

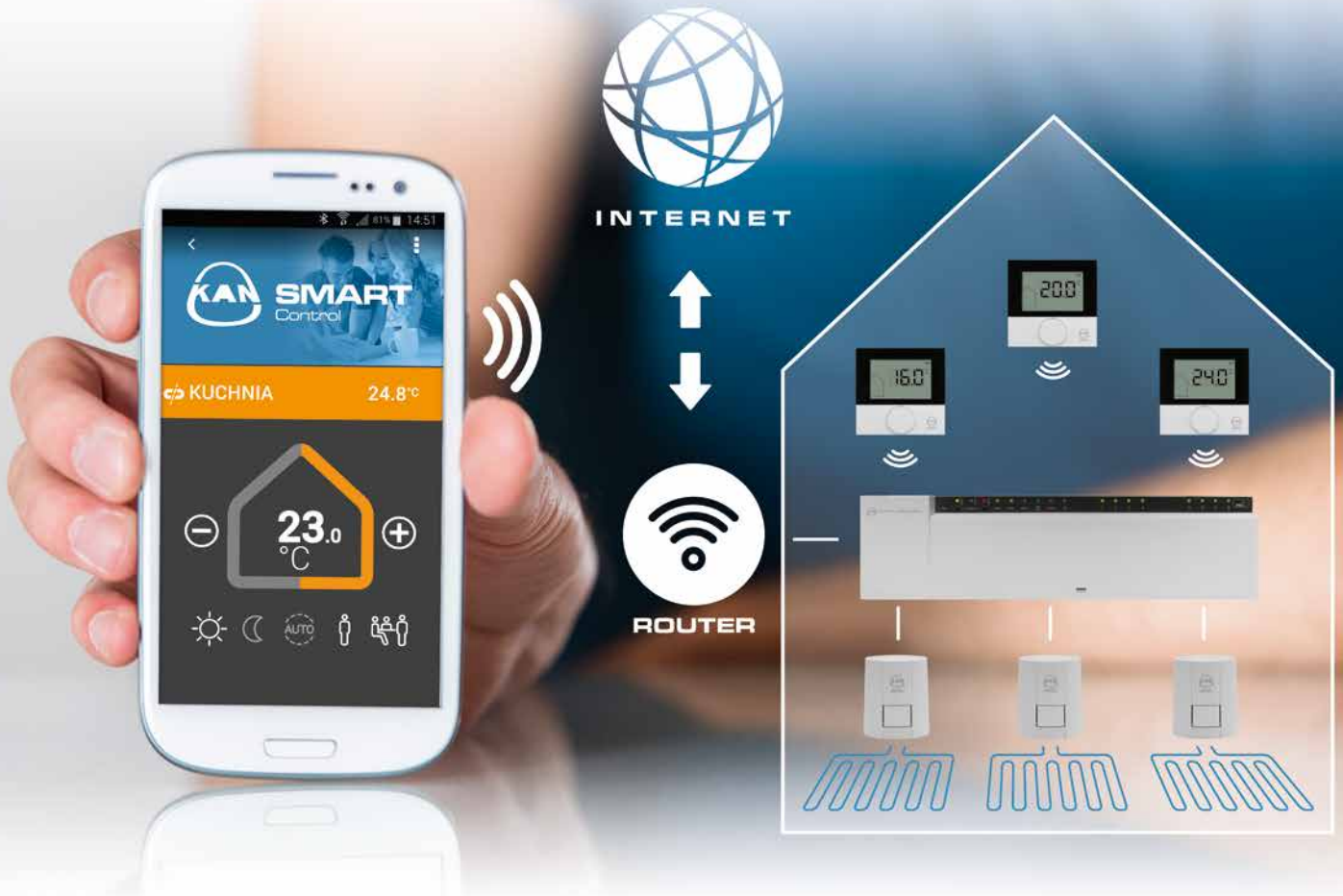


SYSTEM **KAN-therm**

Smart

User guide  
KAN Smart control

EN 10/2020





## About KAN

### Innovative water and heating solutions

KAN was established in 1990 and has been implementing state of the art technologies in heating and water distribution solutions ever since.

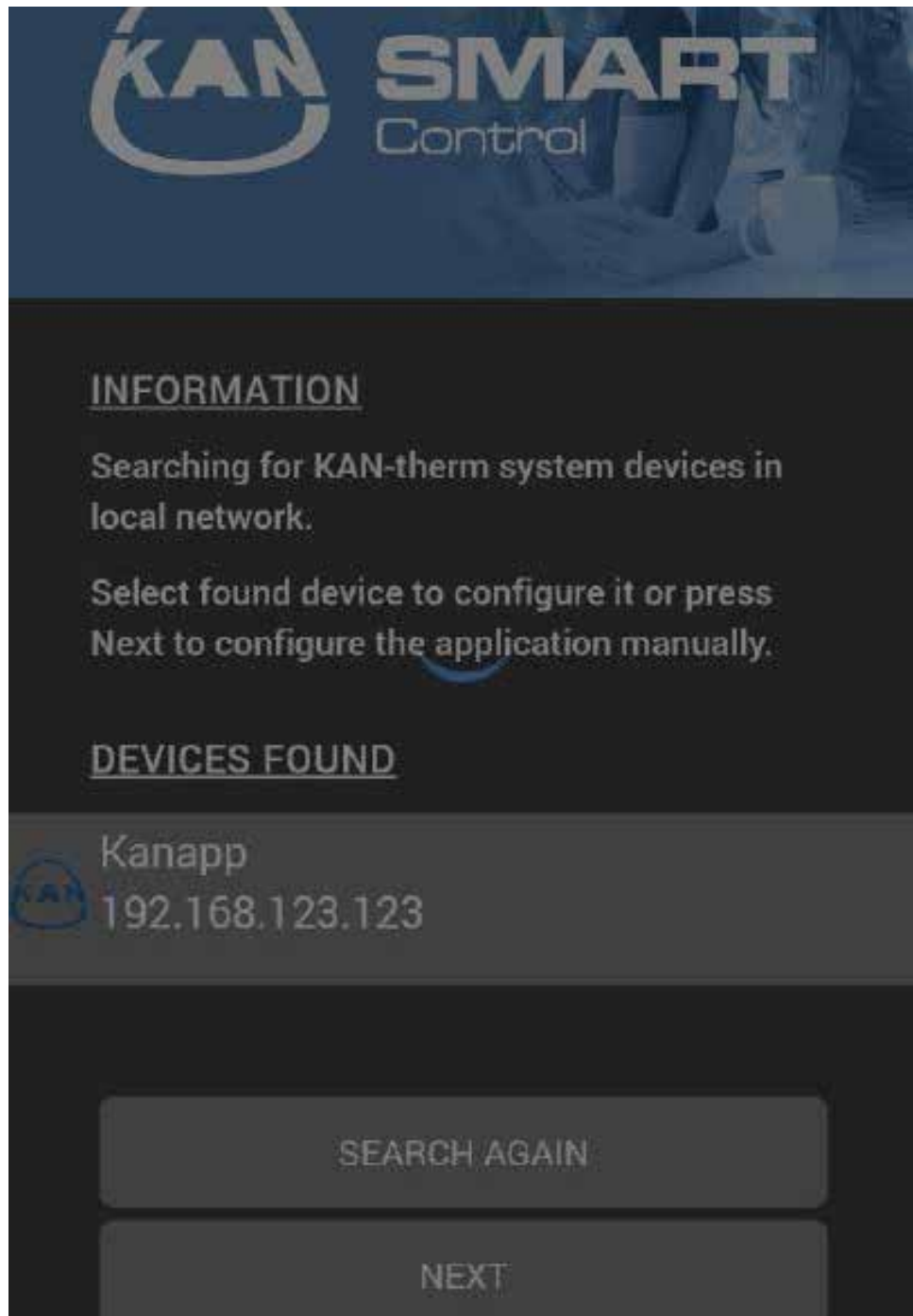
KAN is a European recognized leader and supplier of state of the art KAN-therm solutions and installations intended for indoor hot and cold tap water installations, central heating and floor heating installations, as well as fire extinguishing and technological installations. Since the beginning of its activity, KAN has been building its leading position on such values as professionalism, innovativeness, quality and development. Today, the company employs over 600 people, a great part of which are specialist engineers responsible for ensuring continuous development of the KAN-therm system, all technological processes applied and customerservice. The qualifications and commitment of our personnel guarantees the highest quality of products manufactured in KAN factories.

Distribution of the KAN-therm system is performed through a network of commercial partners all over Poland, Germany, Russia, Ukraine, Belarus, Ireland, the Czech Republic, Slovakia, Hungary, Romania and in the Baltic States. Our expansion and dynamic development has proven so effective that KAN-therm labeled products are exported to 23 countries, and our distribution network assumes Europe, a great part of Asia, and a part of Africa.

The KAN-therm system is an optimal, complete multipurpose installation system consisting of state of the art, mutually complementary technical solutions for pipe water distribution installations, heating installations, as well as technological and fire extinguishing installations. It is the materialization of a vision of a universal system, the fruit of extensive experience, the passion of KAN's constructors, as well as strict quality control of our materials and final products.

## First start, when you are connected to a Wi-Fi network, to which the terminal block is connected

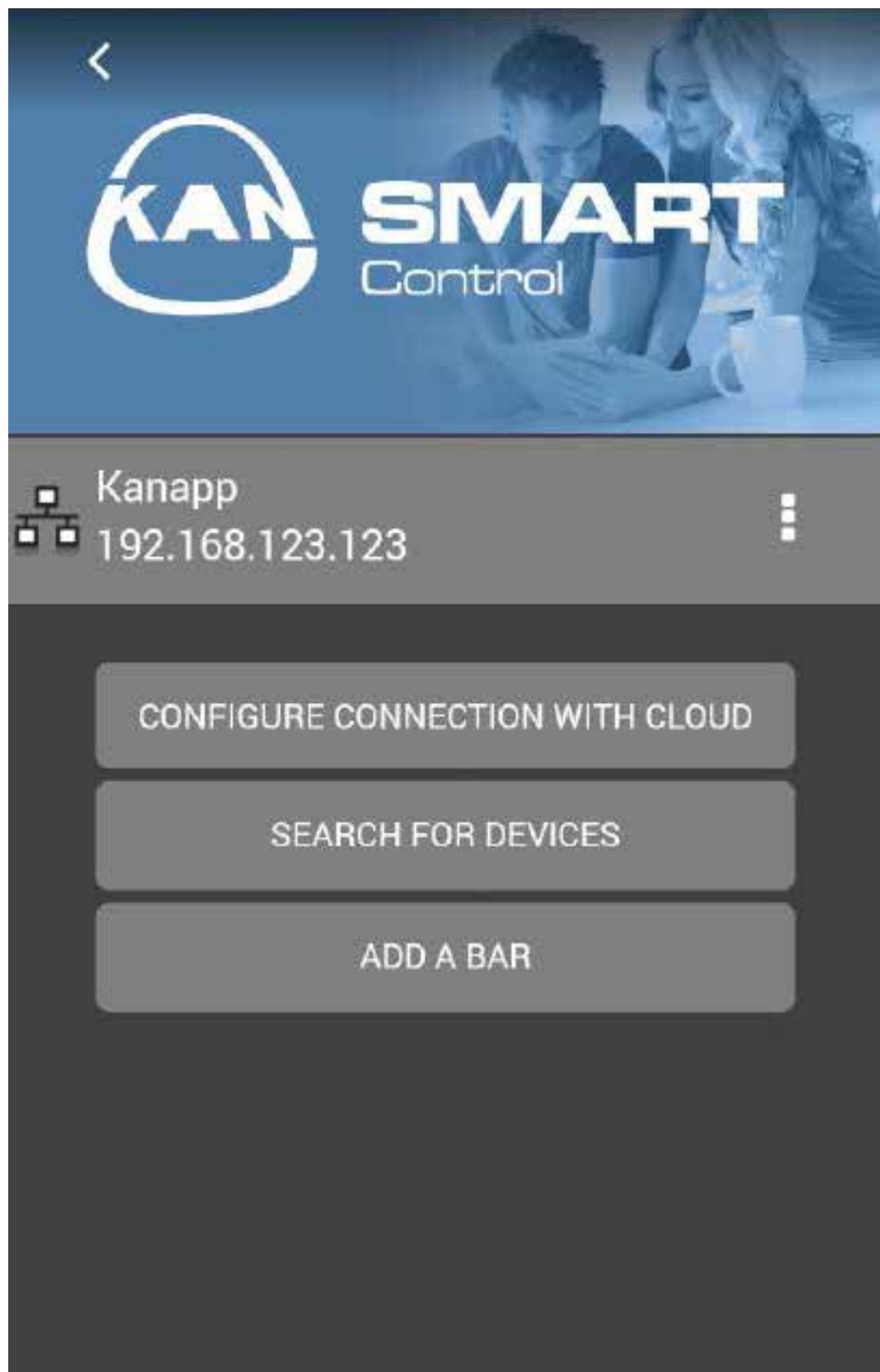
The first time the application starts, it begins to search for available KAN Smart terminal blocks within the Wi-Fi network, to which you are connected. The application should be able to find all terminal blocks. If during the first search a terminal block is not found or all connected terminal blocks are not found, look for the „Search Again“ option.




When all terminal blocks are found, choose the „Next“ option.



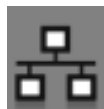
The configuration is described in another section.



The next screen shows connected terminal blocks and information about connection. To move to the connection view, click 

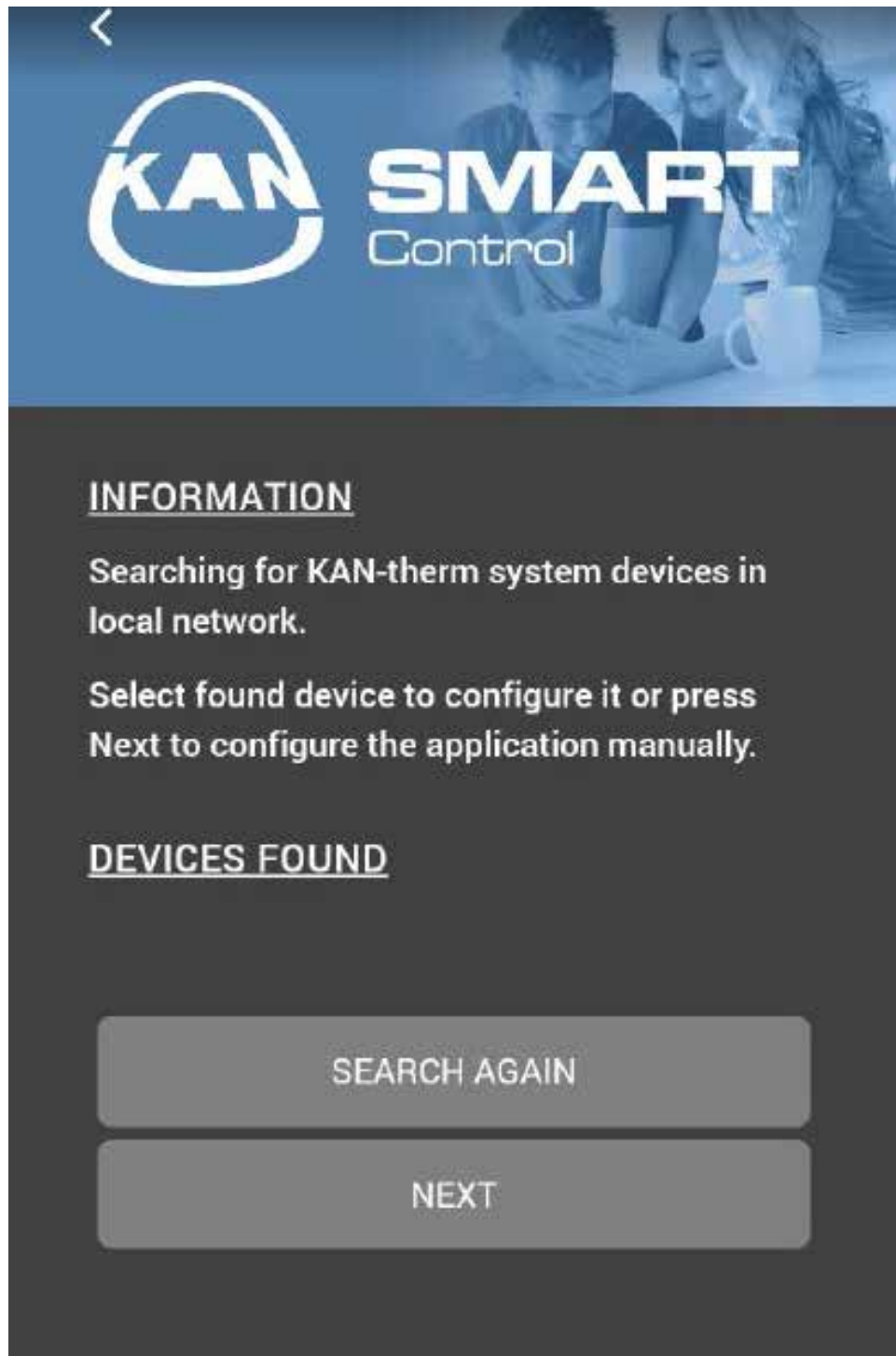


Terminal block connected through the Internet



Terminal block connected through the internal network (Intranet).

**First start, when you are not connected to a Wi-Fi network (or mobile network is used), to which the terminal block is connected.**

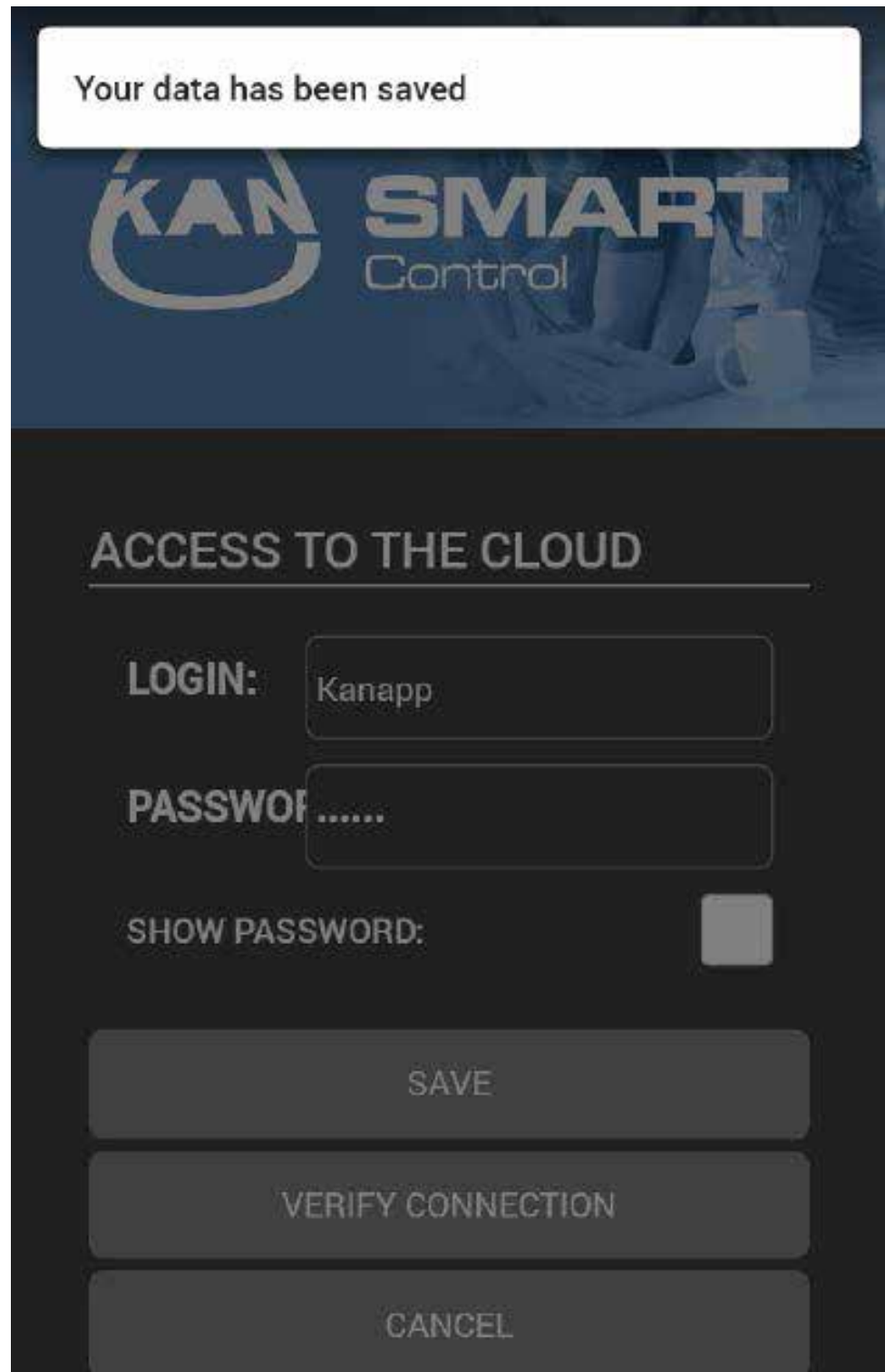


If you are not connected to a Wi-Fi network to which the terminal blocks are connected and when the mobile network is used, select „Next“.

Then select the „Set up a connection to the Cloud“ module.

Enter the login and password (as established in ezs-home.de), choose „Save“ and then „Check connection“.

After downloading data, click  and move to view the rooms view.



**Your data has been saved**

**KAN SMART Control**

**ACCESS TO THE CLOUD**

**LOGIN:**

**PASSWOF .....**

**SHOW PASSWORD:**


**SAVE**

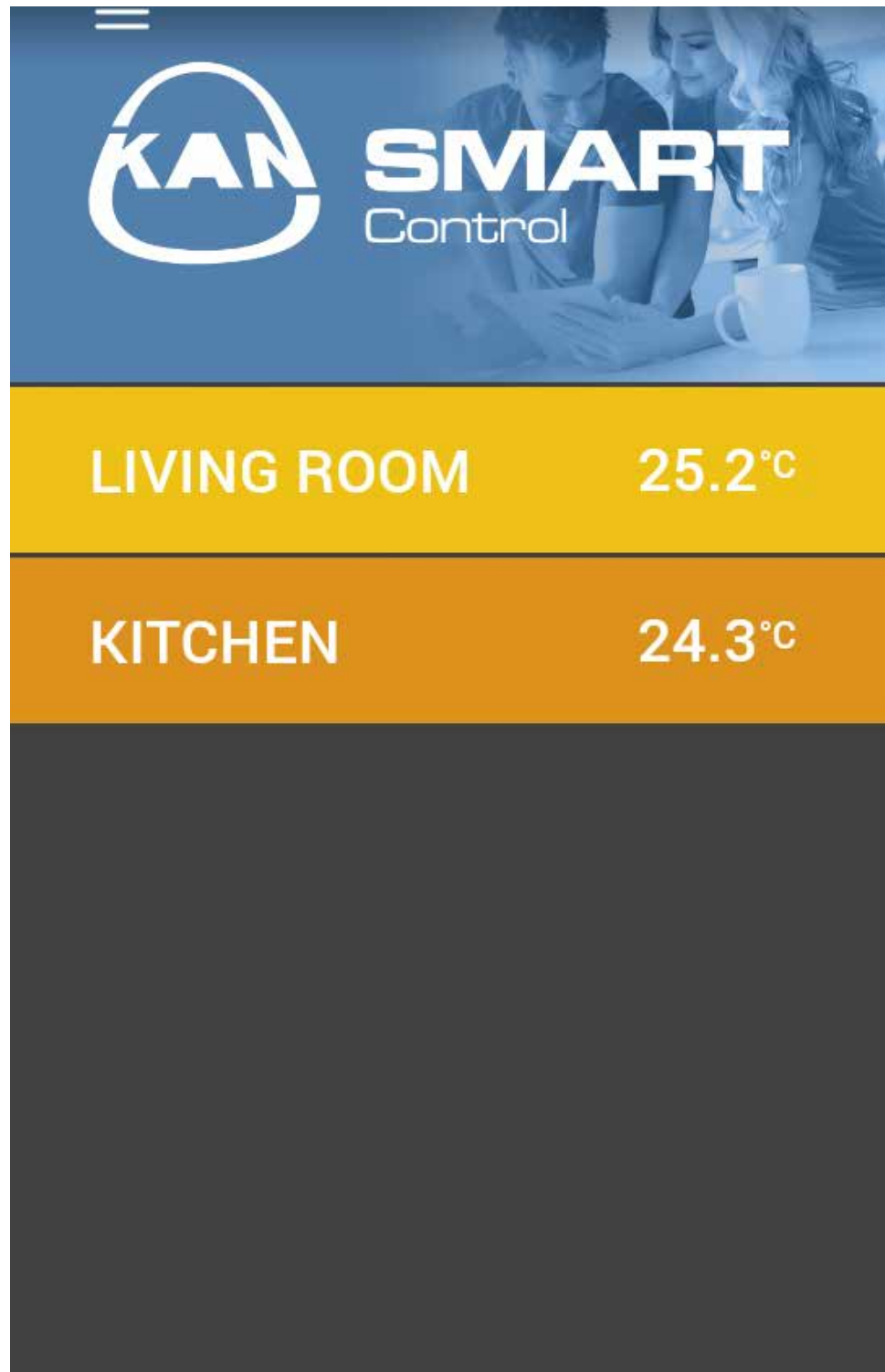
**VERIFY CONNECTION**

**CANCEL**

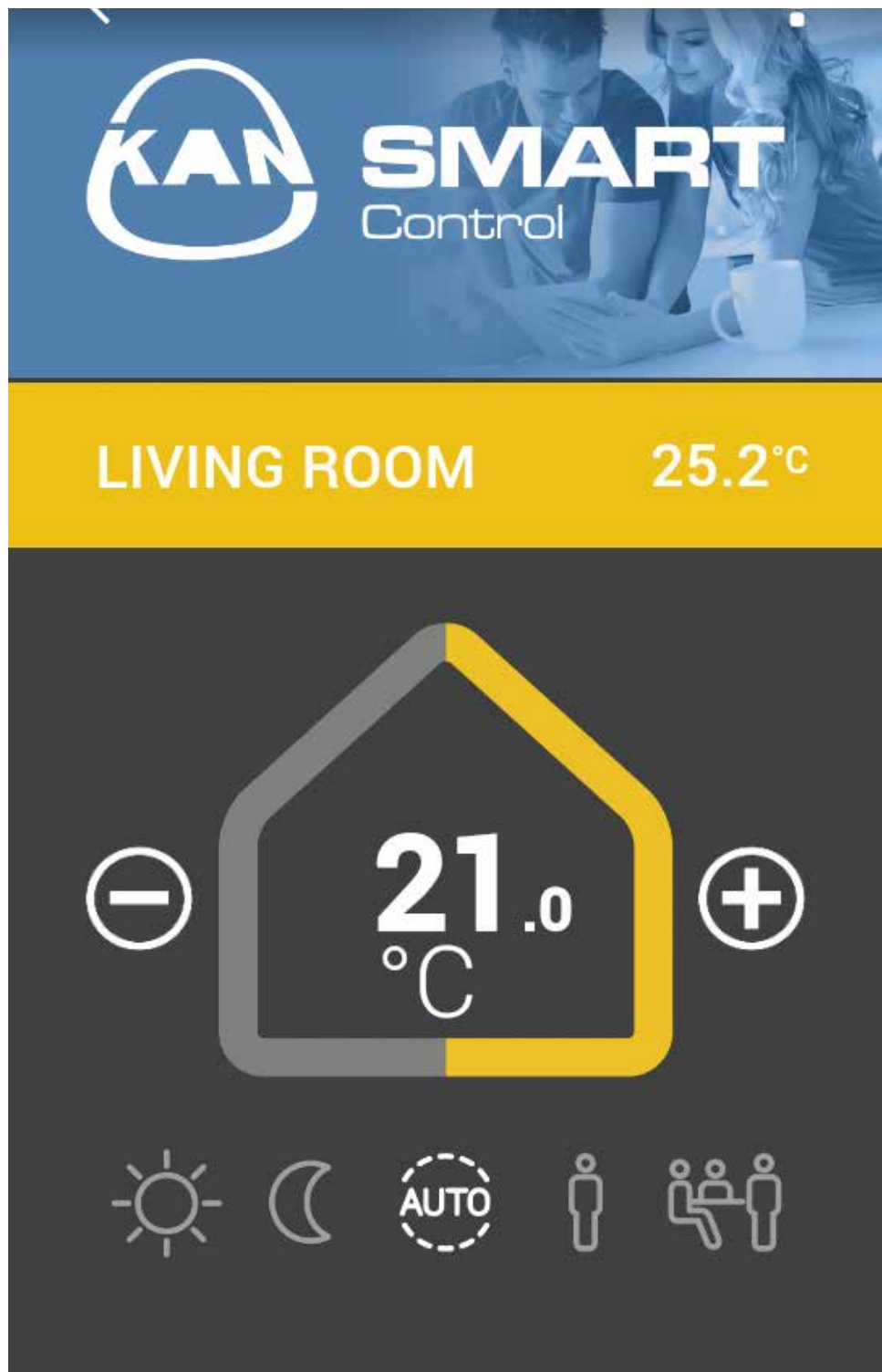
## User Menu

The screen displays a list of available rooms and the information about the current temperature in each of them. To change the settings for the room, click on its name.

If the name of the room is accompanied by  symbol, it means that the application has lost a connection with the terminal block, to which the thermostat is assigned. This icon can also be displayed, when the thermostat installed in your room loses connection with the terminal block (e.g. due to low battery).







Next to the name of the room the current temperature is displayed.

The „House“ displays the currently set temperature that we can adjust depending on the needs, selecting + or –.

Below are the standard control programs:



**Auto** – comfort and night reduction programs are activated in accordance with the automatic temperature settings.



**Day** – (default setting) constant adjustment after setting the temperature.



**Night** – constant decrease to the programmed night temperature.



**Presence** – heating times for the weekend program are also used in working days.




**Party** – disables the temperature decrease (night reduction) to set time value.

When you select the Party, choose its duration and click „Save“.

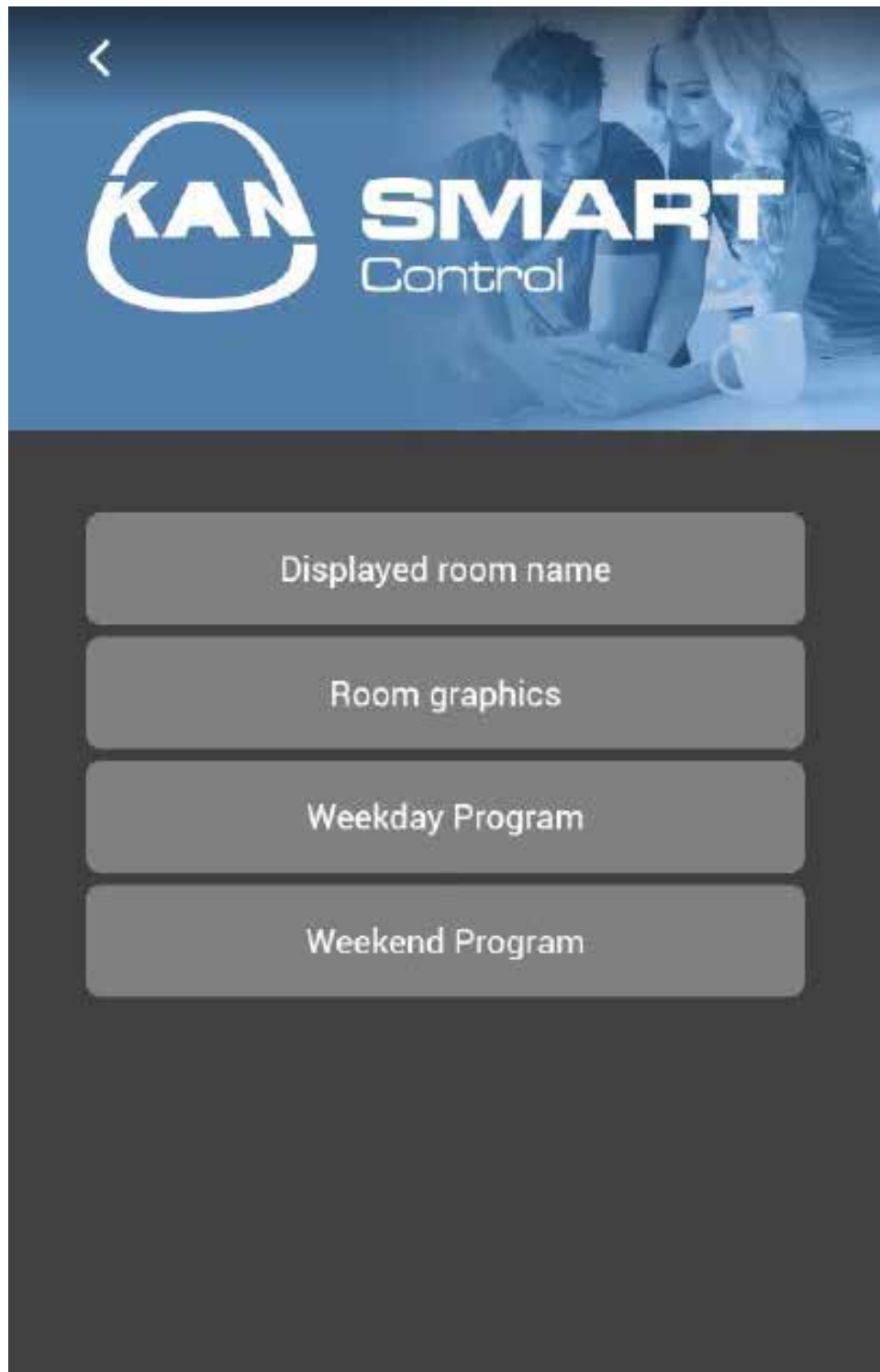
If you wish to return to the room view, click 




To check the room settings, select the menu icon 

**Room menu:**

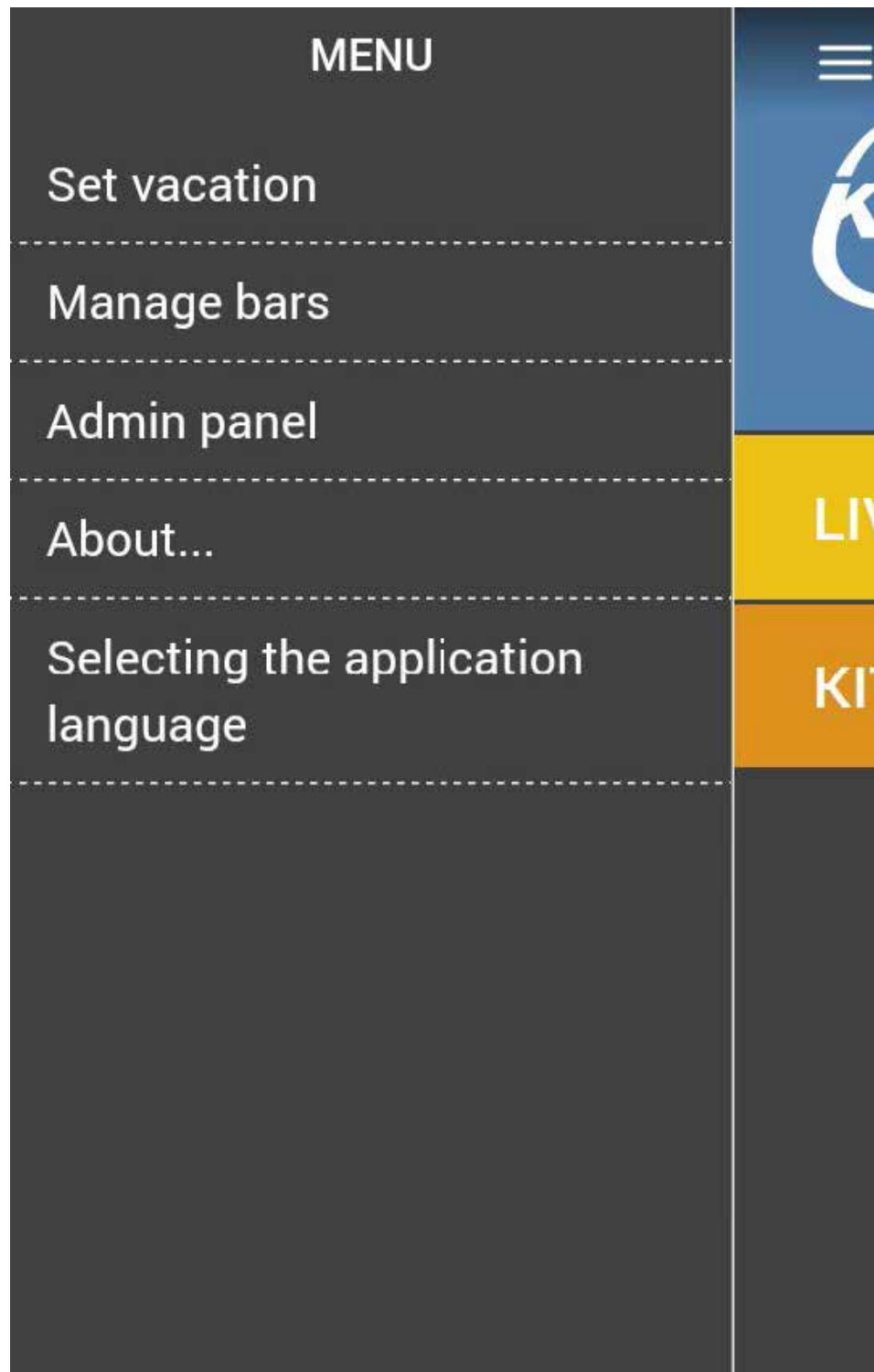
- **Displayed room name** – you can change the room name, which is only visible in the application (each application user may name the rooms on their devices as preferred).
- **Room graphics** – you can set e.g. a photograph of a specific room that will be displayed instead of the blue background with the KAN logo.
- **Working day program** – you can choose the comfort program for the working day.
- **Weekend program** – you can choose the comfort program for the weekend.



If you wish to return to the room list, click 

## Main menu

To access the Main Menu, click

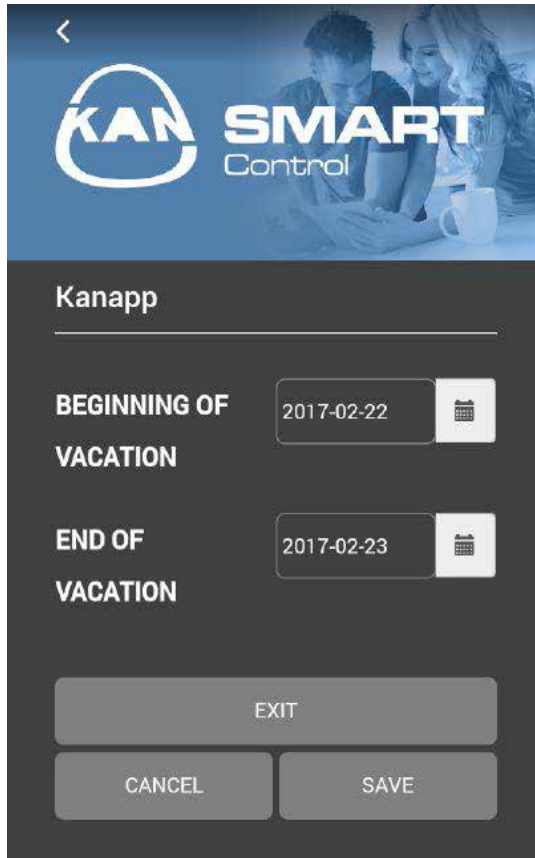


### The Main Menu allows to:

- Set the „Holiday“ program
- Manage all terminal blocks available in the control system
- Access the administrator panel
- Select/change the application language
- View the license and usage terms

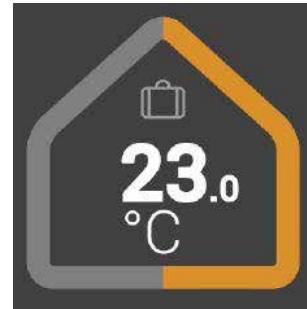
To set the „holiday program“, select „Set holiday“ and then choose the terminal block for which you want to set the program.

The application goes to the next window.

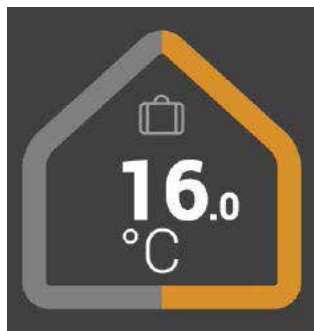


To set the „holiday program“, define the beginning and the end of the holidays and then click „Save“.

In the view of rooms assigned to the terminal block for which the holidays program is activated, the suitcase symbol informs about the active holiday program.



If the suitcase symbol is highlighted, it means that the holiday mode is currently active and implemented by the control system.



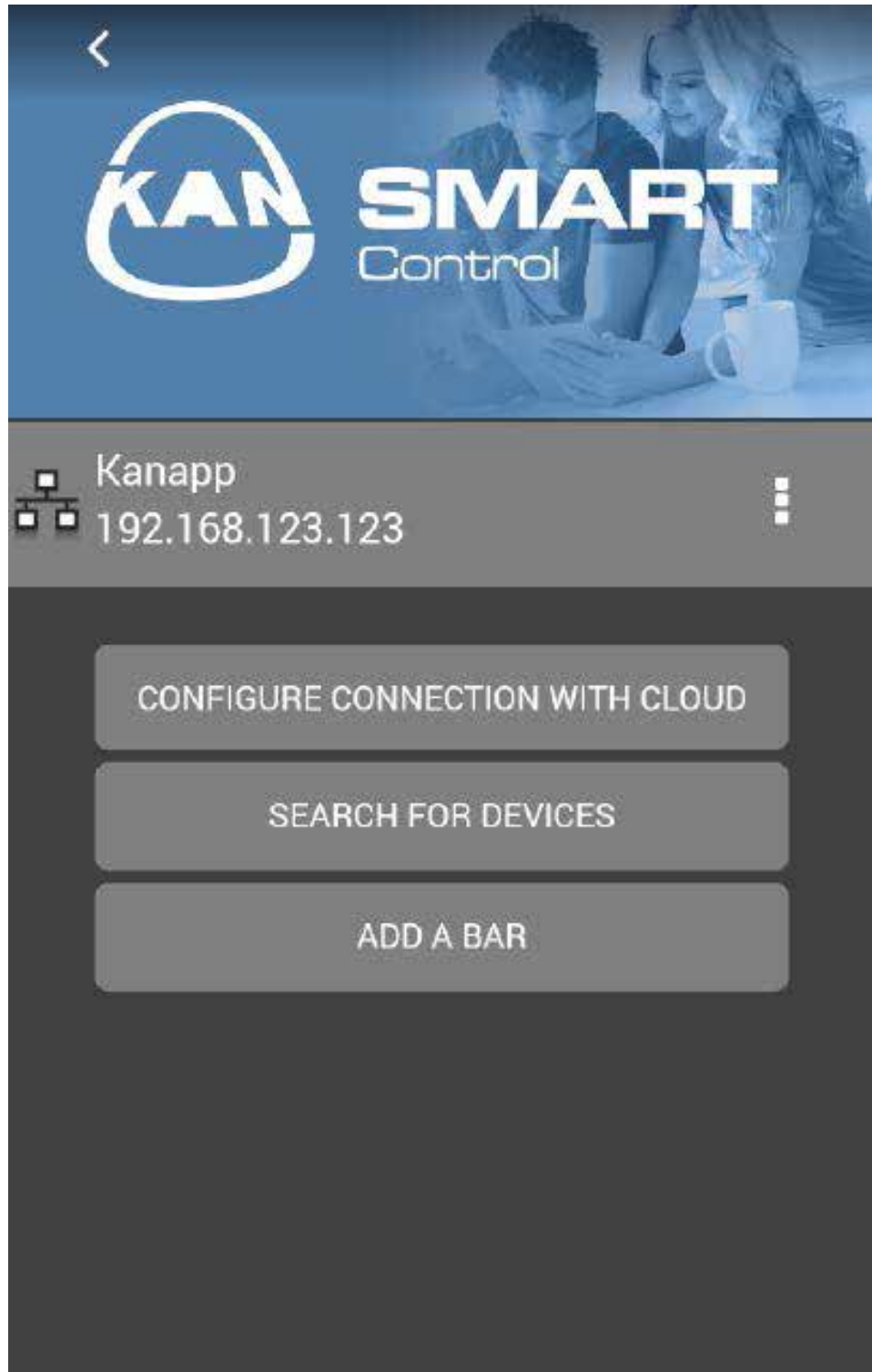
You can always deactivate the previously set holidays program by selecting the Disable button.

By selecting option from the main menu, you can go to the „Manage terminal blocks“ view, to see the advanced terminal block settings.

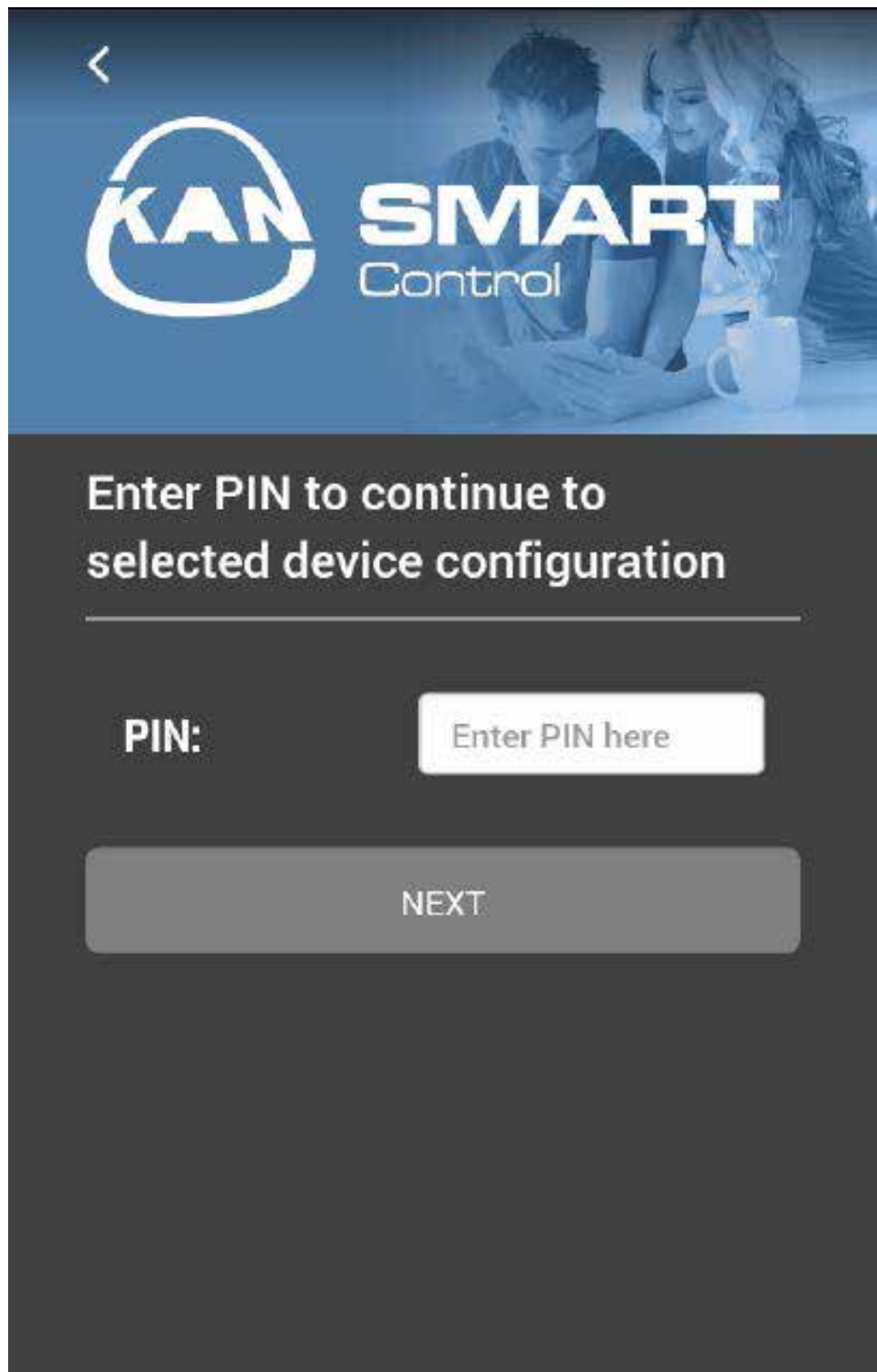
You can set the terminal block connection, if it was not previously done. See point 2 of the Manual.

We can also search for a new terminal block, that is attached to the current control system, by selecting the „Search for Device“ option. See point 1 of the Manual.

We can also add the terminal block manually, if you know its IP address. Select the „Add terminal block“ option and enter its IP address. The new terminal block should be automatically visible in the application.



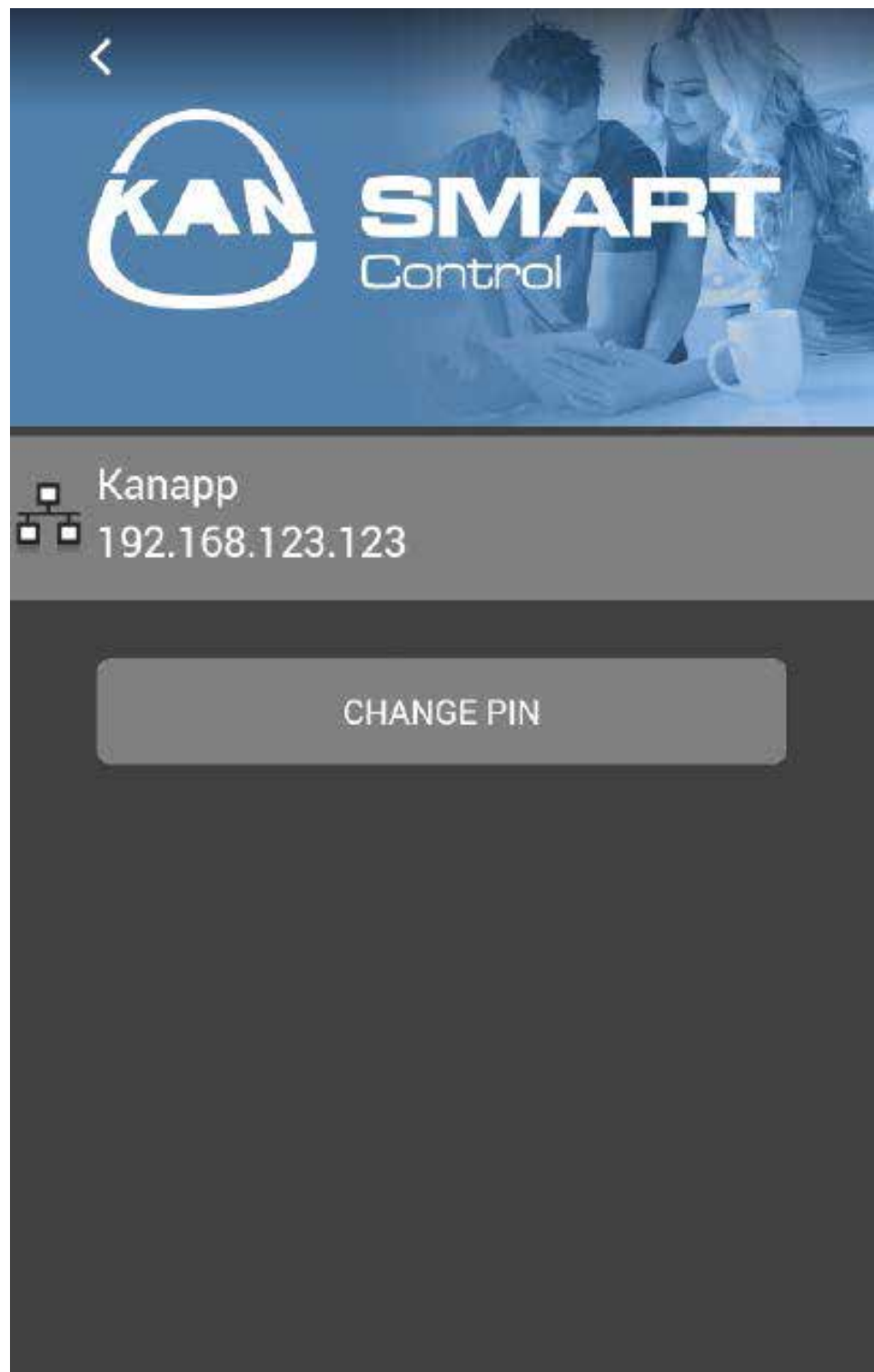
## Administrator's panel



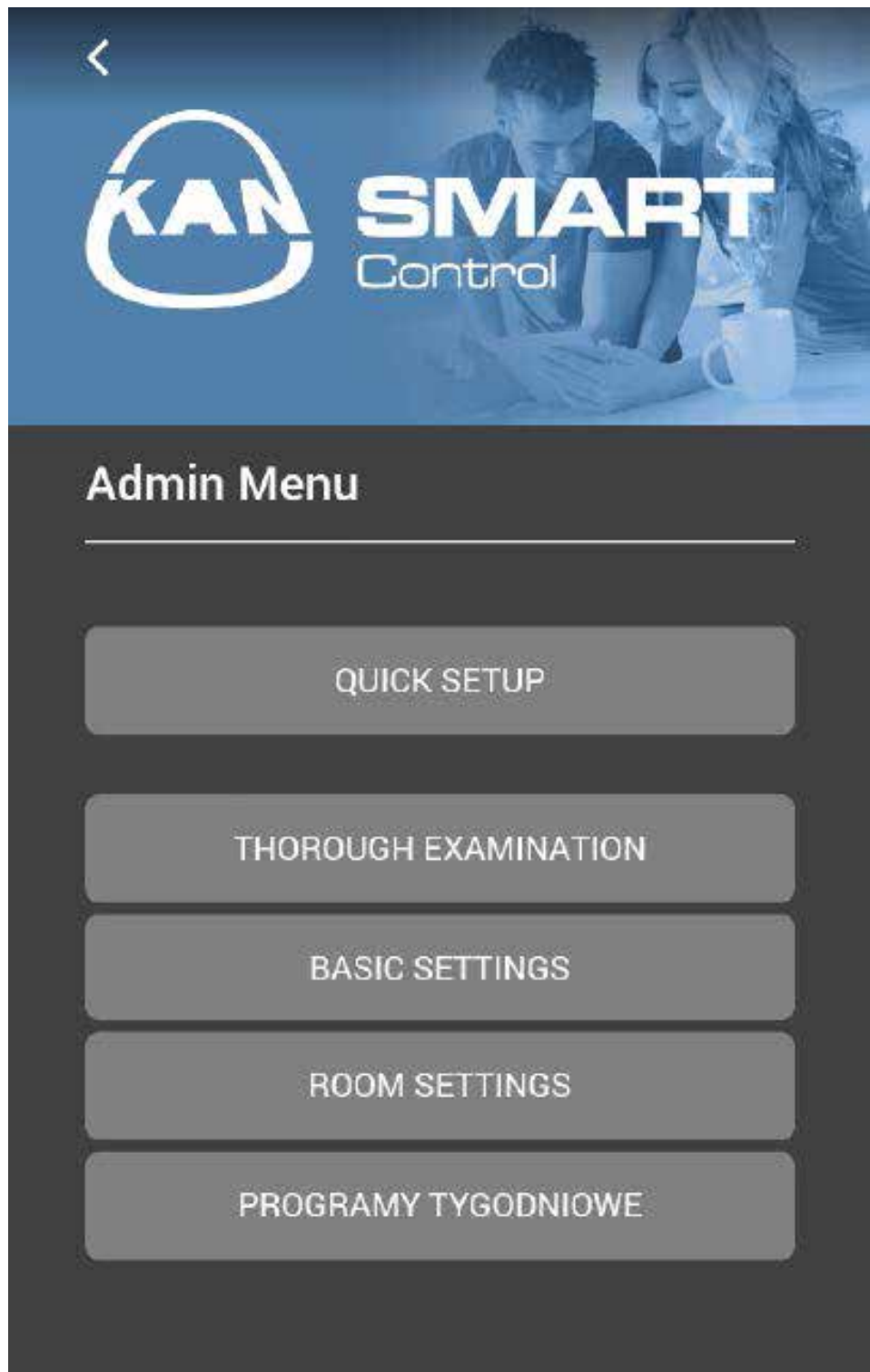
The administrator's panel is protected by a PIN code. The default PIN code is 1234. Be aware that the changes made in the administrator panel may have an impact on the correct operation of the heating and cooling installation. The changes should be made after reading the electric terminal block Manual and EZR-manager program.

After entering and confirming the PIN code, a list of all terminal blocks connected to the system and detected by the application will be displayed. To further configure settings, select the specific terminal block for which you want to make changes.

In this part of the application you can also change the default PIN code to your preferred one.







**Quick setup** – allows to configure the terminal blocks quickly and set the basic functions.

- **Overview** – allows to preview the current terminal block configuration or set the basic functions, such as date and time.
- **Basic settings** – allows to set the basic parameters of the terminal block operation.
- **Room settings** – allows to change the settings in specific selected rooms.
- **Weekly programs** – allows to change the weekly programs set for the selected thermostats/ rooms.

The screenshot shows two screens of the KAN SMART Control app. The top screen is titled 'Thorough Examination' and contains two sections: 'Instrument id' with the value 'Kanapp' and 'Bar status in the system' with the value 'Master'. The bottom screen is titled 'Date and time' and contains several settings: 'Summer/winter time' set to 'Automatic switching', 'Automatic switching' set to 'On', 'Time synchronization' set to 'Manual', 'Time Zone' set to 'GMT +01:00', 'Day' set to 'Tuesday', 'Date (dd.mm.yyyy)' set to '2017-02-21', and 'Time (hh:mm)' set to '08:46'. At the bottom of the second screen are two buttons: 'SAVE AND' and 'CANCEL AND'.

**Unit ID** – current device name (terminal block)

**Terminal block status in the system** – informs whether that the base station (terminal block) works in the independent mode (one terminal block in the system) or in combination with a master or slave device.

**Smart Start** – indicates the current status of the Smart Start. After activation, based on the numerous collected data, the control terminal block automatically calculates the time required heating/cooling activation or deactivation time to reach the desired temperature in the user-defined period.

**Protection against frost** – indicates the current state of the heating/cooling installation against frost - system protection against freezing. If the function of frost protection function is activated, the system automatically activates the heating process after exceeding the minimum temperature specified by the user.


**Temperature limit** – when the optional temperature limiter is used, in the case of exceeding the critical temperature (status = active), all valves are closed. The function protects against damage of delicate coverings of the floor due to high temperature of concrete.

**ECO input** – base station (terminal block) is fitted with the ECO input, to connect an external control clock. The external control clock manages the operation times of the terminal block - all thermostats connected to the terminal block.

**CH Input** – if the external operation mode switch is used, the entire system switches according to the settings between heating and cooling mode (active status = device operates in the cooling mode).

**Dew point sensor** – if the terminal block is connected to an additional humidity sensor and the condensation process is detected on the reference surface, the system automatically stops the cooling process by closing all valves on the manifold.

**Leave** – the option informs about the current state of the holiday mode.



**KAN SMART Control**

**Date and time**

---

**Summer/winter time**

**Automatic switching**

On

---

**Time synchronization**

Manual

---

**Time Zone**

GMT +01:00

---

**Day**

Tuesday

**Automatic switching**

On

---

**Time synchronization**

Manual

---

**Time Zone**

GMT +01:00

---

**Day**

Tuesday

---

**Date (dd.mm.yyyy)**

2017-02-21

---

**Time (hh:mm)**

13:05

---

SAVE AND SUBMIT      CANCEL AND RETURN

When the „Date and time” option is selected, additional options are available.

**Automatic switching of the summer/winter time** – you can decide whether the winter time change is automatic or manual.

The time is synchronized automatically, the settings can be changed to the manual operation and the time can be entered manually.

**DHCP**

On

---

**IPv4 address**

192.168.123.123

---

**Subnet mask**

255.255.255.0

---

**Domain server**

10.100.96.5

---

**Gateway**

192.168.123.1

---

**MAC Address**

38:DE:60:01:08:50

---

SAVE AND SUBMIT      CANCEL AND RETURN

You can check or change the network settings.

If the DHCP option is enabled (On), the base station will be automatically assigned an IP address by the router/switch for the home network. In order to assign an IP address manually, deactivate the DHCP option. Then you must activate the IPv4 address and subnet mask in order to implement the change.

In the event of problems with the Internet connection, you can review and correct the network settings.

**KAN SMART Control**

Internet connection function

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**Internet connection**

Activated

---

**Local port**

52128

---

**Source port**

52128

---

**Server address**

www.ezr-cloud1.de

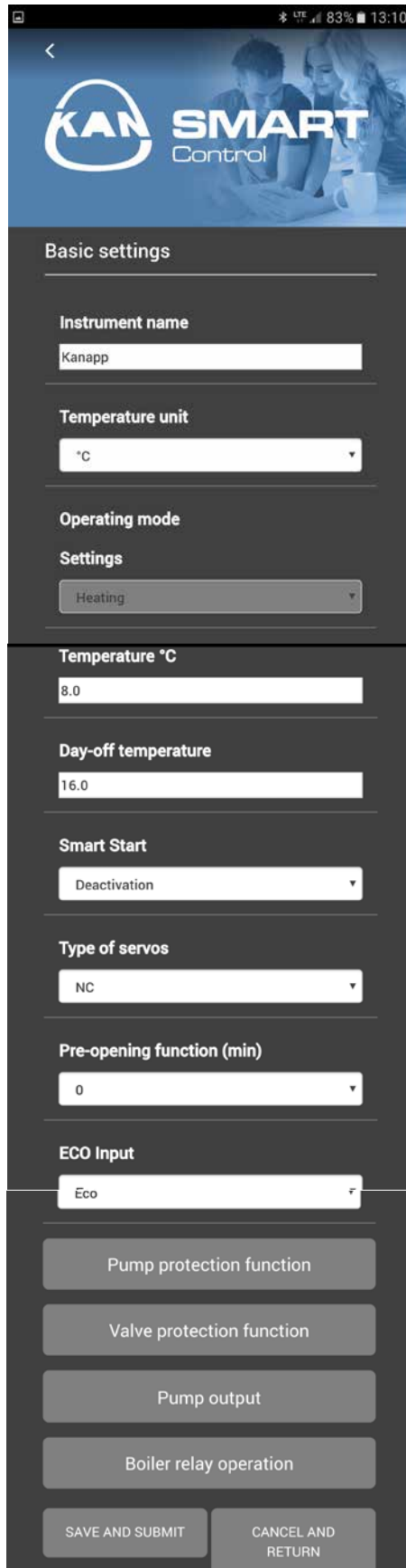
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**Status**

Online

---

SAVE AND SUBMIT      CANCEL AND RETURN



**Device name** – you can assign a name to each terminal block.

**Temperature unit** – you can change from °C to °F and vice versa.

**Operation mode** – used to change the heating and cooling modes. This button is active only when the mode change remote is activated. If the mode change input is used, this place shows the current status (heating or cooling).

**The protection against frost** enables activation/deactivation of the frost protection function and setting a safe temperature.

**Temperature on the leave** – you can adjust the temperature reduction in the holiday mode.

**Smart start** – allows to activate / deactivate the SmartStart function.

**Type of cylinders** – you can choose the type of cylinders used in the system.

**Pre-opening function** – allows to set the time for which the cylinders will remain open after engaging the SMART terminal block power.

**ECO input** – allows to select what the external input should be used for. You can decide between the temperature reduction mode and the holiday mode.

The screenshot shows the 'Pump protection function' settings in the KAN SMART Control app. At the top, there is a header with the KAN SMART Control logo and a background image of a man and a woman looking at a tablet. Below the header, the title 'Pump protection function' is displayed. There are two dropdown menus: 'Downtime (d)' with the value '3' and 'Uptime (min)' with the value '5'. At the bottom, there are two buttons: 'SAVE AND SUBMIT' and 'CANCEL AND RETURN'.

**Pump protection feature** – allows to set the time the pump deactivation in days or the working time in minutes.

**Valve protection feature** – allows to set the time the valve deactivation in days or the working time in minutes.

The screenshot shows the 'Valve protection function' settings in the KAN SMART Control app. At the top, there is a header with the KAN SMART Control logo and a background image of a man and a woman looking at a tablet. Below the header, the title 'Valve protection function' is displayed. There are two dropdown menus: 'Downtime (d)' with the value '14' and 'Uptime (min)' with the value '5'. At the bottom, there are two buttons: 'SAVE AND SUBMIT' and 'CANCEL AND RETURN'.

The screenshot shows the 'Pump output' configuration screen in the KAN SMART Control app. At the top, there is a header with the KAN SMART Control logo and a background image of a man and a woman looking at a tablet. Below the header, the screen is titled 'Pump output' and contains several settings, each with a dropdown menu:

- Pump type:** High-performance pump
- Output:** Local
- Time to pump start-up (min):** 3
- Time to pump shut-off (min):** 3
- Minimum operating time (min):** 20
- Minimum running time (min):** 30
- Switching method:** Normal

At the bottom of the screen, there are two buttons: 'SAVE AND SUBMIT' and 'CANCEL AND RETURN'.

**Pump type** – the choice of the system pump: Conventional pump or high performance pump (energy-saving).

**Output** – control of local pump (for circuits connected to the terminal block) or global (for the whole installation).

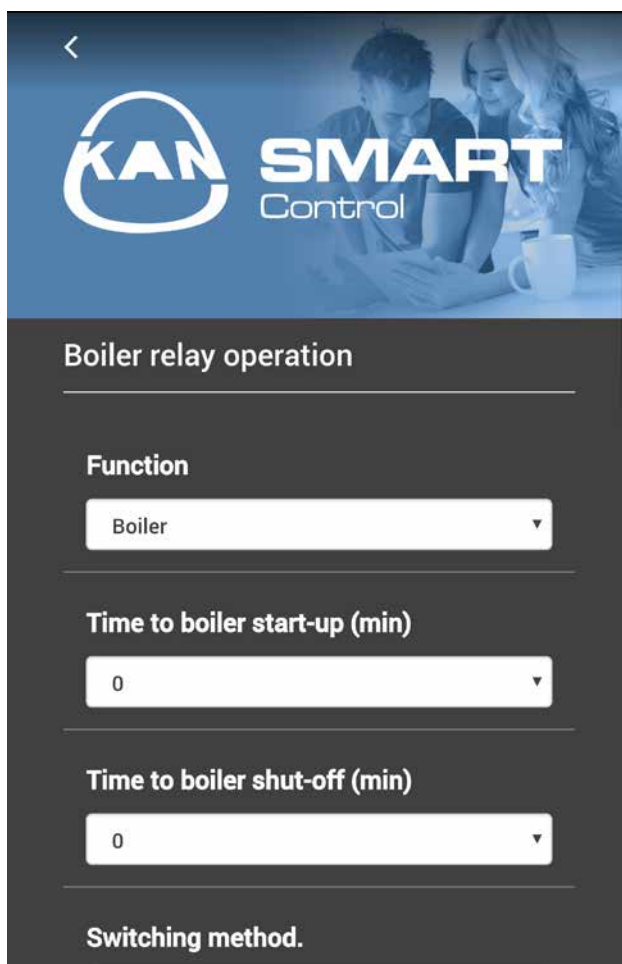
**Time to start the pump** – time to start the pump after receiving the signal of engagement of at least 1 cylinder (for standard pump).

**Time to stop the pump** – time to stop the pump after receiving the signal of closing all cylinders (for standard pump).

**Minimum operation time** – informs about the high performance pump operation time until switch off.

**Minimum stop time**, high performance pump: The pump can be switched off only when the minimum stop time is ensured.

**Switching method** – using the pump relay as the control output allows for the change of the relay operation.



**Relay function for boiler/remote control** – the choice if the output should be used to control the boiler relay or as a central heating control. Choosing the Remote control function allows for manual switching of the heating/cooling mode with the application.

**Time to start the boiler** – time to start the boiler after receiving the signal of engagement of at least 1 cylinder (for standard pump)

**Time to stop the boiler** – time to stop the boiler after receiving the signal of closing all cylinders (for standard pump)

**Switching method** – using the boiler relay as the control output allows for the change of the relay operation.



When you select the “Room Settings” option, a list of rooms (thermostats) connected to the terminal block is visible. Select the room for which you want to change the parameters.



The screenshot shows the 'Room settings' screen in the KAN SMART Control app. At the top, there is a header with the KAN SMART Control logo and a background image of a family. Below the header, the settings are organized into sections:

- Room settings** (Section Header)
- Name**: Input field containing 'Salon'.
- Temperature correction (K)**: Input field containing '0.0'.
- Heating temperature during the day**: Input field containing '21.0'.
- Cooling temperature during the day**: Input field containing '18.0'.
- Setting the min desired temperature**: Input field containing '5.0'.
- Setting the max desired temperature**: Input field containing '30.0'.
- Operating mode lock**: Dropdown menu set to 'Normal'.
- Heating system**: Dropdown menu set to '0'. Below it, a legend reads: '0 Floor heating std. 1 Low-energy floor heating 2 Heater 3 Passive conv. 4 Active conv.'
- Temperature adjustment is possible only with the device for room control**: Dropdown menu set to 'ON'.
- Code protected operation lock**: Dropdown menu set to 'OFF'.
- External sensor**: Dropdown menu set to '0'. Below it, a legend reads: '0 No additional sensor 1 Dewpoint sensor 2 Floor sensor 3 Room sensor'.
- Floor temperature during the day**: Input field containing '1.0'.

At the bottom of the screen, there are two buttons: 'SAVE AND SUBMIT' and 'CANCEL AND RETURN'.

**Room name** – enter the individual room name.

**Temperature correction** – enter the correction factor in this field. Values between -2.0 to +2.0 with accuracy of 0.1.

**Day heating temperature** – here you can set the desired temperature for heating in day mode.

**Day cooling temperature** – here you can set the desired temperature for cooling in day mode.

**Night heating temperature** – here you can set the desired temperature for heating in night mode.

**Night cooling temperature** – here you can set the desired temperature for cooling in night mode.

**Setting the minimum desired temperature** – here you can set the minimum temperature required for the thermostat

**Setting the maximum desired temperature** – here you can set the maximum temperature required for the thermostat

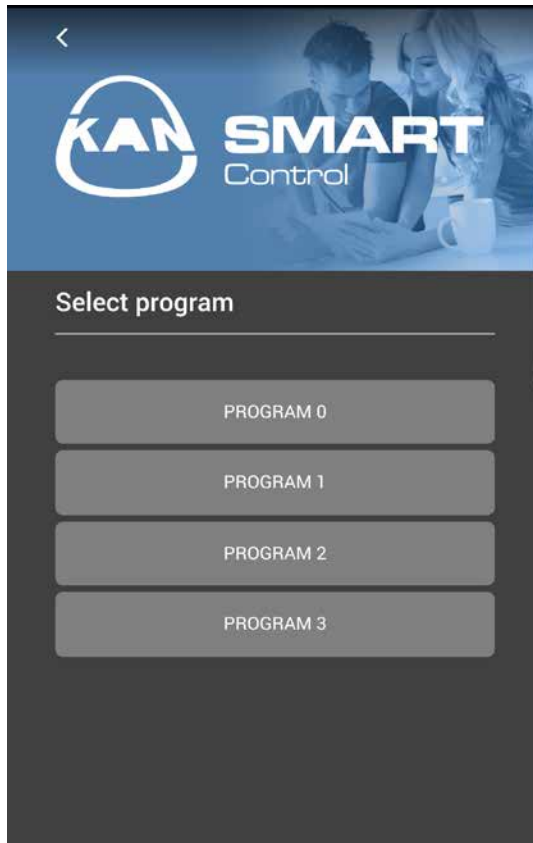
**Operation lock mode** – this button is used to lock the heating or cooling modes for the individual heating zones. When you select the “normal” option, none of the modes is locked.

**Heating system** – this button is used to select the temperature alignment system used in the heating zone

**Service lock** – using the check box, you can decide whether the operation of the thermostat is protected by a PIN code

**External sensor** – choose the appropriate external sensor

**Day floor temperature** – this dialog box is active only if the floor sensor is used. Allows to set the minimum temperature of the floor.



**Weekly programs** – allows to change the weekly programs set for thermostats.

You can choose from 4 programs, that can be set up in such a way as to obtain the optimum comfort in rooms and adapt them to our expectations.

The image shows a mobile application interface for 'KAN SMART Control'. At the top, there is a header with the KAN SMART logo and a background image of a couple. Below the header, the screen is titled 'Program' and shows 'P Program0'. It contains four sections for 'Comfort period 1' through 'Comfort period 4'. Each section has 'START' and 'STOP' labels followed by two time selection dropdown menus. At the bottom, there are two buttons: 'SAVE AND SUBMIT' and 'CANCEL AND RETURN'.
























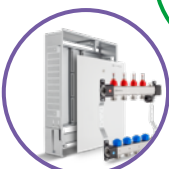
Section	Label	Time 1	Time 2
Comfort period 1	START	05	30
	STOP	21	00
Comfort period 2	START	00	00
	STOP	00	00
Comfort period 3	START	00	00
	STOP	00	00
Comfort period 4	START	00	00
	STOP	00	00

Buttons: SAVE AND SUBMIT, CANCEL AND RETURN

You can choose time when you want to have optimum temperature and the system itself regulates it. For every heating program you can choose from 4 periods of maintaining optimum temperature.

# SYSTEM **KAN-therm**

Optimal, complete multipurpose installation system consisting of state of the art, mutually complementary technical solutions for pipe water distribution installations, heating installations, as well as technological and fire extinguishing installations.

	UltraLine	
	Push/Push Platinum	
	Press LBP	
	PP	
	Steel	
	Inox	
	Groove	
	Copper/Copper Gas	
	Sprinkler	
	Surface heating and automation	
	Football Stadium installations	
	Cabinets and manifolds	

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