PT10_aj.qxd 20.6.2006 23:56 Page 1

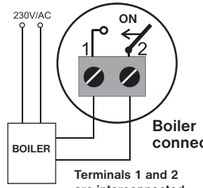
INSTALLATION OF PT10:

The installation of PT10 may be performed only by a person with appropriate qualification in electrical engineering.

Install the thermostat on a suitable place, where its operation would not be influenced by direct flow of hot air from the heater, by solar radiation and other disturbing influences. Also avoid the installation on outer wall.
Follow the illustrations in the course of installation (Pic.1 to Pic.5):

Pic.1

Pic.2



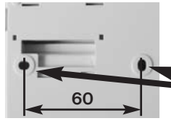
Boiler connection

Terminals 1 and 2 are interconnected when the thermostat is switched on

Pic.3

Pic.4

Pic.5



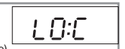
Openings for mounting screws (for KU/KP 68)

LOCATION OF BATTERIES AND THEIR REPLACEMENT:

Pic.6

a, LOCATION OF BATTERIES (see Pic.6)
The batteries are located inside the front microprocessor part. After batteries insertion, colon must blink on the LCD display. If some unidentifiable conditions occur, it is necessary to remove the batteries for approx. 1 minute. Always observe correct polarity!
b, REPLACEMENT OF BATTERIES **(serves also as a RESET of processor in undeterminable conditions).**
Low battery is indicated by blinking symbol " **bAt** " on the display. Use solely alkali pencil batteries 2x1.5 V of AA/R6 type! If the replacement lasts more than 25 s, all saved information will be lost!

"LOCK" FUNCTION: child lock (protection against unauthorized handling)



By simultaneous pressing of **Fce** , ☾☀ and **−** buttons the keyboard is locked (buttons are inactive).
Message LOC (LOCK) is shortly displayed. The function can be cancelled, e.g. the keyboard unblocked by simultaneous pressing of **Fce** , ☾☀ and **+** buttons (the buttons are again functioning from now).

ROOM THERMOSTAT PT10

PT10 is a digital room thermostat for automatic regulation of heating, offering the possibility to set 4 temperature changes for each day (minimal duration of time interval to be set is 30 minutes).

Further advantages:

- **different temperature program for each day**
- **simple control and programming**
- **possibility to make a short-term change in program temperature**
- **easy installation to all types of installation boxes KU/KP68**
- **retention of memory contents, when the batteries are replaced sooner than after approx. 25s**

Specifications	
Power supply	alkal.batteries 2 x 1,5 V typ AA/R6
Number of adjustable temp.	4 temperature changes for a day
Hysteresis	0,5°C
Minimal programming time	30 minutes
Range of possible temp.	5 to 39°C
Step of temperature setting	po 1°C
Minimal step of indication	0,1°C
Measurement accuracy	0,5°C
Output	relay, max. 5A/250V AC

Overview of produced types:

TS20

HD20

PT21, PT30

BPT21, BPT30

PT30GSM

NEW

TS10GSM, TS11GSM

CERTIFICATE OF GUARANTEE
(guarantee period for the product amounts to 2 years)

product No.:	date of sale:
	stamp of shop:
examined by:	

Send the controller for guarantee and after-guarantee service to manufacturer's address.

ELEKTROBOCK CZ s.r.o.
Blanenská 1763
Kuřim 664 34
Tel./fax: +420 541 230 216
Technical support (before 14 o'clock)
Mobil: +420 724 001 633
www.elbock.cz

ROOM THERMOSTAT PT10

- **FOR ALL TYPES OF HEATING**
- **4 TEMPERATURE CHANGES IN A DAY**
- **ANTI-FREEZE TEMPERATURE OF 5°C**

Via digital regulation of temperature towards high savings of energy

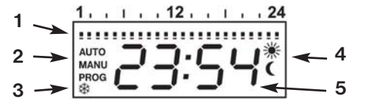
Table for registration of your programs

day \ progr.	1		2		3		4	
Mon								
Tue								
Wed								
Thu								
Fri								
Sat								
Sun								

Temperature and time set

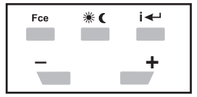
OPERATING INSTRUCTIONS

DISPLAY DESCRIPTION:



1, indication of set time and temperature program
2, indication of selected function AUTO, MANU, PROG etc.
3, indication of anti-freeze temperature ❄
4, indication of temperatures, comfort ☼, economic ☾
5, indication of time/temperature

CONTROLS:



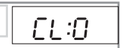
Fce : serves for function selection
☾☼ : selection of set temperatures
i ↵ : information button (after pressing in AUTO mode it displays successively required temperature, current time/temperature and present day). button for confirmation (ENTER)
+/- : for function selection and temperature setting

FUNCTIONS OF PT10:

Following functions can be selected by pressing **Fce** and then **–/+** buttons:

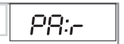
1. AUTO : the thermostat works according to program as set.
2. MANU : serves for manual setting of temp. (the selection by ☾☼ or **–/+** buttons), the temperature should be constant up to next change.
3. CLO : setting of present day and time.
4. PAr : setting of parameters (constants).
5. PROG : programming mode.
6. OFF : in this mode, PT10 is permanently switched-off (with the exception of the regime " ❄ ").

" CLO " FUNCTION: setting of current day and time



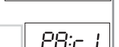
1, Press the **Fce** , button, by pressing **–/+** select **CLO** *(clock)* function and confirm by **i** ↵ .
2, The time is displayed and indication of hours is blinking on the display, use **–/+** buttons to set required hours and confirm by **i** ↵ button. Indication of minutes starts blinking, use **–/+** buttons to set required minutes and confirm again by **i** ↵ button. The day displays (d:1 represents Monday, d:7 Sunday), use **–/+** buttons to select current day and again confirm by **i** ↵ button.

" PAr " FUNCTION : setting of parameters (constants)



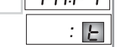
1, Press the **Fce** button, by pressing **–/+** buttons select **PAr** (PARAMETERS) and confirm by **i** ↵ .

PAr 1: display of current temperature (t) or time (C)



After displaying of **Par1**, press **i** ↵ and with using of **–/+** buttons select display option.
t for displaying of current room temperature and confirm by **i** ↵ button.
C for displaying of current time and again confirm by **i** ↵ button.

PAr 2: setting of economic (☾) temperature



Press **i** ↵ to set **Par2**, symbol ☾ displays. Set the value of economic temperature by **–/+** buttons and confirm it by pressing **i** ↵ .

PAr 3: setting of comfort (☼) temperature

Press **i** ↵ to set **PAr3**, symbol ☼ displays. Set the value of comfort temperature by **–/+** buttons and confirm it by pressing **i** ↵ .

" PROG " FUNCTION: setting the program for automatic mode AUTO

1, Press the **Fce** button, by pressing **–/+** buttons select **PROG** *(programming)* and confirm by **i** ↵ . The day to be programmed is showed on the display.
2, By pressing **–/+** select the days according to the table and confirm by **i** ↵ .

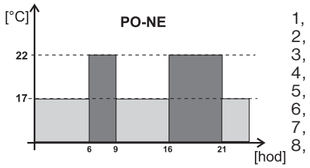
d:1 Mon	**d:5 Fri**	**d1:5 Mon to Fri**
d:2 Thu	**d:6 Sat**	**d6:7 Sat to Sun**
d:3 Wed	**d:7 Sun**	**d1:7 whole week**
d:4 Thur		

TABLE: SELECTION OF DAYS FOR PROGRAMMING

3, Symbol **1:U1** for the setting of the first time interval displays for a short time on the display. By pressing of **–/+** buttons set the time of the first change (min. step of 30 min.) and by means of pressing the ☾☼ button assign economic or comfort temperature to this time. Again confirm by pressing **i** ↵
4, Symbol **1:U2** for the setting of the second time interval displays for a short time on the display. By pressing of **–/+** buttons set the time of the second change and by means of pressing the ☾☼ button assign economic or comfort temperature to this time. Again confirm by pressing **i** ↵ .
Use the same procedure for the setting of further time intervals and days.
Up to four time intervals (temperature changes) can be defined for one day.

Note: Last temperature set is maintained up to the first change of temperature of next day.

EXAMPLE: setting of week program



1, Set 17°C for ☾ (Pa:r2)
2, Set 22°C for ☼(Pa:r3)
3, Select programming of whole week **d1:7** (Prog)
4, assign the time of **6:00** and ☼ temperature to **17:U1**
5, assign the time of **09:00** and ☾ temperature to **17:U2**
6, assign the time of **16:00** and ☼ temperature to **17:U3**
7, assign the time of **21:00** and ☾ temperature to **17:U4**
8, Leave the programming by pressing **Fce** and select **AUTO** function for setting the week program

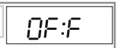
When the output is switched on, AUTO/MANU is showed on the display, otherwise the symbol blinks.

Note: If you do not push any button in 2 minutes, PT10 returns into set mode. Longer pushing of **–/+** buttons speeds up their functions.

"PARTY" FUNCTION: short-term change of temperature in AUTO mode

By simple pressing of **–/+** buttons in **AUTO** mode, it is possible to make a short-term change of required temperature. PT10 will maintain this temperature up to next temperature change as defined in the program.

"OFF" FUNCTION: switching off of the thermostat

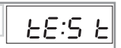


Press the **Fce** button, by pressing of **–/+** buttons select OF:F function and confirm by **i** ↵ button.
In this way, PT10 is permanently switched off. In this mode, symbol OF:F and data on current temperature/time are showed alternatively on the display. To cancel this function, press **Fce** button and select different mode with using of **–/+** buttons.

" ❄ " FUNCTION: anti-freeze temperature in OFF mode

If in the "OFF" mode, the room temperature drops below 5° C, the thermostat automatically switches on the output and symbol " ❄ " is displayed. In this way, PT10 prevents freezing up of the heating system.

"TEST" FUNCTION: inspection of correct connection



By pressing **Fce** and subsequently ☾☼ , the TEST function is activated.
This function performs switching-on and switching-off of the output contact for several times.