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**CAUTION!**

Before commencing any work on the electrical connections, you must first disconnect the thermostat from the mains. None of the 230V connections must be live until the installation has been completed and the housing is closed. Only qualified electricians or authorised service staff are permitted to open the thermostat.

There are parts that may carry mains voltage behind the cover. The thermostat must not be left unsupervised when open. (Prevent non specialists and especially children from gaining access to it.)

CE

**Important: Keep this document**

Prior to setting the thermostat, it is necessary to complete all required settings described in this section.

## 1. Factory default settings



|                                |   |
|--------------------------------|---|
| Contacts:                      | Volt Free                               |
| Temperature indicator:         | °C                                      |
| Switching differential:        | 0.4°C                                   |
| In built frost protection:     | 5°C                                     |
| High and Low temp. limitation: | Off                                     |
| Blue backlight activated :     | for 10 secs after any button is pressed |
| Clock:                         | 24 hours                                |
| Keypad lock:                   | Off                                     |

## 2. Specifications & wiring

|                         |                                       |
|-------------------------|---------------------------------------|
| Power supply:           | 2 x AA Alkaline Battery               |
| Power consumption:      | 8 VA                                  |
| Temp. control range:    | 5 ... 35°C                            |
| Ambient temperature:    | 0 ... 50°C                            |
| Contact rating:         | 8A 230Vac                             |
| Dimensions:             | 84 x 84 x 30mm                        |
| Temperature sensor:     | NTC 10K Ohm @ 25°C                    |
| Switching differential: | Adjustable from 0.2/0.4/0.6/0.8/1.0°C |
| Frost protection:       | Only operational in stand by mode     |

## 3. Mounting

The mounting height should be 1.5 meters above the floor level.

The thermostat should be wall mounted in the room where the heating is to be controlled.

The place of installation should be chosen so that the sensor can measure the room temperature as accurately as possible.

Choose the mounting location to prevent direct exposure to sunlight or other heating / cooling sources when mounted.

- The unit can be fitted to:
1. Recessed conduit boxes
  2. Surface mounting boxes
  3. Directly on walls.

## 4. Installation

Slacken the fastening screw on the bottom of the thermostat with a philips head screwdriver.

The thermostat is hinged and can be opened 180 degrees.

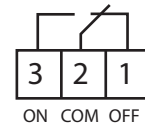
**Mount the unit as described in section 3.**

Wire the thermostat according to the wiring diagram.

Close the thermostat and tighten the fastening screw.

## 5. Wiring diagram

INTERNAL WIRING DIAGRAM CRTP



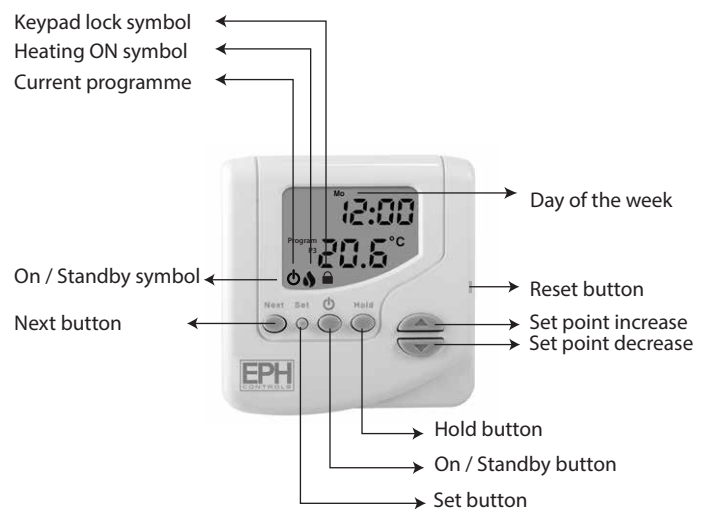
If mains voltage output is required, 230V must be connected to terminal 2.

## 6. Frost protection 5°C

Frost protection is built into this thermostat, it is pre fixed at 5°C and is not adjustable.

It will only be activated when the thermostat is in the stand by mode and the room temperature reaches 5°C.

## 7. Button / Symbol description



## 8. Resetting the thermostat




It is necessary to reset the thermostat prior to initial use.




Press and hold the button for 5 seconds.

dEL will appear on the screen.

Press the button on the side of the thermostat.

### 9. Keypad lock and unlock OFF

To lock the keypad, press and hold the  and  buttons for 5 seconds.  will appear on the screen. The keypad is now locked.



To unlock the keypad, press and hold the  and  buttons for 5 seconds.  will disappear from the screen. The keypad is now unlocked.


### 10. High and Low temperature limitation OFF


It is possible to limit the High and Low temperature setpoints in this thermostat.

Temperature setpoints in temporary override, permanent override and the programmed setpoints will be limited within the High and low limit setpoints. The High temperature limit is preset at 25°C and cannot be adjusted. The Low temperature limit is preset at 15°C and cannot be adjusted.



**To activate High and Low temperature limitation.**


Press and hold the  and  buttons for 10 seconds. "Limit OFF" will appear on the screen.


Press the  button to select "Limit ON" mode.

Press the  button and the thermostat is ready for operation. "Limit" will appear on the screen.


**To deactivate High and Low temperature limitation.**



Press and hold the  and  buttons for 10 seconds. "Limit ON" will appear on the screen.



Press the  button to deactivate this function. "Limit OFF" will appear on the screen.



Press the  button and the thermostat is ready for operation.



### 11. Setting the date and time



Press the  button once, 'Set Date Year' will appear on the screen.

Press the  and  buttons to adjust the year. Press the 'Next' button.

Press the  and  buttons to adjust the month. Press the 'Next' button.

Press the  and  buttons to adjust the day. Press the 'Next' button.

Press the  and  buttons to adjust the hour. Press the 'Next' button.

Press the  and  buttons to adjust the minute. Press the 'Next' button.

After 10 seconds the thermostat will return to normal operation.



### 12. Factory default setting 5d/ 1d/ 1d



| Default  | P1   | P2   | P3    | P4    | P5    | P6    |
|----------|------|------|-------|-------|-------|-------|
| Mon-Fri  | 6:30 | 8:30 | 12:00 | 12:00 | 16:30 | 22:30 |
| °C       | 21   | 16   | 21    | 16    | 21    | 16    |
| Saturday | 6:30 | 8:30 | 12:00 | 12:00 | 16:30 | 22:30 |
| °C       | 21   | 16   | 21    | 16    | 21    | 16    |
| Sunday   | 6:30 | 8:30 | 12:00 | 12:00 | 16:30 | 22:30 |
| °C       | 21   | 16   | 21    | 16    | 21    | 16    |

### 13. Adjusting the program settings


Press the  button twice.

**Programming for Monday to Friday is now selected.**



Press the  and  buttons to adjust the P1 time. Press the 'Next' button.



Press the  and  buttons to adjust the P1 temp. Press the 'Next' button.

Repeat this process to adjust P2 to P6 times and temperatures.


Press the  button.

**Programming for Saturday is now selected.**



Press the  and  buttons to adjust the P1 time. Press the 'Next' button.



Press the  and  buttons to adjust the P1 temp. Press the 'Next' button.

Repeat this process to adjust P2 to P6 times and temperatures.


Press the  button.

**Programming for Sunday is now selected.**



Press the  and  buttons to adjust the P1 time. Press the 'Next' button.


Press the  and  buttons to adjust the P1 temp. Press the 'Next' button.

Repeat this process to adjust P2 to P6 times and temperatures.



Press the  button.

**The thermostat switching differential is now selected.**

Press the  and  buttons to adjust the differential from 0.2 ... 1°C.


Press the  button to return to normal operation.

### 14. Temporary override (Manual)


Press the  and  buttons to adjust the temperature setpoint.

'Manual' will appear on the screen.



After 10 seconds the thermostat will operate in this temporary override.

Press the  button to return to automatic mode.


### 15. Permanent override (Hold)

Press the  button.

'Hold' will appear on the screen.

Press the  and  buttons to adjust the temperature setpoint.

After 10 seconds the thermostat will operate in this permanent override.

Press the  button to return to automatic mode.

### 16. Replacing the batteries

Slacken the fastening screw on the bottom of the thermostat with a philips head screwdriver.

The thermostat is hinged and can be opened 180 degrees.

Replace the batteries with 2 x AA Alkaline batteries.

Close the thermostat and tighten the fastening screw.

