

16. PRECAUTIONS/ SAFETY INSTRUCTIONS

Switch off power from all wiring before installing, testing or replacing the thermostat. Only qualified electricians are allowed to work on electrical connections and the electric supply of the device. Otherwise the warranty invalidates. Only use plastic wall mounting boxes for the thermostat installation.

17. WARRANTY

The manufacturer guarantees the compliance of the thermostat with the design description given that the installation and operation manual has been respected.

Warranty period - 2 years from date of purchase.

In case of failure during the warranty period due to faulty manufacturing despite correctly executed installation (according to the installation and operation manual), the customer has the right to get the product repaired or replaced.

The warranty does not cover any damages due to inadequate handling, damages through third party faults, wrong installation (not following the manual) or its consequential damages. Please keep your receipt. Warranty payments will be provided upon presentation of the sales receipt only.

18. CLAIMS

In case of failure during the warranty period, please contact the supplier service center or the regional authorized representative.

The thermostat MCS300 passed all tests successfully.

Name: _____

Street: _____

Zip code, city: _____

Country: _____

Phone: _____ E-Mail: _____

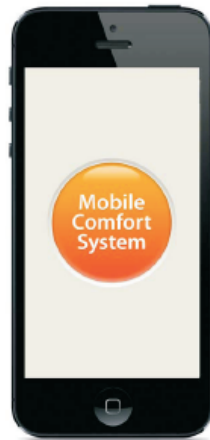
Date of purchase: _____ Installer: _____

Installation date: _____ Signature _____

19. Wi-Fi NETWORK SETTINGS (router settings)

SSID network name:	any (for default network MCS_default)
Wi-Fi network name:	any (for default network 12345467890)
Wireless network mode:	AUTO
Channel range:	40 MHz
Channel:	AUTO
Authentication method:	WPA-AUTO-Personal (WPA/WPA2 Personal)*
WPA encryption:	AES

* the thermostat MCS 300 supports WPA Personal authentication method



INST-1300-MCS300 APPLE-UH-261113

MCS 300

MOBILE COMFORT SYSTEM



Manual

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15.3.2 CONNECT ANOTHER THERMOSTATS

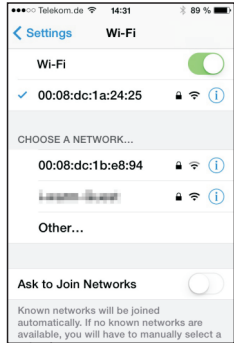


15.3. CONNECT THE NEXT THERMOSTAT

To connect the second thermostat, please follow the instructions described in chapter 14.2.

15.3.1 Second thermostat

To connect the thermostat with the Wi-Fi, please set the password as first (see chapter 10.2).



Picture 34: Connection second thermostat

1. SYSTEM REQUIREMENTS

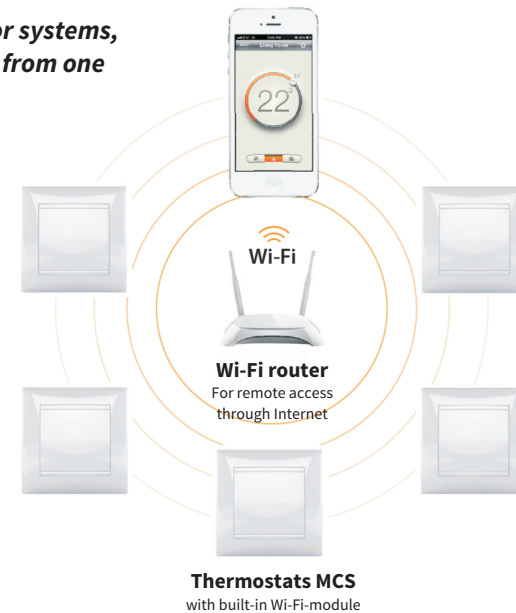
- iPhone with iOS 6 or higher
- min. 1, max. 32 MCS300 thermostat

Install the thermostat in the wall and connect it with the heating element of the electrical warm floor heating system, as it shown in the installation manual. Download the software, connect the thermostat devices with your network and start your system.

Remote control and managing the heating through Internet



Control all warm floor systems, connected together, from one mobile device.



2. IMPORTANT INFORMATION FOR SAFE USAGE

Manufacturer's guarantee does not cover malfunctions caused by mechanical damage, improper installation, or exploitation for purposes, or under conditions, not provided by the User- and Installation Manual. Please keep in mind that the Installation Manual and the Connection Diagram are no replacement for the professional skill of the device installer. We recommend that you apply for professional service for the thermostat and heating system installation. Only qualified electricians should perform the connections and power networking of the device. Switch off power before connecting wiring to the thermostat or disconnecting the device for testing.

3. INTRODUCTION

Thank you for choosing the new and innovative thermostat application **MCS 300** - an electronic regulation device. We proudly present you the thermostat application **MCS 300** for remote control of electric heating systems by means of the smartphone. This is a convenient solution for modern people, who value comfort and know how to be master of their time. The thermostat application **MCS 300** allows a user to control the operation of electric warm floor heating systems. The thermostat and smartphone are commutated in the unified local network through common domestic Wi-Fi router. Control over all thermostats is possible through Internet from anywhere in the world.

4. APPLICATION

The thermostat application **MCS 300** allows to control the parameters and to manage the operation of electric heating systems in rooms (living room, bedroom, kitchen, children room, etc) or in several residential properties (apartment, house, country house). Simultaneously, the application can interact with up to 32 heating systems by connecting them in one Wi-Fi network. Maximum amount of united in one system thermostats depends on the type of the router and the amount of other devices, connected to the network. It is designated by the amount of free for use IP-addresses. In every room the thermostat application **MCS 300** enables a user in current time mode to preset and maintain the heating temperature in the range from +5 °C to +45°C, and also control the working order of heating system elements.

5. OPERATION MODES

In the basic settings of the thermostat application **MCS 300** are three operation modes are provided:



PROGRAM MODE

The program operation mode allows to preset the heating schedule for each room for every day of the week ahead. The user is able to enter desired heating temperature values for hourly amount of time for a day. You just preset the desired temperature. Thermostat application **MCS 300** monitors it itself, maintaining comfort and saving energy.

RESERVATION

Technical data are subject to change without notice. Changes, errors and printer's errors do not justify claims for damages. For safety components and systems the relevant standards and regulations are to be observed, as well as the corresponding operating and installation instructions.

TEMPERATURE MAINTAIN MODE

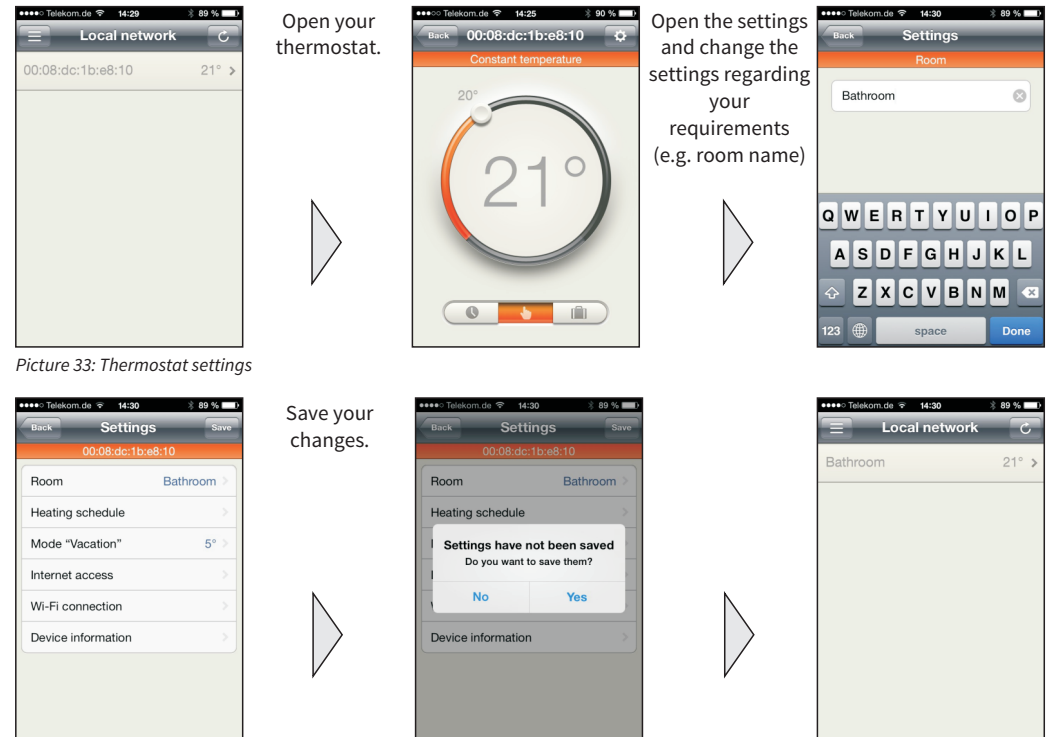
In this operation mode you have the possibility to adjust the maintain temperature from +5 °C to +45 °C

VACATION MODE

If the user activating this mode, he could preset the the room maintainance temperature in the range from +5 °C to +12 °C.

15.2.3. SET THE THERMOSTAT SETTINGS

Few seconds after start, the first set appears in your thermostat list. Now you can set all settings for this heating circuit (e.g. room name or heating mode).



Picture 33: Thermostat settings

To finish the settings, set your heating mode like described in chapter 11 „program mode“; chapter 12 „maintain temperature mode“ or chapter 13 „vacation mode“.

Please note your settings

Room	Settings

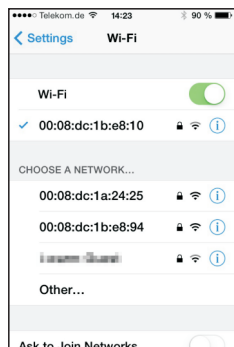
15. CONNECT SEVERAL THERMOSTATS (UP TO 32) WITH YOUR HOME NETWORK

15.1. PREPARATION

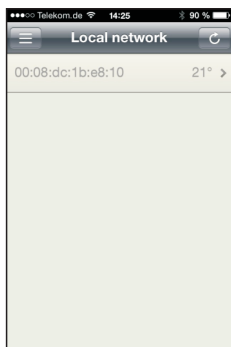
- Install all thermostats like described in chapter 7.
- Switch on all installed thermostats to set their MAC address (like chapter 9.1.)
- Open your iPhone settings/Wi-Fi like described in chapter 9.2

15.2. CONNECT THE FIRST THERMOSTAT

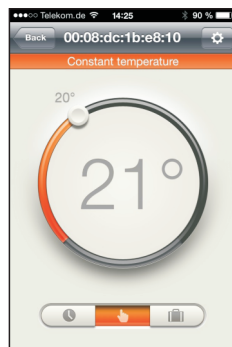
15.2.1. WI-FI SETTINGS



select the first thermostat at your list as active and open your MCS300 application.

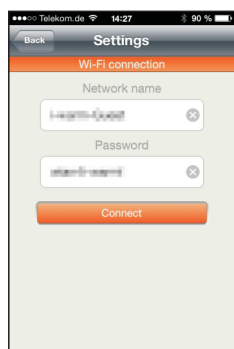


open your thermostat.

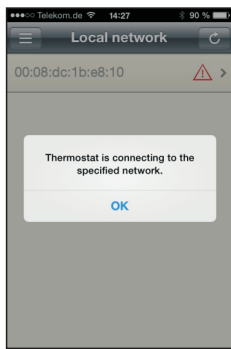


Open the settings

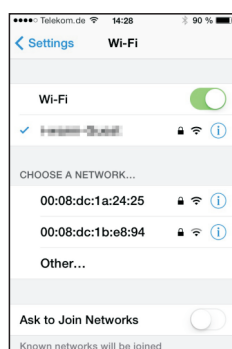
Picture 31: WiFi settings



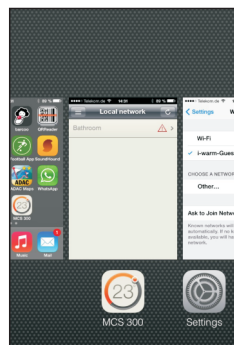
Fill in your network name and your WPA key and connect the thermostat.



Your home network is active now (selected automatically) and the connected thermostat is disappeared from your network list.



15.2.2. RESTART SOFTWARE



Important! Close your MCS300 application and close the task totally.



Start your MCS300 application again.

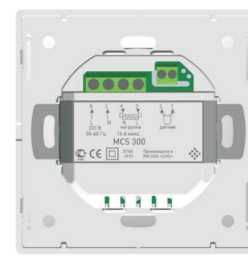


Picture 32: Restart MCS300 App

6. THERMOSTAT TECHNICAL DATA



Picture 1: front view MCS 300



Picture 2: back view MCS 300



Picture 3: side view MCS 300

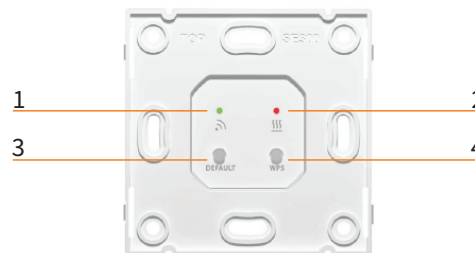


Picture 4: top view MCS 300 with removed cover

5.1. TECHNICAL DATA

Supply voltage	230 V AC
Maximum load current	16 A
Power consumption	2 W
Weight	100 g
Dimensions	83x83x48 mm
max. safe time settings (disconnected)	12 months
IP rating	IP21
Protection class	II
Sensor type	TST02
Sensor wire length	2 m
Operation temperature	+5°C....+40°C
max. humidity	80 %
temperatre setting range	+5°C....+45°C
max. ambient temperature	+28 °C

7. THERMOSTAT CONTROLS AND INDICATION



Picture 5: top view MCS 300 with removed cover

CONTROLS	
1	green LED power supply and Wi-Fi connection
2	red LED „heating on“ and sensor failure
3	DEFAULT ON/OFF and setting of network
4	WPS WPS connection

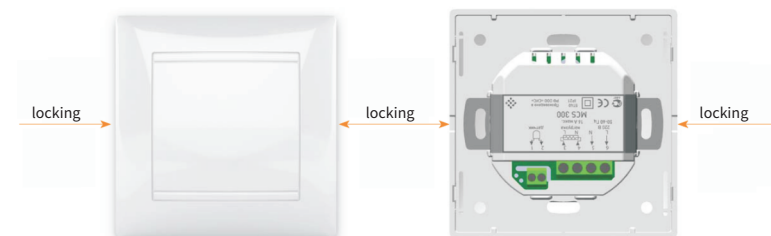
INDICATION		
		Thermostat is OFF
		Heating is ON
		Network error
		Sensor error
		Network connection
		Network failed
		Network OK

○ LED OFF
● LED ON
★ LED blinks

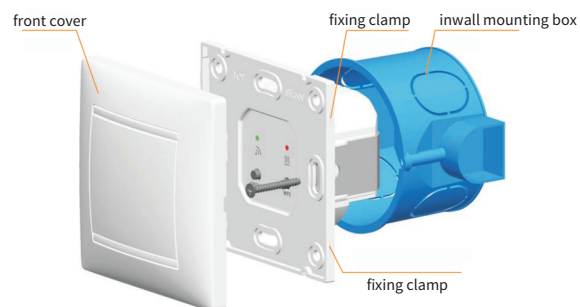
8. THERMOSTAT INSTALLATION

Remove the front cover of the thermostat.

1. Unlock the cover by insertion of a flat blade screwdriver
2. Remove the cover (picture 5).
3. Install the power supply, the heating mat and the sensor according to the wiring diagram
4. Mount the Thermostat into the inwall mounting box
5. Set the temperature and Wi-Fi settings (see chapter OPERATIONS)
6. install the front cover

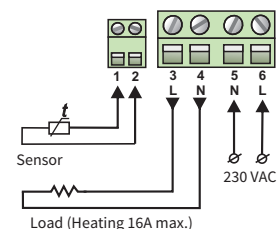


Picture 6: front cover removing



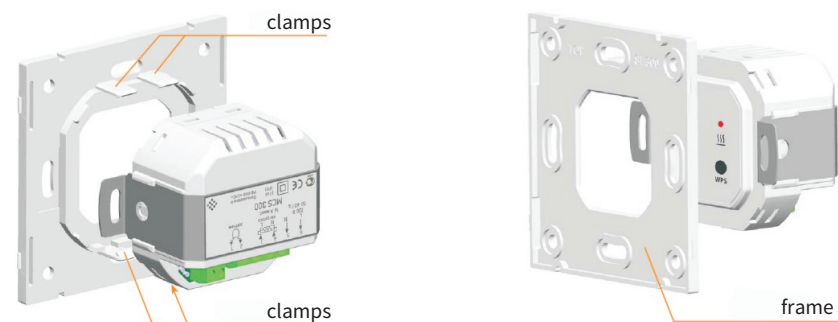
Picture 7: assembly / disassembly diagram

8.1. CONNECTION DIAGRAM



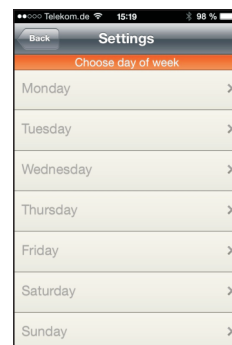
The thermostat MCS 300 is equipped with a removable front cover / frame. This front cover is normally fixed on a frame. This frame could be removed, if it is necessary to install the thermostat into the junction box without the front cover. With this flexible installation possibility the thermostat could be easily installed in standard stopper plugs of some manufacturers of electric equipment too.

To remove the frame of the device, press the four fixing clamps, located on upper and bottom sides of the thermostat, with a flat blade screwdriver and remove the frame from the thermostat body.

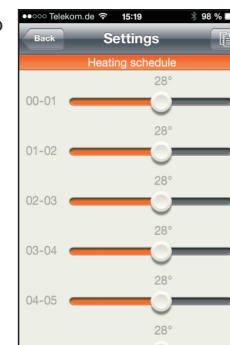


Picture 8: disassembly of the removable frame

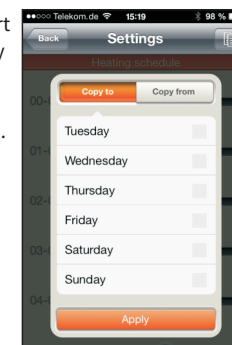
12.1.2. HEATING SCHEDULE



Choose a day to set the heating schedule



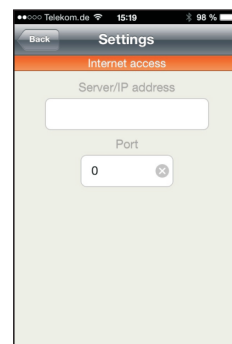
Set your comfort temperature by sliding the buttons (left down, right up).



If could copy your settings to another day

Picture 25: Heating schedule screens

12.1.3. WEB & Wi-Fi ACCESS



You could connect your heating circuit via Internet. How to proceed you will find in the manual of your Internet Router.



To connect up to 32 heating circuits with your local network (see next page)



Picture 26: Internet Access screen

Picture 27: Wi-Fi screen

Picture 28: Device info screen

12. TEMPERATURE MAINTAIN MODE

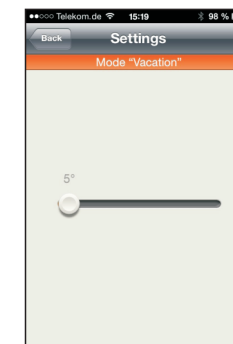


Picture 29: Vacation screen

Slide the button to left or to right to set your comfort temperature (left decrease temperature, right increase temperature) (min +5°C, max +45°C)

The small number is your set comfort temperature, the big number shows you the measured room temperature.

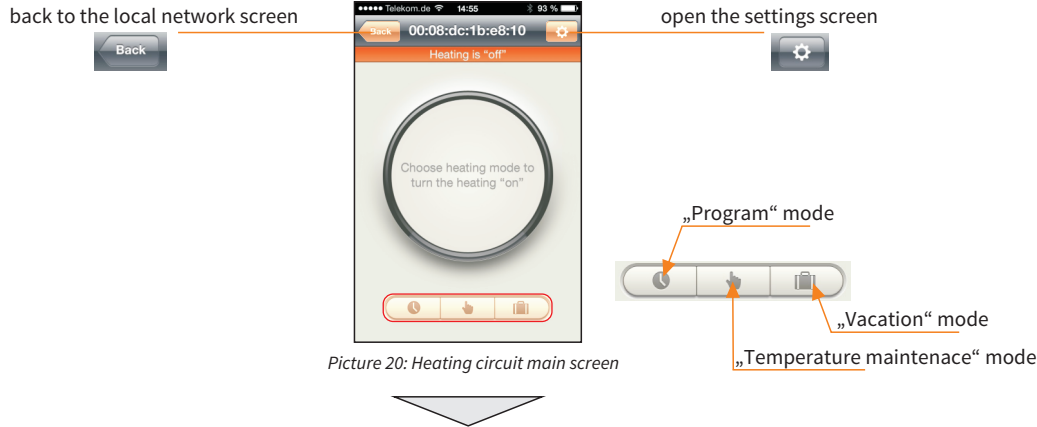
13. VACATION MODE



Picture 30: Vacation screen

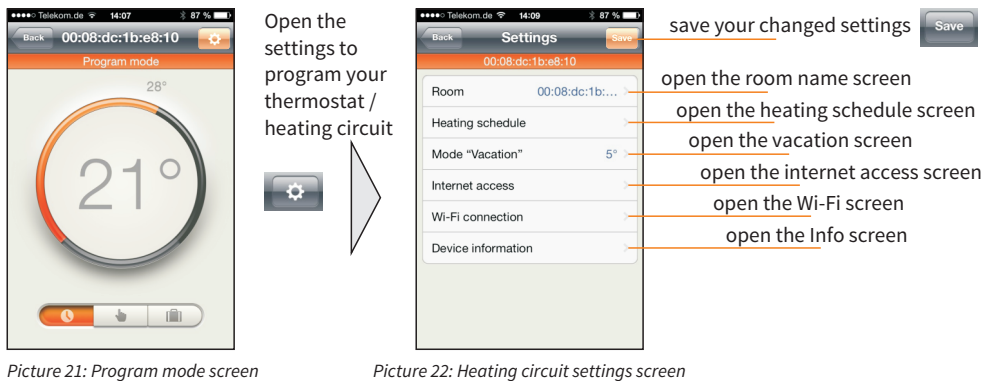
Set your economy temperature during the vacation by sliding the button (left down, right up) (min +5°C, max +12°C)

11.3.2. MAIN SCREEN STRUCTURE

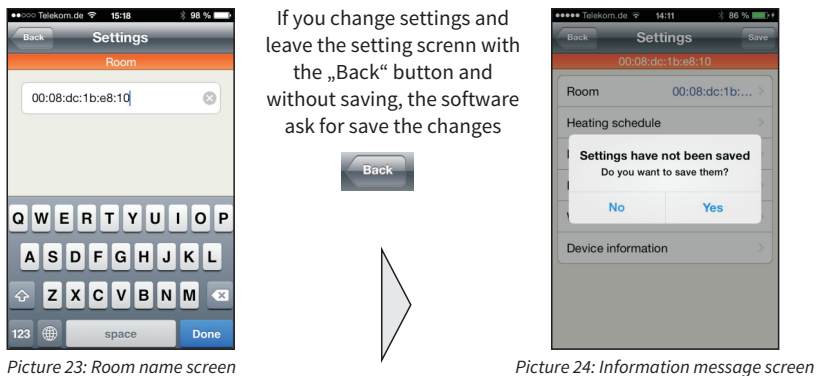


12. PROGRAM MODE

12.1. SETTINGS SCREEN STRUCTURE



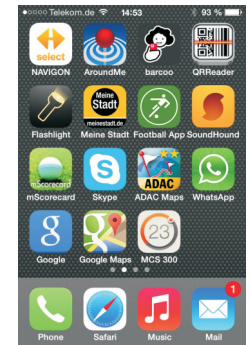
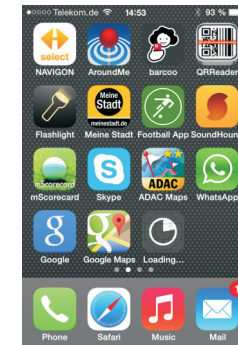
11.1.1. ROOM NAME



9. MOBILE APPLICATION SETUP

9.1. SOFTWARE INSTALLATION

Search and download the free application **MCS 300** in the shop in accordance to your mobile phone operation system.



10. CONNECT THE THERMOSTAT TO THE NETWORK

The thermostat MCS 300 is a temperature controller with built-in Wi-Fi module. Therefore each thermostat could be used as an access point too.

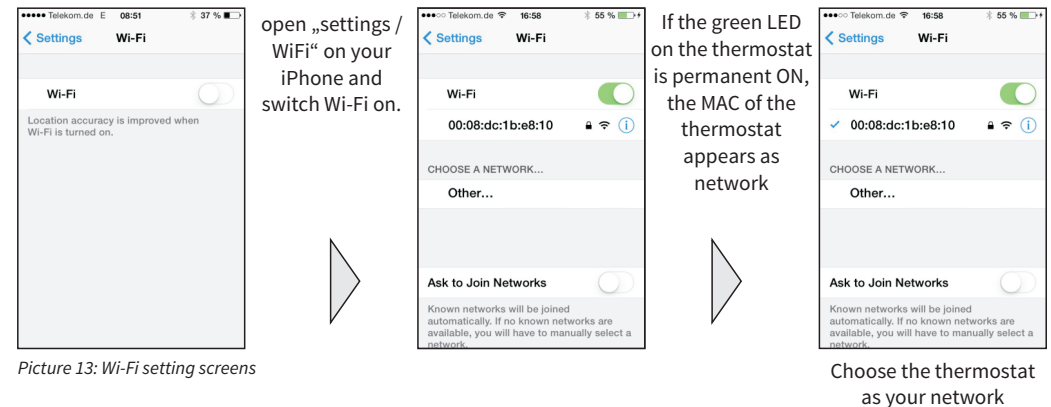
10.1. SET MAC-ADDRESS

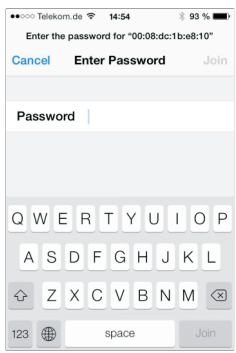
To connect the thermostat through AP (access point), quickly press twice the «default» key on the thermostat. The green LED will start blinking at that. The thermostat becomes an access point at this moment with a name «MAC-address of the device» (for example 00:08:DC:10:24:26) and the green LED goes on continuously. Now you are able to connect the thermostat with your mobile phone.



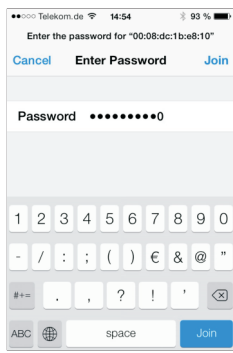
10.2. CONNECT THE THERMOSTAT DIRECT TO THE MOBILE PHONE

If you don't have a Wi-Fi Router, you are also able to connect the Thermostat directly to your iPhone.

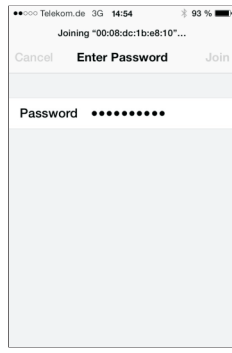




Your iPhone ask for the password.



Enter 1234567890



Join the thermostat to your network

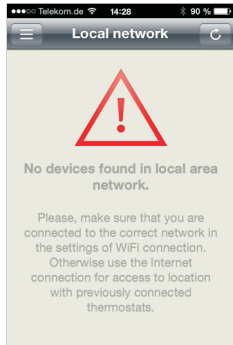
Picture 14: Wi-Fi connection screens

11. MOBILE APPLICATION OPERATION

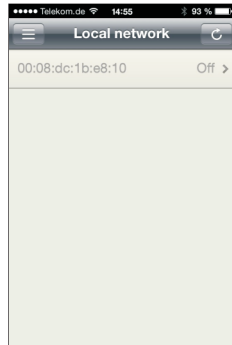
11.1. FIRST START



Start your MCS 300 software

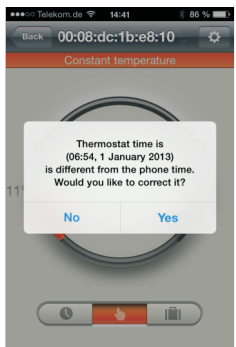


After the software start it takes few seconds for connection

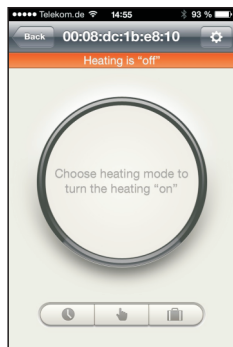


Touch the address to open the local network screen

Picture 15: Software start screens



At the first start the software ask to set time and date according your iPhone settings. Please choose „YES“



Picture 17: Start screen „test mode“

Picture 16: Screen „date and time“

11.2. TEST MODE

At the first start the thermostat starts in the „test mode“. The test mode is necessary to test the thermostat after the installation of the heating system.

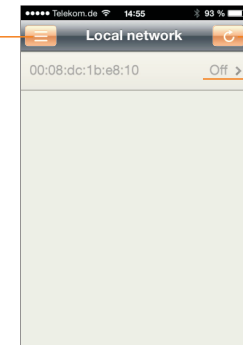
In this „test mode“ the user cannot control the temperature settings of the warm floor system. The thermostat constantly maintains the temperature at 28 °C. The „test mode“ will be activated only when switching on the thermostat for the first time.

If the thermostat was connected somehow to Wi-Fi network the „test mode“ becomes unavailable and all settings will be stored in the thermostat.

10.3. DISPLAY STRUCTURE

10.3.1. MENU SCREEN STRUCTURE

open the menu screen

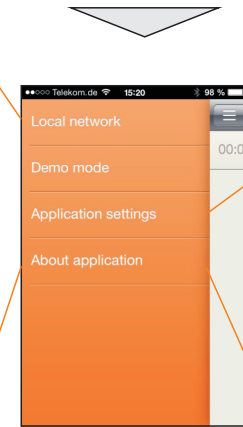
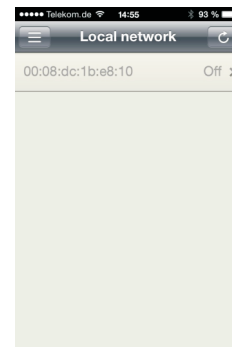


refresh the connection



touch this to open the main screen of the thermostat

Picture 18: Local network screen



Picture 19: Menu screen

