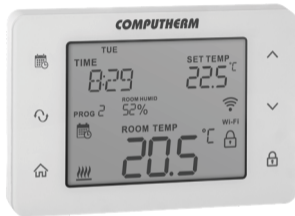


# COMPUTHERM Q20 Wi-Fi

Wi-Fi thermostat



**COMPUTHERM SMART**



Works with Tuya / SmartLife, Amazon  
Alexa and Google Home

Operating Instructions

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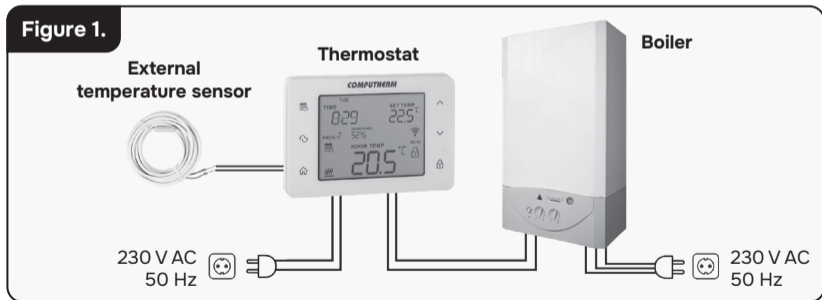
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# 1. General description of the thermostat

The **COMPUTHERM Q20 Wi-Fi** type switch mode room thermostat is suitable for regulating a large majority of boilers, air conditioners, humidifiers and dehumidifiers in circulation. It can easily be connected to any gas boiler, air conditioner, humidifier and dehumidifier with two-wire room thermostat connection point and to other electrical devices, regardless of whether the device has a 24 V or 230 V control circuit.



The device can be programmed as needed so that the heating/cooling or humidifier/dehumidifier system heats/cool and humidifies/dehumidifies your apartment or office to the desired temperature or humidity at the times you want, and it contributes to the reduction of energy costs in addition to providing comfort. Separate independent daily programs can be created for each day of the week. For each day, beside 1 fixed switching time ( **PROG** ) 10 freely adjustable (in 10 minutes increments) switching times ( **PROG**1 - **PROG**10 ) can be set, and a different temperature (in 0.5 °C increments) and humidity (in 1 percent increments) can be assigned to every switching times.

The device can be easily controlled both via the internet and through the touch-button user interface, while its operating status can be continuously monitored. The device also provides the possibility of automatic control based on temperature/humidity and time schedules. Multiple thermostats, even those installed at different locations, can be registered to and controlled from the same user account.

The **COMPUTHERM Q20 Wi-Fi** thermostat can be used for controlling:

- Gas boilers
- Electric underfloor heating systems
- Existing heating/cooling and humidifying/dehumidifying systems via remote control
- Electric water heaters
- Solar systems
- Selected groups of other electrical devices

With the help of the product, the heating/cooling as well as the humidifying/dehumidifying of your apartment, house or holiday home can be controlled anytime and from anywhere. The product is especially ideal if your apartment or house is not used according to a predefined daily schedule, if you leave your home for an uncertain period during the heating season, or if you also wish to use your holiday home during the heating season.

Thanks to the connectable external temperature sensor, the thermostat is particularly suitable for controlling underfloor heating systems.

The simultaneous use of several **COMPUTHERM** room thermostats and one **COMPUTHERM Q4Z** or **Q10Z**, zone controller provides the possibility for the thermostats to also control a pump or a zone valve in addition to starting the heater or cooler. This way it is easy to divide a heating / cooling system into zones, thanks to which the heating / cooling of each room can be controlled separately, thus greatly increasing comfort. Furthermore, the zoning of the heating / cooling system will greatly contribute to the reduction of energy costs, as due to this only those rooms will be heated / cooled at any time where it is required.

## 2. Important warnings and safety recommendations

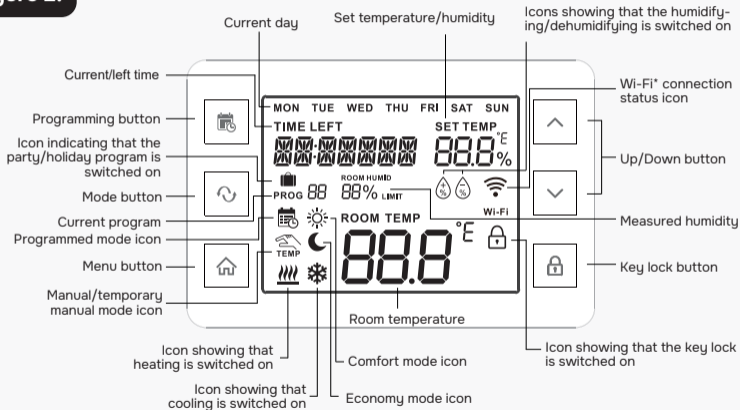
- Before starting to use the device, please study the operating instructions carefully and strictly follow the instructions described therein.
- The thermostat is designed for business or household (non-industrial) use and can be used to control any electrical device with a power output not exceeding 1.84 kW (load capacity: max. 30 V DC / 250 V AC; 8 A [2 A inductive load]).
- Before putting the thermostat into operation, make sure that a Wi-Fi network is reliably available at the intended place of use.

- This device is designed for indoor use only. Do not use it in wet, chemically aggressive or dusty environments.
- This device is a thermostat controlled via a wireless Wi-Fi network. In order to avoid signal interference, keep electrical equipment that may interfere with wireless communication at a sufficient distance from the thermostat.
- The manufacturer will assume no responsibility for any possible direct or indirect damages or income losses incurring during the use of the device.
- The device does not operate without power supply; however, the thermostat is capable of storing its settings. In the event of a power supply failure (power outage), the device will continue to operate according to the previously set settings and operating mode after the power supply has been restored and the exact date and time have been reset (if automatic time setting is disabled). If the device is used in an environment where power outages occur frequently, it is recommended, for safety reasons, to regularly check the proper operation of the thermostat.
- **Before starting the actual control of the device connected to the thermostat, make sure that the controlled device operates perfectly and can be reliably operated when controlled by the thermostat.**

- The mobile application is continuously being developed and updated. To ensure proper operation, regularly check whether a mobile application update is available and always use the latest version. Due to continuous updates, certain functions of the application may operate or appear slightly differently from those described in this operating manual.

### 3. Information appearing on the display of the thermostat

Figure 2.

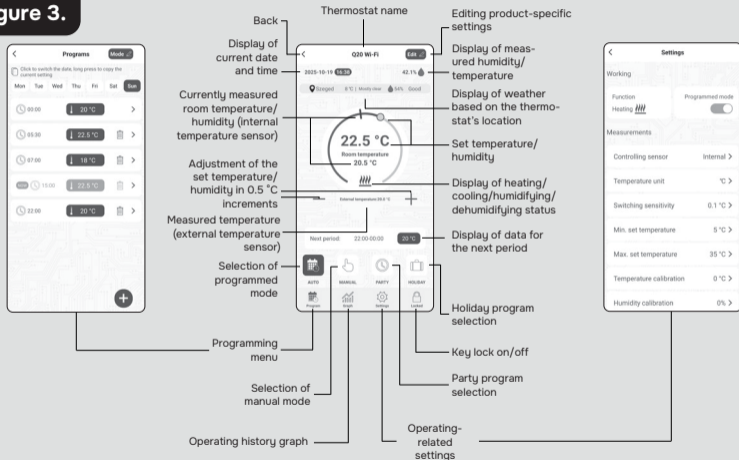


**\*Wi-Fi icon indications:**

- Flashing every 10 seconds: not connected to a Wi-Fi network and not in pairing mode
- Flashing every 2 seconds: in AP Wi-Fi pairing mode
- Flashing every 1 second: in Bluetooth Wi-Fi pairing mode
- Continuously lit: connected to a Wi-Fi network.

## 4. Functions available in the mobile application

Figure 3.



## 5. Location of the thermostat

It is reasonable to locate it in a room used regularly or for many hours per day so that it is in the direction of natural ventilation in the room but protected from drought or extreme heat (e.g. direct sunlight, refrigerator, chimney, etc). Its optimal location is 0.75 - 1.5 m above floor level.

The design of the product allows it to be most easily installed flush-mounted into a standard 65 mm built-in electrical wall box.

Please ensure that a sufficiently strong Wi-Fi signal is available for reliable Wi-Fi communication. Check that the thermostat is within the coverage area of the Wi-Fi network. If the signal is weak, try positioning the router closer to the device or use a signal repeater. Make sure that the internet connection is stable and reliable. Adequate signal strength is essential for smooth remote control and for full use of the application's functions.

**Important warning!** If the radiator valves in your flat are equipped with a thermostatic head, adjust it to maximum temperature or replace the thermostatic head of the radiator valve with a manual control knob in the room where the room thermostat is to be located, otherwise the thermostatic head may disturb the temperature control of the flat.

## 6. Connection and commissioning of the thermostat

### 6.1. Connection of the device to be controlled

**Warning!** The device must be installed and connected by a qualified professional. Before installing, make sure that neither the thermostat or the device to be controlled is connected to the 230 V mains voltage. Modifying the thermostat can cause electric shock or product failure.

The thermostat controls the boiler (or air-conditioning unit) through a potential-free changeover relay with the following connection points: **1** (NO); **2** (COM); **3** (NC). These connection points are located on the rear panel of the device (**Figure 4**). The heating or cooling device to be controlled must be connected to the terminal block on the back of the product.

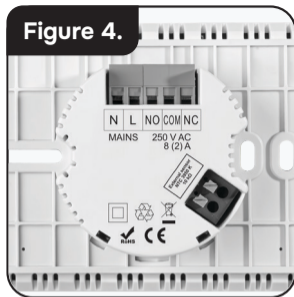
Connect the two connection points of the heating or cooling equipment to be controlled to the normally open **1** (NO) and **2** (COM) terminals of the relay. If you would like to operate an old boiler or any other device that has no connection points for thermostats, then the **1** (NO) and **2** (COM) connection points of the thermostat should be connected to the mains cable of the device, similarly as a switch would be connected.

**Attention!** Always consider the loadability of the thermostat and follow the manufacturer's instructions of the heating or cooling equipment. The device must be installed and connected by a qualified professional! The voltage appearing at terminals **1 (NO)** and **2 (COM)** depends only on the system being controlled, therefore the dimensions of the wire are determined by the type of the device to be controlled. The length of the wire is of no significance.

## 6.2. Connection of the external temperature sensor

An external temperature sensor (NTC 3950 K, 10 k $\Omega$  at 25 °C) can be connected to the thermostat. If you wish to use the external temperature sensor instead of, or in addition to, the built-in temperature sensor during operation, connect it to the terminals marked "**External sensor**" on the rear side of the thermostat (**Figure 4**).

By using the external temperature sensor, the output(s) can be controlled based on the temperature measured by this sensor. In addition, a maximum temperature can be set, upon reaching which the thermostat switches off the outputs. This function




can be particularly useful for underfloor heating and electric heating systems for safety reasons.

**Attention!** If the external temperature sensor is intended to be used for floor temperature measurement, it is recommended to embed the sensor into the floor inside a short copper tube, so that it can be easily replaced in case of failure. Furthermore, the cable of the external temperature sensor should be routed separately from other cables, preferably in a dedicated protective conduit, in order to avoid possible interference.

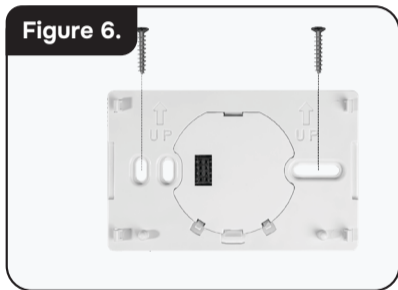
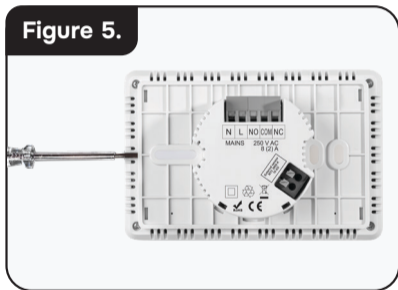
### **6.3. Connection to the electrical network**

The product should be connected to the 230 V network through a two core cable. Power supply should be connected to points **N** and **L** of the terminal block located on the rear side of the thermostat. You do not have to take care of phase correctness during the connection process (**Figure 4**). It is not necessary to connect a ground wire because the product is double insulated.

After the device has been connected to the electrical network, the display will flash, showing the day, time, program number, the set and measured temperature, the measured humidity, and the operating mode icon. After touching the , the display stops flashing, the thermostat switches to the home screen, and the setting process can be started.

## 6.4. Mounting the thermostat

To mount the thermostat, separate the front panel from the rear panel using a flat-head screwdriver (**Figure 5**). Then place the rear part of the product into the 65 mm built-in electrical wall box and fix it with screws (**Figure 6**). Finally, attach the front panel back onto the mounted rear panel.



In order to ensure that the relay is definitely in the state corresponding to the settings, using the  $\wedge$  and  $\vee$  buttons once set the set temperature above the measured temperature, then reduce it below the measured temperature.

## 7. Setting up the internet control

### 7.1. Installing the application

The thermostat can be controlled from a smartphone or tablet using the free **COMPUTHERM SMART** application. The **COMPUTHERM SMART** application is available for **iOS** and **Android** operating systems. The application can be downloaded via the link below or by using the QR code:

<https://computherm.info/en/smart-home>



Works with **Tuya / SmartLife, Amazon Alexa** and **Google Home**







**Attention!** In addition to Hungarian, the application is also available in English and several other languages, and it automatically appears in the language set on the phone. If the phone is used in a language that is not available in the application, the application will be displayed in English.



## 7.2. Pairing the thermostat with the Wi-Fi network

In order to enable remote control, the device must be connected to the internet via a Wi-Fi network. The already configured **COMPUTHERM Q20 Wi-Fi** thermostat can also operate according to a preset program without a permanent internet connection.

**Attention!** The thermostat can only be connected to a **2.4 GHz** Wi-Fi network.


### 7.2.1. Selecting the pairing mode on the thermostat

- Touch and hold the  button for 10 seconds, regardless of whether the key lock is enabled. The thermostat then enters pairing mode, which is indicated by the continuously lit  symbol. After 1 minute of inactivity or after touching the  icon, the thermostat exits pairing mode and returns to the home screen.
- Next, select whether you want to perform pairing using **Bluetooth (BLE)** or **AP mode**. This can be selected using the  and  buttons and confirmed by touching the  button.


- **Bluetooth (BLE) mode (recommended):** This is a simplified pairing method in which, using the built-in Wi-Fi and Bluetooth modules, the **COMPUTHERM SMART** application automatically detect nearby **COMPUTHERM Q20 Wi-Fi** thermostat that are set to Bluetooth pairing mode.
- **AP mode:** If your smartphone or tablet does not support the simplified (**Bluetooth**) pairing mode, or if pairing fails for any reason, **AP mode** must be selected. In this case, pairing is performed manually using the thermostat's Wi-Fi hotspot.
- **Bluetooth mode** is indicated on the thermostat by the  symbol flashing every 1 second, while **AP mode** is indicated by the  symbol flashing every 2 seconds.

### 7.2.2. Pairing the thermostat with the application

- Enable location services (GPS) and Bluetooth on your phone, and connect it to the **2.4 GHz** Wi-Fi network that you want to use with the thermostat. In the case of a dual-band Wi-Fi router, make sure that the **2.4 GHz** network is selected; otherwise, the application will prompt you to choose another network.


- Download and start the **COMPUTHERM SMART** application. Grant all requested permissions to ensure proper operation.
- Register an account and log in.
- On the application's home screen, touch the  in the upper right corner and select “**Add device**”.

### Pairing via Bluetooth mode:

- After a short search, the application displays a list of nearby available devices. After selecting the thermostat, the application prompts you to enter the Wi-Fi network password. Once the password has been entered, pairing is completed automatically.
- If the thermostat does not appear among the available devices, you can manually select it from the list under “**Add Manually**”. If you are unsure of the exact model, touch the  icon in the upper right corner and scan the QR code located on the back of the device.
- In the dialog that appears, select the “**Bluetooth**” option and follow the instructions in the application.

### Pairing via AP mode:


- At the bottom of the displayed page, under “**Add Manually**”, select the

**COMPUTHERM Q20 Wi-Fi** thermostat (if you are unsure of the exact model, touch the  icon in the upper right corner and scan the QR code on the back of the device). In the dialog that appears, select the “**AP**” option and follow the instructions in the application.

After successful pairing, the thermostat becomes available in the application and appears on its home screen.

### 7.3. Basic settings in the application


After launching the application, the “**Home**” page displays the **COMPUTHERM** devices assigned to the account. Using the home management function, devices located in different buildings can be grouped, the created groups can be given custom names, and, if required, shared with other **COMPUTHERM SMART** users.

Select the desired device from the list and touch the  button to enter the editing interface. On the next page, you can change the name of the thermostat, delete the thermostat from the application, view device information and perform additional setting.

### 7.4. Controlling the thermostat by multiple users

When several users wish to control the same thermostat, after the thermostat has

been put into operation the following steps should be carried out to add further users:





- In the **COMPUTHERM SMART** application, select the thermostat to be shared, then touch the  icon on the displayed page and choose “**Shared devices**”.
- You can share the selected device with other **COMPUTHERM SMART** accounts by entering the associated phone number or e-mail address.
- The invitation required for sharing (link) can be sent using any method supported by the smartphone or tablet (SMS, e-mail, social media, Bluetooth, nearby sharing, etc.). The invited user can control the shared device (provided they have a user account). This permission can be revoked at any time.

## 7.5. Integrating the thermostat into other smart home systems




In addition to the **COMPUTHERM SMART** application, the thermostat is also compatible with the Tuya and SmartLife applications. To use these, set the thermostat to Wi-Fi pairing mode and perform the pairing by following the steps in the respective application. The thermostat can also be integrated into Amazon Alexa and Google Home smart home systems using the **COMPUTHERM SMART** skill.

## 8. Operation of the thermostat that has been put into operation





The thermostat controls (manually or via programming) the devices (e.g. gas boiler, pump or dehumidifier) connected thereto on the basis of the humidity/temperature measured by it and being set, considering the switching sensitivity of the thermostat ( $\pm 0.2\text{ }^{\circ}\text{C}/\pm 1.0\%$  according to factory default) This means that when the thermostat is set to heating mode and  $22\text{ }^{\circ}\text{C}$  then at switching sensitivity of  $\pm 0.2\text{ }^{\circ}\text{C}$  the connection points of the output relay of the thermostat **1** (NO) and **2** (COM) close at a temperature below  $21.8\text{ }^{\circ}\text{C}$  (the heating system switches on), and open at a temperature above  $22.2\text{ }^{\circ}\text{C}$  (the heating system switches off). In cooling mode the relay switches conversely. When the thermostat is set to humidifying mode and to 60%, then at switching sensitivity of  $\pm 1.0\%$  the output relay of the thermostat **1** (NO) and **2** (COM) close at a relative humidity below 59% (the humidifier switches on) and open at a relative humidity above 61% (the humidifier switches off). In dehumidifying mode the relay switches conversely.

The closed state of the connection points **1** (NO) and **2** (COM) of the output relay is indicated by the  ,  ,  or  icons appearing on the display of the device, according to the selected mode.

## 9. Settings

**Attention!** According to factory default setting the key lock of the thermostat automatically switches on after 30 seconds which is indicated by the  icon that appears in the bottom right corner of the display. To unlock the keyboard, touch the  button for 2 seconds  until the icon disappears from the display.

In the application, you can lock and unlock the thermostat by tapping the  icon.



The thermostat allows a number of setting options that allow its operation to be customized as required. You can enter the settings menu of the thermostat by touching and holding the  for 2 seconds. At this point, the setting for the automatic time synchronization function appears on the display. Within the settings menu, the current setting can be modified using the  and  buttons, and you can move to the next setting by touching the  button. The setting that can currently be modified is shown flashing on the display. The table below shows the available setting options:

Displayed abbreviation	Description of the setting	Setting options	Factory default setting	Detailed description
T SYNC	Automatic time synchronization	OFF: switched off	ON	Chapter 9.1.
		ON: switched on		
FUNC	Operating mode	HEA: heating	HEA	Chapter 9.2.
		COO: cooling		
		HUM: humidifying		
		DEH: dehumidifying		
PROGRAM	Switching on and off of programmed mode	OFF: Switched off. In this case the thermostat is working in a manually set Economy mode or comfort mode.	ON	Chapter 9.3.
		ON: Switched on. In this case the thermostat is working according to a pre-set program or manual mode.		
SENSOR	Temperature sensor selection	INT: internal temperature sensor	INT	Chapter 9.4.
		EXT: external temperature sensor		
		ALL: combined use of the internal and external temperature sensors		
T UNIT	Temperature unit	°C	°C	--
		°F		



Displayed abbreviation	Description of the setting	Setting options	Factory default setting	Detailed description
HYSTER	Switching sensitivity (internal temperature sensor)	±0.1 – ±1.0 °C	±0.2 °C	Chapter 9.5.
		±0.2 – ±2.0 °F	±0.4 °F	
		±1 – ±5% RH	±1% RH	
	Switching sensitivity (external temperature sensor)	±0.1 °C – ±10.0 °C	±0.2 °C	
±0.2 °F – ±18.0 °F		±0.4 °F		
MIN	Minimum adjustable temperature/humidity (internal temperature sensor)	5 – 45 °C	5 °C	--
		41 – 97 °F	41 °F	
		0 – 98% RH	30% RH	
	Minimum adjustable temperature (external temperature sensor)	0.0 – 99.5 °C	5.0 °C	
32 – 211 °F		41 °F		
MAX	Maximum adjustable temperature/humidity (internal temperature sensor)	5 – 45 °C	35 °C	--
		41 – 97 °F	95 °F	
		1 – 99% RH	80% RH	
	Maximum adjustable temperature (external temperature sensor)	0.0 – 99.5 °C	40 °C	
32 – 211 °F		104 °F		
T CALIB	Calibration of the temperature sensor	-3.0 – +3.0 °C	0.0 °C	Chapter 9.6.
		-6.0 – +6.0 °F	0.0 °F	


Displayed abbreviation	Description of the setting	Setting options	Factory default setting	Detailed description
T LIMIT (only when ALL sensor setting is selected)	Setting the external temperature limit	0.0 - 99.5 °C	40.0 °C	Chapter 9.7.
		32 - 211 °F	104 °F	
EXT HYS (only when ALL sensor setting is selected)	Switching sensitivity of the external temperature limit	0.5 - 10.0 °C	2.0 °C	
		1 - 18 °F	4 °F	
H CALIB	Calibration of the humidity sensor	-10 - +10% RH	0% RH	Chapter 9.8.
H LIMIT (only in cooling mode and when INT / ALL sensor setting is selected)	Setting the humidity limit for cooling	OFF: switched off	80% RH	Chapter 9.9.
		30-99: if the measured humidity is higher than the set value, the cooling system switches off		
A LIGHT	Automatic backlight	OFF: switched off	ON	--
		ON: switched on (backlight of the keys switches on and off simultaneously with the backlight of the display)		

Displayed abbreviation	Description of the setting	Setting options	Factory default setting	Detailed description
B MOD	Automatic backlight during remote adjustment	OFF: switched off	ON	--
		ON: switched on		
BRIGHT	Backlight brightness	1 - 10	7	--
B LIGHT	Backlight of the buttons	OFF: switched off	ON	--
		ON: switched on (backlight of the keys switches on and off simultaneously with the backlight of the display)		
B SOUND	Acoustic signal when buttons are touched	OFF: switched off	OFF	--
		ON: switched on		
LOCK	Automatic key lock	OFF: automatic key lock is switched off	ON	--
		ON: automatic key lock is switched on (the key lock is activated 30 seconds after touching the last button)		
CODED L	Coded key lock	OFF: switched off	OFF	Chapter 9.10.
		01-99: switched on, protected by the set code		
PUMP	Switching on and off of the pump protection function	OFF: switched off	OFF	Chapter 9.11.
		ON: switched on		

Displayed abbreviation	Description of the setting	Setting options	Factory default setting	Detailed description
RESET	Restoring factory default settings	--: saving the settings and exiting the settings menu after touching the  button	--	Chapter 9.12.
		RES: restoring factory default setting after touching  button		





To exit the setting menu and save the settings:

- touch the  button, or
- wait for 30 seconds until the display of the thermostat is reset to the default screen, or
- go through the settings with the  button.

To enter the settings menu in the application, touch the  icon located on the bottom bar. The operating-related settings menu of the thermostats will then appear, where you can view and modify the thermostat settings (except for the current time).

## 9.1. Automatic time synchronization (T SYNC)

When this function is enabled (**ON**; factory default setting), after the thermostat is connected to the internet it automatically sets the exact time for the given time zone. If you do not wish to use this function or if the thermostat is not connected to the


internet, you can set the current day of the week and the exact time manually. To do this, switch the setting to **OFF**, then touch the  button to proceed to the next setting. At this point, the time appears continuously illuminated on the display, while the English abbreviation of the current day (Monday: **MON**; Tuesday: **TUE**; Wednesday: **WED**, etc.) flashes. Within the settings menu, the current setting can be modified using the  and  buttons, and you can move to the next setting by touching the  button.


## 9.2. Selecting the operating mode (FUNC)

You can easily switch between heating (**HEA**; factory default setting) and cooling (**COO**), humidifying (**HUM**) and dehumidifying (**DEH**) modes. The connection points of the output relay of the thermostat 1 (NO) and 2 (COM) close **at temperatures below those set in the heating mode and at temperatures above those set in the cooling mode, below the humidity level set in the humidifying mode and above the humidity level set in the dehumidifying mode** (taking the switching sensitivities into account).

## 9.3. Switching on and off of the programmed mode (PROGRAM)

The thermostat can be used in both programmed (**ON**; factory default setting) and non-programmed (**OFF**) modes. When the programmed mode is on, in automatic (programmed) mode the thermostat controls the devices connected thereto according to the pre-set program, but it can be switched to manual mode by

touching the  button, and in this case it will constantly control the devices according to the temperature/humidity set manually, regardless of the pre-set program.

When you switch off the programmed mode, you can set two independent temperatures/humidity levels (comfort and economy), and you can easily switch between the two modes by touching the  button. In this case the devices connected to the thermostat cannot be controlled according to the pre-set program.



#### **9.4. Temperature sensor selection (SEN)**

**Attention! This function can only be used if an external temperature sensor is connected to the product (NTC 3950 K, 10 k $\Omega$  at 25 °C).**

During operation of the thermostat, you can select which temperature sensor is to be used. By default, the thermostat displays the measured temperature based on the built-in temperature sensor and switches the output according to the set temperature accordingly. It is also possible to connect an external temperature sensor; the procedure is described in **Subsection 6.2**.

- The internal temperature sensor is used for control. (**INT** / Internal)
- The external temperature sensor is used for control. (**EXT** / External)
- The internal temperature sensor is used for control, but the out-

put is switched off when the temperature measured by the external temperature sensor reaches the set external temperature limit. In this case, the heating/cooling icon on the thermostat display starts flashing (if the thermostat would otherwise be heating or cooling), and the warning text “External temperature limit reached” appears in the application above the measured external temperature. This operating mode can be particularly useful for underfloor heating and electric heating systems for safety reasons, as it helps protect the heating system against possible damage or overheating ( **ALL** / Internal and external).

The temperature measured by the external temperature sensor can be checked in the application at the location shown in **Figure 3**. If the thermostat is controlled based on the internal temperature sensor (**INT** or **ALL**), the temperature measured by the external sensor can be viewed by touching and holding the  button while simultaneously touching the  button.

If the thermostat is controlled based on the temperature measured by the external temperature sensor (**EXT**), the temperature measured by the internal sensor can be viewed in the same way. In this case, the positions of the internal and external temperature values are also swapped in the application.

## 9.5. Selecting switching sensitivity (HYSTER)

The switching sensitivity can be adjusted. By modifying this value, you can define the difference below/above the set temperature/humidity where the thermostat should switch on/off the device connected thereto. The smaller this value, the more stable is the inner temperature/humidity in the room and the comfort improves. Switching sensitivity does not affect the heat loss of the room (building) and vapour formation.

When higher comfort level is needed, it is reasonable to select the switching sensitivity so that it ensures as stable inner temperature/humidity as possible. On the other hand, too frequent starts and stops of the controlled device should be avoided because this may reduce the efficiency and lifetime of the device.

The switching sensitivity can be set in the temperature range of  $\pm 0.1$  °C to  $\pm 1.0$  °C /  $\pm 0.2$  to  $\pm 2.0$  °F and in the humidity range of  $\pm 1$  to  $\pm 5\%$  RH. Apart from some special cases, we propose to use  $\pm 0.1$  °C or  $\pm 0.2$  °C (factory default) when a heating/cooling system should be controlled. For humidification/ dehumidification we recommend you use a switching sensitivity of  $\pm 1\%$  (factory default) or  $\pm 2\%$ . For more information about switching sensitivity please refer to **Chapter 8**.

## 9.6. Calibration of the temperature sensor (T CALIB)

The accuracy of the thermometer of the thermostat is  $\pm 0.5$  °C. The temperature displayed by the thermostat can be modified by maximum  $\pm 3.0$  °C /  $\pm 6.0$  °F compared to the temperature measured by the temperature sensor, in increments of  $0.1$  °C /  $0.1$  °F.

## 9.7. Setting the external temperature limit (T LIMIT) and its switching sensitivity (EXT HYS)

In heating mode, if the temperature measured by the external temperature sensor reaches the set value, the thermostat disables (switches off) its outputs regardless of the temperature set on the thermostat, and keeps them disabled until the temperature drops below the set value, taking the set external temperature switching sensitivity (**EXT HYS**) into account. This means that if the **T LIMIT** value is set to  $42$  °C and the **EXT HYS** value is set to  $2$  °C, the thermostat outputs will be disabled as soon as the temperature measured by the external temperature sensor reaches  $44$  °C, and the outputs will only return to normal operation when the temperature measured by the external temperature sensor falls below  $40$  °C. In cooling mode, this function operates in exactly the opposite manner.

## 9.8. Calibration of the humidity sensor (H CALIB)

The accuracy of the humidity sensor of the thermostat is  $\pm 3\%$  RH. The relative humidity displayed by the thermostat can be modified by maximum  $\pm 10\%$  compared to the humidity measured by the sensor, in increments of 1%.

## 9.9. Setting the humidity limit for cooling (H LIMIT)

When a cooling system including surface cooling is controlled, it is important that the air in the room must not reach dew point because in this case condensation occurs which can cause serious damages. Using this function, you can set the humidity level above which the thermostat will stop cooling to prevent condensation.

## 9.10. Coded key lock (CODED L)

Instead of the standard key lock, a coded key lock can be used to prevent unauthorized changes to the settings. To enable this function, change the default **OFF** value by selecting a code between **01** and **99**. In this case, when the key lock is to be unlocked, the number  $\square \downarrow$  appears on the display, which can be modified using the  $\wedge$  and  $\vee$  buttons. After setting the correct number, touch the  $\text{↻}$  button to unlock the key lock. If the entered number is correct, the key lock will be released. If the number is incorrect, the number will flash three times and the key lock will remain locked. If you have forgotten the set code, you can either check or disable it in the application, or reset it to the default state by touching and holding the

^ and v buttons simultaneously for 30 seconds. In this case, the message CODE RES appears on the display and the key lock is released.

### 9.11. Switching on and off of the pump protecting function (PUMP)

In order to prevent the pump from jamming, the activated pump protection function (ON; factory default setting) will start the devices connected thereto for 1 minute every day at 12:00 p.m. (noon), if switching was not done either on the respective day or on the previous day (e.g. during non-heating period). The pump protection-function only works when the controlled device is in operable condition.

### 9.12. Restoring factory default setting (RESET)

This function resets all settings of the thermostat, including the Wi-Fi configuration, to factory default values. To restore the factory default settings, select the “RES” option under the “RESET” function in the settings menu, then proceed by touching the ↺ button.

If the “RESET” function is left in its default state (--) , after touching the ↺ button the thermostat saves the settings, exits the menu, returns to the home screen, and continues operating according to the previously set operating mode.

You can also restore the factory default settings from the settings menu of the

application. This method of resetting does not affect the Wi-Fi network connection, therefore reconnection is not required. The thermostat remains available in the application.

## 10. Operating modes of the device



The thermostat has the following four operating modes:

- When the programmed mode is off
  - Economy mode (☾; **Chapter 10.1.**)
  - Comfort mode (☀; **Chapter 10.2.**)
- When the programmed mode is on
  - Manual mode (👉; **Chapter 10.3.**)
  - Automatic (programmed) mode (📅; **Chapter 10.4.**)

Touching the ↻ button you can switch between the modes.



When you intend to operate your device temporarily in a way other than the set default mode (e.g. on the occasion of a family gathering, a holiday or a winter vacation) then you can choose from the following 3 supplementary operating modes:

- Temporary manual mode until the next program switching (👉  
**Chapter 10.5.**) (only in case of programmed mode)



- Temporary manual mode for 1 to 99 hours (party program) (; **Chapter 10.6.**)
- Temporary manual mode for 1 to 99 days (holiday program) (; **Chapter 10.7.**)

The thermostat can be used for control on the basis of temperature and humidity alike. In every mode the temperature/humidity to be maintained by the thermostat can be defined in 0.5 °C / 0.5 °F / 1% increments within the intervals specified in the settings.

### **10.1. Economy mode** ()

In economy mode, the thermostat provides the economical (e.g. night time) temperature/humidity corresponding to the set value in the vicinity of the place of installation. This set value can be freely modified at any time while this operating mode is in use: on the thermostat using the  and  buttons, and in the application using the **+** and **-** buttons or the circular slider.

### **10.2. Comfort mode** ()

In comfort mode, the thermostat provides the economical (e.g. daytime) temperature/humidity corresponding to the set value in the vicinity of the place of installation. This set value can be freely modified at any time while this operating mode is in use: on the thermostat using the  and  buttons, and in the application using the **+** and **-** buttons or the circular slider.

### 10.3. Manual mode (👉)

In manual mode, the thermostat provides the temperature/humidity corresponding to the set value in the vicinity of the place of installation until the next manual intervention. This set value can be freely modified at any time while this operating mode is in use: on the thermostat using the  $\wedge$  and  $\vee$  buttons, and in the application using the + and - buttons or the circular slider.

### 10.4. Programmed mode (📅)

#### 10.4.1. A description of programming




- Programming includes setting the switching times and selecting associated temperature/humidity levels. The devices can be programmed for a one week period. Its operation is automatic, repeating the set switchings cyclically every 7 days. For each day, 1 fixed switching time (**PROG 1**) and 10 optional switching times (**PROG 1** - **PROG 10**) can be set. A different temperature/humidity value can be assigned to every switching time. Every temperature/humidity level set to a switching will remain valid until the time of next switching. For example, temperature/ humidity values set to **PROG 1** switching time will be kept until the time of **PROG 1** switching. The temperature/humidity level selected to **PROG 1** switching will remain valid from the time of **PROG 1** switching to the time of next switching( **PROG 2** ).

- The time of **PROG** switching is 00:00 that cannot be modified, only the temperature assigned thereto can be changed to meet individual requirements. In default setting the thermostat carries on only 1 switching (**PROG**) every day, which is valid from 00:00 to 00:00 on the following day.


**Remark:** 1 switching a day (factory default setting) only makes sense if you need uniform temperature all day. (For example, if you want to maintain a continuous economical temperature, e.g. 16 °C, on weekdays, while you wish to maintain a comfort temperature, e.g. 22 °C, on weekend days). In other cases, it is advisable to activate several switchings a day for comfort and energy-saving reasons. Considering energy savings, it is recommended that the comfort temperature is activated only during the periods when the room is being used, because lowering the room temperature by 1 °C will result in approx. 6 percent energy savings on average during a heating season.

- In default position **PROG** – **PROG** switchings are inactive (their time is --:-- ), but can be activated according to needs. The times of **PROG** – **PROG** switchings are freely adjustable in 10 minutes increments between **00:10** and **23:50** with the proviso that the device enables settings of times only in ascending chronological order so that there should be at least 10 minutes difference between switching times. The min. 10 minutes

difference between switching times remains even when you modify the times of a previously set program in order to avoid coincidence or overlap of switching times. In this case the device pushes forward the respective times so that the min. 10 minutes difference always remains. If due to time modifications the time of one or more switchings is moved after the last adjustable daily switching time ( 23:50 ) it or they will become inactive automatically.





- To enter programming mode touch the  button for 2 seconds. **During programming the values being set (date, time, temperature/ humidity) flash on the display of the device. The values are always modified by using buttons ^ and v on the front panel of the device. Use the  button to record the set value and to move on.** The set program can be saved by touching the  button. A more detailed description of programming can be found in **Chapter 10.4.2.**
- If there are days of the week on which you intend to use the same program then it is sufficient to write this program only once because it can be easily adopted to an optional day with the help of the “**COPY**” function according to **Chapter 8.4.3.** If you want the same program for each day or intend to write programs to be used from Monday to Friday and from Saturday to Sundays which are different but are the same on a given day, you can program the device this way as described in **Chapter 8.4.2.** But keep in mind that when you


programmed several days similarly this way, you can modify their program only together. Therefore, if you want a program that differs from the others even for a single day, you should program the days separately, and the repeated programs can be copied with the “**COPY**” function.







- Separate programs can be written for cooling, heating, humidifying and dehumidifying modes, and the thermostat will save them when switching between modes. Therefore you can use your thermostat in more than one mode, and you do not have to rewrite the program according to the operating mode whenever switching between modes.
- In the application, programming of heating/cooling and humidifying/dehumidifying can be accessed by touching the  button.




#### 10.4.2. Steps of programming the device



##### Programming on the thermostat user interface:

- a) **Touch the  button to move the thermostat to home screen then touch the  button for 2 seconds.** Then the device gets to programming mode and the syllable indicating the relevant day(s) flashes in the top line of the display.
- b) Using the  and  buttons select the day to be programmed (the **MON** syllable indicates Monday, the **TUE** and **WED** syllables indicate Tuesday and Wednesday, and soon). If you wish to write the same program for every day of the week it is reasonable to select all days of the week at the same time

(indicated by simultaneous flashing of syllables **MON, TUE, WED, THU, FRI, SAT, and SUN**) instead of programming the days of the week separately. If you want to write programs to be used from Monday to Friday and from Saturday to Sundays which are different but are the same on a given day, it is advisable to choose the 5+2 programming mode (it is indicated by simultaneous flashing of syllables **MON, TUE, WED, THU** and **FRI**, while syllables **SAT** and **SUN** are shown continuously). After the day(s) has/have been selected, touch the  button to save the setting and move on.

- c) Then the device offers to **set the temperature/humidity** of **PROG!** switching that belongs to the day(s) selected. During the setting process the currently set value (in case of heating function the default setting is 20 °C) is flashing. Using  and  button set the desired temperature / humidity then touch the  button to record the setting and move on.
- d) This is followed by the next step of programming, i.e. **setting the start time of PROG!** switching that belongs to the selected day(s), and the display of the device will flash the time value (the default setting is --:-- ) to be set. Using  and  buttons on the front panel of the device set the desired time of **PROG!** setting then touch the  button to record the setting and move on.
- e) Now the **programming process is continued by setting the temperature belonging to PROG!** setting and the display flashes the value to be set (in case

of heating function the default setting is 20 °C). Using  and  buttons set the desired temperature / humidity of **PROG 1** setting then touch  button to record the setting and move on.


- f) Then the device offers to set the time of **PROG 2** setting, and the display of the device will flash the time value (the default setting is --:--) to be set. To set switchings **PROG 2** – **PROG 1** (in the same way as **PROG 1** has been set) repeat steps “d” – “e”. If you do not intend to activate further switching options for the day(s) selected in addition to those that have already been set then touch the  button, without resetting the start date of the next offered switching from the default --:-- position. Then programming of the respective day(s) is completed and the device immediately offers selection of a new day and programming can be continued from step “b”. If you have set all switchings from **PROG 2** – **PROG 1** for the selected day(s) then, after the temperature/humidity of switching **PROG 1** has been set, programming the respective day(s) is finished and the device immediately offers selection of a new day and programming can be continued from step “b”.
- g) **You can save and finish programming by touching the  button.** The device will automatically acknowledge settings even if no button is touched for 1 minute. Then the display of the device returns to the home screen

If you would like to copy the program written for the day selected in section “b” to

another day/other days you can easily do it by means of the “**COPY**” function as described in Chapter **10.4.3**.

### **Programming via the application:**

In the application, programming of heating/cooling and humidifying/dehumidifying can be accessed by touching the  button.




On the displayed interface, by touching the  button, you can select the programming mode from the pop-up tiles: **7-day**, **5+2 day**, or **24-hour** format.







- a) 7-day programming: To configure the program, use the icons located at the top of the application, marked with the initial letters of the individual days. Briefly touch the icon corresponding to the desired day to define the settings for that day. By touching and holding a day icon, you can copy the settings to other days. In the pop-up panel that appears, select the days to which you wish to apply the current settings.
- b) 5+2 day programming: The 5+2 programming mode allows separate settings for weekdays and weekends. On the displayed interface, select either the weekday or weekend option using the top buttons. After selecting the category, you can modify the settings for the corresponding days.
- c) 24-hour programming: The 24-hour programming mode allows the same settings to be applied for every day.




Additional time periods and temperature/humidity values can be added using the “+” button.



### 10.4.3. The use of “COPY” function (copying the program of a day to another day or other days)

**Attention!** The “COPY” function may only be used for programming the days of the week separately!

On the thermostat, touch the  button to move the display of the thermostat to the home screen then enter the programming menu by touching the  button for 2 seconds. Following this, touch the  button for 2 seconds to activate the “COPY” function. The state of being ready for copying the program is indicated by the „COPY” notice appearing in the place of hour characters and flashing of the syllable showing the day being programmed.



- Using  and  buttons select the day whose program you intend to copy to another day/other days.
- Touch the  button to copy the program of the selected day. After copying has been completed, the syllable indicating the copied day stops flashing and becomes continuously visible.
- Using  and  buttons select the day to which you wish to copy the day that has been copied previously. Thy syllable indicating the day being selected will be flashing during setting.
- After you have chosen the day to which you wish to copy the day that has been copied previously touch the  button to copy the program. Then





the syllable indicating the day to which you have copied the program also becomes continuously visible and its flashing stops. Using buttons  and  you can select additional days to which you can copy the program that has been copied previously with  button.

- You can save the copied programs by touching the  button for 2 seconds. The thermostat returns to programming mode and you can continue to program the device. The thermostat saves program modifications and returns to the home screen after touching the  button or after 15 seconds.
- You can perform further copying of programs according to your need by repeating the steps described above.

In the application, in 7-day programming mode, if you touch and hold the button indicating a specific day, you can copy the settings to other days. In the pop-up panel that appears, select the days to which you wish to apply the current settings.


#### **10.4.4. Modifying the programs of the device**




- **Set values can be freely modified at any time by repeating the programming steps.**
- You can increase the number of switchings activated previously as you like according to **Chapter 10.4.2.**
- You can cancel a switching activated beforehand so that during the modification of the time of switching with buttons  and  you reset

- the time set previously to factory default (--:--) or touch the  button for 2 seconds. Touch the  button to cancel respective switching. If you cancelled an intermediary number the remaining switchings will be renumbered.
- If you want to finish modification of the switchings of the selected day then repeatedly touching the  button step through the switchings of the respective day until the sign of the respective day start flashing on the screen. Now you can continue modifications by selecting the next day.
- Touching the  button you can save and finish modifications. The device will automatically acknowledge the settings even if no button is touched for 1 minute. Then the display of the device returns to the home screen.
- In the application, you can delete a specific setting by touching the  icon displayed next to the desired switching. By touching the temperature/humidity or the time value, you can modify the respective parameters.
- If you intend to write a whole new program then cancel the set programs as described above or reset the device to factory default as described in **Chapter 9.12**. In this case the device should be set and programmed again as described in **Chapters 9.** and **10.4.**

### 10.4.5. Program inspection






- On the thermostat, touch the  button to move the display of the thermostat to the home screen then touch the  button. Syllable(s) indicating the day(s),



the symbol of the **PROG**  switching, the **00:00** time and the temperature/humidity value appear on the screen (none of the values is flashing).

- Repeatedly touching the  button you can check the values of **PROG 1**, **PROG 2** etc. switchings that belong to the respective day(s). Using **^** and **v** buttons you can switch between the days. If during the programming process you programmed every day of the week (**MON, TUE, WED, THU, FRI, SAT, and SUN**), simultaneously then you can view the programs of all days only together. If you selected the 5+2 (**MON, TUE, WED, THU, FRI, SAT and SUN**) programming mode, you can inspect either programming of the first 5 days (**MON, TUE, WED, THU, and FRI**) or of the last two days (**SAT SUN**) and you can switch between these options with **^** and **v** buttons.
- After checking the program, touching the  button you can return to the home screen (if no button has been touched for 15 seconds, the display will automatically return to the home screen).
- In the application, you can enter the programming menu by touching the  button, where you can review the previously set program.





## 10.5. Temporary manual mode until the next program switching





The temporary manual mode until the next program switching can only be used when the thermostat is operating in programmed mode. To activate it, modify




the temperature/humidity set according to the program: on the thermostat using the  and  buttons, and in the application using the **+** and **-** buttons or the circular slider. After the adjustment, the program number disappears from the display and the  icon appears, indicating that the thermostat will operate in temporary manual control until the next program switching. During this period, the device maintains the modified temperature/humidity until the next scheduled switching time according to the program, and the value can be freely modified using the  and  buttons.




During the temporary manual mode the segments indicating the time on the display alternately show the exact time (**TIME**), and the time remaining in manual control (**TIME LEFT**) (e.g. 4:02, that is 4 hours and 2 minutes). After this time, the  icon disappears and the device returns to the set program. If you wish to return to the set program before the switching time, touch the  button.

## **10.6. Temporary manual mode for 1 to 99 hours (party program)**

The party program can be used in any default mode of the thermostat. For activation touch the  button for 2 seconds. Then the  icon appears on the display together with the „H” notice in place of the exact time segments to show the duration of the party program in hours (the „!” number that indicates the number of the hours is flashing to show that the duration is adjustable). Using  and  buttons the intended duration can be freely set between 1 and 99 hours.










The set party program starts automatically and enters into effect after approx. 10 seconds. Then using  and  buttons set the temperature to be maintained during the party program period. Until the expiry of the set period the device will maintain the temporary temperature/humidity that differ from the default mode and can be freely modified with buttons  and  during the party program period.



During the party program the segments indicating the hour on the display alternately show the exact time (TIME) and the time remaining in temporary manual control (**TIME LEFT**) (e.g. :20, that is 3 hours and 20 minutes). After this time, the  icon disappears and the device returns to operation according to the mode used before the party mode. Touch the  button if you wish to return to the previously used mode before the set time expires.




The application provides the possibility to activate the party program, which sets a different temperature for a specified period of time. To do this, touch the  button. Enter the desired duration (in hours) and temperature, then activate the function by touching the “**Confirm**” button. The set temperature can be modified at any time: on the thermostat using the  and  buttons, and in the application using the + and - buttons or the circular slider.

## **10.7. Temporary manual mode for 1 to 99 days (holiday program)**


The holiday program can be used in any default mode of the thermostat. For

activation touch the  button for 2 seconds. Then the  icon appears on the display together with the „H” notice in place of the exact time segments to show the party program. Touch the  button to switch to the holiday program. Then in place of the exact time segments the „I” indication appears, showing the duration of the holiday program in days (the „I” number indicating the days flashes to show that the duration is adjustable). Using  and  buttons the intended duration can be freely set between 1 and 99 days (one day means 24 hours from the moment of setting). The set holiday program starts automatically and enters into effect after approx. 10 seconds. Then using  and  buttons set the temperature to be maintained during the holiday program period. Until the expiry of the set period the device will maintain the temporary temperature/humidity that differ from the default mode and can be freely modified with buttons  and  during the holiday program period.

During the holiday program the segments indicating the hour on the display alternately show the exact time (**TIME**) and the number of days remaining in temporary manual control (**TIME LEFT**) (e.g. „3I” that is 3 days). When the remaining time decreases below 24 hours then from then on the remaining time is displayed in the same as at the party program (e.g. 22:18, that is 10:18 p.m.). After this time, the  icon disappears and the device returns to operation according to the mode used before the holiday mode. Touch the  button if you wish to return to the previously used mode before the set time expires.


The application provides the possibility to activate the holiday program, which sets a different temperature for a specified period of time. To do this, touch the  button\*\*. Enter the desired duration (in days) and temperature, then activate the function by touching the “**Confirm**” button. The set temperature can be modified at any time: on the thermostat using the  and  buttons, and in the application using the **+** and **-** buttons or the circular slider.


## 11. Operation of backlight

By factory default the backlight of the thermostat automatically switches on for 15 seconds after touching any button. Regardless of the automatic backlight, touching the  button you can switch on/off the backlight. If you touch any button while the backlight is active, the backlight will go out only 10 seconds after the last button has been touched.

You can modify the automatic backlight of the thermostat, the backlight of the keys and the backlight brightness as described in **Chapter 9**.

## 12. Locking the control buttons

You can switch off the control buttons of the thermostat to prevent the settings from accidental or unauthorized modifications. Touching the  button for 2 seconds

you can lock and unlock the control buttons. The  icon appearing/ disappearing in the right bottom corner of the display indicates the locked/ unlocked state of the control buttons.

In the application, you can also lock and unlock the control buttons of the thermostat by touching the  or  button.

By default setting the thermostat automatically locks the control buttons 30 seconds after the last button has been touched. This setting can be switched off as described in **Chapter 9**, either on the thermostat or in the application.

Instead of the standard key lock, a coded key lock can also be used to prevent unauthorized modifications of the settings. This can be configured as described in **Chapter 9.10**.

## 13. Frequently asked questions

When you think that your appliance is operating incorrectly or you encounter any problem while the appliance is being used then we recommend that you read the Frequently Asked Questions (FAQ) available on our website, where we collected the problems and questions that most frequently occur while our appliances are being used, along with the solutions thereto:

<https://computherm.info/en/faq>



The vast majority of the problems encountered can be solved easily by using the hints available on our website, without seeking professional help. If you have not found a solution to your problem, please contact our qualified support team.

## 14. Product information data sheet

- Trademark: **COMPUTHERM**
- Model identifier: **Q20 Wi-Fi**
- Temperature control class: **I. class**
- Contribution to the efficiency of seasonal space heating: **1%**

### Remark:

In addition to using modern temperature regulators, the following up-to-date regulation methods also contribute significantly to the improvement of the comfort provided by the heating network, the energy efficiency of the heating network and the coefficient of performance:

- By dividing the heating network into sections or zones (e.g. by means of **COMPUTHERM Q4Z** or **Q10Z** zone controller and the associated **COMPUTHERM** zone valves) and with their separate regulation we can ensure that every room (zone) is heated only when it is necessary. (You can obtain information on the establishment of the heating network and apparatuses and fittings needed for division into zones in our publication titled “**Energy Savings and Comfort**” which is also available on our website [www.computherm.info](http://www.computherm.info))
- Using programmable thermostats you can ensure that every room (zone) is just heated according to a timetable preset in accordance with the demands.
- Using modern modular heating devices equipped with an external temperature sensor the boiler can be operated at higher efficiency.

- Using low temperature heating networks (e.g. 60/40 °C) and condensing boilers the temperature of the flue gas leaving the boiler can be reduced, and this way fuel efficiency can be improved significantly.

## 15. Technical data

- **Temperature measurement range (internal temperature sensor):** 0 to 48 °C (in 0.1 °C increments) / 32 - 100 °F (in 0.1 °F increments)
- **Temperature measurement range (external temperature sensor):** -9.9 to 99.9 °C (in 0.1 °C increments) / 14 - 212 °F (in 1 °F increments)
- **Humidity measurement range:** 0 to 99% RH (in 1% increments)
- **Adjustable temperature range (internal temperature sensor):** 5 to 45 °C (in 0.5 °C increments) / 41 to 97 °F (in 0.5 °F increments)
- **Adjustable temperature range (external temperature sensor):** 0.0 to 99.5 °C (in 0.5 °C increments) / 32 to 211 °F (in 1 °F increments)
- **Adjustable humidity range:** 0 to 99% RH (in 1% increments)
- **Temperature measurement accuracy:**  $\pm 0.5$  °C /  $\pm 0.9$  °F
- **Humidity measurement accuracy:**  $\pm 3\%$  RH
- **Temperature calibration range:**  $\pm 3$  °C (in 0.1 °C increments) /  $\pm 6$  °F (in 0.1 °F increments)

- **Humidity calibration range:**  $\pm 10\%$  RH (in 1% increments)
- **Adjustable external temperature limit:** 0.0 to 99.5 °C (in 0.5 °C- increments)  
32 – 211 °F (in 1 °F increments)
- **Switching sensitivity (external temperature limit):** 0.5 to 10.0 °C (in 0.5 °C- increments)  
1 – 18 °F (in 1 °F increments)
- **Optional switching sensitivity (internal temperature sensor):**  $\pm 0.1$  °C –  $\pm 1.0$  °C (in 0.1 °C increments)  
 $\pm 0.2$  °F –  $\pm 2.0$  °F (in 0.2 °F increments)  
 $\pm 1\%$  –  $\pm 5\%$  RH (in 1% increments)
- **Optional switching sensitivity (external temperature sensor):**  $\pm 0.1$  °C –  $\pm 10.0$  °C (in 0.1 °C increments)/  
 $\pm 0.2$  °F –  $\pm 18.0$  °F (in 0.2 °F increments)
- **Switchable voltage:** max. 30 V DC / 250 V AC
- **Switchable current:** 8 A (2 A inductive load)
- **Supply voltage for the thermostat:** 230 V AC, 50 Hz
- **Storage temperature:** -10 °C ... +50 °C
- **Operating temperature:** 0 °C ... +48 °C

- **Operating humidity:** 5% – 90% RH (without condensation)
- **Protection against environmental impacts:** IP30
- **Operating frequency:** Wi-Fi (b/g/n) 2.4 GHz
- **Dimensions:** 125 x 82 x 15.5 mm (W x H x D)
- **Weight:** 180 g
- **Built-in temperature and humidity sensor type:** GXCAS GXHT30 digital sensor
- **Connectable external temperature sensor type:** NTC 3950 K 10 k $\Omega$  at 25 °C



The **COMPUTHERM Q20 Wi-Fi** type thermostat complies with the requirements of directives RED 2014/53/EU and RoHS 2011/65/EU.



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Origin:

designed in the EU, manufactured in China

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