperature) and the clock program (setpoint temperature).

Temperature values are sent as temperature data telegrams and as pushbutton telegrams (e.g. to switch on/off a pump with an FSR61).

Hygrostat values are sent as humidity data telegrams and as pushbutton telegrams (e.g. to switch on/off a fan with an FSR61).

Hystereses are adjustable for the pushbutton telegram.

The designation *Room1* refers to the room controller in the primary room where the FUTH65D/230V is installed. For Rooms 2-8 the FUTH65D/230V acts as a type of gateway which links data between the FTR (signal source, installed in the room to be controlled), night reduction (timing program), operating mode, FTK window/door contacts and individual signal receivers such as FKS-MD and FHK.

Control using the GFVS software:
The GFVS software specifies a setpoint temperature for the FUTH65D/230 V.
Set temperature without priority means that the set temperature of the single rooms must be adapted individually to ± threshold value but only in case if they are beyond ±3°C. (Example: the setpoint temperature is specified by the GFVS at 20°C. Room 1 has a setpoint temperature of 22°C and remains unchanged. Room 2 has a setpoint temperature of 16°C. A correction is made to 17°C. Room 3 has a setpoint temperature of 25°C. Here a correction is made to 23°C. With setpoint temperature with priority, the setpoint temperatures of all rooms are set to the setpoint temperature of the GFVS. Control by the GFVS is terminated by a telegram containing a setpoint temperature of 0°C. If no telegram is received by the GFVS for longer than 1 hour, the control process is also ended. If the FUTH65D/230 V is activated by the GFVS, a wireless icon appears in the display. Settings at TF will be overruled by

GFVS. FTK however have prioritiy.

FHK data transfer:
- Corresponds to the FTR telegram compliant with EEP A5-10-06 and acts additionally to control FHK devices.
Teach-in telegram: 0x40300D87
- The FTK evaluation of the individual rooms (each consisting of 4 FTKs) is not taken into consideration
- The FTK devices have no influence on whether the pump is switched off since an open window is not a permanent state and the FTKs are taught-in into the FHK during FHK operation.

FKS data transfer:
FKS telegrams from Kieback&Peter compliant with EEP A5-20-01
FKS-H telegrams from Hora compliant with EEP A5-20-04
- Window contacts are considered separately for each room.
- FKS devices send a get telegram signal and receive a reply telegram from the FUTH65D/230 V.

TF61R (FR62) data transfer:
The FUTH65D/230V operates as a 2-point controller in conjunction with TF61R (FR62).
Telegrams compliant with EEP A5-38-08; Teach-in telegram 0xE0400D80

Hygrostat data transfer:
Telegrams compliant with EEP A5-10-12; Teach-in telegram 0x40900D80

Lock settings: Briefly press MODE and SET together and at *lock*, press SET to lock. This is displayed by an arrow next to the lock symbol.
Unlock settings: Press MODE and SET together for 2 seconds and at *unlock* press SET to unlock.

enocean®
THE UNIQUE WIRELESS **PROFESSIONAL SMART HOME** STANDARD

Frequency	868.3 MHz
Transmit power	max. 10 mW

Hereby, Eltako GmbH declares that the radio equipment type FUTH65D/230V is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address: eltako.com

Must be kept for later use!

Eltako GmbH
D-70736 Fellbach
Technical Support English:
☎ +49 711 94350025
✉ technical-support@eltako.de
eltako.com