### **ENGLISH**

# **Wi-Fi THERMOSTAT**

## Wall mounting











App

### Installation and use manual

- · Wireless connection
- Equipped with a back-lit LCD display with "White-LED" technology
- · "All glass" finish for a pleasant and modern design
- · Easy to program via APP
- · Weekly programming



PE - DECRPE024EN 01/20

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# **EU SIMPLIFIED CONFORMITY DECLARATION**

The manufacturer declares that the type of radio equipment listed below complies with Directive 2014/53/EU (RED).

The full text of the EU Declaration of Conformity is available at the Internet address shown on the label:

Manufacturer, Fabricat, Fabrikant, Fabbricante, Fabricante:

### PERRY ELECTRIC S.r.I.

Via MILANESE, 11 - 22070 VENIANO (Como)

ITALY - www.perry.it

Tel. +39-031-8944.1 Fax +39-031-8365201 http://www.perry.it/it/dichiarazioni.aspx

Type, Typen, Tipo:

Series, serie:

1TXCR029WIFI

V002





### **WARNINGS**



The installation and electrical connection of the programmable thermostat must be implemented only by a qualified electrician and in conformity with current laws and regulations.



Carefully read the instruction manual before using the product as it provides important guidelines regarding safety, installation and use. The instruction manual must be preserved with care for future reference.

- Ensure the product is intact once it is removed from its packaging.
- Packaging components (any plastic bags, PVC suspensions, etc.) must be kept out of reach of children.
- The programmable thermostat is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or by those with a lack of experience and knowledge of the instructions, unless they are supervised or have received the necessary instructions concerning use of the device by a person responsible for their safety. Children should be supervised to ensure that they do not play with the device.
- If necessary, clean the programmable thermostat with a slightly damp cloth.



Important: for the system modes and operation of the Wi-Fi temperature control system and for correct installation, also see the specific manual of the APP



Radio frequency waves emitted by the wireless programmable thermostat are not a risk to human or animal health.



Important: the manufacturer shall not, under any circumstances, be liable if the products fail to operate due to the interruption of the internet network or unavailability of these resources: Cloud. Server. Portal.



Important: internet access costs are charged to users according to the rates of their mobile phone provider.

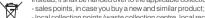


Important: the manufacturer reserves the right to introduce any technical and/or constructive changes deemed necessary, with no prior notice.

#### DISPOSAL OF ELECTRICAL & ELECTRONIC EQUIPMENT

This symbol on the product or its packaging to indicates that this product shall not be treated as household waste.

Instead, it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment, such as for example:

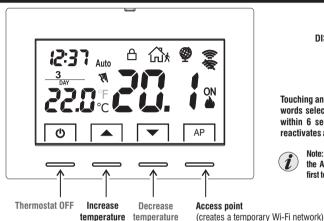


-local collection points (waste collection centre, local recycling center, etc...).

By ensuring this product is disposed of correctly, you will help prevent potential negative consequence for the environment and human health, which could otherwise be caused by inappropriate waste handing of this product.

The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your house hold waste disposal service or the shop where you purchased the product.

# **KEYS FUNCTION LEGEND**



# Important!

DISPLAY AND KEY BACK-LIGHTING



Touching any key activates back-lighting, displaying the words selection and navigation; press the desired key within 6 sec. to vary the settings (touching any key reactivates a 6 sec time-out).



Note: with fixed backlighting (which can be set from the APP); besides being always lit, the keys can be first touch operated

THE COLOUR OF THE KEYS varies depending on the temperature Set and operating at that moment, as per the rule below:

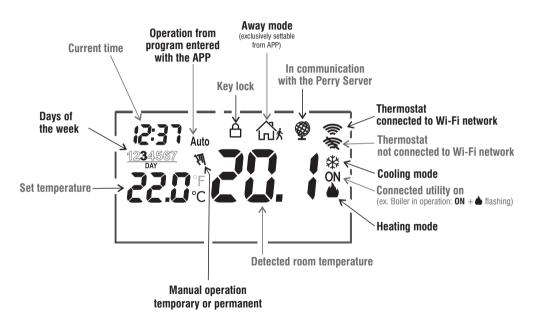
in WINTER mode: Setting lower than  $18.1^{\circ}C = \text{kevs lit in green}$ 

Setting from 18.1 to  $21^{\circ}C = \text{kevs lit in blue}$ Setting over than  $21^{\circ}C = \text{kevs lit in red}$ 

in SUMMER 💥 mode: Setting over than  $26^{\circ}C = \text{kevs lit in green}$ 

Setting from 26 to  $23^{\circ}C = \text{keys lit in blue}$ Setting lower than 23°C = keys lit in red

# **DISPLAY LEGEND**



### **INSTALLATION**

# Radio range warnings

During installation, some precautions must be taken in order not to limit or inhibit the range of the radio waves between Wi-Fi Router and thermostat:

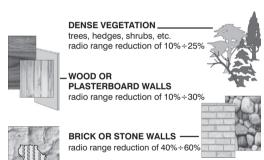
- install the appliance away from metal furniture or structures which could alter or screen propagation of radio signals;
- make sure that there are no electrical or electronic devices (television, microwave oven, etc.) within a range of at least 1 m from the appliance.

Note: if there are no obstacles between the thermostat and the Wi-Fi Router, the "open air" range is approximately 100 m; indoors with the presence of walls, the range is approximately 20m (see "technical data").

Radio range decreases significantly when the components are interposed between the obstacles. This attenuation varies in different degrees depending on the type of material the walls or barriers to cross are made of.

The presence of noise or electromagnetic interference sources can also reduce the indicated radio range.

Below are some examples of mitigation related to materials, which impact on the "Free air" range declared above.



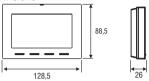
radio range reduction of 50% ÷ 70%

CONCRETE WALLS

METAL WALLS and/or FLOORS - radio range reduction of 65% ÷ 90%

### **INSTALLATION**

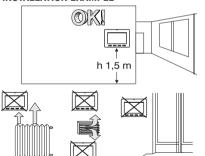
#### DIMENSIONS



### Thermostat installation: independent fixed

Wall mounted - onto a recessed rounded box or with a rectangular 3 module box.

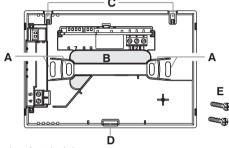
#### INSTALLATION EXAMPLE



Install the thermostat preferably at a height of 1.50 to 1.60 m from the floor, far from sources of heat, air inlets, doors or windows and anything that may alter its operation.

#### **FASTENING THE WALL BASE**

- Switch off mains power 230V~
- Fasten the base of the thermostat with the screws supplied: to the wall, to the rounded or rectangular recessed box via the relative paired holes A.



- A base fastening holes: wall-mounted, round or rectangular recessed box
- B wire passage from corrugated tubes, round or rectangular recessed box
- $\boldsymbol{\mathsf{C}}$  thermostat hooking teeth
- D thermostat fastening slot
- E screws to fasten the wall base to the rectangular or round recessed box.

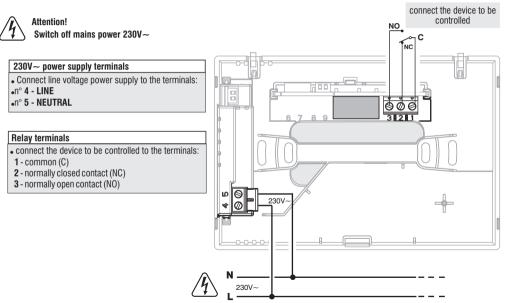


To ensure the thermostat is fitted correctly to the wallmounted base, the latter must not be bent due to the screws being tightened too much to the rounded or rectangular recessed box.

# **ELECTRICAL CONNECTIONS**

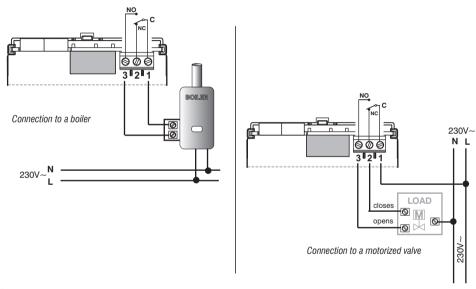


Important: the installation and electrical connection of the thermostat must be implemented only by a qualified electrician and in conformity with current laws and regulations. The manufacturer declines all liability in connection with the use of products subject to special environmental and/or installation standards.



# **ELECTRICAL CONNECTIONS**

### Examples of electrical connections to devices to be controlled



(i)

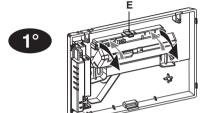
with heavy inductive loads (pumps and solenoid valves), connecting an RC filter parallel to the load is recommendable.

After having completed the electrical connections, secure the body of the thermostat to the wall base as instructed in the following paragraph.

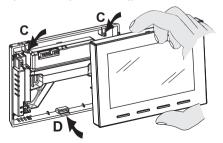
# FASTEN OR REMOVE THE THERMOSTAT TO/FROM THE WALL-MOUNTED BASE

After having made the electrical connections:

- Apply the terminal cover to the base, securing it to hook E.
- To remove the cover, use a small screwdriver on hook **E** for leverage.

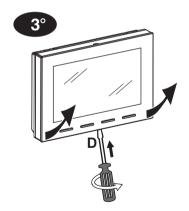


Hook the thermostat to the wall base in teeth **C**. Then press the thermostat at the bottom to complete fastening in slot **D**. (CLICK indicating the correct fixing).



# Removing the thermostat from the wall base





Unhook the thermostat from the wall base, using a screwdriver in the specific slot **D** in the lower part of the device for leverage, then turn to remove it.

# SYSTEM ASSEMBLY



#### IMPORTANT!

The thermostat can be used via the Perry APP with a Wi-Fi network connected to an internet network.

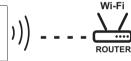
APP:



# Perry Thermostat 230V

Perry Electric S.r.l.











Docad the APP for free **«Perry Thermostat 230V»** from **Google Play** or from the **dall'App Store**.



also reachable through the use of the following QR Code:

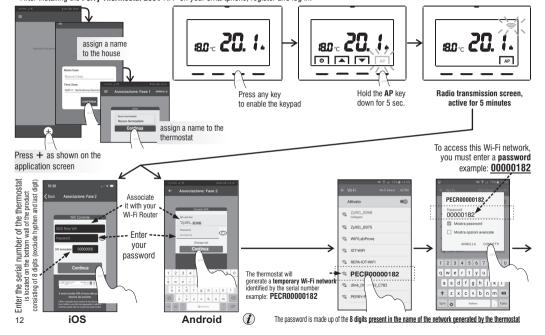


Consult the APP manual, which is available online at:

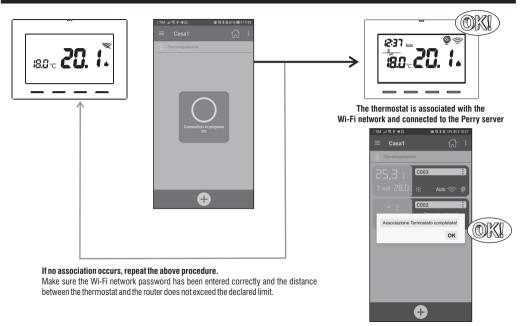
http://perry.it/it/prodotto/1tx-cr029wifi.aspx

### THERMOSTAT ASSOCIATION TO ROUTER WI-FI

The programmable thermostat must be associated with the Wi-Fi network via the relative **Perry Thermostat 230V** APP. After installing the **Perry Thermostat 230V** APP on your smartphone, register and log in.



# THERMOSTAT ASSOCIATION TO ROUTER WI-FI



### THERMOSTAT OPERATION MODE

Auto: the set temperature changes automatically depending on the program set via APP.

(the set default temperature for all days of the week is 18°C).

**Temporary override:** this is a temporary mode activated when the temperature is modified directly by the user; the change remains valid until the next programmed change.

OFF: the thermostat was switched off directly by the user; it suspends all temperature control and can be remote-controlled.

#### **TEMPORARY OVERRIDE mode**





Temporary manual mode is activated by changing the set temperature. To do so, press the arrow keys ▲▼: the flashing symbol = 🍿 appears on the display.

It will be active until the next change programmed by the APP or until midnight of the current day.

It is possible to exit in advance by pressing the key 🖰 twice or by using the command from the APP.



It is possible to set **Permanent manual mode** by only using the Perry APP. This way, the Set temperature can also be changed using the keys extstyle exts

It is possible to exit the permanent manual mode from the APP as well as by pressing the key @ of the thermostat twice.

#### **OFF** mode



Pressing the key () suspends (OFF) all temperature control, with the exception of the antifreeze/thermal protection functions, if activated.

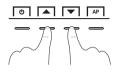


The thermostat can be remote controlled via APP.

Exit from the **OFF** mode by pressing the key 1 again or by using the command from the APP. The thermostat will go back to **Auto** mode.

# **OPERATIONS CARRIED OUT DIRECTLY BY THERMOSTAT**

#### **KEY LOCK**



To lock the keyboard, simultaneously press the keys ▲▼: the lock symbol ♠ will appear on the display (padlock).

To unlock the keyboard, simultaneously press the keys ▲▼: the lock symbol 🖒 will disappear from the display (padlock).

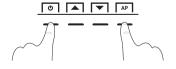


Operation that can also be carried out from the APP

### **RESET**

Should the timer thermostat feature malfunctioning, wrong displays or other incorrect conditions, perform a "**Reset**". Simultaneously press the (!) and **AP** keys.

After a few seconds of Lamp-test, the thermostat will restart its normal operation.





RESET will not eliminate any settings saved on memory.

## **TECHNICAL SPECIFICATIONS**

```
·Power supply 230V~ 50-60 Hz
·Backlit LCD with «White-LED» technology
·n°4 backlit keys (color blue, green or red depending on the set temperature band set), with lock option
·Type of action, disconnection and appliance: 1 / BSU / Electronic.
·Type of output: relay with contact in COM / NO / NC exchange, potential free - max 5(3)A/250V~
·Cross-section of the wires to the terminals: 0.5 mm<sup>2</sup> ÷ 2.5 mm<sup>2</sup>
·Rated impulse voltage: 2.5 kV
·Software: class A
·Radio emission: the appliance intentionally emits radio waves at a frequency band of 2412-2472 MHz (Wi-Fi),
                 with a max, power lower than 100 mW e.i.r.p.
Integrated PCB aerial, indicated range 100 m outdoors, approximately 20 m indoors
·72-hour charge (ensures current time advance)
·Non-volatile memory to store settings and programming carried out
·Temperature scale: °C (Celsius) default or °F (Farenheit)
•Weekly programming, with 1 minute resolution, precision +/- 1 minute
·10 programmable temperature levels a day
·Set temperature: +4 °C ÷ +37.7 °C, at 0.1 °C steps
·Room temperature measurement: 0 °C ÷ +37.7 °C, resolution 0.1 °C, precision +/- 1 °C
·Operating temperature: 0 °C ÷ +45 °C
·Storage temperature: -10 °C ÷ +60 °C
·Temperature control mode:
 - ON/OFF differential (default setting) Hysteresis settable from 0.2 °C to 1.2 °C at 0,1 °C steps (default 0,3 °C)
 - PID modulating proportional settable from 7 to 20 minutes at 1 minute steps (default 7 minutes)
·Antifreeze mode (Winter) settable +4 °C ÷ +12 °C (default 5 °C)
·Thermal protection mode (Summer) settable +37,7 °C ÷ +30 °C (default in OFF - disabled)
·ERP Energy classification Reg. EU 811/2013:
 - in ON/OFF differential mode = ERP Class I 1%
 - in modulating proportional mode = ERP Class IV 2%
Insulation class: Class II
·Protection rating: IP30
·Rate of pollution: Normal
Descaling function of the pump (it is activated for 2 minutes if it has never been activated in the previous 24h)
·Operating mode: Heating (default setting) / Cooling
·Thermal gradient: 1°K
```

Temperature for marble test: terminals, printed circuit 125° C; enclosure 75° C