

Centrometal

HEATING TECHNIQUE

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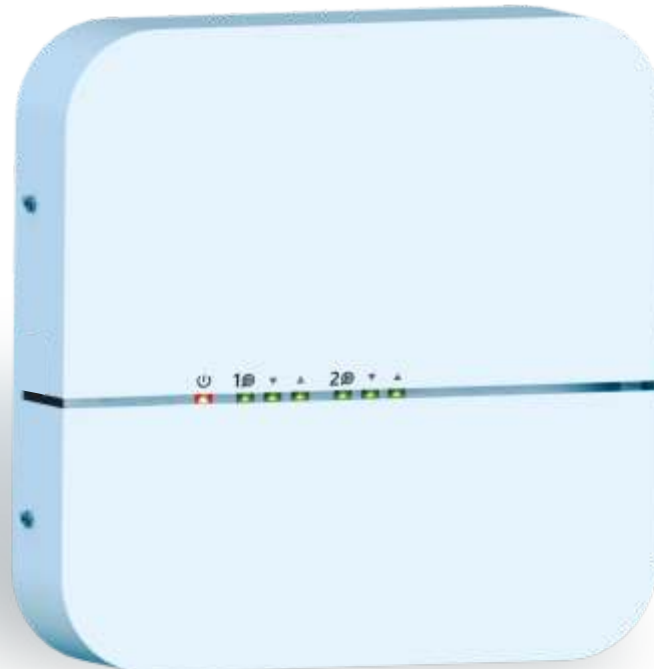
ENG

Technical instructions

for installation and using the additional equipment

CM2K module for
mixing circuits / DHW / Recirculation

for connection to: PelTec, Cm Pelet-set Touch, BioTec-L
BioTec Plus, EKO-CKS P Unit, EKO-CKS Multi Plus



CM2K

Thank you for purchasing our product

Please read these technical instructions carefully so that you can use and adjust the CM2K module as easily as possible. After reading the instructions, place them in an appropriate place where you can easily find them if you need further information about the operation and use of the CM2K module.

Please make sure that the CM2K module has been disposed of in order to reduce environmental pollution.

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TECHNICAL CHARACTERISTICS CM2K

Inputs	4x sensor inputs (NTC5K, 2x main flow/DHW, 1x outdoor, 1x reserve)
	2x room corrector inputs CSK
	2x digital inputs (CSK-Touch: wire)
	1x power supply 12VDC
Outputs	4x semi-conductor (triac / 2x pump, 2x mixing valve actuator)
Output power	Triacs (2x) max. 200W (1A)
Power supply	195-265V/50Hz
Max. power	
Electricity consumption	
Conductor cross section	1-1,5 mm ²
IP protection	IP20 according EN
Environment temperature	-10 do 40°C
CM2K mass	715 g
Housing material	Flame resistant ABS (UL94V-0)
CM2K dimensions	(WxHxD) 200x40x200

Sensor technical characteristics

Sensor type	NTC5K
Min. conductor cross section	0,5-0,75 mm ²
Max. conductor length	50 m

EC Declaration

The product complies with the requirements of the current rules and is marked CE.
The EC Declaration of Conformity is available on request, contact the manufacturer.



BASIC PARTS

INPUTS:

- 4x sensor input (NTC5K sensor - 2x main flow/DHW, 1x outdoor sensor, 1x reserve)
- 2x room corrector CSK input (possibility of connection with 3 or 2 wires - connection depends of boiler type and boiler firmware)
- 2x digital input (CSK-Touch: wire)
- 1x 12VDC

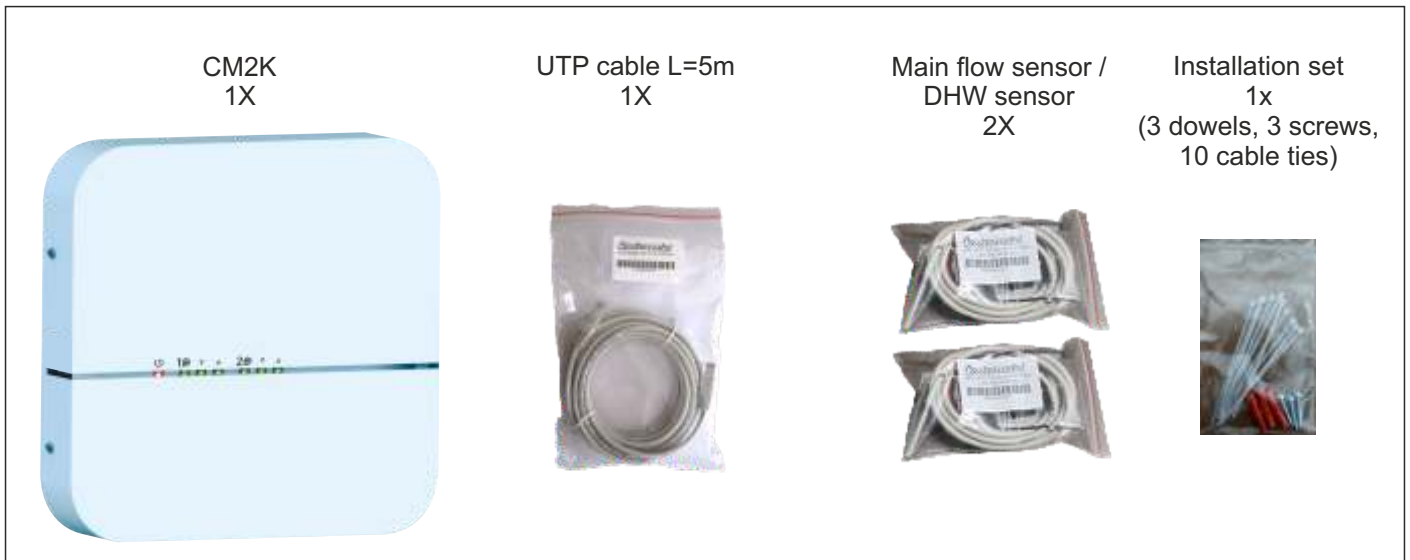
OUTPUTS:

- 2x standard (230V) - pump
- 2x standard (230V) - actuator
- 2x UTP connector for connecting to the boiler and connection more CM2K modules or other additional equipment (WiFi box...)

DELIVERY in cardboard box:

- 1x CM2K module
- 2x NTC5K (main flow sensor / DHW sensor)
- 1x UTP cable 5m
- 3x dowel+screw
- 10x cable ties
- 1x technical instructions

DELIVERY CONTENT



ADDITIONAL EQUIPMENT FOR CM2K

Room corrector **CSK**



Outdoor sensor **OVT**



Note:

Room corrector CSK is **NOT** in delivery package.

With CM2K module is possible to use only **CSK room corrector** from producer Centrometal.

Maximum of two room correctors can be connected, one for each circuit.

Outdoor sensor OVT is **NOT** in delivery package.

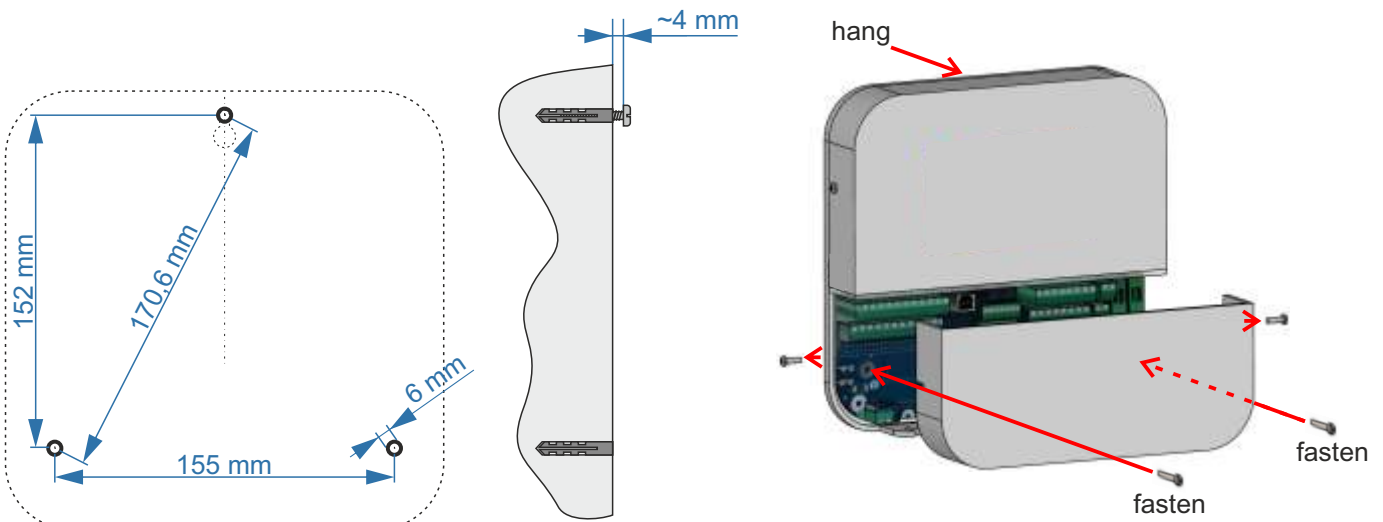
At certain boilers outdoor sensor is in standard delivery and at some boilers it must be **separately ordered**.

INSTALLATION

CM2K module is installed on the wall or on hard surface in closed dry room.

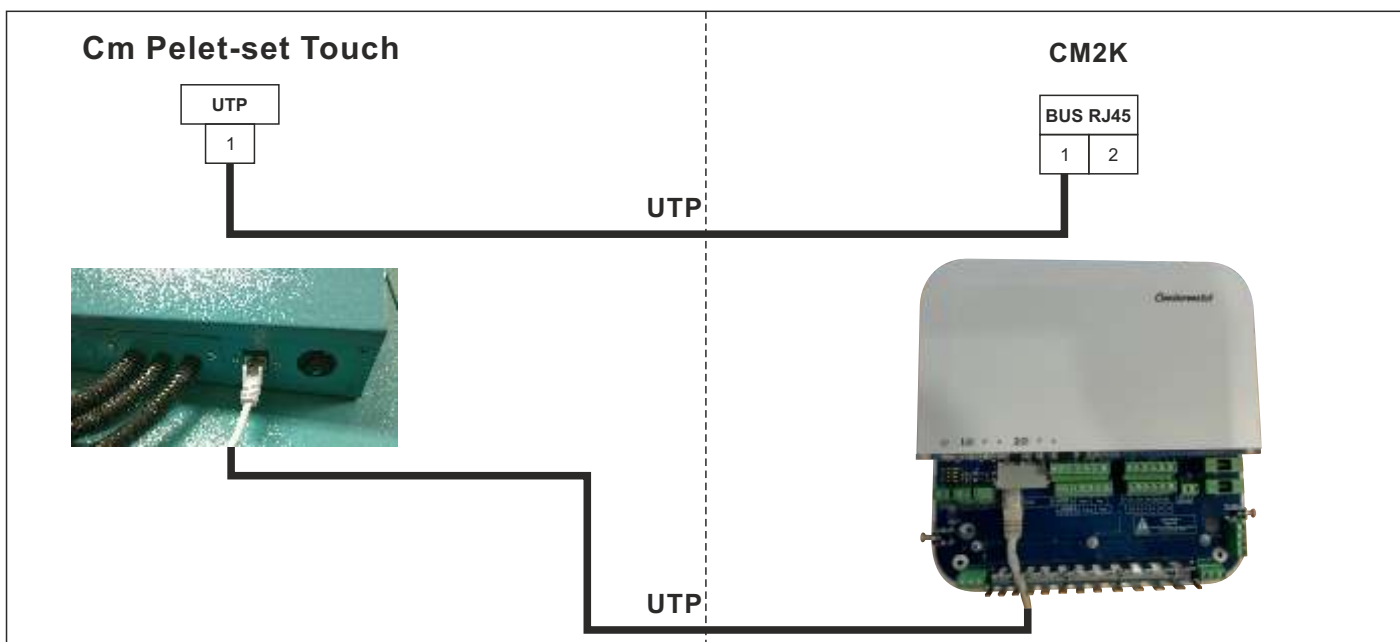
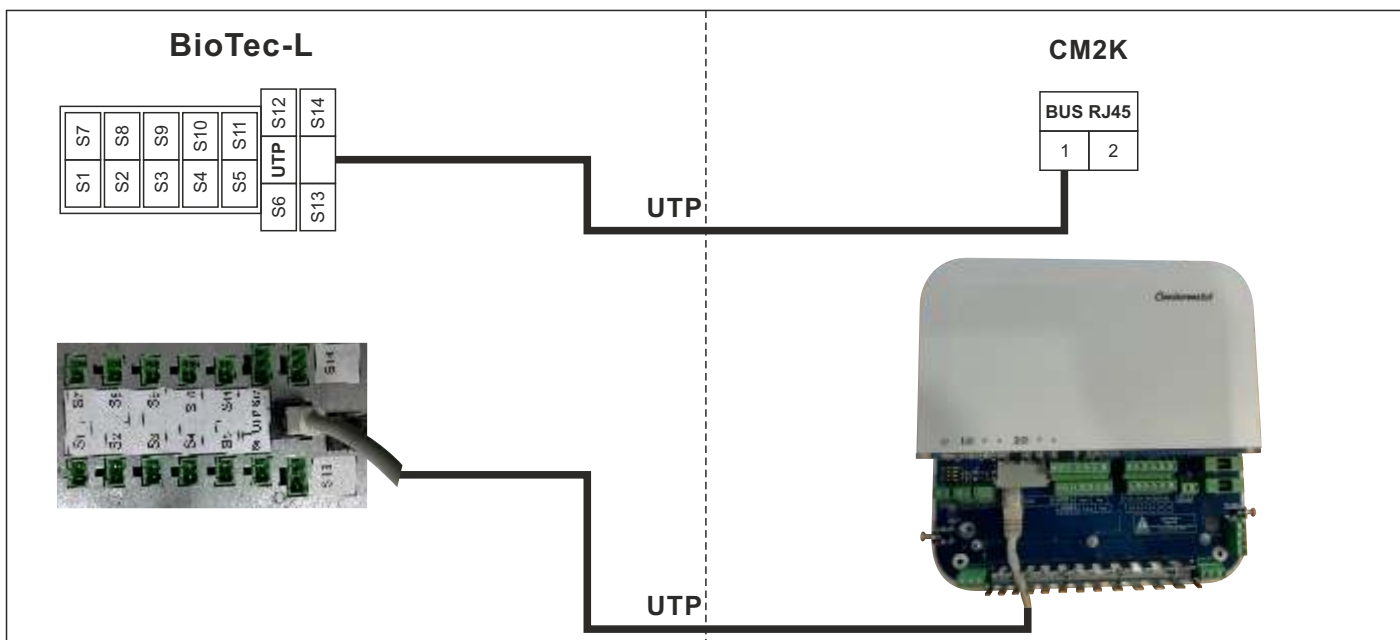
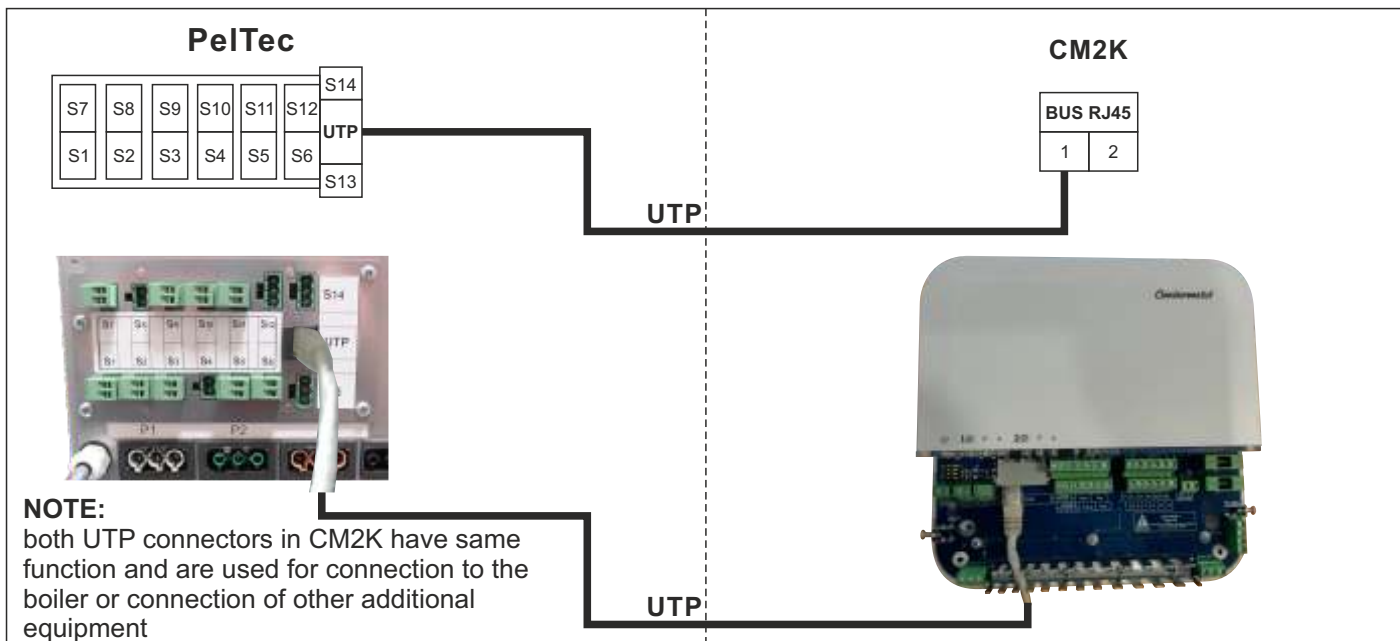
According the picture below, drill 3 holes 6 mm x 35-45 mm.

Insert 3 dowels into drilled holes and install screw into upper dowel with ca. 4 mm distance from the wall.

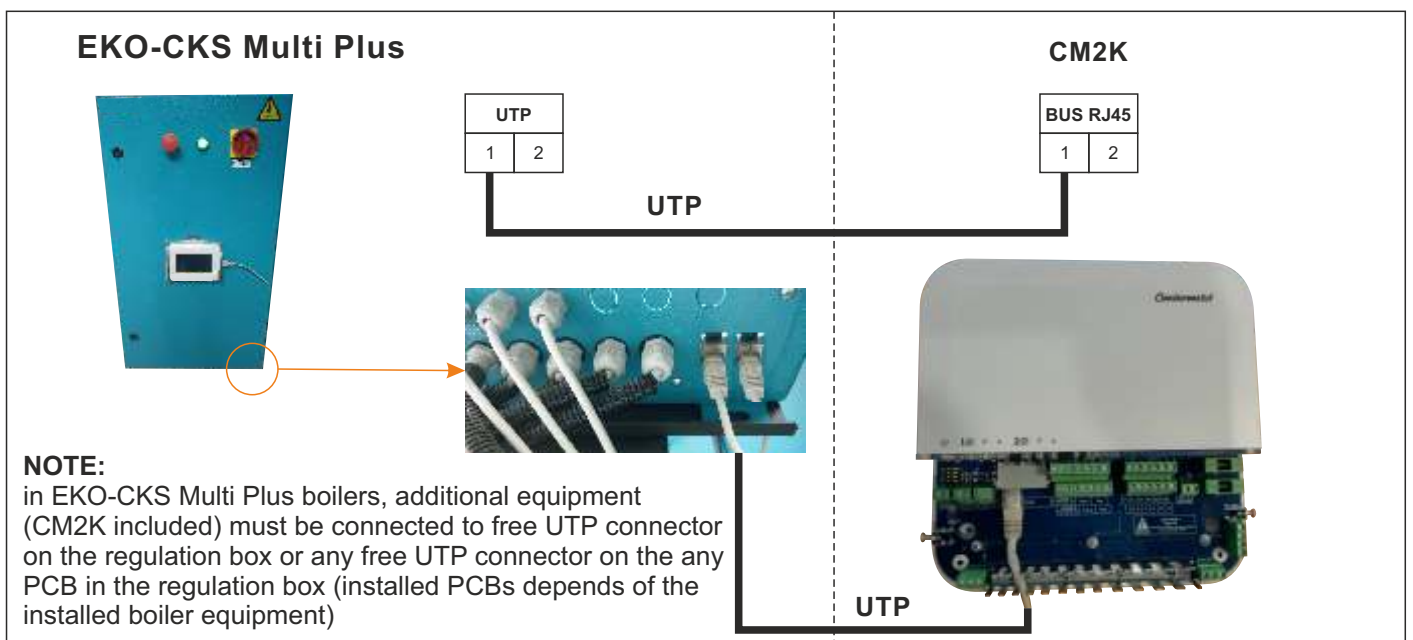
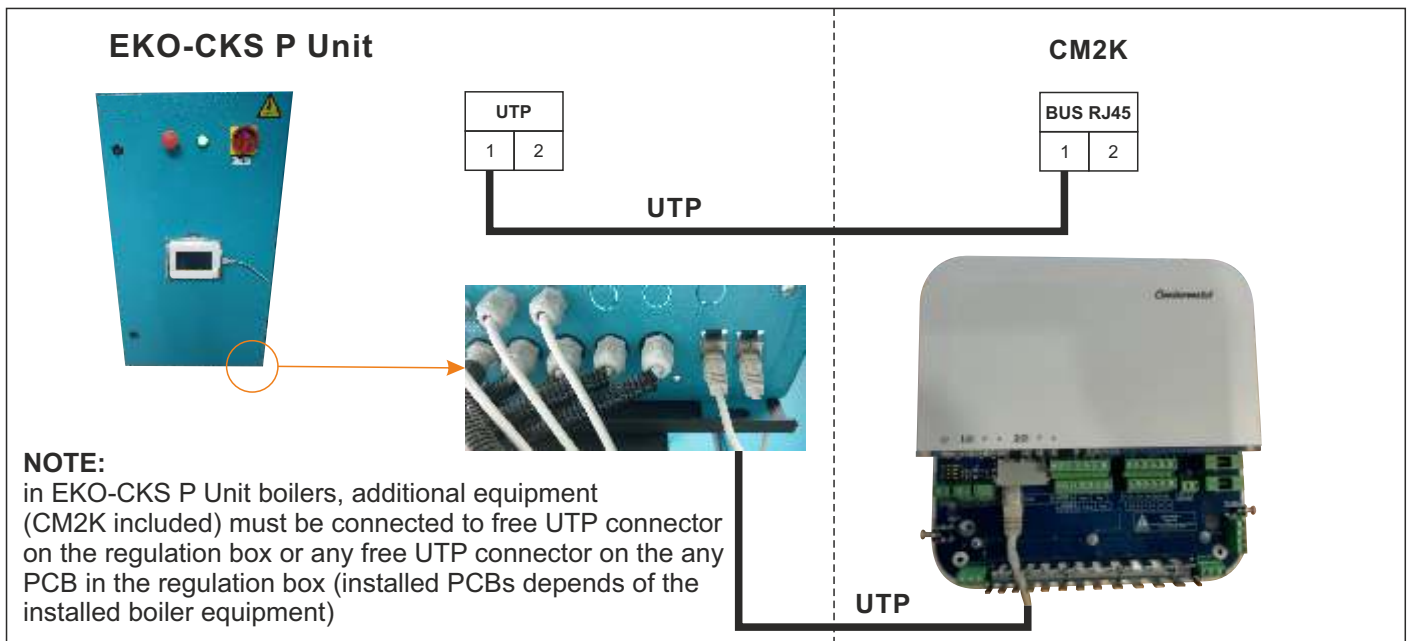
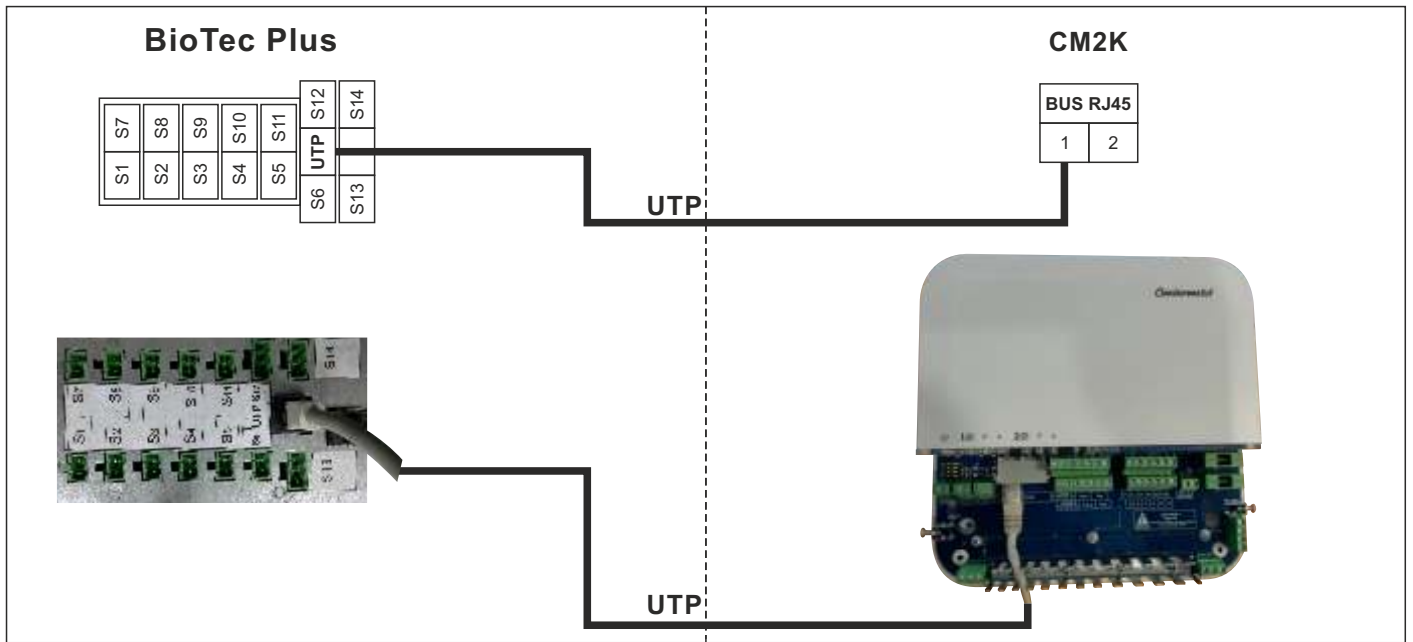


Remove lower cover, hang the module on the upper screw, install lower screws to the mounting holes in the module and in the wall. Fasten the screws to secure the module to the wall.

CONNECTION TO THE BOILER




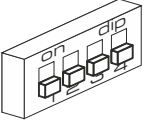

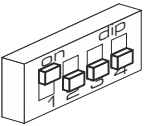

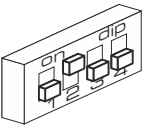

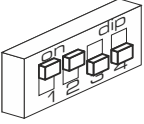

CONNECTION TO THE BOILER

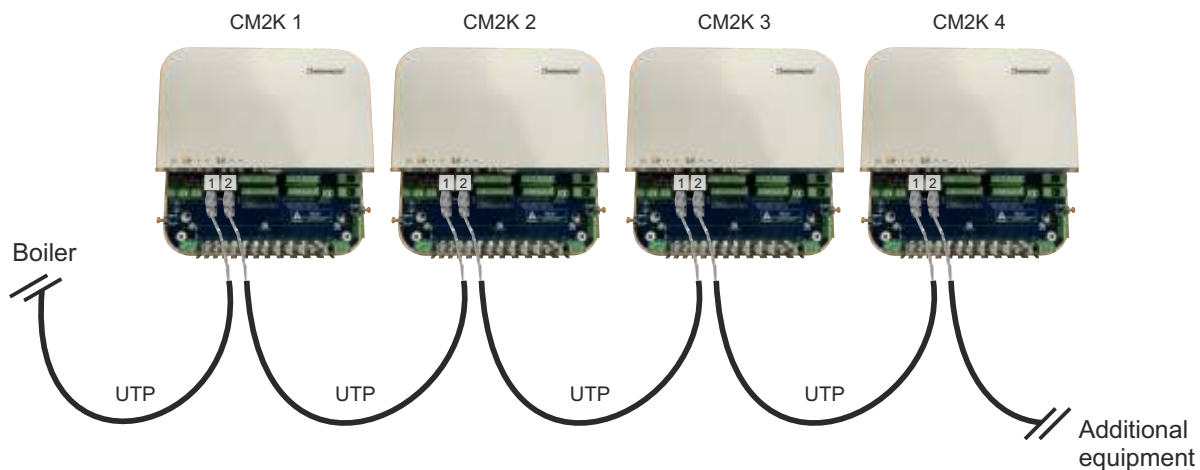


CONNECTING MORE CM2K MODULES

Maximum up to 4 modules can be connected. Connection is done by UTP cables. UTP input/output 1 or UTP input/output 2 can be used (they both have same function, free connector is used for connection of next module or for connection of other additional equipment).

If there are more than 1 CM2K installed, in every module is necessary to set device address (0-4). Address is set by SW switches on the PCB of the module (below casing cover of the connection clamps). Order of connection is not important, circuit number is defined by module address with SW switches (every module must have different address, i.e. two devices can't have same address).

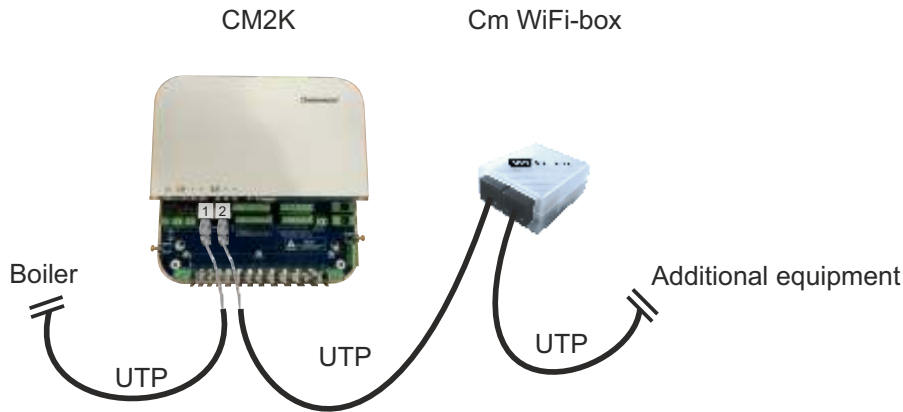
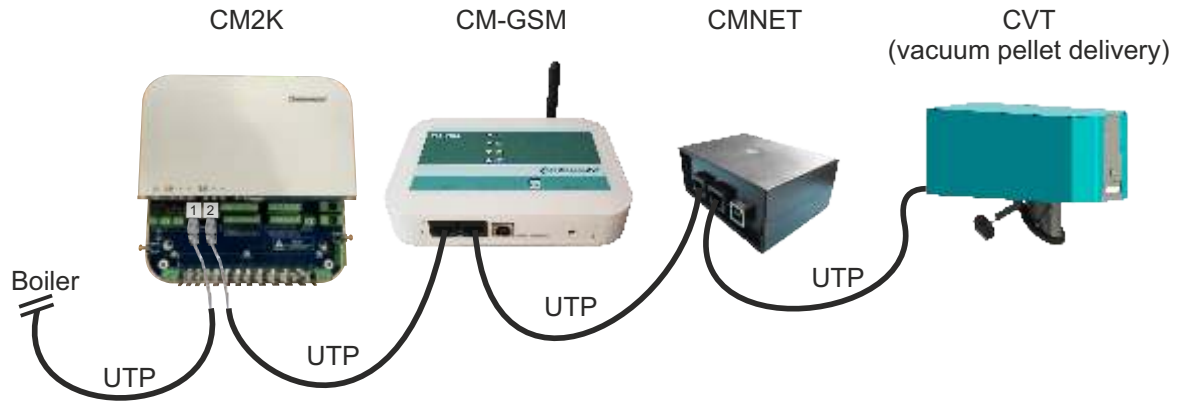
 <p>Position of the SW switches</p>	<p>Device 1</p> <p>1 - off 2 - off 3 - off 4 - off</p>  
	<p>Device 2</p> <p>1 - on 2 - off 3 - off 4 - off</p>  
	<p>Device 3</p> <p>1 - off 2 - on 3 - off 4 - off</p>  
	<p>Device 4</p> <p>1 - on 2 - on 3 - off 4 - off</p>  



CONNECTION TO THE OTHER DEVICES (CM WIFI-BOX, CM-GSM, CMNET, CVT)

Connection is done with UTP cables. Every additional equipment device has 2 UTP connectors. Both UTP connector have same function. Devices can be connected in any order.

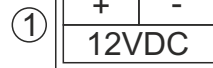
Example of connection:



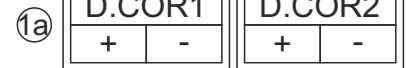
INPUTS AND OUTPUTS CONNECTION



Digital input



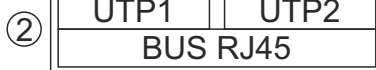
Digital inputs/outputs



1 - Input (12V DC):
 CSK-Touch digital room corrector uses power supply via input / output D.COR when the boiler main switch is ON.
 OPTION - input (12V DC): can be used to power CSK-Touch digital room corrector when the boiler main switch is OFF (additional equipment: 12V DC rectifier)

1a - Digital inputs/outputs:
 Wired connection of CSK-Touch digital room corrector. It is not important which output each individual corrector is connected to, but pay attention to have the corrector terminal "+" connected to the CM2K terminal "+" and vice versa, to have the corrector terminal "-" connected to the CM2K terminal "-".

UTP inputs/outputs



Inputs/outputs for UTP cables

- one input/output is for connection to the boiler
 - free input/output is used for connecting more CM2K modules or other additional equipment

Circuit 1 inputs



Circuit 1 inputs

- A.COR 1- room corrector
 - Tsp 1 - main flow sensor
 - Tos - outdoor sensor

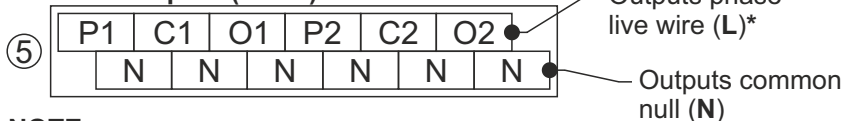
Circuit 2 inputs



Circuit 2 inputs

- A.COR 2- room corrector
 - Tsp 2 - main flow sensor
 - Tspr - reserve (not used)

Triac outputs (230 V)

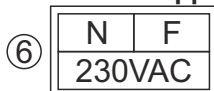


* P1 - circuit 1 pump
 C1 - circuit 1 actuator - close
 O1 - circuit 1 actuator - open
 P2 - circuit 2 pump
 C2 - circuit 2 actuator - close
 O2 - circuit 2 actuator - open

NOTE:

The maximum current for each pump output is $I_{max} = 1 A$
 In case of installation of a stronger or three-phase pump, it is necessary to install an additional contactor.

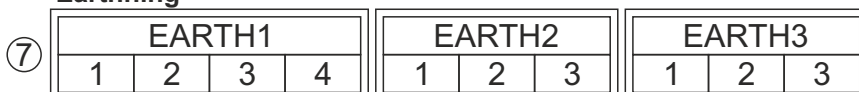
Power supply



CM2K power supply

power supply 230V must be connected to control connected pumps and actuators

Earthing



Common earthing

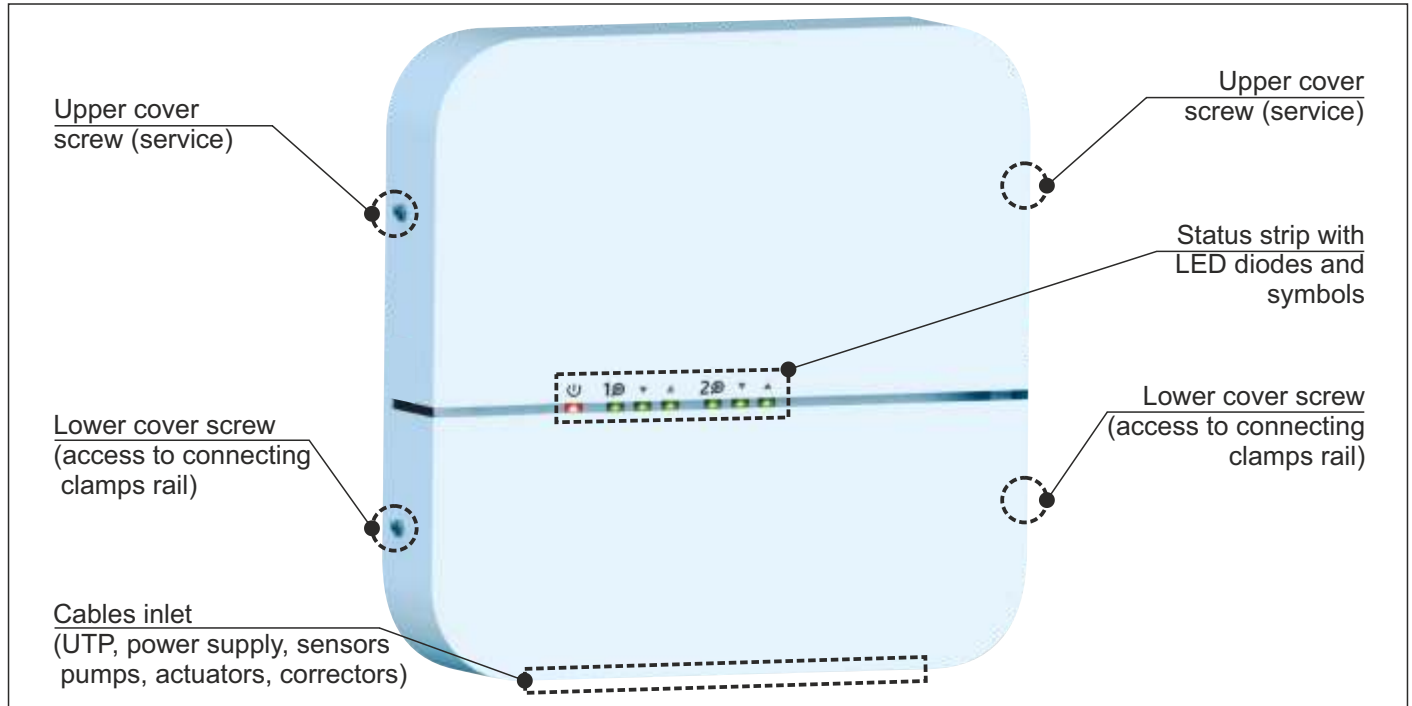
connect earthing of the power supply and connected pumps





⑧ **Cable connecting rail**
 fasten the cables to the rail with cable ties

⑨ F2 - fuse 1,6A - outputs 2. circuit (pump, actuator)

⑩ F1 - fuse 1,6A - outputs 1. circuit (pump, actuator)

LED INDICATORS



-  - **status** - indicates CM2K status; connection with the boiler is ok, boiler is connected to the power supply and main switch is on - doesn't mean that CM2K is connected to the power supply (230V)
-  - **pump** - indicates working of the pump (LED ON = pump works / LED OFF = pump doesn't work)
-  - **actuator - close** (LED ON = actuator closes / LED OFF = actuator doesn't work)
-  - **actuator - open** (LED ON = actuator opens / LED OFF = actuator doesn't work)

NOTE: actuator open and actuator close can't work at the same time

EXAMPLES OF LED INDICATORS



1. Circuit
All devices are off



2. Circuit
All devices are off



1. Circuit
Pump works; Mixing valve closes



2. Circuit
Pump works; Mixing valve closes



1. Circuit
Pump works; Mixing valve opens



2. Circuit
Pump works; Mixing valve opens

CONFIGURATIONS



For configuration schemes and view on the screen look in the boiler regulation technical instructions.

Boiler configuration must be set in the **Installation** menu (under PIN).

PeITec - CM2K can be enabled only in schemes that have accumulation tank or hydraulic crossover.

BioTec-L - CM2K can be enabled in all configurations (schemes) because all have accumulation tank.

Cm Pelet-set Touch - CM2K can be enabled in all configurations (schemes) because all have accumulation tank, hydraulic crossover or 4-way mixing valve.

BioTec Plus - CM2K can be enabled in all configurations (schemes) because all have accumulation tank.

EKO-CKS P Unit - CM2K can be enabled in all configurations (schemes) because all have accumulation tank or hydraulic crossover.

EKO-CKS Multi Plus - CM2K can be enabled in all configurations (schemes) because all have accumulation tank.

Example of scheme selecting: **PeITec**



ENABLING CM2K

CM2K can be enabled only by authorized serviceman in **Installation** menu (PIN). By selecting number of CM2K modules, module is enabled (every module can control 2 circuits). By selecting number of CM2K modules, option REGULATOR/CM2K is enabled (activated) and in the main menu Regulator/CM2K menu icon will be displayed. User can use this menu to monitor and adjust some of the parameters.



Display order and ordinal numbers in regulation don't have to match exactly to this instructions. They depend of the configuration, firmware version and setting of the regulation.

NOTE: after enabling any of CM2K modules (2 circuits), for each circuit, heating type must be set / selected. After selecting the heating type, it is enabled and settings for it are displayed.

Example of enabling CM2K: **PeITec (1xCM2K - 2 circuits)**

The process for enabling CM2K on a PeITec boiler involves the following steps:

- Accessing the main menu and selecting the **Installation** icon.
- Entering the PIN (XXXX) to access the installation settings.
- Choosing the **CM2K** option from the installation menu.
- Entering the **10.18.CM2K** configuration screen.
- Selecting **1xCM2K (2 circ.)** to enable two circuits.
- Returning to the main menu where the **CM2K** icon is now visible.

CM2K enabled

Example of enabling CM2K: **BioTec-L (2xCM2K - 4 circuits)**

The process for enabling CM2K on a BioTec-L boiler involves the following steps:

- Accessing the main menu and selecting the **Installation** icon.
- Entering the PIN (XXXX) to access the installation settings.
- Choosing the **Regulator** option from the installation menu.
- Entering the **9.20.Regulator** configuration screen.
- Selecting **2xCM2K (4 circ.)** to enable four circuits.
- Returning to the main menu where the **Regulator** icon is now visible.

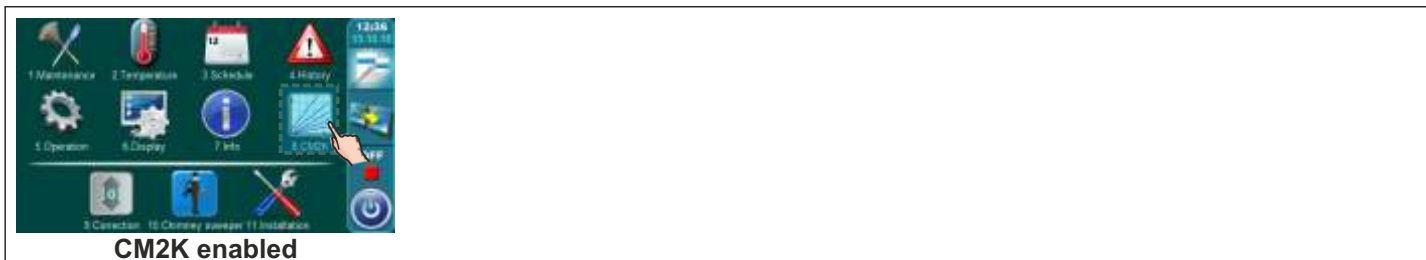
CM2K enabled

Example of enabling CM2K: **Cm Pelet-set Touch (1xCM2K - 2 circuits)**

The process for enabling CM2K on a Cm Pelet-set Touch boiler involves the following steps:

- Accessing the main menu and selecting the **Installation** icon.
- Entering the PIN (XXXX) to access the installation settings.
- Choosing the **Commissioning** option from the installation menu.
- Entering the **11.5.Commissioning** configuration screen.
- Selecting **Additional equipment** and then **Regulator(1xCM2K)**.
- Returning to the main menu where the **Commissioning** icon is now visible.

CM2K enabled



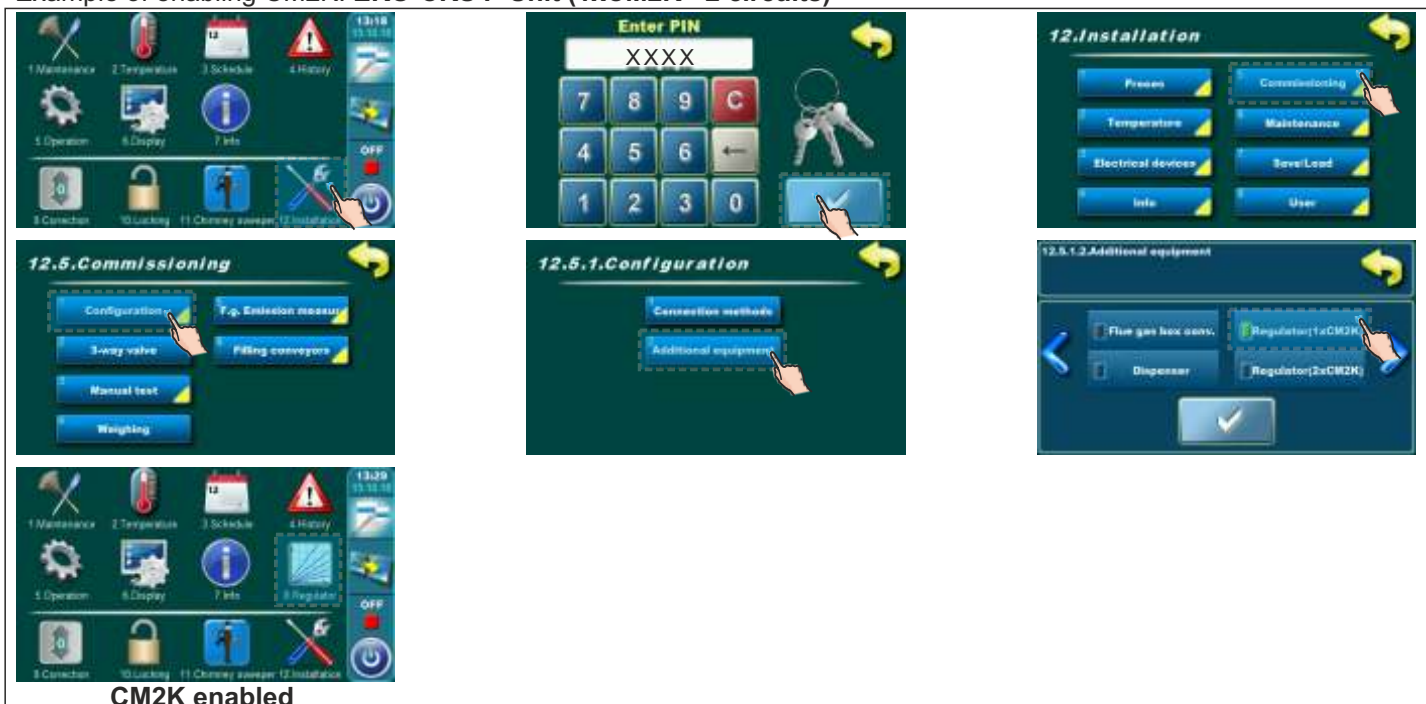
CM2K enabled

Example of enabling CM2K: **BioTec Plus (1xCM2K - 2 circuits)**



CM2K enabled

Example of enabling CM2K: **EKO-CKS P Unit (1xCM2K - 2 circuits)**



CM2K enabled

Example of enabling CM2K: **EKO-CKS Multi Plus (1xCM2K - 2 circuits)**





MANUAL TEST

In this menu all outputs to the connected devices /(pumps/actuators) can be manually tested. Every circuit can be separately tested. Depending of the number of enabled circuits, manual test for each circuit is shown.

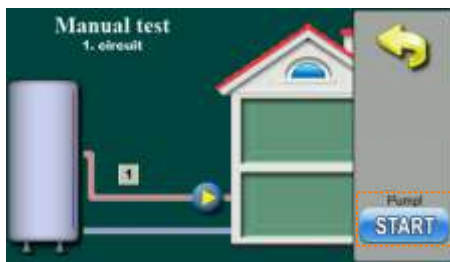
Example of manual test menu:



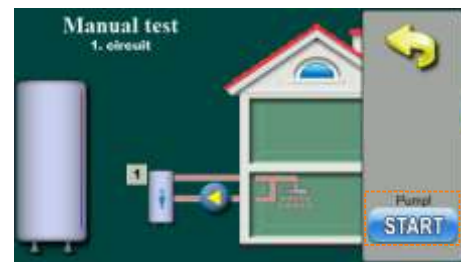
Example:
Radiator/Floor/Const. temp.



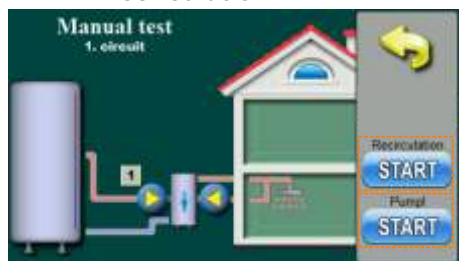
Example:
DHW



Example:
Recirculation



Example:
DHW + Recirculation

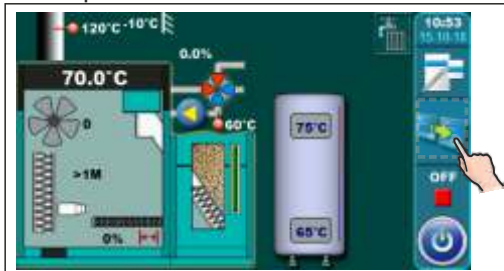


NOTE:

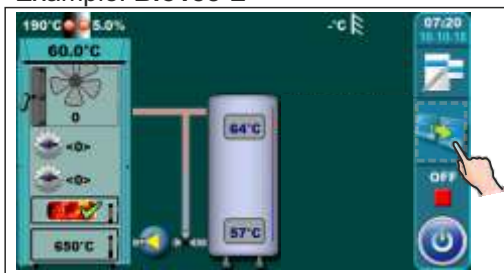
- By pressing the button START, pump or valve actuator opening/closing is started and this button becomes STOP
- by pressing the button STOP, pump or valve actuator opening/closing is stopped and this button becomes START
- with this options, demand for work of output/connected device is manually started, but is necessary to check if outputs is actually activated and device is actually working.

CM2K VIEW SELECTION

Example: **PeITec**



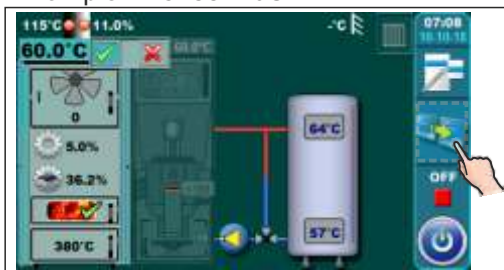
Example: **BioTec-L**



Example: **Cm Pelet-set Touch**



Example: **BioTec Plus**



Example: **EKO-CKS P Unit**



Example: **EKO-CKS Multi Plus**



CM2K VIEW

Enabled circuits and their settings can be monitored (circuit type: Radiators / Floor / Const. temp. / DHW / Recirculation / DHW+Recirculation; set temperatures; measured temperatures; pumps working; actuator working; schedules; working mode...).

To access CM2K options view press button or on main screen (there will be new window with CM2K view or tools menu with additional button for CM2K view and other additional equipment buttons). To go back to main menu press button or to cycle between views press . If there is more than one CM2K installed, in CM2K view, views between CM2K modules (circles) can be changed by pressing buittons (in one view is one CM2K, i.e. two circuits).

CIRCUIT TYPES AND CM2K VIEW SYMBOLS

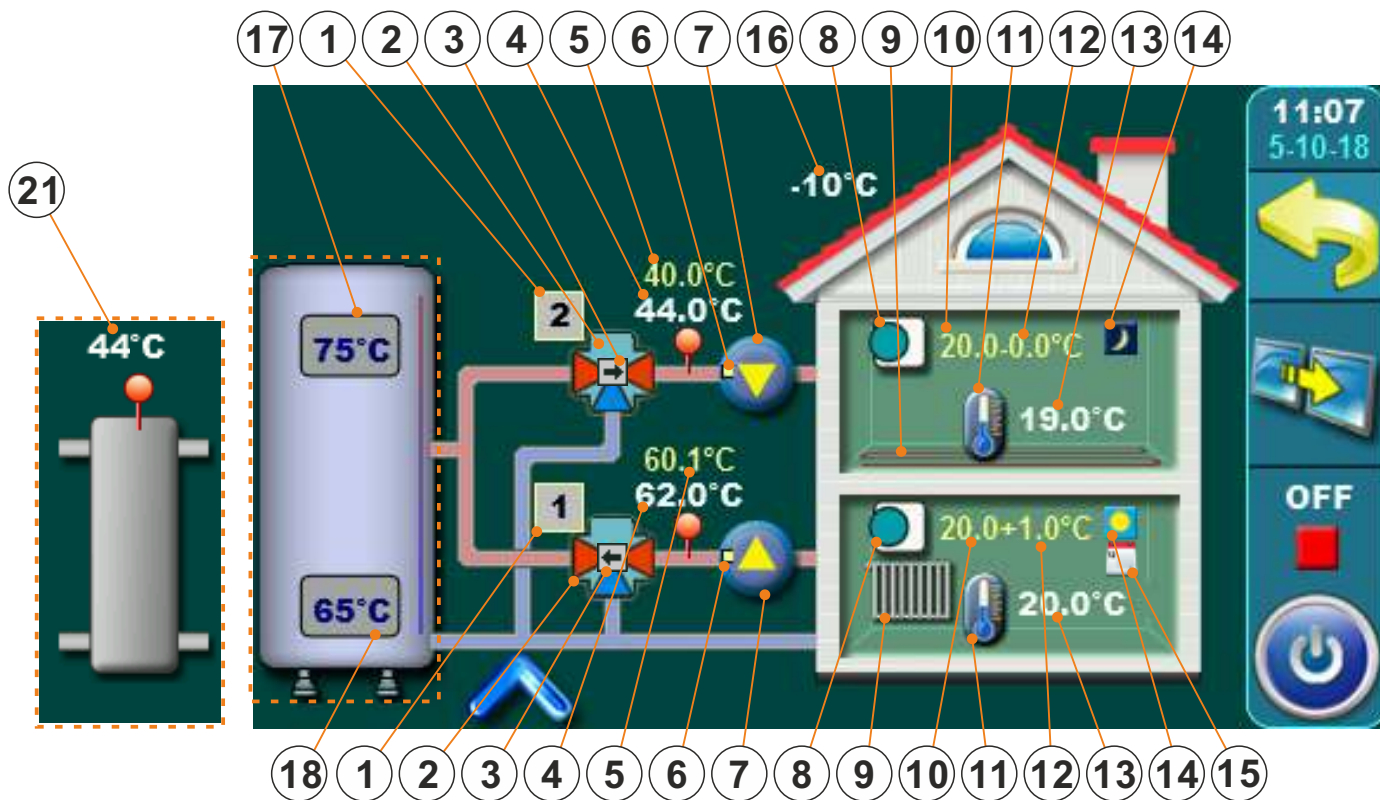
The image displays three sequential screenshots of the CM2K control interface, each showing a different circuit view. The interface includes a house icon, a boiler with two temperature gauges (75°C and 65°C), and a control panel on the right with a yellow arrow, a blue arrow, an 'OFF' button, and a power button. The background temperature is consistently -10°C.

- Top Screenshot (11:07):** Shows Circuit 2 (Floor heating room corrector night mode) and Circuit 1 (Radiator heating room corrector day mode). The boiler temperatures are 75°C and 65°C. The house shows a room with 19.0°C and another with 20.0°C. The control panel shows a yellow arrow pointing left, a blue arrow pointing right, and the 'OFF' button is red.
- Middle Screenshot (10:54):** Shows Circuit 4 (DHW) and Circuit 3 (Constant temp. room corrector day mode). The boiler temperatures are 75°C and 65°C. The house shows a room with 55°C and another with 25.0°C. The control panel shows a yellow arrow pointing left, a blue arrow pointing right, and the 'OFF' button is red.
- Bottom Screenshot (10:48):** Shows Circuit 6 (DHW + Recirculation recirculation schedule (work enabled)) and Circuit 5 (Recirculation recirculation schedule (work disabled)). The boiler temperatures are 75°C and 65°C. The house shows a room with 44°C and another with 25.0°C. The control panel shows a yellow arrow pointing left, a blue arrow pointing right, and the 'OFF' button is red.

Arrows from the text labels point to the corresponding circuit numbers and descriptions in the screenshots. At the bottom, arrows point to the blue arrow icons on the control panel, labeled "Circuits view change".

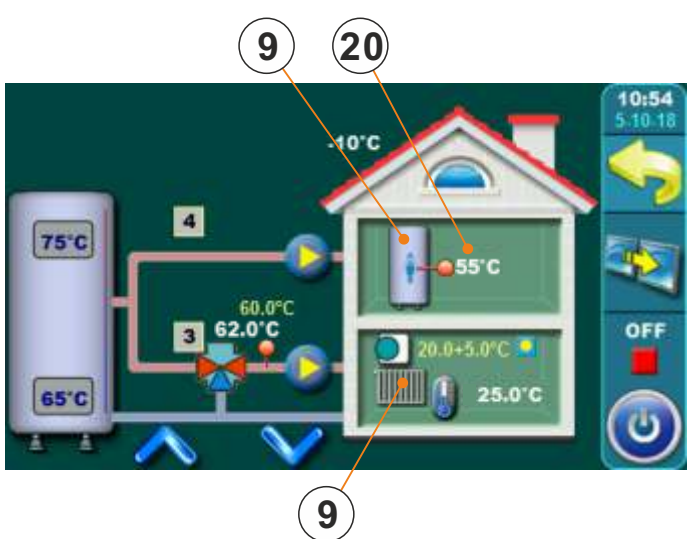
CM2K VIEW EXAMPLES

- 1. circuit - radiator heating / room corrector / day mode (with schedule)
- 2. circuit - floor heating / room corrector / night mode

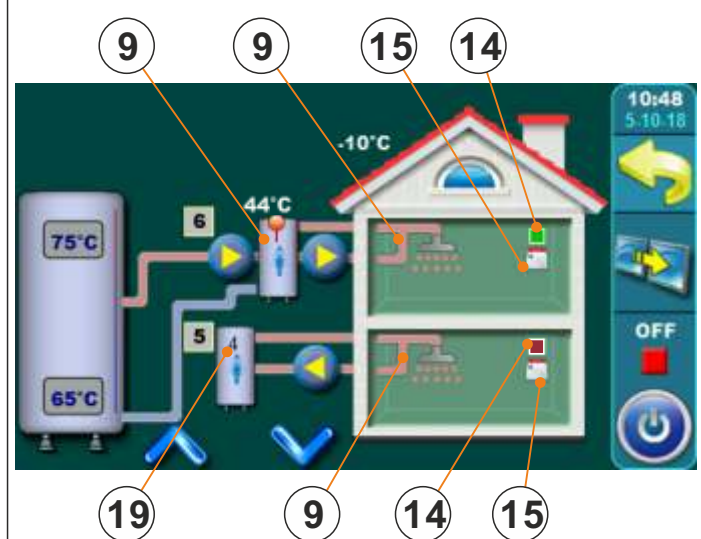


- 1 - circuit number
- 2 - mixing valve with actuator
- 3 - actuator working indication
- 4 - measured main flow temp.
- 5 - calculated main flow temp.
- 6 - pump working demand indication
- 7 - pump
- 8 - room corrector
- 9 - circle heating type
- 10 - set room temp.
- 11 - room temp. indication
- 12 - corrector correction setting
- 13 - measured room temp.
- 14 - work mode indication
- 15 - schedule/work enabled/disabled indication
- 16 - measured outdoor temp.
- 17 - measured accumulation tank upper temp.
- 18 - measured accumulation tank lower temp.
- 19 - indication of DWH tank with enabled recirculation
- 20 - measured DWH (domestic hot water) tank temp.
- 21 - measured CRO (hydraulic cross over) temp.

- 3. circuit - constant temp. / room corrector / day mode
- 4. circuit - DHW



- 5. circuit - Recirculation / Recirculation enabled (by schedule)
- 6. circuit - DHW + Recirculation / Recirculation disabled (by schedule)

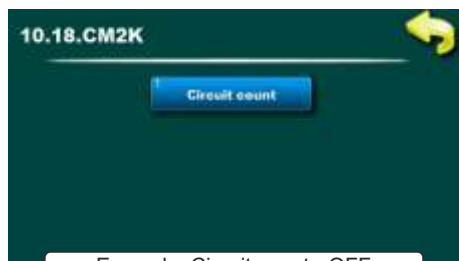


CM2K SETTINGS

Initial settings of working parameters for CM2K must be done by authorized serviceman because enabling and certain setting parameters are under **Installation** menu (PIN). After enabling the CM2K module in main menu new icon (menu) **Regulation/CM2K** will appear. Under this menu user can adjust certain parameters of heating circuits.

NOTE: every parameter will be marked by who can set it, serviceman and user **(S/K)** or only serviceman **(S)**.

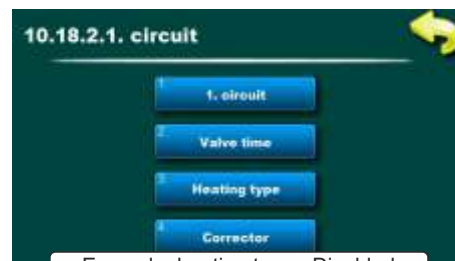
EXAMPLE: view of the **CM2K** menu under **Installation** menu (PIN) - parameters with **(S/K)** indication will be displayed also under **CM2K** menu in the main menu so user can adjust them.



Example: Circuit count - OFF



Example: Circuit count - 2 CM2K (4 circuits)



Example: heating type - Disabled



Example: Heating type - radiator



Example: Heating type - radiator



Example: Heating type - radiator

DESCRIPTION AND PARAMETERS VALUE

NOTES:

- at initial circle view (before adjusting) are only certain parameters shown (X. circuit / Valve time / Heating type / Corrector). After adjusting the circuit heating type, in main menu of heating circuit, other parameters will be shown according to the set heating type.
- certain parameters depends of the boiler type to which CM2K is installed and view is set according to this. Because of this, certain parameters are shown or not shown depending of the boiler type.

Circuit count **(S)**

This parameter is used to set number of CM2K modules i.e. number of circuits (1 CM2K = 2 circuits)
By selecting and confirmation of CM2K modules this parameter is enabled.



Factory setting		setting
Circuit count	OFF	OFF / 1xCM2K... 4xCM2K

X. circuit **(S/K)** (in this example - 1. circuit)

Enable and disable heating circuit.
This parameter is used to enable or disable heating circuit (set parameters are stored).

Factory setting		setting
1. circuit	ON	OFF/ON

Valve time **(S/K)**

Setting the mixing valve actuator speed.
This parameter is used for setting the speed of the mixing valve actuator speed for work of 90° (open/close). It must be set according to the installed mixing valve actuator speed.

Factory setting		setting
Valve time	120 sec	10-300 sec

Heating type **(S)**

Setting the heating circuit type.
This parameter is used to set heating circuit type. After setting the heating circuit type, in main menu of the circuit, other setting parameters will be shown according to the heating circuit type.



Factory setting		setting
Heating type	Disabled	Disabled/Radiator/Floor/Constant temp./DHW/*Pool/Recirculation/DHW+Recirculation

* NOT USED

Corrector (S)

Setting for room corrector (CSK) (installed/not installed) and room corrector type.

This parameter is used for setting if room corrector (CSK) is used or not, room corrector (CSK) type and its connection type.



Factory setting		setting
Corrector	OFF	OFF / ON / Room temp. (2 wires) / Reg. control

Corrector ON: standard connection of Centrometal **CSK** room corrector with 3 wires (measuring and view of the room temp. and corrector correction).

Room temp. (2 wires): connection of Centrometal **CKS** room corrector with 2 wires (measuring and view of the room temp., without corrector correction) - in case only 2 wires are installed.

Reg. control: regulating the circuit pump with external heating circuit regulation and its demand for heating and pump working.

Note:

When the CSK is properly connected to the CM2K and the following situations occur:

- the +5 °C correction is constantly displayed on the CSK display regardless of the wheel position: means that pins 1 and 2 are short-circuited.
- the measured temperature of 125 °C is constantly shown on the CSK display: means that pins 2 and 3 are in short-circuit.

DESCRIPTION AND PARAMETERS VALUE BY HEATING CIRCUIT TYPE

RADIATOR / FLOOR

X. circuit (S/K) - see page 18

Valve time (S) - see page 18

Heating type (S) - see page 18

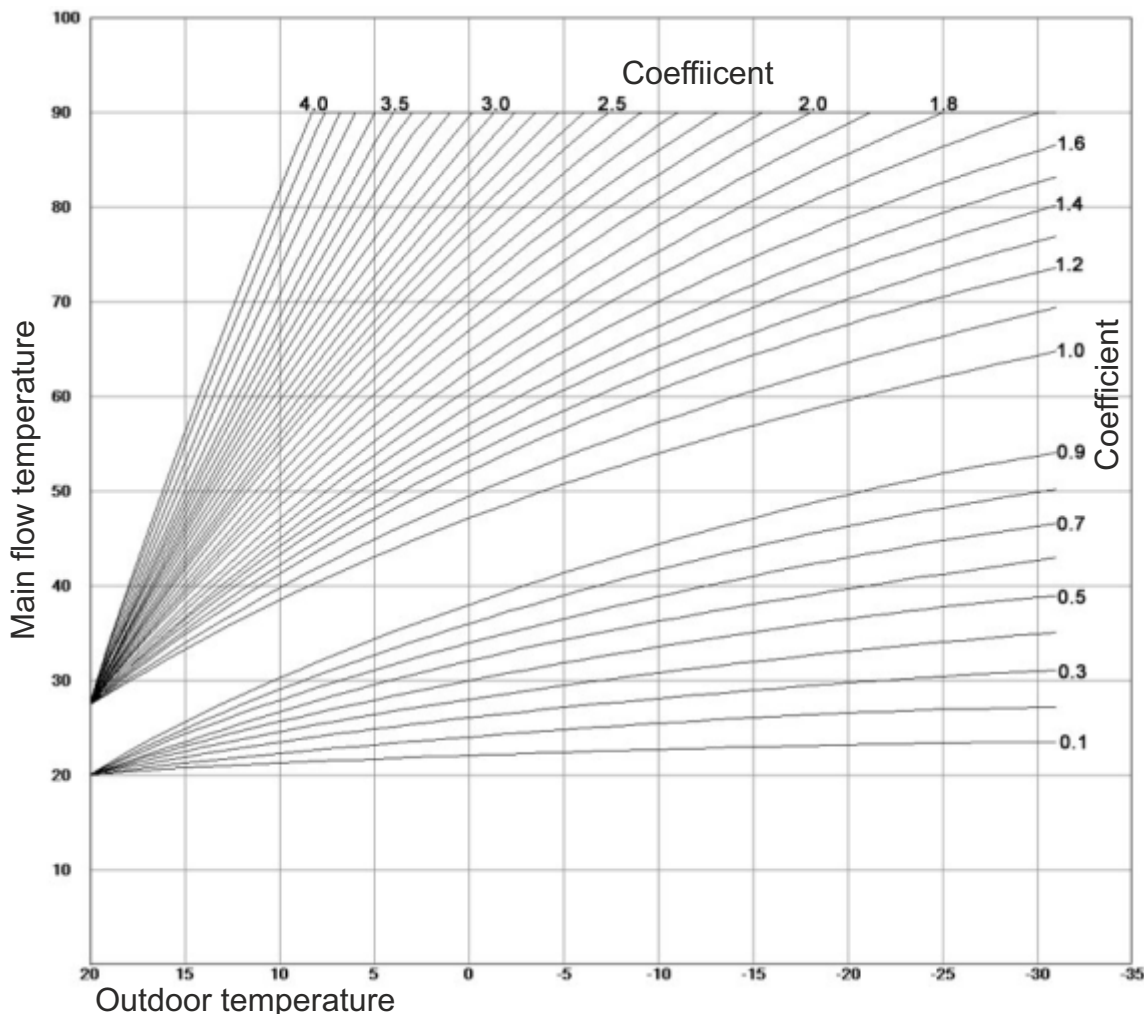
Corrector (S) - see page 19

Heating curve (S/K)

Setting of the heating curve.

Heating curve is one of the parameters for main flow temp. calculation.

Factory setting		setting
Heating curve	1.0	0.1-4.0



Day / Night temp. (S/K)

Setting the heating circuit mode.

This parameter is used to set heating circuit mode. Selecting the Day temp. heating circuit always works according set day temp., selecting the Night temp. heating circuit always works according set night temp. and by selecting the Table 1/2, heating circuit automatically switches mode between set day and set night temp. according the time set in the Table 1/2.

Factory setting		setting
Day/night temp.	Day temp.	Day temp. / Night temp. / Table 1 / Table 2

Table 1 / Table 2 (S/K)

Setting the schedule tables with heating circuit mode switching between day and night temp.. For each day 3 mode switching can be set. All settings from one day can be selected and copy/paste to any another day of the week. After any adjustment they must be confirmed by pressing OK button to save the settings. Two tables can be set but only one can be active.

The interface consists of a grid for setting heating schedules. The title is "1. circuit - Table 1". The columns represent days of the week: MON, TUE, WED, THU, FRI, SAT, SUN. The rows represent time intervals: 06:00 and 22:00. On the left side of the grid, there are icons for selecting a day (sun for day, moon for night) and a button for selecting the entire day. On the right side, there are buttons for back, copy, paste, and OK (confirmation).

Correction coefficient (S/K)

Setting the correction coefficient for room corrector.

This parameter is used for setting the correction coefficient of the room corrector which will be used for main flow temp. calculation. Higher value of this parameter, higher effect it will have on main flow temp. calculation. This parameter is used only if room corrector is installed.

Factory setting		setting
Correction coeff.	1.0	0.1 - 5.0

Pump off (S/K)

This menu is used for setting the parameters for switching off circuit pump according outdoor temperature and settings in this menu (doesn't affect DHW and Recirculation).

It has 3 options: **Outside temp. / Difference / Time**

Toutside (S/K)

Setting outside temperature.

This parameter is used to set according which outside temp. circuit pump will stop.

Factory setting		setting
Toutside	20°C	0 - 40°C

Out temp. difference (S/K)

Setting the difference.

This parameter is used to set difference on which circuit pump will start again and delay time will be reset.

Factory setting		setting
Out. temp. difference	2°C	0 - 5°C

Time (S/K)

Setting the time.

This parameter is used to set time delay for switching off the circuit pump when temperature for pump switching off is reached.

Factory setting		setting
Time	30 min	0 - 600 min

Min. temperature radiator / floor / constant temp. (S)

Setting the main flow min. temp.

This parameter is used to set mixing circuit main flow min. temp..



Factory setting		setting
Min. temp. radiator/floor/constant temp.	20°C	20 - 90°C

Max. temperature radiator / floor / constant temp. (S)

Setting the main flow max. temp.

This parameter is used to set mixing circuit main flow max. temp..



Factory setting		setting
Max. temp. radiator/floor/constant temp.	90°C	20 - 90°C

Day room temperature (S/K)

Setting the day room temp.

This parameter is used to set desired heating circuit day room temperature.

Factory setting		setting
Day room temp.	20°C	5.0. - 30.0°C

Night room temperature (S/K)

Setting the night room temp.

This parameter is used to set desired heating circuit night room temperature.

Factory setting		setting
Night room temp.	20°C	5.0. - 30.0°C

dT pump off (S)

Setting the room corrector difference.

This parameter is used to set how many °C measured room temp. must be higher than set room temp. to switch off the circuit pump (only if room corrector is installed).



Factory setting		setting
dT pump Off	0.5°C	0.0. - 3.0°C

dT pump on (S)

Setting the room corrector difference.

This parameter is used to set how many °C measured room temp. must be lower than set room temp. to switch on the circuit pump (only if room corrector is installed).



Factory setting		setting
dT pump On	0.5°C	0.0. - 3.0°C

Transition time (S/K)

This parameter is used only when there isn't room corrector installed because regulation doesn't have info regarding measured room temp. This is presumed time in which system will achieve set room temp. between switching from day to night mode and vice versa, i.e. in which time main flow temp. will be optimized for quick transition.

Factory setting		setting
Transition time	3600 sec	0 - 18000 sec

Note:

If room corrector CSK (additional equipment) is connected to the CM2K, this parameter is not used.

CONSTANT TEMPERATURE

- X. circuit (S/K) - see page 18
- Valve time (S) - see page 18
- Heating type (S) - see page 18
- Corrector (S) - see page 19
- Pump off (S/K) - see page 21
- Day room temp. (S/K) - see page 21
- Night temp. (S/K) - see page 22
- Day / Night temp. (S/K) - see page 20
- Table 1/2 (S/K) - see page 20
- dT pump off (S) - see page 21
- dT pump on (S) - see page 21
- Transition time (S/K) - see page 22

Day constant temp. (S/K)

Setting the circuit main flow constant temp. for day mode.
This parameter is used to set desired circuit main flow constant temp. for day mode.

Factory setting		setting
Day constant temp.	60°C	20 - 90°C

Night constant temp. (S/K)

Setting the circuit main flow constant temp. for night mode.
This parameter is used to set desired circuit main flow constant temp. for night mode.

Factory setting		setting
Night constant temp.	60°C	20 - 90°C

DHW

- X. circuit (S/K) - see page 18
- Heating type (S) - see page 18

DHW Temperature (S/K)

Setting the DHW tank temperature.
This parameter is used to set desired DHW tank (domestic hot water) temp.

Factory setting		setting
DHW temp.	50°C	40 - 80°C

DHW difference (S/K)

Setting the DHW difference.
This parameter is used to set desired DHW tank (domestic hot water) difference.

Factory setting		setting
DHW difference	5°C	4 - 40°C

DHW schedule (S/K)

Setting the schedule for DHW.
this parameter is used to set if DHW schedule is active or not and select active Table 1/2 according to which schedule will work.

Factory setting		setting
DHW schedule	OFF	OFF / Table 1 / Table 2

Table1 / Table 2 (S/K)

Setting the DHW schedule tables.
This parameter is used for setting the tables according DHW schedule will work. Only one table can be active.

RECIRCULATION

- X. circuit (S/K) - see page 18
- Heating type (S) - see page 18

DHW circuit (S)

Setting the DHW circuit for which recirculation will be enabled. 
DHW circuit which has circulation installed must be selected. Selecting the DHW circuit must be done according how this circuit is regulated (boiler or one of CM2K circuits).

Sensor installed (S) 
NOT USED

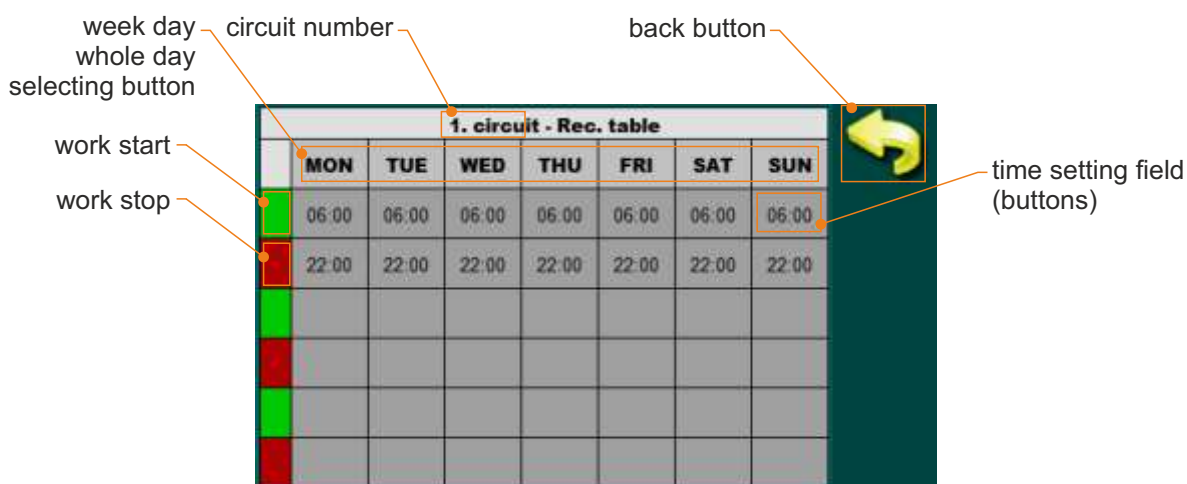
Time On rec. (S/K)
Recirculation pump work time.
Setting the recirculation pump work time when recirculation is active.

Factory setting		setting
Time On rec.	5 min	0 - 1440 min

Time Off rec. (S/K)
Recirculation pump stop time.
Setting the recirculation pump stop time when recirculation is active.

Factory setting		setting
Time Off rec.	5 min	0 - 1440 min

Recirculation table (S/K)
Recirculation work and stop table.



Annotations for the first screenshot:

- week day
- whole day
- selecting button
- circuit number
- back button
- work start
- work stop
- time setting field (buttons)

1. circuit - Rec. table							
	MON	TUE	WED	THU	FRI	SAT	SUN
work start	06:00	06:00	06:00	06:00	06:00	06:00	06:00
work stop	22:00	22:00	22:00	22:00	22:00	22:00	22:00



Annotations for the second screenshot:

- whole day select
- copy button
- paste button

1. circuit - Rec. table							
	MON	TUE	WED	THU	FRI	SAT	SUN
whole day select	06:00	06:00	06:00	06:00	06:00	06:00	06:00
	22:00	22:00	22:00	22:00	22:00	22:00	22:00



Annotation for the third screenshot:

- OK (confirmation) button

1. circuit - Rec. table							
	MON	TUE	WED	THU	FRI	SAT	SUN
	06:00	06:00	06:00	06:00	06:00	06:00	06:00
	22:00	22:00	22:00	22:00	22:00	22:00	22:00

DHW + RECIRCULATION

X. circuit **(S/K)** - see page 18

Heating type **(S)** - see page 18

DHW temp. **(S/K)** - see page 22

DHW difference **(S/K)** - see page 22

Time On rec. **(S/K)** - see page 23

Time Off rec. **(S/K)** - see page 23

DHW schedule **(S/K)** - see page 22

Table 1 **(S/K)** - see page 20

Recirculation table **(S/K)** - see page 23



Company assumes no responsibility for possible inaccuracies in this book originated typographical errors or rewriting, all the pictures and diagrams are principal and it is necessary to adjust each actual situation on the field, in any case the company reserves the right to enter their own products such modifications as considered necessary.

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HEATING TECHNIQUE