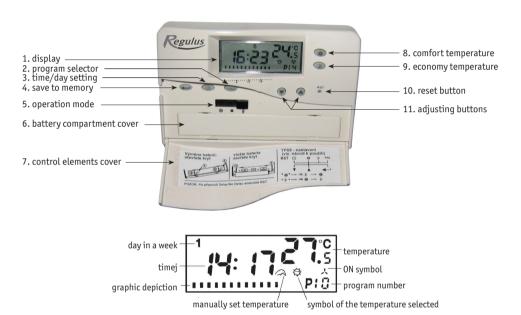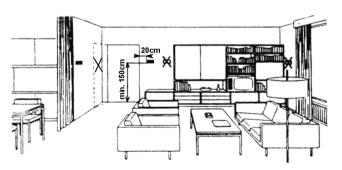# Operating instructions

TP08 Programmable Thermostat

Description

Programmable thermostat for control of heating or A/C. During operation, real room temperature is displayed as well as time and day in a week, selected program, its graphic depiction, ON/OFF, temperature selection outside the program and the selected temperature (economy – comfort). It offers a choice from 8 preset programs (0-6 and 8) and 8 user-adjustable programs (10-16 and 18). Two temperature levels can be set (economy and comfort) in the range 5-35°C. The program No. 8 is Antifrost, heating is turned on when the temperature drops below 5°C and the measured temperature and dF (defrost) symbol blink alternately on the display.

1. display
2. program selector
3. time/day setting
4. save to memory
5. operation mode
6. battery compartment cover
7. control elements cover

8. comfort temperature
9. economy temperature
10. reset button
11. adjusting buttons

day in a week
timej
graphic depiction

temperature
ON symbol
program number

manually set temperature   symbol of the temperature selected

Recommended installation place

20cm

min. 150cm

The thermostat is designed for indoors usage only. It should be placed on an inner wall about 150 cm above the floor, into a suitable space where changes in the room temperature can be registered thanks to freely circulating air.

Do not mount above heat sources (TV set, heater, fridge etc.), to places exposed to direct sunshine, draught, radiation from instruments,nor to damp rooms.

Installation instructions

A.   Initial setting, wiring

1. Wiring
On the back side, in the right top corner there are 3 wiring contacts marked L (live), H (heat) and C (cool). L is wired to control voltage (e.g. a phase), H serves for heating control, C is wired to A/C (cooling).

2. Mounting
Fix the thermostat into a suitable position by means of the enclosed screws and sockets.

3. Operation mode selector (5)
For heating control slide the selector to its right position (flame symbol), for A/C control to its left position (snowflake symbol). The middle position means OFF.

4. Delay switch (back side, under wiring contacts)
Use the two-position switch to set the delay in turning on the heating appliance (delay = quick temperature fluctuations do not cause the thermostat to switch on/off repeatedly):

	HEAT	COOL
NO DELAY	10 sec	5min
DELAY	5min	5min

The delay prevents frequent thermostat switching during temperature fluctuations.

B.   Start / Reset

1. After wiring insert 2 new alkaline batteries AA 1.5 V (Mind the polarity!). Data will be displayed.
2. Press Reset - **RST** button with a rounded-end instrument to zero the display.
3. Turn on the heating appliance. It will remain OFF until TP08 is set so that the output is closed (a rotating propeller symbol appears on the display).

C.   Operation

1. Starts with checking the temperature and display will show room temperature.
2. If batteries are weak, C, P and a colon will flash.
3. If the temperature is below 0 °C and Heat is ON, the display will show L.
4. If the temperature is over 39.5 °C and Cool is ON, the display will show H.

D.   Clock setting

1. Press ⊕ , day will flash (1-7), by pressing up or down arrows the desired day is set.
2. Press ⊕ , hours will flash, by pressing up or down arrows the desired hour is set.
3. Press ⊕ , minutes will flash, by pressing up or down arrows the desired minutes are set.
4. Either pressing ↵ or 10 seconds of inactivity will close the clock setting and return to normal thermostat operation.
5. Time format of 12 or 24 hours can be selected through the jumper on the PCB. The default setting is 24 h.

E.   Program setting

1. Press **PRG**, day will start flashing (1-7), by pressing up or down arrows the desired day will be set.
2. Press **PRG**, program numbers will start flashing (0-6, 8, 10-16, 18), by pressing up or down arrows the desired program is selected.

Each day in a week can have a different program.

3. Programs 10-16 and 18 can be set by pressing ☼ or ☽ button (comfort or economy temperature), time changes in 1 hour steps, program setting is displayed in the left bottom corner (black rectangle means comfort temperature).
4. Either pressing ↵ or 10 seconds of inactivity will close the program selection and return to normal thermostat operation.

F.   Comfort and economy temperature setting

1. Slide the operation selector to the flame symbol (or snowflake).
2. Holding either ☼ or ☽, button enters mode of setting comfort or economy temperature.
3. By pressing up or down arrows the desired temperature is set (5-35°C).
4. Either pressing ↵ or 10 seconds of inactivity will close the temperature setting and return to normal thermostat operation.

G.   Factory-preset programs: PROG 0-6, 8

PROG 0		preset program
PROG 1		preset program
PROG 2		preset program
PROG 3		preset program
PROG 4		preset program
PROG 5		comfort temperature all day long
PROG 6		economy temperature all day long
PROG 8		antifrost program

H.   User program manual override (10 – 16 a 18)

1. Pressing ☼, ☽ enters mode of user program manual override, ☼ and ☽ are in opposite mode and the display shows ☞.
2. Either pressing ↵ or 10 seconds of inactivity will close programming and return to normal thermostat operation.
3. By pressing up or down arrows the desired temperature for manual override is set.
4. Pressing ☼, ☽ of the opposite state will end the manual override.
5. The following change in program or the following day will finish manual override.

I.   Turning on comfort or economy temperature (outside a program)

1. Hold ☼ for 1 sec. and press ☼ or ☽, this enters time setting for keeping comfort temperature,1 in the time field and ☞ flash.
2. By pressing up or down arrows the desired number of hours is set during which the temperature shall be kept (after that the thermostat will return to the preset program).
3. Either pressing ↵ or 10 seconds of inactivity will close programming and return to normal thermostat operation.
4. If you wish to change the temperature with the comfort temperature timer, this can be done in normal mode when timer for keeping comfort temperature is active, by simple pressing up or down arrows.
5. The timer for keeping comfort temperature will be terminated by pressing ☽.
6. Hold ☽ for 1 sec. and press ☼ or ☽, this enters time setting for keeping economy temperature, 1 in the time field and ☞ flash. Follow points 2-4, keeping economy temperature will be terminated by pressing ☼.

J.   Specification

Temperature range	5,0-35,0 °C (step 0,5 °C)	Switching contact	24-230V~; 8 (2,0)A
Temperature display	0,0-39,5 °C (step 0,5 °C)	IP	IP30
Accuracy	± 0,5 °C	Batteries	2× 1,5 V AA
Temperature detection interval	10 sec.	Operating temperature	-10 to +50 °C