

AVANSA 2007 TX

WIRELESS PROGRAMMABLE RADIO FREQUENCY
DIGITAL ROOM THERMOSTAT

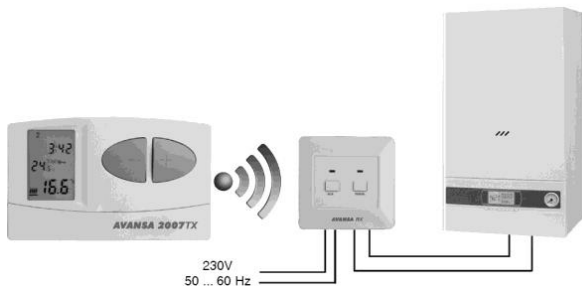


User manual

GENERAL DESCRIPTION OF THERMOSTAT

AVANSA 2007 TX room thermostat with operating switching is suitable for controlling most boilers sold in the Czech Republic. It can be connected to any gas boiler with a connection for a room thermostat with double wiring or to a climate control system regardless of whether it has 24V or 230V operating voltage.

The device can be programmed individually according to your needs so that the heating (cooling) system starts at the time and temperature you require, heats (cools) your apartment or office and in addition to ensuring comfort also contributes to reducing energy costs. A separate, independent temperature program can be created for each day of the week. Daily, you can set 1 fixed (PROG) and 6 freely selectable (PROG-PROG) switching times (adjustable in 10 minute intervals) and in each switching interval you can set a freely chosen temperature (adjustable in 0.5°C intervals).



The device consists of two units. One portable control unit (thermostat) and one receiving unit, which is used to control the boiler. The connection between the thermostat and the receiver is ensured by radio frequency waves, so there is no need to install wiring between the thermostat and the boiler. Both units are pre-set by the manufacturer to operate on the same frequency. The thermostat and the receiver have their own security code. For this reason, unknown external radio signals cannot interfere with the safe operation of the device.

Installation of the receiving unit, connection and adjustment with the thermostat see in chapter 9. In order to increase battery life, the thermostat does not emit continuously, but repeats the current switching command after 8 minutes. Thus, even after a possible power failure, heating (or cooling) control is ensured.

The relocatability of the thermostat has the following advantages:

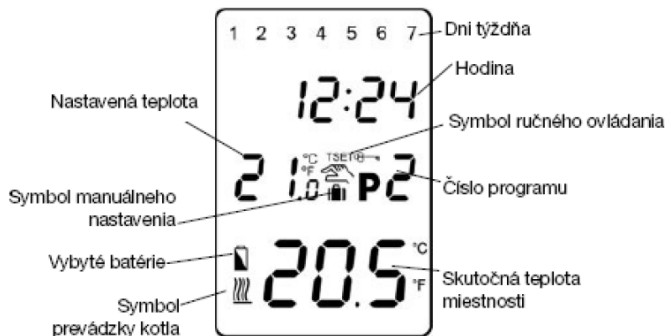
- It is not necessary to install wiring, which is advantageous mainly during the renovation of old buildings,
- The optimal placement of the thermostat can be chosen during use,
- Its use is also advantageous in cases where we want to use the thermostat in different rooms during different time periods of the day (e.g. during the day in the living room, but in the evening in the bedroom). The sensor built into the thermostat has a range of approx. 50 m in open space. This distance can be significantly reduced in a building, especially in cases where radio waves pass through iron structures or reinforced concrete walls.

The switching sensitivity of the thermostat can be set to $\pm 0.1^{\circ}\text{C}$ or to $\pm 0.2^{\circ}\text{C}$ (basic factory setting) or to $\pm 0.3^{\circ}\text{C}$. This means the temperature difference between the set value and the actual measured temperature at switching. In the case of the basic factory setting (switching sensitivity $\pm 0.2^{\circ}\text{C}$, heating operation), for example, when the set value on the thermostat is 20°C , the device turns on at a temperature of 19.8°C or below, respectively turns off the boiler at 20.2°C or above. In cooling operation, the thermostat switches exactly the opposite. To change the factory-set switching sensitivity $\pm 0.2^{\circ}\text{C}$ see point 2. The thermostat is equipped with a pump protection function. This function is used to prevent the pump from clogging. It turns on the boiler every day at 12:00 for one minute in the case that the boiler has not been turned on according to the program (e.g. during the summer period) for more than 24 hours. To activate the pump protection function see point 2.5.

potřeby rozšiřitelný i zásuvkou typu , pomocí níž je bez jakékoliv montáže a jednoduše možné ovládání jakéhokoliv elektrického zařízení (napr. kotol, čer-

pad, heat radiator, etc.) operated at 230V (50 Hz, max. 10A).
(For detailed information visit our website.)

Zobrazené symboly na displeji:



1.LOCATION OF DEVICE

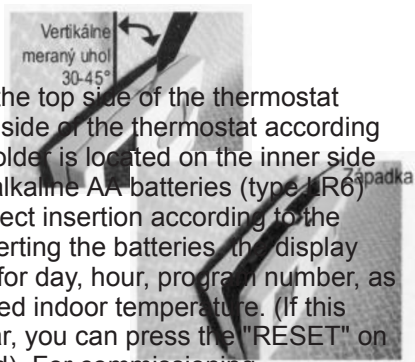
The AVANSA 2007 TX thermostat is freely movable within the apartment. In rooms where you regularly or for a longer time stay, it is suitable to place it so that it is positioned in the direction of the natural air flow in the room, but is not exposed to drafts or excessive temperature influences (e.g. sunlight, refrigerator, chimney, etc.). Its optimal placement is at a height of 1.5 m above floor level. It can be placed either on its own stand or mounted on the wall.

IMPORTANT NOTICE!*If your rooms in the apartment are equipped with radiator valves with thermostatic heads, replace these radiator valves with thermostatic heads with manually adjustable controllers or set them to the maximum temperature level in the room where you intend to install the thermostat. Otherwise, the thermostatic head may interfere with temperature control in the apartment.*

2.PUTTING THE THERMOSTAT INTO OPERATION, BASIC SETTING

2.1 Inserting batteries

Press the latch located on the top side of the thermostat cover to separate the back side of the thermostat according to the figure. The battery holder is located on the inner side of the front cover. Insert 2 alkaline AA batteries (type LR6) into the holder. Ensure correct insertion according to the marked polarities. After inserting the batteries, the display will show blinking symbols for day, hour, program number, as well as the set and measured indoor temperature. (If this information does not appear, you can press the "RESET" on the inside of the base board). For commissioning



press the "SET" button after inserting the batteries to reset the thermostat to its basic position. After pressing the "SET" button, the blinking on the display will stop, the thermostat will return to its factory basic position, and the setting can begin.

2.2 Setting the current date and time

Press the "SET" button and then the "DAY" button. At this point, only the symbol for the current day will blink on the thermostat display (MON for Monday at first start) and the hour and minutes will also be displayed. Use the large buttons

on the front cover of the device to set the current day symbol (Monday: MON, Tuesday: TUE, Wednesday: WED, etc.). Press the "DAY" button again. The symbol indicating the day will stop blinking and become permanently visible, while the digits indicating the time will continue to blink. Use the large buttons

on the front cover of the device to set the current time - hour. Press the "DAY" button again. The digit indicating the hour will stop blinking and become permanently visible, while the digits indicating the minutes will continue to blink. Use the large buttons

on the front cover of the device to set the current time - minutes. If you wish to change the set data, press the "DAY" button again to return to the beginning of the setting. Confirm the end of the setting by pressing the "SET" button. Pressing the "SET" button will save the set data and the device will return to its basic position. (After approximately 15 seconds, the setting will be automatically confirmed and the device display will switch to the basic position).

2.3 Switching between heating and cooling operation

You have the option of simple switching between heating operation modes (basic factory setting) and cooling. The thermostat's output relay contacts 1 (NO) and 2 (COM) close during heating operation below the set temperature level, and during cooling operation above the set temperature level (depending on the set switching sensitivity). The closed state of the output relay contacts 1 (NO) and 2 (COM) is displayed in the lower left corner of the display during heating with  icon, and at cooling with icon .

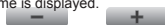
To switch between operation modes, first press the "SET" button so that

the device display is on the basic screen. Then press and hold the "SET" button, and also press the "COPY" button.

The operation mode - heating ("HEAT") or cooling ("

COOL") will then appear where the time is displayed.

You can change the operation mode using the large buttons



the setting can be confirmed by pressing the "SET" button (if no button is pressed within 15 seconds, the setting will be confirmed automatically). The basic screen will then return to the device display.

2.4 Setting the switching sensitivity (accuracy)

Switching sensitivity refers to the temperature difference between the set value and the actual measured temperature when switching on. The smaller this number is, the more even the room temperature will be, increasing comfort. Switching sensitivity does not affect the room (building) heat loss. In the case of a higher comfort requirement, it is advisable to choose a switching sensitivity that ensures the highest possible temperature evenness. However, it is also important to ensure that the boiler only switches on in the case of low outdoor temperatures (e.g. -10°C) a few times per hour, because frequent switching on and off reduces the boiler's operating efficiency and increases gas consumption. In the case of heating systems with high thermal inertia (e.g. underfloor heating) and traditional building structures (e.g. brick buildings), we recommend setting the switching sensitivity to $\pm 0.1^{\circ}\text{C}$, while in the case of heating systems with low thermal inertia (e.g. flat radiators) and buildings with light construction (e.g. built-in attics), we recommend setting the switching sensitivity to $\pm 0.2^{\circ}\text{C}$ (basic factory setting) or $\pm 0.3^{\circ}\text{C}$. To set the desired switching sensitivity, first press the "SET" button so that the basic screen is displayed on the device display, then press the "DAY" and "COPY" buttons one after the other. You can then use the large buttons to

případě nízké venkovní teploty (např. -10°C) zapínal víckrát za hodinu, protože časté vypínání a zapínání zhoršuje efektivnost provozu kotle, zvyšuje spotřebu plynu. V případě vytápěcích systémů s velkou tepelnou setrvačností (např. podlahové topení) a tradičních konstrukcí budov (např. cihlové stavby) doporučujeme nastavení spínací citlivosti na $\pm 0,1^{\circ}\text{C}$, zatím co v případě vytápěcích systémů s malou tepelnou setrvačností (např. topení plochými radiátory) a v případě budov lehké konstrukce (např. vestavěné podkroví) doporučujeme nastavení spínací citlivosti na $\pm 0,2^{\circ}\text{C}$ (základní výrobní nastavení) nebo na $\pm 0,3^{\circ}\text{C}$.

K nastavení žádané citlivosti spínání nejprve stiskněte tlačítko „**SET**“, aby na displayi přístroje byla základní obrazovka, poté stiskněte jeden po druhém tlačítka „**DAY**“ a „**°C**“.

Poté můžete pomocí velkých tlačítek  a  select the switching sensitivity.

The label "

S:1

" indicates $\pm 0,1^{\circ}\text{C}$, label "

S:2

" indicates $\pm 0,3^{\circ}\text{C}$.

S:3

" indicates $\pm 0,3^{\circ}\text{C}$.

Setting is confirmed by pressing the „**SET**“ button (if no button is pressed within 15 seconds, the setting

is confirmed automatically). After that, the basic screen is displayed on the device display).

2.5 Activation of the pump protection function

In the basic factory preset setting, this function is not active. Its activation or deactivation is possible by pressing the "SET" button (which puts the device into the basic position) and then pressing the "DAY", "PROG" and large buttons

 or . Setting „  " (off) or " 

(on) is confirmed by pressing the „SET“ button. (After approximately 15 seconds the setting is confirmed automatically and the device display switches to the basic position). The activated pump protection function prevents the pump from clogging during the non-heating period and turns on the boiler every day at 12:00 for one minute. (The pump protection function can fulfill its purpose only if the boiler is in an operational condition even during summer. For this period, it is recommended to set a lower temperature (e.g. +10°C), to prevent unnecessary boiler activation during temporary cooling.)

2.6 Calibration of the thermostat thermometer

You can calibrate the device thermometer (correct the measured room temperature). First, press the „SET“ button so that the basic screen is displayed on the device display. Then press the „DAY“ button, followed by the „HOLD“ button. The text „CAL“ will appear in the place of the time and the place of the temperature . Using the large correction value (factory basic position  set the correction value between -3.0°C and +3.0°C in 0.1°C intervals. Confirm the setting by pressing the „SET“ button (if no button is pressed within 15 seconds, the setting is confirmed automatically). After that, the device display returns to the basic screen. The correction of the measured temperature takes place within a few seconds after confirmation.

3.PROGRAMMING THE THERMOSTAT

3.1 Short explanation of programming

- Programming means setting the switching times and selecting the corresponding thermal values. The device can be

set for a period of one week. Operation is automatic, the set on-times are repeated in 7-day cycles. The device allows setting of 1 fixed (PROG) and 6 freely selectable switching times (PROG–PROG) separately for each day of the week, independently of each other. For each switching time, it is possible to choose a different temperature level between 5 and 35°C in 0.5°C intervals. The set temperature for each switching time is valid until the next switching time. For example, the temperature set for switching time PROG is maintained until switching time PROG. From switching time PROG onward, the temperature level selected for switching time PROG is valid until the next switching time (PROG).

• Switching time PROG is  , which is unchangeable, only

the corresponding temperature level can be adjusted according to special requirements. In the basic factory setting, the thermostat performs only 1 switching on (PROG) per day, which is valid from  to  the following day.

Note: Using 1 switching on per day (basic factory setting) makes sense only when a uniform temperature level is required daily

e.g. when you want to maintain a constant saving temperature of e.g. 16°C during weekdays and a constant comfortable temperature of e.g. 22°C at the end of the week. In other cases, it is more useful from the point of view of comfort and energy saving to activate multiple switching ons per day. For energy saving purposes, it is recommended to set the comfortable temperature level only for the time when the room or building is in use, because each 1°C reduction in temperature results on average in about 6% energy saving per season. Contrary to the common belief, it is not heating up the apartment but maintaining the temperature that requires more thermal energy (e.g. on a stove, you can keep water boiling with a bigger flame than when gently heating it). • The PROG–PROG switching ons are inactive in the basic position (their duration is ---:---), but they can be activated according to the requirements

The PROG–PROG switching on times can be freely set in 10-minute intervals between 23:50 and 00:10

with the restriction that the device allows setting only in the order of increasing time

terms so that there must be a minimum difference of 10 minutes between individual switching times. The minimum difference of 10 minutes between switching times remains even when adjusting the time data of a previously set program, to avoid overlapping and identical switching times. In such a case, the device shifts the relevant times forward to ensure that there is always a minimum time difference of 10 minutes. If due to the time adjustments one or more switching times fall beyond the last adjustable time of the day (23:59), it automatically changes to inactive.

- To enter programming mode, it is necessary to press and hold the „SET“ button while also pressing the „PROG“ button. During programming, the set values (day, time, temperature) appear blinking on the device display. In each case, changes to the values are made using the large buttons   which are located on the front of the device. Confirmation of the set value and continuation is done by pressing the „PROG“ button. The set program can be saved by pressing the „SET“ button. A more detailed description of programming is described in section 3.3.

•If there are days among the seven days on which you want to use the same program, it is enough to write that program once, because you can easily adapt it to any day using the „COPY“ button according to point 3.4. If you want the same program for all days, you also have the option to program all days of the week at once (in this case, when selecting days, you need to select the order syllables MON TUE WED THU FRI SAT SUN together). However, do not forget that when you program all days at once, you will only be able to modify their programs together. Therefore, if you want a different program for just one day from the others, it is necessary to program the days separately and copy the identical days using the „COPY“ button. •It is possible to write separate programs for heating and cooling operation, which the thermostat will retain when switching between operations. Therefore, if you use the thermostat in heating as well as cooling operation, it is not necessary to rewrite the program accordingly every time when switching between operations.

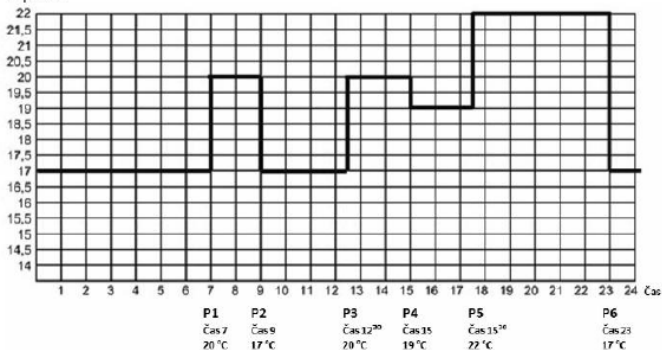
3.2 Suggestion for creating a heating program

General comfort requirements are satisfied by a room temperature reduced to 19-21°C at night and higher than 22-23°C during the day when at home. During the day, while the family is at work and school, it is sufficient to temper. Since heating up and cooling down usually takes a long time, it is practical to set switching times 0.51 hours before the change of daily routine. This option is offered by the thermostat's programmability. We recommend composing an energy-saving heating program for an average employed family similarly to the heating program listed below:

PROG 0	00:00	20°C
PROG 1	05:30	22°C
PROG 2	07:00	18°C
PROG 3	15:00	22°C
PROG 4	22:00	20°C

Temperature diagram

Teplota



3.3 Programming steps of the device

a. Press the „SET“ button so that the basic screen appears on the thermostat display

b. Press the „SET“ button again and hold it down, and while

holding it down, also press the „PROG“ button. The device will then enter the programming position and the order syllables indicating the current day (days) will flash in the top row on

the display. c. Using the large buttons



on the front side

of the device, select the day you want to program (MON syllable on Monday, TUE is Tuesday and WED is Wednesday, etc.). If you want to write the same program for every day of the week, it is practical to select all days of the week at once (this is indicated by the common flashing of the order syllables MON TUE WED THU FRI SAT SUN), so that each day of the week does not have to be programmed separately. After selecting the day (days) for recording the settings and continuing, press the „PROG“ button. d. The device will then offer the setting of the temperature when turning on

PROG, relating to the selected day (days). When setting

the current set temperature is flashing (in the basic factory setting 20°C). Using the large buttons



a



located on the front of the device

set the desired temperature level, then press the „PROG“ button to record the setting and continue.

then the next programming step follows, setting

the initial on time PROG, which the device display indicates by flashing the set time value (in the basic factory setting 22). Using the large buttons

 a  located on the front of the device

set the desired time for PROG on, then press the „PROG“ button to record the setting and continue. f. Then the programming continues with setting the temperature related to PROG on, which the device display indicates by flashing the set temperature value (in the basic factory setting 20°C);

20°C). Using the large buttons



which the device display indicates by flashing the set time value (in the basic factory setting 2)

2

). Switching on

PROG 2 — PROG 5

--- can be set by
repeating steps

. Then the programming for the given day(s)

--:-- is completed, the device immediately offers selection of a new day and programming can continue from step „c“. If you have already set all switching on for the selected day(s)

PROG—PROG, then after setting the temperature for
PROG on

the programming for the given day(s) is completed, the device immediately offers selection of a new day and programming can continue from step „c“. h. Programming can be saved and ended by pressing the „SET“ button

. Then the basic screen returns to the device display. The device saves the settings automatically if no button is pressed within 1 minute. Then the display returns to the main screen.

If you want to copy the written heating program for the selected day(s) in point „c“ to another day, you can easily do it using the „COPY“ function according to point 3.4.

3.4 Using the „COPY“ function (Copying a program from one day to another day or days)

3.4 Používání funkce „COPY“ (Okopírování programu jednoho dne na druhý den nebo dny)

•Press the „SET“ button so that the thermostat's basic screen is displayed. Then press the „COPY“ button for approximately 3 seconds to activate the „COPY“ function. The readiness to copy the program is indicated by the symbol „COPY“, which appears in the place of the hour character and blinking

of the sequential segment MON, indicating Monday. •Use the large buttons   located

on the front of the device to select the day whose program you want to copy to another day or days. •Press the „COPY“ button to perform the copying of the selected day's program. After copying, the blinking of the sequential segment indicating the copied day disappears and remains visible continuously.

- Using the large buttons



a



located

on the front of the device select the day to which you want to copy the previously copied day's program. The sequential segment indicating the currently selected day during the setting blinks (after the first pressing of the button

- After you have selected the day to which you want to copy the previously copied day's program, press the „COPY“ button to perform the program copying. Then the sequential segment of the day to which you copied the program is continuously visible and blinking stops. Using the large buttons



you can then select additional days to which you can also copy the previously copied program using the button

„COPY“. •You can save the program copies by pressing the „SET“ button (if no button is pressed within 15 seconds, the program copy is saved automatically). Then the basic screen returns to the display. Subsequently, you can freely copy the program of a new day (days) by repeating the above described steps.

3.5 Modification of the device program

- By repeating the programming steps you can change the set values at any time.
- The number of previously activated turn-ons can be arbitrarily increased according to point 3.3.
- Some previously activated turn-ons can be removed by returning the previously

 set time to the basic factory position during the change of switching time, using the buttons

(or by one pressing of the „DAY“ button) to ), then

press the „PROG“ button. Consequently, when you have removed one intermediate turn-on, the remaining turn-ons are renumbered sequentially. •When you want to finish the modification of the selected day's switching, press the „PROG“ button for 3 seconds. Then you can continue with the modifications by selecting another day. Changes can be saved, ended by pressing the „SET“ button. The device will also save the settings automatically if no button is pressed within 1 minute. At that time, the basic screen returns to the device display.

•If you want to write a completely new program, press the "RESET" button to erase previous settings from the device memory. This will return the device to its basic factory position. Then perform the basic device setup and programming as described in points 2 and 3.

3.6 Program Check

•Press the "SET" button to display the basic screen on the thermostat display, then press the "PROG" button. The display will then show the sequential syllables indicating the day (days), the PROG on symbol, as well as the set time and temperature for turning on PROG for the given day (days) (none of the values are blinking). •Repeatedly,

multiple times by pressing buttons pressing "PROG" you can check the values PROG, PROG and other on settings related to the given day (days). You can change the days using the buttons

If you programmed all days of the week at once (MON TUE WED THU FRI SAT SUN) during programming, you can only view the program for all days together. •After checking the program, you can press the "SET" button to return to the basic screen on the display (if no button is pressed within 15 seconds, the basic screen will return to the display automatically).

4.TEMPORARY MODIFICATION OF THE TEMPERATURE SET ACCORDING TO THE PROGRAM

If you want to operate the programmed device temporarily differently from the set program (e.g. during holidays and winter vacation), you can choose between the options described in section 4.1-4.4. For a simpler manual temperature modification, in the basic, factory preset setting, the large button is assigned the value °C and the button

°C. If you want to modify the temperature manually, one press of the button

 assigns the factory preset temperature level assigned to the  button.  value

For example, if the currently running program PROG is set to °C, in case of need, simply one press of the button automatically turns on ensures a comfortable temperature of

°C. To set this temperature, it is not necessary for you to set it manually by multiple presses of the button  with ³ 0.5°C increments. The energy-saving temperature

°C set according to the program

°C and it is not necessary for you to set it manually by ¹⁵ with multiple presses of the button

0.5°C increments. Subsequent repeated pressing of the buttons  change to

comfort temperature ²²°C pre-

set by the manufacturer with 0.5°C increments can be increased or decreased according to current requirements. 

°C can be

 or  it is of course possible to set the temperature ²²

• To set the energy-saving temperature, press and hold the "SET" button and then press the button once

To the large buttons  a  od výrobce přidělenou úspornou teplotu ¹⁵ °C, resp. přidělenou komfortní teplotu ²²°C lze ľubolne zmenit podle následujícího postupu:

- **Pro nastavení úsporné teploty** stiskněte a podržte tlačítko „“ a následně jednou stiskněte tlačítko  a

then using the button  and / or  set by you

the desired energy-saving temperature level. After setting the desired temperature level, press the "SET" button again to save the set temperature level (after approximately 15 seconds, the copied program will be automatically confirmed and the thermostat will return to the basic position). •To set the comfort temperature, press and hold the "SET" button and then press the button 

then using the button



and / or



set by you

the desired comfort temperature level. After setting the desired temperature level, press the "SET" button again to save the set temperature level (after approximately 15 seconds, the copied program will be automatically confirmed and the thermostat will return to the basic position).

4.1 Temperature modification until the next program switch-on

By pressing or holding the large buttons



or



using the buttons located on the front cover of the device, set the desired temperature. After setting the temperature, the program number disappears from the display

the program number appears on the display  an icon indicating, that the thermostat is operating based on manual setting. The device controls the boiler according to the set value until the next switch-on time according to the program. During temperature changes, the display shows values indicating hours, which alternately show the exact time (TIME) as well as the remaining time from the activation of the manual setting (TIME LEFT) (e.g.

4:02

, i.e. 4 hours and 2 minutes). After this time, the icon disappears and the device switches back to the set program. If you wish to return to the original program before the next switch-on, press the "SET" button.

4.2 Temperature modification for a 1 ... 99-hour period (party program)

Using large buttons  a  located on the front panel of the device, set the desired temperature. After setting the temperature, the program number disappears from the display, the icon  appears, indicating that the thermostat is operating in manual control mode, then press the "DAY" button. Then the icon ,

disappears and the icon , as well as in the segments indicating over-
the current time, the label indicating in hours the starting duration of the
manual temperature adjustment (the number , indicating the number of
hours, blinks, indicating that the duration can be set). Using the buttons

you can set the desired duration arbitrarily from 1 to 99
hours. After the full 10 seconds, the set party program is
automatically activated and becomes valid. The device then
maintains the modified temperature according to the set
duration. The set temperature can be changed arbitrarily
using the buttons  or .

On the display during temperature changes, values indicating hours
appear, which alternately show the exact time (TIME) as well as the
remaining time from the activation of the manual setting (TIME LEFT) (e.g.

3:20
, i.e. 3 hours and 20 minutes). After the set time duration has
elapsed, the icon  disappears and the device switches to

the set program. If you wish to return to the original program
before the time duration expires, press the "SET" button,
which will interrupt the set temperature.

4.3 Temperature modification for 1 ... 99 - daily segment (holiday program)

Using large buttons



located on

on the front panel of the device, set the desired temperature. After setting the temperature, the program number disappears from the display, the icon  appears, indicating that the thermostat is operating in manual control mode, then

press and hold the "HOLD" button for at least 2 seconds. After pressing the "HOLD" button, the icon 

, for 2 seconds the icon appears  disappears, then after 2 seconds the icon 

as well as in the segments indicating over- the set time the label  appears, which in days indicates the initial period of manual

temperature adjustment (the number of days   indicating that the duration can be set). Using the buttons

set the desired duration arbitrarily from 1 to 99 days (one day is considered 24 hours, starting from the moment of setting). After the 10-second countdown, the set holiday program starts automatically and becomes valid. The device then maintains the modified temperature according to the set duration. The set temperature can be changed at any time using the buttons  or  without leaving the party program.

On the display during temperature changes, the values indicating the exact time (TIME) and the number of remaining days from the activation of manual setting (TIME LEFT) will alternate. After the set time duration has elapsed, the icon  disappears, the device switches to the set program. If you wish to return to the original program before the time duration expires, press the "SET" button, which will interrupt the set temperature.

4.4 Temperature modification until the next manual intervention

By pressing or holding the large buttons



or



located on the front cover of the device, set the desired temperature level. Manual control is indicated by the icon



Press the "HOLD" button  and icon  disappears. The device maintains the set

temperature until you perform another intervention. You can adjust the set temperature value at any time by pressing the large buttons  or  located

on the front cover of the device without canceling the manual control. Pressing the "SET" button cancels the temperature modification and the device returns to functioning according to the original program.

5.TURNING ON THE DISPLAY BACKLIGHT

If you press the "LIGHT" button, the display backlight turns on for 10 seconds. If you press another button during this time, the display backlight turns off 15 seconds after the last button press. If you want the display backlight to automatically turn on when pressing any button, you can activate this by pressing the "LIGHT" button for 5 seconds. After that, when using buttons, the display backlight will automatically turn on and remain on until the last button press or after 15 seconds. Activating automatic display backlight when using buttons is indicated on the display - for 3 seconds in the segments indicating the exact time - by the message "

L:00". A new pressing of the button

"LIGHT" for 5 seconds, the automatic display backlight activation is canceled, and pressing the "LIGHT" button again will operate according to the basic factory settings. Resetting the display backlight to the basic state is indicated on the display - for 3 seconds in the segments indicating the exact time - by the message "L:OF".

6.CLOSING OF CONTROL BUTTONS

You have the option to temporarily disable the thermostat's control buttons. This can prevent unauthorized persons from changing the set temperature or program. To lock the control buttons, first press the "SET" button to bring the device display to the basic screen. Then press and hold



buttons simultaneously for at least 5 seconds. The locking of control buttons is indicated by the message "L:OF", which

appears in the place of the current time display. While the control buttons are locked, their normal functions are disabled. Pressing any button will only display the message "L:OF" in the place of the current time display. To cancel

the locking of control buttons, press and hold



buttons again and hold them for at least 5 seconds. Within a few seconds

after releasing, the message "



appears in the place of the current time display, after which the device buttons are again freely

usable.

7.BATTERY REPLACEMENT

Battery life is approximately 1 year. Frequent use of the display backlight can significantly shorten this period. If the icon



indicating low battery

voltage appears on the display, the batteries need to be replaced (see section 2.1). After replacing the batteries, it is necessary to reset the exact time. The programmed settings remain stored in the device even without batteries. Therefore, it is not necessary to reprogram them.

8. RESET TO FACTORY DEFAULTS

Press the "RESET" button inside the base board cover to restore the factory preset settings. All other settings will be deleted. Do not use electrically conductive materials, e.g. a graphite pencil, when pressing the button. After restoring the factory preset settings, reset the basic settings on the device and reprogram according to points 2 and 3.

9. RECEIVER

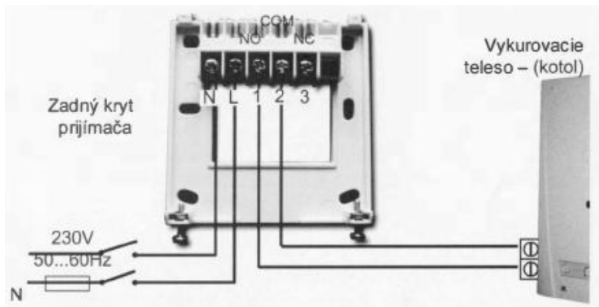
9.1 Installation and connection of the receiver

The receiver unit must be mounted on the wall near the boiler, in a location protected from moisture and heat.

UPOZORNĚNÍ! *Přijímací jednotku neumístíte pod kryt kotle, nebo blízko k teplým trubkám, protože to může poškodit součástky zařízení, resp. může ohrožovat kontakty bez vede-*

low (radio frequency connection). To avoid electric shock, leave the connection of the receiver to the boiler to a qualified technician. Loosen the 2 screws located at the bottom of the receiver. Do not remove them completely. Then separate the front cover of the receiver and subsequently attach the rear cover of the receiver using the screws provided to the wall near the boiler. The markings of the connection points N, L, 1, 2, 3 are clearly embossed into the plastic above the terminals. The receiver must be connected to a 230V mains voltage. For the mains connection, we recommend installing a fixed wiring instead of using a plug. This prevents accidental power interruption. Connect the neutral mains cable to point N and the phase cable to point L. We also recommend installing a switch so that the receiver can be turned off if necessary. The receiver unit controls the boiler (or air conditioning unit) via a non-potential relay with an alternating current contact, whose connection points are: 1 (NO), 2 (COM) and 3 (NC). The device you want to control (heating-cooling device) must be connected using two connection points, created for the connection of a room thermostat, in the relay's open state on the series switch contacts 1 (NO) and 2 (COM).

In the case where you want to control such an old boiler or another device (e.g. a pump) that does not have a connection point for the room thermostat, then connect the connection points 1 and 2 of the receiver unit as the connections of a single switch in the mains circuit of the device you want to control.



WARNING! When creating connections for heating / cooling equipment, always strictly comply with the manufacturer's instructions in every case!

UPOZORNĚNÍ! Při vytváření připojení pro topné / chladicí zařízení v každém případě bezpodmínečně dbejte na dodržení předpisů uvádzaných výrobcem!

The voltage appearing on the 1st, 2nd, or 3rd terminal depends only on the controlled system. Therefore, the type of the controlled device determines the wiring parameter. The cable length is not important. You can mount the receiver either next to the boiler or in a more distant location. However, never mount it under the boiler cover.

If due to various circumstances the distance between the transmitter and the receiver is too large and the radio frequency connection may become unreliable, place the receiver closer to the thermostat.

9.2 Commissioning the receiver

Connect the receiver to the power supply. Within a few seconds, the radio frequency systems (thermostat and receiver) will connect to the set frequencies. For testing purposes, press the button  located on the thermostat several times until the set temperature exceeds the actual room temperature by 2 - 3°C. Subsequently, within a few seconds, the icon should appear on the display  indicating the on state.

At the same time, the red LED on the receiver should turn on, indicating that the receiver has received the signal from the transmitter (thermostat). If this does not happen, the entire system must be re-tuned. To re-tune it, press and hold the „M/A“ button on the receiver for a long time (approx. 10 seconds) until the green LED starts blinking. Then, first press and hold the „SET“ button on the thermostat, then press and hold the button

„DAY“ on the thermostat for a long time (approx. 10 seconds), while the green LED continues to blink and turns off, so that the receiver „learns“ the security code of the transmitter (thermostat). The system automatically remembers the security code and it will not be lost even in the event of a power outage.

WARNING! Simultaneously pressing and holding the „SET“ and „DAY“ buttons for 10 seconds will generate a new security code for the thermostat. The receiver will recognize this new code only after re-tuning. After a successful tuning of the two units, do not simultaneously hold the „SET“ and „DAY“ buttons on the thermostat or the „M/A“ button on the receiver without reason.

9.3 Checking the range

Using the „TEST“ button, it is possible to check whether both units are within the range of the radio frequency connection. To check them, press and hold (for approximately 2 seconds) the „SET“ button. The thermostat will then start transmitting a control signal alternating between turning the receiver off and on for 2 minutes in 5-second intervals

(the symbol alternately appears and turns off on the display ). Receiving the control signal is indicated on the receiver

The unit signals by turning on, respectively turning off the red LED. In case the receiving unit does not register signals sent by the thermostat, both units are out of the radio frequency transmitter range and it is necessary to place both units closer to each other.

WARNING! *If due to the building floor plan structure or due to the shielding effect of the building structure between the two units, it is possible to place the two units only at the edge of the range or only outside of it, then for the purpose of guaranteeing the secure radio frequency connection, place a radio frequency signal relay device of type AVANSA TX between the two units.*

9.4 Manual control of the receiving unit

Pressing the "MANUAL" button disconnects the thermostat from the receiving unit and the boiler connected to the receiving unit can be turned on, respectively turned off manually only without the possibility

of temperature level control. Continuous lighting of the green LED indicates the active state of the "MANUAL" function. Turning on, respectively turning off the boiler is possible by pressing the "M/A" button. (In the turned on state the red LED is lit.) Repeated pressing of the "MANUAL" button restores the thermostat operation (the green LED turns off).

TECHNICAL DATA

Technical data of thermostat (transmitter):

- temperature measuring range: 3 – 45°C (with 0.1°C increments)
- adjustable temperature measuring range: **5 – 40°C (with 0.5°C steps)** –
measured temperature accuracy:
- temperature calibration range: ±3°C (with 0.1°C increments)
- optional switching sensitivity: ±0.1°C; ±0.2°C; ±0.3°C
- recommended storage temperature: **-10°C ... +40°C**
- supply voltage: 2 x 1.5V alkaline batteries
(Type LR6; AA size)
- power: 1.3mW
- battery life: approx. 1 year
- operating frequency: 868.35MHz
- dimensions: 130x80x22mm (without bracket)
112g
- weight:
- type of thermal sensor: NTC 10kΩ ±1% at 25°C

Technical data of the receiver:

- power: 230V AC, 50Hz
- supply voltage: 6W
- connection voltage: 24V AC/DC, ... 250V AC, 50Hz
- adjustable current intensity: 6A (inductive load 2A)
- range: approx. 50m in open space
- weight: 150g

Total weight of the device: approx. 305g (thermostat + receiver + bracket)

PROGRAMMING IN BRIEF

- **Setting date and time: buttons "DAY" and**  **or**  .
- **Programming:** press and hold the "SET" button, simultaneous pressing of the "PROG" button, then setting the temperature level by pressing the "PROG" button and , respectively copying repeating programs using the "COPY" button.
- **Program check: using the "PROG" buttons and**  **or**  .
- **Temporary modification of the temperature set according to the program:**
 - **until the next program turn on: setting the temperature level**
using the buttons  **a**  .
 - **for a period of 1-9 hours: setting the temperature level using the buttons and** 
, then pressing the "DAY" button, finally setting the desired duration using the buttons and  **a** .
 - **for a period of 1-99 days: setting the temperature level using the buttons and** 
, then pressing the "HOLD" button for 2 seconds, finally setting the desired duration using the buttons and  **a** .
 - **until the next intervention: setting the temperature level using the buttons and** 
a , then a short press of the "HOLD" button.