

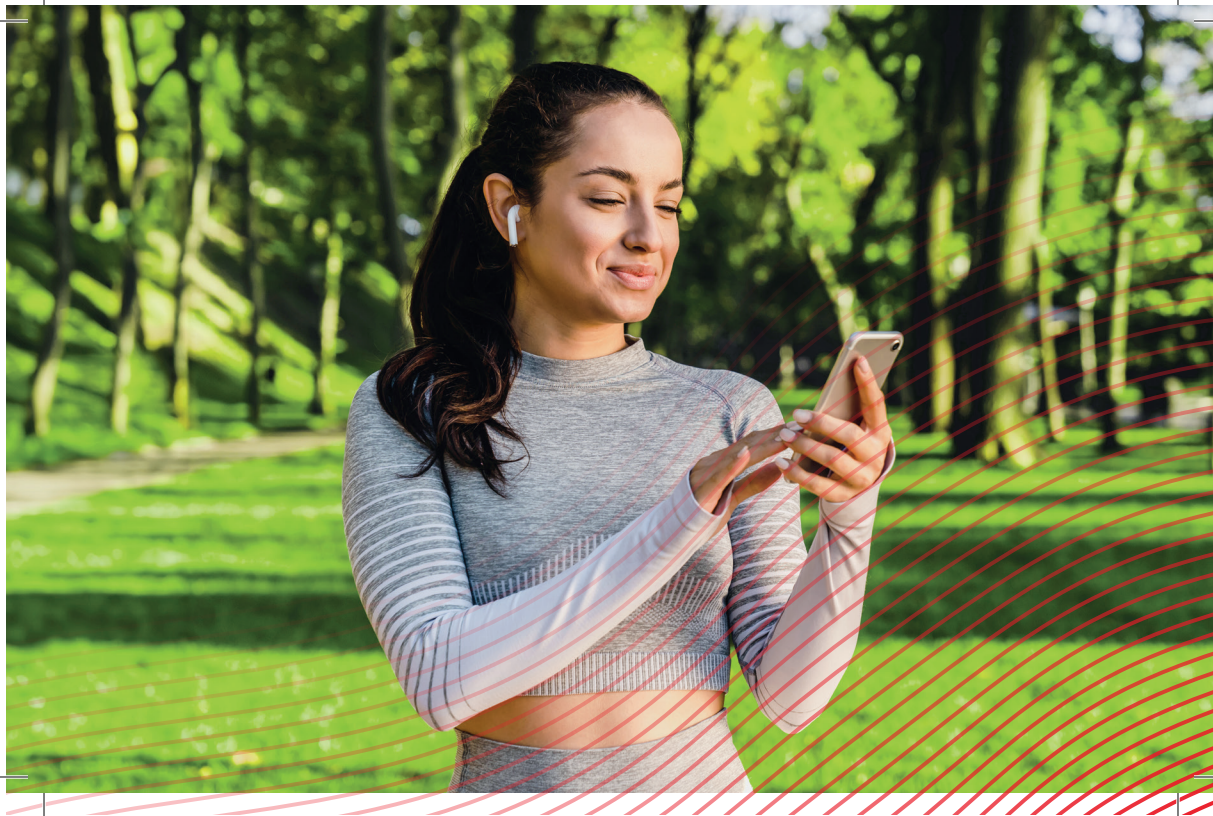


# TMEC Wi-Fi

IMMERSION HEATER  
AND THERMOSTAT

INSTALLATION  
GUIDE

PUT YOUR CYLINDER  
IN YOUR POCKET



Thank you for purchasing the TMEC Wi-Fi!

The TMEC Wi-Fi must be always powered on and must be stable connected to your Wi-Fi network.

Enjoy it!

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## ||||| SAFETY INFORMATION

The TMEC Wi-Fi must be installed by a competent person or qualified engineer. Please read these instructions carefully. Failure to follow these instructions can damage the TMEC Wi-Fi or cause a hazardous condition.

The installer must ensure that the heating element is fully immersed in water and is only subjected to normal operating conditions in a domestic hot water system which conforms to BS699, BS1566 or BS3198, such as vented, unvented or solar thermal cylinder (hereinafter "the Cylinder"). No warranty is hereby given or implied in other uses except domestic.

The installer and the user must also ensure that there is water in the Cylinder before the TMEC Wi-Fi is switched on. If the TMEC Wi-Fi is allowed to run when the water level is not fully covering the heating element there may be serious damage incurred to the heater, property or persons.

The TMEC Wi-Fi must be fitted in accordance with the latest IEE wiring regulations and must be wired through a double pole isolator or suitable controller which must have a

contact separation of at least 3 mm in all poles. It is essential that the TMEC Wi-Fi plastic cap is never covered as this will potentially cause major problems with the working of the unit and can be very dangerous.

- **Always isolate the mains supply before installing the TMEC Wi-Fi or performing maintenance activities on it.**
- **The TMEC Wi-Fi must not be modified in any way.**
- **The TMEC Wi-Fi must be earthed.**
- **To reduce the risk of scalding, it is recommended that the temperature set point is set no higher than 65°C.**

The TMEC Wi-Fi can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the TMEC Wi-Fi in a safe way and understand the hazards involved. Children shall not play with the TMEC Wi-Fi. Cleaning and user maintenance shall not be made by children without supervision.

This publication is based on information available when approved for printing. Ongoing design refinements may lead to changes not included in this publication.

The Manufacturer warrants that as from the date of purchase of the TMEC Wi-Fi for a period of

- **TMEC Wi-Fi Retrofit Kits: 2 (two) years for the electronic components (Wi-Fi module and TMEC Wi-Fi Thermostat);**
- **TMEC Wi-Fi Immersion Heaters with Alloy 800 element: 2 (two) years for the Heating Element and for the electronic components (Wi-Fi module and TMEC Wi-Fi Thermostat);**
- **TMEC Wi-Fi Immersion Heaters with Titanium element: 3 (three) years for the Heating Element, 2 (two) years for the electronic components (Wi-Fi module and TMEC Wi-Fi Thermostat);**
- **SOLTEC Wi-Fi Immersion Heaters with Titanium element: 3 (three) years for the Heating Element, 2 (two) years for the electronic components (Wi-Fi module and TMEC Wi-Fi Thermostat);**

the TMEC Wi-Fi is free from any defects in design, workmanship, construction or materials ("Defect"). In the event of Defect, the Manufacturer will only offer a replacement of the faulty item. The Manufacturer will not be held responsible for any replacement or re-installation costs, travelling expenses, etc.

## WARRANTY

This warranty does not cover defects or damages due to improper installation, alteration, accident or any other event beyond the control of the Manufacturer. Defect or damage resulting from misuse, abuse or negligence will void this warranty. This warranty does not cover wear and tear under normal operating conditions.

All warranty claims must be made in written form through the retailer where the TMEC Wi-Fi was originally purchased within 10 (ten) days from the Defect discovery. A purchase receipt or other proof of date of purchase of the TMEC Wi-Fi will be required to process all warranty claims. The model number and the part number found on the TMEC Wi-Fi label will be required when submitting any warranty claims.

This express warranty is in lieu of any warranty of merchantability, fitness for a particular purpose, or other warranty. In no event shall Manufacturer be liable for general or consequential damages, whether resulting from delay in delivery, loss of use, parts failure, or other cause.

## ||||| BOX CONTENTS

	PLASTIC CAP	TMEC Wi-Fi THERMOSTAT	HEATING ELEMENT	INSTALLATION GUIDE
TMEC Wi-Fi Retrofit Kits (*)	✓	✓	✗	✓
TMEC Wi-Fi Immersion Heaters	✓	✓	✓	✓
SOLTEC Wi-Fi Immersion Heaters	✓	✓	✓	✓

\* TMEC Wi-Fi Accessory only suitable for Thermowatt SMART Immersion Heaters (model numbers: 3402106, 3402107, 000003402106, 000003402107, 3402029, 3402053, 3402060, 3402061, 3402098).

## DESCRIPTION OF COMPONENTS

The TMEC Wi-Fi Immersion Heaters and the SOLTEC Wi-Fi Immersion Heaters are complete heating solutions in which heating element, controls and Wi-Fi module are fully integrated:

- 1 | TMEC Wi-Fi THERMOSTAT
- 2 | PLASTIC CAP
- 3 | HEATING ELEMENT

## 1 | TMEC Wi-Fi THERMOSTAT HEATING SYSTEM MANAGER

The heating control is managed by the TMEC Wi-Fi Thermostat, MEChatronic Thermostat patented by Thermowatt with electronic temperature control and mechanical bipolar safety cut-out.

In addition to the basic functions of a mechanical thermostat, thanks to the self-learning ECO mode, the TMEC Wi-Fi Thermostat has the possibility to record the end user's habits and adapt the temperature of the water in terms of time and energy content, ensuring comfort at all times, increasing energy efficiency and saving.

Furthermore, the TMEC Wi-Fi Thermostat provides additional features such as the Wi-Fi connection, the PROGRAMMING (AUTO) and HOLIDAY modes, the diagnostic for the malfunction management and the Antifreeze and Antibacterial always-on functions.

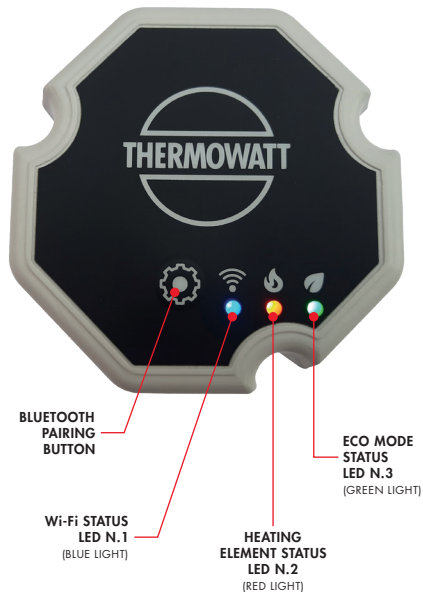
The TMEC Wi-Fi Thermostat is equipped with an on-board potentiometer that enables the available working modes: MANUAL, ECO, OPK / Wi-Fi, OFF. Other working modes such as PROGRAMMING (AUTO) and HOLIDAY are available via APP only (the potentiometer has to be in OPK / Wi-Fi position).



## 2 | PLASTIC CAP PLASTIC COVER EQUIPPED WITH WI-FI MODULE AND LINK WIRE

The Wi-Fi module is an electronic board that, if connected to the TMEC Wi-Fi Thermostat with the link wire and if the potentiometer is in OPK / Wi-Fi mode position, allows to control the heating element remotely via APP.

The Wi-Fi module is equipped with 1 button and 3 LEDs:



#### **BUTTON**

The button enables the Bluetooth pairing procedure for the Wi-Fi network configuration, to be performed via APP.

#### **LED N.1**

**LED n.1 (blue light) is the indicator of the Wi-Fi status**

- when the Wi-Fi module is connected to the Wi-Fi network → LED On Steady
- when the Wi-Fi module is not connected to the Wi-Fi network → LED Off
- when the Wi-Fi module is in configuration / pairing process → LED Blinking

#### **LED N.2**

**LED n.2 (red light) is the indicator of the heating element status**

- when the heating element is switched on → LED On Steady
- when the heating element is switched off → LED Off
- if an error or a warning is detected by the TMEC Wi-Fi Thermostat → LED Blinking

#### **LED N.3**

**LED n.3 (green light) is the indicator of the ECO mode status**

- when the ECO mode is enabled → LED On Steady
- when the ECO mode is not enabled → LED Off

<b>WORKING MODES</b>	<b>LED N.2 (RED LIGHT)</b>	<b>LED N.3 (GREEN LIGHT)</b>
<b>OFF</b>		
No heating	OFF	OFF
Antifreeze heating	ON	OFF
Antibacterial heating	ON	OFF
Warning or error detected	Blink	OFF
<b>ECO</b>		
Heating in progress	ON	ON
No heating	OFF	ON
Antibacterial heating	ON	ON
Warning or error detected	Blink	ON
<b>MANUAL</b>		
Heating in progress	ON	OFF
No heating	OFF	OFF
Antibacterial heating	ON	OFF
Warning or error detected	Blink	OFF

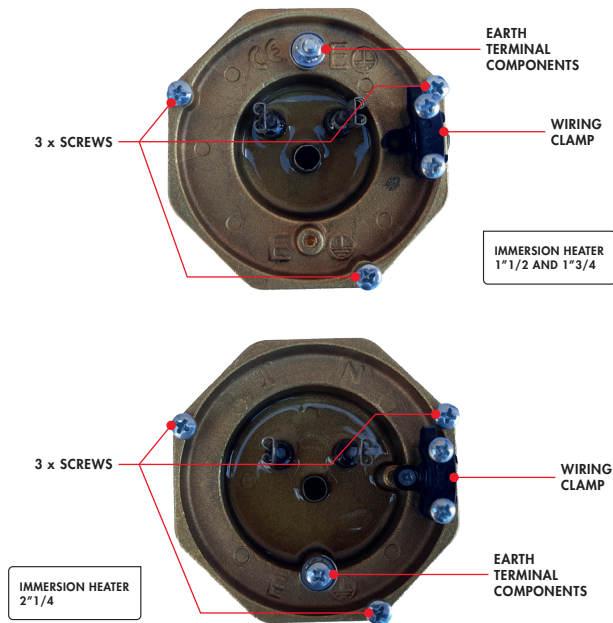
<b>PROGRAMMING (AUTO)</b>	<b>LED N.2 (RED LIGHT)</b>	<b>LED N.3 (GREEN LIGHT)</b>
Heating in progress	ON	OFF
No heating	OFF	OFF
Antibacterial heating	ON	OFF
Warning or error detected	Blink	OFF
<b>HOLIDAY</b>		
No heating	OFF	OFF
Antifreeze heating	ON	OFF
Antibacterial heating	ON	OFF
Warning or error detected	Blink	OFF

<b>SAFETY CUT-OUT INTERVENTION</b>	<b>LED N.2 (RED LIGHT)</b>	<b>LED N.3 (GREEN LIGHT)</b>
Mechanical bipolar disconnection from the mains supply	OFF	OFF

### 3 | HEATING ELEMENT TITANIUM OR ALLOY 800 ELEMENT, GASKET, EARTH TERMINAL COMPONENTS AND WIRING CLAMP

Alloy 800 elements are recommended in areas where the water conditions are from soft to hard and for Cylinders equipped with magnesium anode, while titanium elements are suitable for every use even in case of very hard and aggressive water conditions but recommended for Cylinders without magnesium anode.

Choosing the proper length of the element is important to obtain the maximum efficiency in terms of hot water production; it is recommended an element maximum length of 14" for horizontal fitting with side entry and vertical fitting with bottom entry, while an element length above 14" for vertical fitting with top entry.



## ||||| TMEC Wi-Fi INSTALLATION

Always isolate the mains supply before installing the TMEC Wi-Fi.

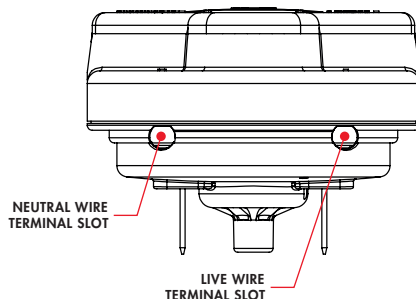
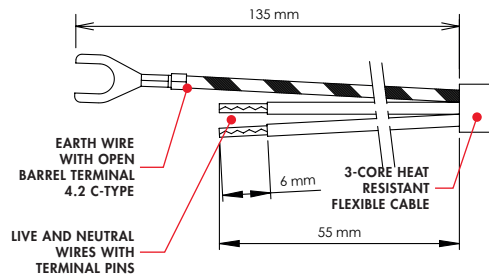
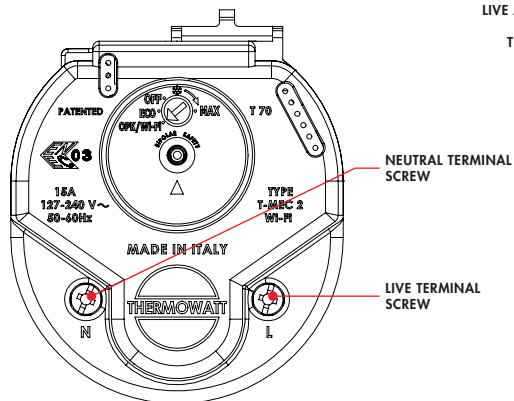
Check your mains supply power voltage matches the voltage rating indicated on the label of the Plastic Cap.

The TMEC Wi-Fi must be wired with a heat resistant flexible cord with a minimum T rating of "T-80" and with a minimum cross-section area of 1.5 mm<sup>2</sup>.

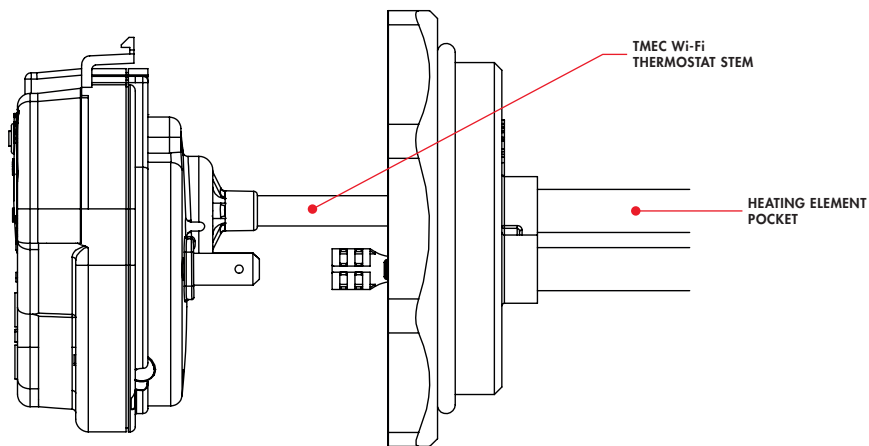
**If you have purchased the TMEC Wi-Fi Accessory (TMEC Wi-Fi Retrofit Kits) only suitable for Thermowatt SMART Immersion Heaters (model numbers: 3402106, 3402107, 000003402106, 000003402107, 3402029, 3402053, 3402060, 3402061, 3402098), remove the cap from the existing immersion heater, disconnect the Live, the Neutral and the Earth wires from the immersion heater, release all the wires from the wiring clamp, remove the thermostat and jump directly to the following step 6.**

- ① Before fitting the Heating Element into the tank, ensure that the unit is not too long and does not interfere with the inside surface of the tank. It is recommended that there is a minimum of 15 mm between the end of the Heating Element and the inside of the tank.
- ② The TMEC Wi-Fi should only be installed in a system where the Heating Element is always below the water level.
- ③ In case of immersion heater replacement, allow the water in the Cylinder to cool down sufficiently, empty the system from water and remove the existing immersion heater.
- ④ The Heating Element must be fixed to the Cylinder using the gasket as supplied (silicone lubricant on rubber gasket is recommended), tightening with a good fitting spanner to prevent any damage to the TMEC Wi-Fi. In case of previous gasket replacement, remove all traces and residuals. Ensure that the unit is properly tightened into the tank boss.
- ⑤ Fill the system with water according to your standard procedure to ensure that all air pockets are removed and check for leaks around the joint.

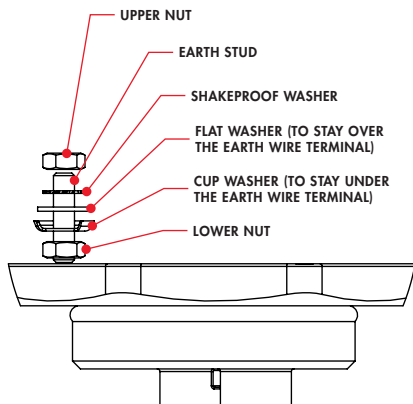
- 6 Connect the Live and Neutral wires to the TMEC Wi-Fi Thermostat terminal slots and ensure that the terminal screws (respectively marked "L" and "N") are properly tightened (from 1 Nm to 2 Nm) to avoid poor electrical connections and prevent the terminations being broken off. Recommended wires length and terminal types (wires / cable are not supplied with the TMEC Wi-Fi) are shown in the picture.



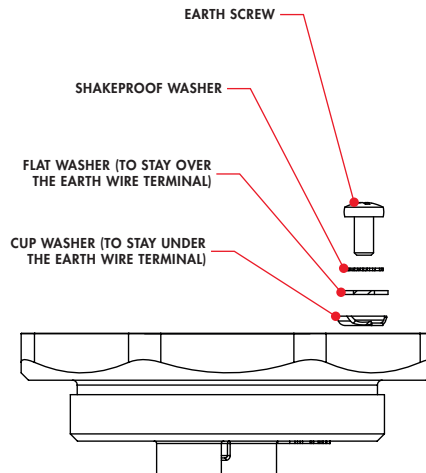
- ⑦ Insert partially the TMEC Wi-Fi Thermostat stem into the heating element pocket.



- 8 Connect the Earth wire to the head of the heating element, fixing the Earth wire terminal between the flat washer and the cup washer.

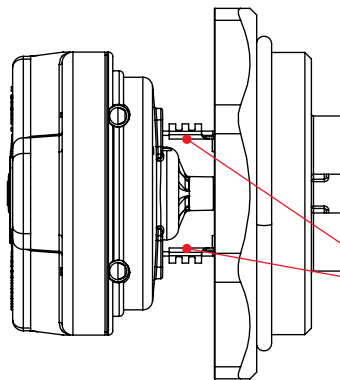


IMMERSION HEATER 1"1/2 AND 1"3/4

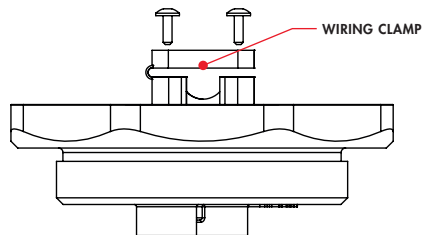


IMMERSION HEATER 2"1/4

- 9 Complete the insertion of the TMEC Wi-Fi Thermostat stem into the heating element pocket and ensure that the TMEC Wi-Fi Thermostat faston terminals fit within the heating element spade connectors. Improper or poor electric contact between faston terminals and spade connectors could generate serious damage to the heater, property or persons.

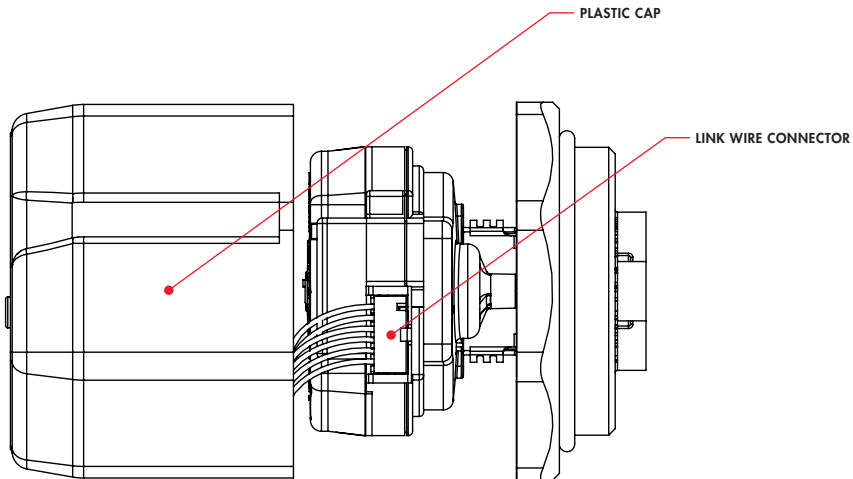


TMEC Wi-Fi THERMOSTAT FASTON TERMINALS  
PROPERLY INSERTED INSIDE HEATING ELEMENT  
SPADE CONNECTORS

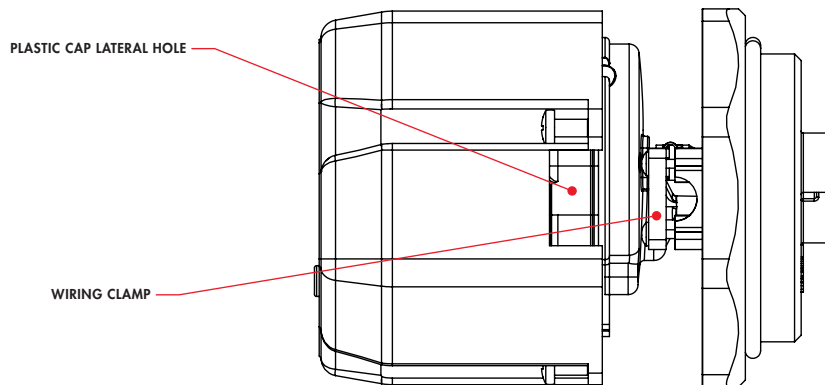


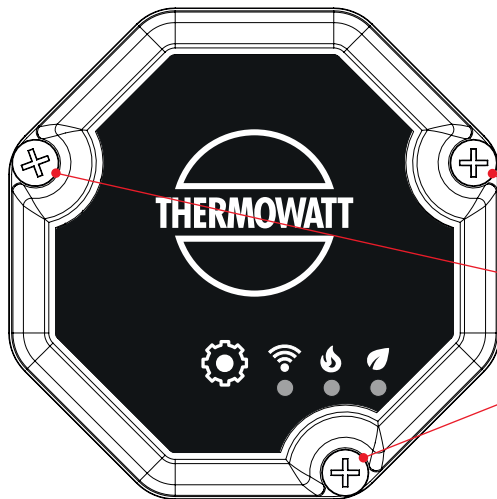
- 10 Ensure that all the electric connections are good and solid before securing all the wires (the cable) into the wiring clamp in the head of the heating element.

- ⑪ Connect the link wire of the Plastic Cap to the TMEC Wi-Fi Thermostat, ensuring that the connection is good and solid.



- 12 Align the lateral hole of the Plastic Cap to the wiring clamp of the heating element head and secure the two parts together with the three screws.





- ⑬ The Cylinder must be full with cold water and the heating element must be fully submerged before powering up.
- ⑭ Turn on the mains supply circuit breaker to enable power to the TMEC Wi-Fi. The LED n.2 (red light) and the LED n.3 (green light) switch on steady except in case of SOLTMEC Wi-Fi Immersion Heaters where the LED n.2 (red light) switches on steady only.

3 x SCREWS

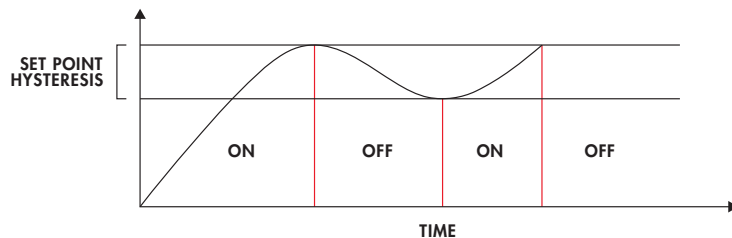
## ||||| OPERATING GENERAL OVERVIEW

The TMEC Wi-Fi Thermostat switches on and off the heating element to reach the target temperature.

If the measured temperature is lower than the difference between the set point and the hysteresis, the TMEC Wi-Fi Thermostat switches on the heating element.

If the measured temperature is higher than the set point, the TMEC Wi-Fi Thermostat switches off the heating element.

The set point and the hysteresis values are established according to the selected working mode.



## FACTORY SETTINGS

The first time the TMEC Wi-Fi is switched on, the TMEC Wi-Fi Thermostat starts to work in ECO mode except in case of SOLTMEC Wi-Fi Immersion Heaters where the TMEC Wi-Fi Thermostat starts to work in MANUAL mode.

If the TMEC Wi-Fi is disconnected by the mains supply and then reconnected or after a volatile error resolution, the TMEC Wi-Fi Thermostat restarts to work in accordance with the last selected working mode.

## WI-FI REMOTE CONNECTION VIA APP

If the TMEC Wi-Fi Thermostat potentiometer is in OPK / Wi-Fi position and the TMEC Wi-Fi Thermostat is stable connected with the link wire to the Wi-Fi module, the TMEC Wi-Fi can be managed remotely via APP.

The TMEC Wi-Fi configuration is performed via APP through the Bluetooth.

Press for 5 seconds the button on the Plastic Cap to enable the Bluetooth for the Wi-Fi network first configuration or to update the Wi-Fi network parameters.

When the configuration is completed, the Wi-Fi module switches off the Bluetooth and the TMEC Wi-Fi starts to communicate with the Wi-Fi network set by the end user.

For more details, see MOBILE APPLICATION section.

## ||||| WORKING MODES

### OFF

The heating element is off, except when Antibacterial or Antifreeze functions are running.

### ECO

ECO is the TMEC Wi-Fi Thermostat self-learning mode based on a 7-day cycle.

#### FIRST WEEK

The set point is 70°C, with a hysteresis of 12°C except in case of SOLTMEC Wi-Fi Immersion Heaters where the hysteresis is 8°C. The TMEC Wi-Fi Thermostat learns the end user's habits, recording time and temperature drop ( $\Delta T$ ) during each withdrawal.

#### FOLLOWING WEEKS

The set point is automatically calculated by the TMEC Wi-Fi Thermostat in accordance with the previous week learning, providing the exact amount of hot water at the right time to satisfy the end user's habitual needs; the comfort is always ensured by a minimum set point of 40°C, with a hysteresis of 12°C except in case of SOLTMEC Wi-Fi Immersion Heaters where the hysteresis is 8°C.

During each week, the TMEC Wi-Fi Thermostat continues to learn the end user's habits for the next week.

The self-learning mode starts (or is reset) each time

- **ECO mode is selected by the end user,**
- **if a disconnection by the mains supply lasts for more than 15 minutes.**

Antibacterial function is enabled.

## MANUAL

The TMEC Wi-Fi Thermostat works as a mechanical thermostat: the TMEC Wi-Fi Thermostat switches on the heating element to reach the desired set point selected manually by the end user, with a hysteresis of 12°C except in case of SOLTMEC Wi-Fi Immersion Heaters where the hysteresis is 8°C.

Antibacterial function is enabled.

## PROGRAMMING (AUTO)

PROGRAMMING (AUTO) is the TMEC Wi-Fi Thermostat working mode available via APP only (the TMEC Wi-Fi Thermostat potentiometer has to be in OPK / Wi-Fi position), based on the weekly cycle set by the end user via APP and tailor-designed to end users who want to get maximum control.

The heating element switches on to reach the temperature set point during the time slots selected by the end user, ensuring always a minimum level of comfort defined through to the COMFORT temperature setting.

*Note: the heating element can switch on out of set periods in case of need: e.g., current temperature < COMFORT temperature or during the antibacterial cycle.*

For more details, see MOBILE APPLICATION section.

Antibacterial function is enabled.

## HOLIDAY

HOLIDAY is the TMEC Wi-Fi Thermostat working mode available via APP only (the TMEC Wi-Fi Thermostat potentiometer has to be in OPK / Wi-Fi position), that switches off the heating element until the date set by the end user via APP, when the TMEC Wi-Fi Thermostat will restart to work in accordance with the previously selected working mode.

Antibacterial and Antifreeze functions are enabled.

## ||||| ALWAYS-ON FUNCTIONS

### ANTIBACTERIAL FUNCTION

The Antibacterial cycle is enabled by default.

The Antibacterial cycle starts if the measured temperature does not exceed 62°C for 15 minutes

- **within 3 days after that the end user switches off and then switches on the TMEC Wi-Fi,**
- **within 3 days after that the TMEC Wi-Fi is disconnected by the mains supply and then reconnected (e.g., after the first installation or a maintenance intervention, after a power failure from the mains supply),**
- **for 30 consecutive days.**

When the Antibacterial cycle starts, the TMEC Wi-Fi Thermostat fixes the set point to 70°C, with a hysteresis of 8°C. The Antibacterial cycle ends as soon as the measured temperature exceeds 62°C for 15 minutes.

### ANTIFREEZE FUNCTION

The function is enabled by default and designed to protect the Cylinder against freezing.

The TMEC Wi-Fi Thermostat switches on the heating element to reach the measured temperature of 16°C, with a hysteresis of 11°C.

## MALFUNCTIONING AND SAFETY FUNCTIONS

The TMEC Wi-Fi Thermostat continuously checks the measured temperatures to detect immediately any situations of malfunctioning or danger for the user and the system. Warnings, volatile and non-volatile errors are notified via MyThermowatt APP. For more details, see MOBILE APPLICATION section.

### WARNING

If a warning is detected, the TMEC Wi-Fi Thermostat continues to work in accordance with the selected working mode.

The TMEC Wi-Fi Thermostat warning status disappears if

- the warning conditions end,
- the end user switches off and then switches on the TMEC Wi-Fi,
- the TMEC Wi-Fi is disconnected by the mains supply and then reconnected.

### E4 - HEATING ELEMENT WARNING (LOW HEATING RATE)

The TMEC Wi-Fi Thermostat detects the warning if the heating element is on for more than two consecutive hours and the measured temperature does not increase more than 2°C (e.g., if any hot water tap is open).

The TMEC Wi-Fi Thermostat warning status automatically disappears if the measured temperature increases more than 2°C.

### VOLATILE ERRORS (QUALIFIED TECHNICIAN INTERVENTION RECOMMENDED)

If a volatile error is detected, the TMEC Wi-Fi Thermostat switches off the heating element.

When a volatile fault is solved, the TMEC Wi-Fi Thermostat error status automatically disappears and the TMEC Wi-Fi Thermostat restarts to work in accordance with the last selected working mode (automatic reset).

## **E2 - SENSORS OPEN/SHORT CIRCUIT**

The TMEC Wi-Fi Thermostat error status appears if at least one of the two sensors reads a value out of the suitable range. The TMEC Wi-Fi Thermostat error status automatically disappears if both sensors read a value included in the range.

## **E3 - SENSORS DIFFERENTIAL ERROR**

The TMEC Wi-Fi Thermostat error status appears if the difference between the temperatures measured by the two sensors is higher than 50°C. The TMEC Wi-Fi Thermostat error status automatically disappears if the difference between the temperatures measured by the two sensors is lower than 42°C.

## **E9 - MISSING COMMUNICATION**

The TMEC Wi-Fi Thermostat error status appears if the Wi-Fi module does not be detected (disconnection) for more than 10 seconds. The TMEC Wi-Fi Thermostat error status automatically disappears if the Wi-Fi module is reconnected.

## **NON-VOLATILE ERROR (QUALIFIED TECHNICIAN INTERVENTION REQUIRED)**

If a non-volatile error is detected, the TMEC Wi-Fi Thermostat switches off the heating element. The TMEC Wi-Fi Thermostat error status disappears only after a manual reset done by a qualified technician.

### **A2 - DRY HEATING**

**Always isolate the mains supply before performing maintenance activities on the TMEC Wi-Fi.**

The TMEC Wi-Fi Thermostat error status appears if the measured temperature increases more than 20°C in 30 seconds.

The intervention of a qualified technician is required to assess the potential damages and solve the severe malfunction's root causes. The TMEC Wi-Fi could be reconnected to the mains supply only after a manual reset done by a qualified technician.

In order to perform the manual reset,

- **ensure that the Cylinder is full with water and the heating element is fully submerged;**
- **remove the screws and the Plastic Cap;**

- turn on temporary the mains supply circuit breaker to enable power to the TMEC Wi-Fi (ATTENTION: do not touch live parts!);
- switch off (hold in OFF position for at least 5 seconds) and then switch on the TMEC Wi-Fi through the potentiometer on the TMEC Wi-Fi Thermostat; the potentiometer has to be in OPK / Wi-Fi position to control the TMEC Wi-Fi via APP;
- turn off the mains supply circuit breaker to cut power to the TMEC Wi-Fi;
- put the Plastic Cap back and secure it to the heating element head with screws;
- turn on the mains supply circuit breaker to enable power to the TMEC Wi-Fi.

## SAFETY CUT-OUT INTERVENTION (QUALIFIED TECHNICIAN INTERVENTION REQUIRED)

Always isolate the mains supply before performing maintenance activities on the TMEC Wi-Fi.

If the temperature measured by the mechanical safety device is above the safety threshold (stem safety reaction

temperature), the TMEC Wi-Fi Thermostat disconnects from the mains supply.

The intervention of a qualified technician is required to assess the potential damages and solve the severe malfunction's root causes. The TMEC Wi-Fi could be reconnected to the mains supply only after a manual reset done by a qualified technician.

In order to perform the manual reset,

- ensure that the Cylinder is full with cold water;
- remove the screws and the Plastic Cap;
- press the bipolar safety pin on the TMEC Wi-Fi Thermostat;
- put the Plastic Cap back and secure it to the heating element head with screws;
- turn on the mains supply circuit breaker to enable power to the TMEC Wi-Fi.





## MOBILE APPLICATION

### MyThermowatt DOWNLOAD

The MyThermowatt APP is available on Google Play and Apple Store for downloading on your mobile phone or tablet.

- ① Access to the Google Play or Apple Store with your Google / iOS account.
- ② Download the application.

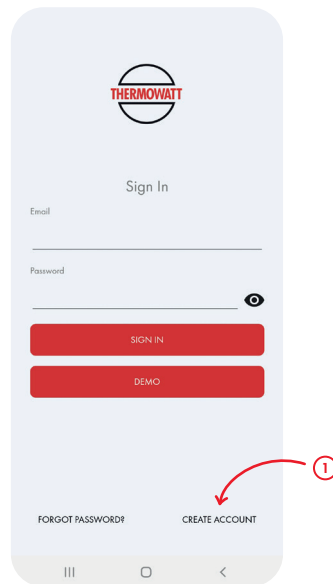
QR code for the MyThermowatt APP download from Google Play and Apple Store:



## MyThermowatt ACCOUNT CREATION AND CONFIGURATION

You can create your personal account on the SIGN IN page.

- ① Click on "CREATE ACCOUNT".
- ② Fill-in all the boxes and click on "CREATE ACCOUNT"; you will receive an email. Click on the link in the received email to activate the account; you will be redirected to the webpage confirming the successful activation.



Mobile app interface for 'CREATE ACCOUNT'. The screen has a red header with a back arrow, the text 'CREATE ACCOUNT', and a menu icon. The form includes fields for 'Email', 'Password', and 'Confirm password', each with a toggle icon for visibility. Below the fields are three checkboxes with labels: 'I have read and accept Terms and Conditions\* and Privacy Notice\*', 'I give express consent to the processing of my personal data for the purposes of profiling activities', and 'I give express consent to the processing of my personal data for the commercial/marketing purposes'. A red 'CREATE ACCOUNT' button is at the bottom. A red arrow points from the 'CREATE ACCOUNT' button to a circled number '2'.

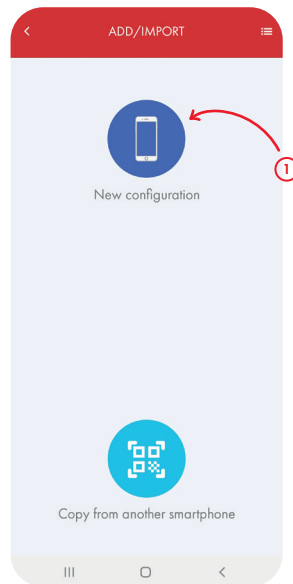
Mobile app interface for 'Sign In'. The screen has a light blue background. At the top is the 'THERMOWATT' logo. Below it is the title 'Sign In'. The form includes fields for 'Email' (containing 'name.surname@gmail.com') and 'Password' (masked with dots). A red 'SIGN IN' button is below the password field, with a red arrow pointing to it from a circled number '3'. Below the 'SIGN IN' button is a red 'DEMO' button. At the bottom are links for 'FORGOT PASSWORD?' and 'CREATE ACCOUNT'. The screen has a light blue header with a back arrow, the text 'Sign In', and a menu icon.

3 Fill-in the "Email" and "Password" boxes and click on "SIGN IN".

## TMEC Wi-Fi CONFIGURATION

Your first TMEC Wi-Fi configuration is required when you sign in for the first time.

- 1 Click on "New configuration".
- 2 Press for 5 seconds the button on the Plastic Cap; the Wi-Fi LED (LED n.1) starts blinking.
- 3 Enable localization and Bluetooth on your device, if required.
- 4 Fill-in all the boxes and click on "CONNECTION TO THE WATER HEATER"; you will be redirected to the HOME page. (\*)





\* If a connection error occurs, press again the button in the Thermowatt Wi-Fi module for 5 seconds and check the info in "Wi-Fi Network Name" and "Password" boxes before clicking on "CONNECTION TO THE WATER HEATER" again.

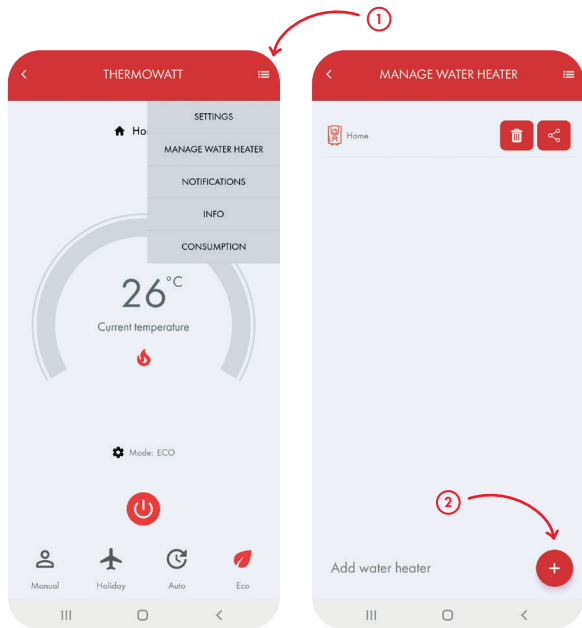
Enter the name of the Wi-Fi network to which the TMEC Wi-Fi has to be connected.

Enter the password of the Wi-Fi network to which the TMEC Wi-Fi has to be connected.

Enter the name you wish to identify the TMEC Wi-Fi.

Enter the Country and confirm it by selecting from the dropdown menu where the TMEC Wi-Fi is installed.

 A smartphone screen displaying the "ADD WATER HEATER" app. The screen has a red header with a back arrow, the title "ADD WATER HEATER", and a menu icon. Below the header are four input fields: "Wi-Fi Network Name", "Password" (with an eye icon), "Label", and "Country: Europe/Rome" (with a dropdown arrow). At the bottom is a red button labeled "CONNECTION TO THE WATER HEATER". A red arrow points from a circled number "4" to this button.

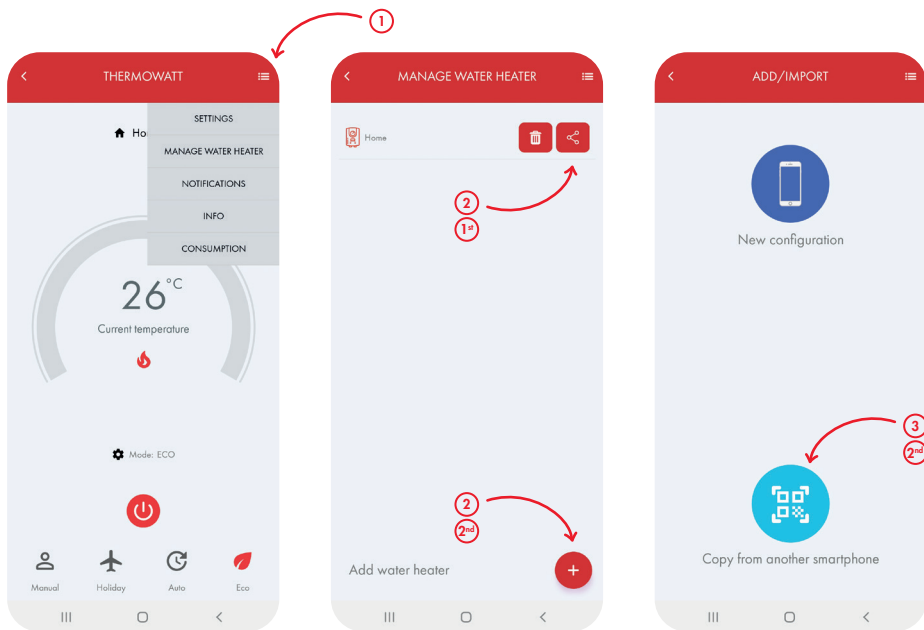


You can control more than one TMEC Wi-Fi with your MyThermowatt account.

- ① Click on the dropdown menu and click on "MANAGE WATER HEATER".
- ② Click on "Add water heater".
- ③ Repeat the procedure already described for the first TMEC Wi-Fi configuration.

You can control the same TMEC Wi-Fi with more than one MyThermowatt account.

- ① Click on the dropdown menu and click on "MANAGE WATER HEATER".
- ② 1<sup>st</sup> | MyThermowatt account: click on share button  
2<sup>nd</sup> | MyThermowatt account: click on "Add water heater".
- ③ 2<sup>nd</sup> MyThermowatt account: click on "Copy from another smartphone" and scan the QR Code generated from the 1<sup>st</sup> MyThermowatt account.



## MyThermowatt MAIN FEATURES

HOME page: you can select temperature set point / working mode and get info from your TMEC Wi-Fi.

### ① DROPDOWN MENU

You can enter the menu to manage settings, different TMEC Wi-Fi and info.

### ② SELECTED TMEC Wi-Fi

You can select from the dropdown menu which of your TMEC Wi-Fi you would like to control.

### ③ TEMPERATURE SET POINT

You can adjust the temperature set point moving the red balloon on the grey area.

### ④ CURRENT TEMPERATURE

The water temperature currently measured inside your Cylinder.

### ⑤ HEATING ELEMENT STATUS

Red flame when the heating element is switched on and grey flame when the heating element is switched off.

### ⑥ SELECTED WORKING MODE

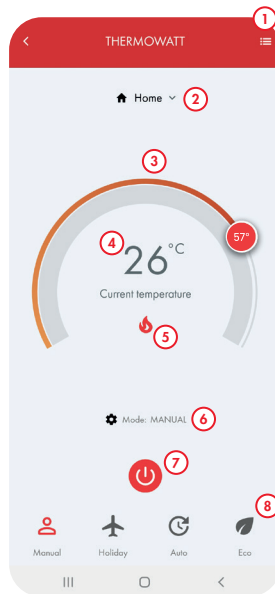
The working mode currently set.

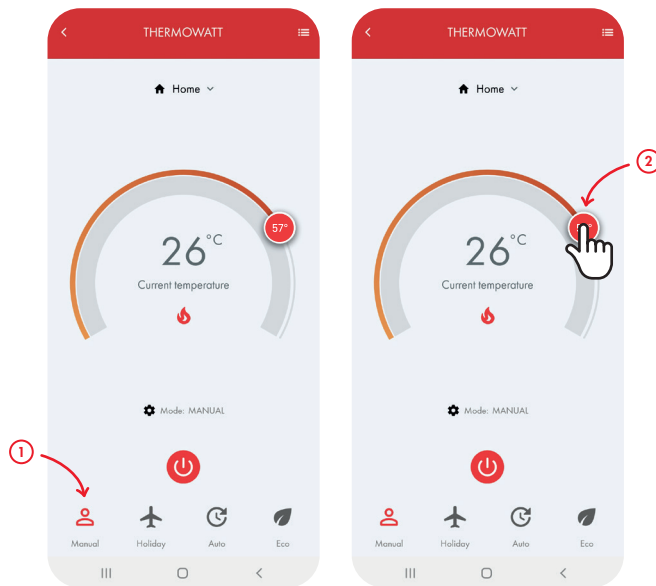
### ⑦ ON/OFF BUTTON

You can switch ON/OFF your TMEC Wi-Fi (red button when the TMEC Wi-Fi is switched on and grey button when the TMEC Wi-Fi is switched off).

### ⑧ WORKING MODES

You can select which working mode you would like to set (the red icon identifies the working mode currently set).





## WORKING MODES MANUAL

**PUT YOUR CYLINDER  
IN YOUR POCKET!**

- 1 Click on the "Manual" icon.
- 2 Adjust the temperature set point moving the red balloon on the grey area.

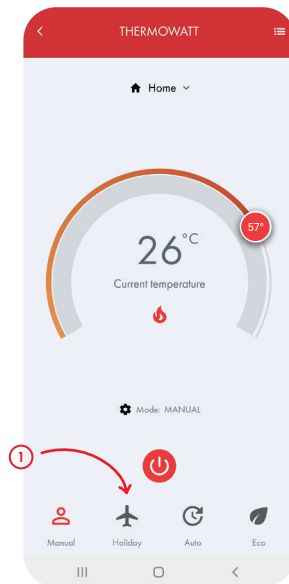
## WORKING MODES

### HOLIDAY

#### SAVE WHILE YOU ARE AWAY!

HOLIDAY working mode is available via APP only (the TMEC Wi-Fi Thermostat potentiometer has to be in OPK / Wi-Fi position).

- 1 Click on the "Holiday" icon to switch off temporarily the TMEC Wi-Fi.



- ② Select the date when the TMEC Wi-Fi will be switched on again (returning in the previously selected working mode) and click on "DONE".



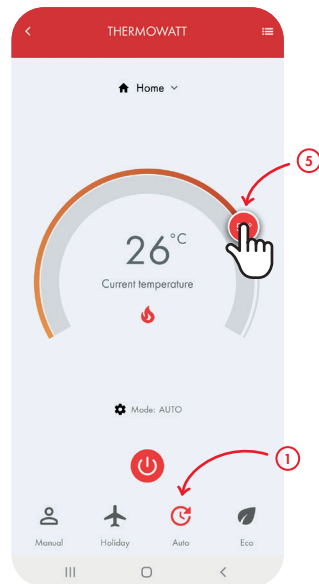
## WORKING MODES

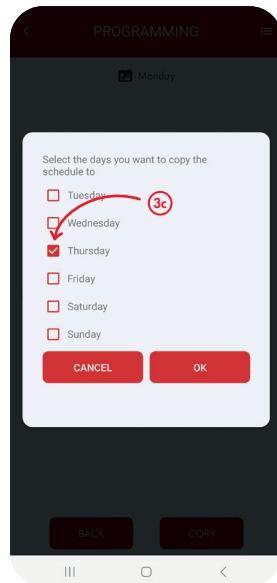
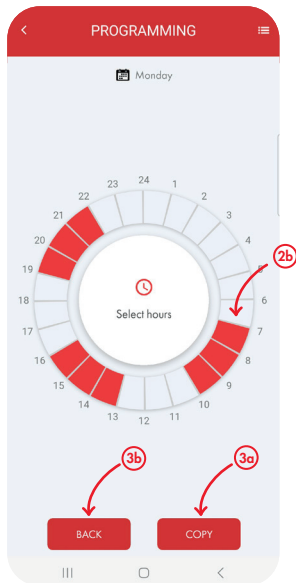
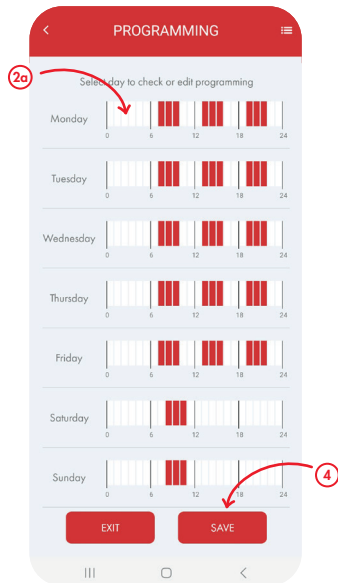
### PROGRAMMING (AUTO)

#### YOU FINALLY GET THE FULL CONTROL OF YOUR CYLINDER!

PROGRAMMING (AUTO) working mode is available via APP only (the TMEC Wi-Fi Thermostat potentiometer has to be in OPK / Wi-Fi position).

- 1 Click on the "Auto" icon to set the weekly programming.
- 2 Select the day of the week (2a) and the hours (red colored, 2b) when the heating element switches on to let the measured temperature inside the Cylinder reach the temperature set point.
- 3 Copy the schedule (click on "COPY", 3a) or repeat the previous step (click on "BACK", 3b) for each day of the week (3c).
- 4 Click on "SAVE".
- 5 Adjust the temperature set point moving the red balloon on the grey area.



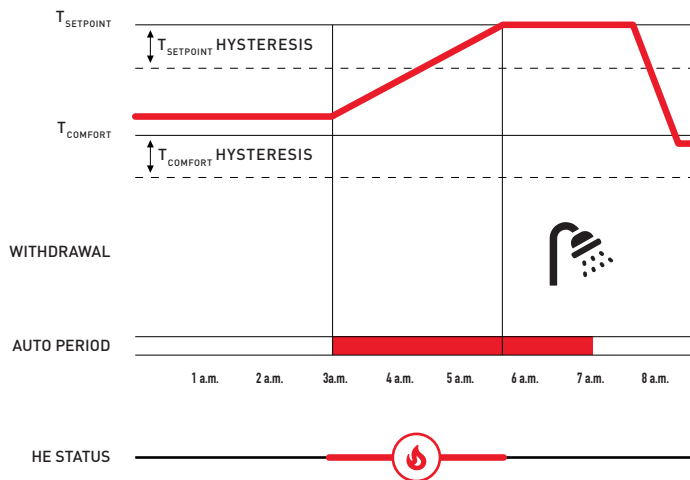


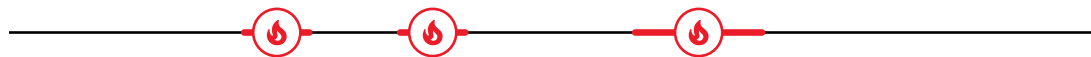
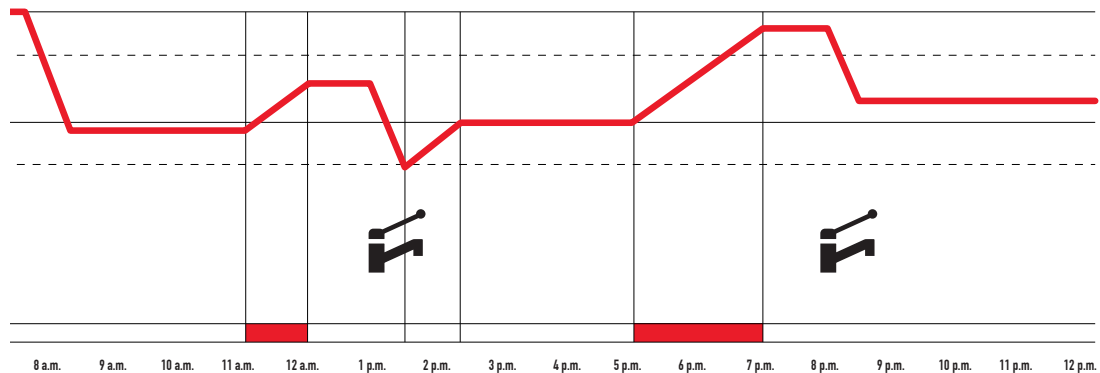
PROGRAMMING (AUTO) working mode with TIMER algorithm is the working mode tailor-designed to end users who want to get maximum control.

The end user sets the period in which the heating element can switch on to reach the temperature set point (\*).

TIMER algorithm guarantees always a minimum level of comfort decided by the end user through to the  $T_{COMFORT}$  setting (click on the dropdown menu → click on "SETTINGS" → fill in the "Tcomfort AUTO" box with a value  $< T_{SETPOINT}$  and click on "back arrow" to confirm).

\* The heating element can switch on out of set periods in case of need: e.g., current temperature  $< T_{COMFORT}$  AUTO or during the antibacterial cycle.





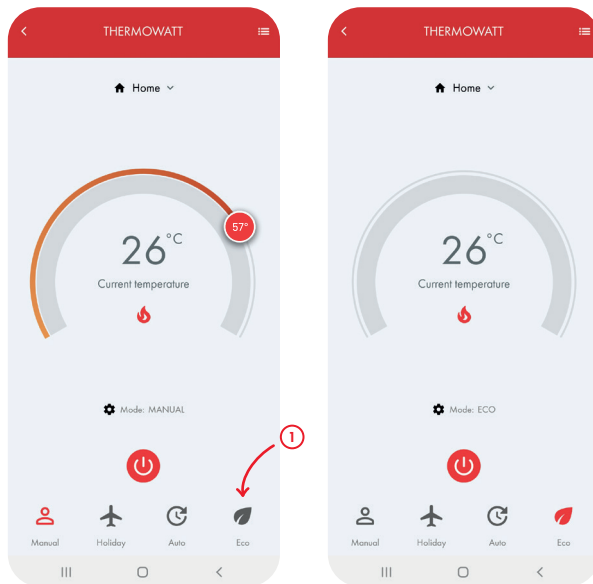
EXAMPLE

## WORKING MODES ECO

**LET THE TMEC Wi-Fi WORK  
FOR YOU!**

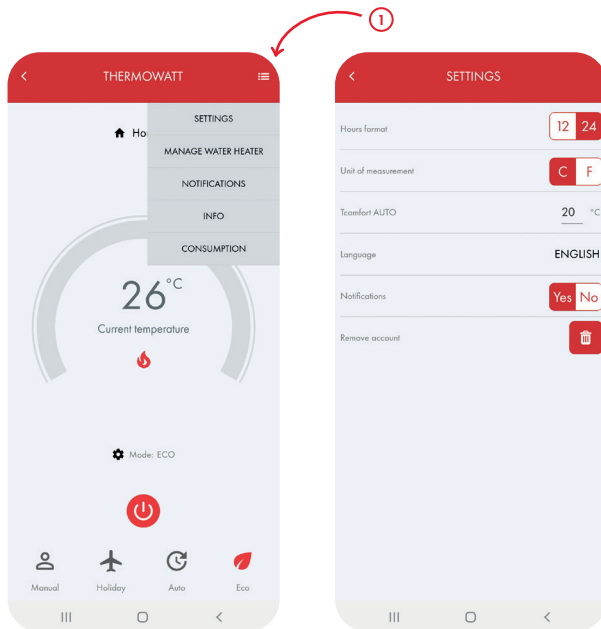
- 1 Click on the "Eco" icon to activate the self-learning mode. (\*)

\* The self-learning ECO Mode records the end user's habits and adapts the temperature set point of the TMEC Wi-Fi accordingly, in terms of time and energy content, ensuring comfort at any time and increasing energy consumption efficiency.



## SETTINGS

- ① Click on the dropdown menu and click on "SETTINGS".
- ② Select your preferences (red colored).

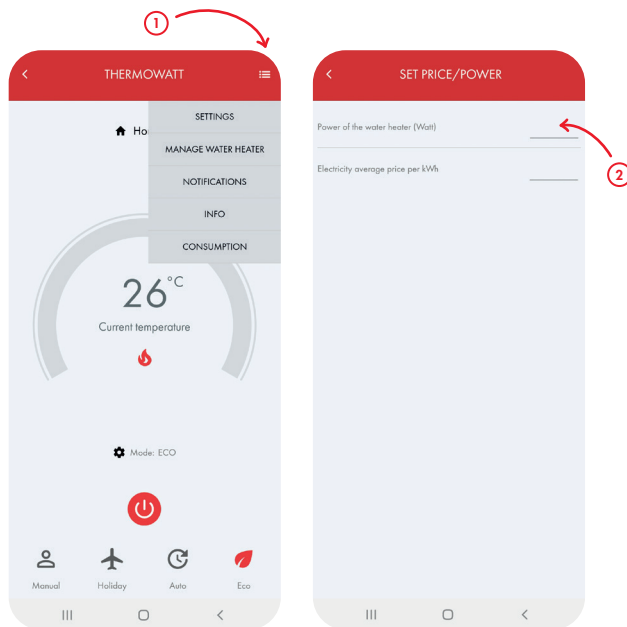


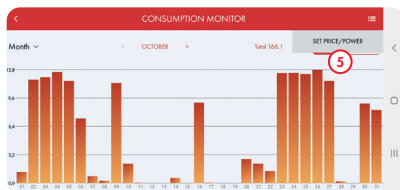
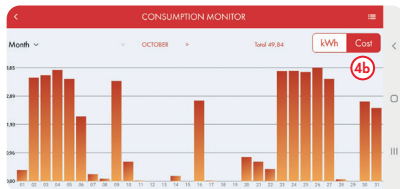
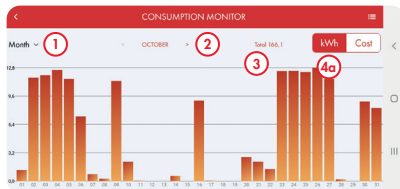
## MyThermowatt CONSUMPTION MONITORING

MyThermowatt can assess the energy consumption and related cost of your TMEC Wi-Fi providing dashboards to let you increase awareness and savings. The displayed values are an estimation of the real electrical consumption.

- ① Click on the dropdown menu and click on "CONSUMPTION".
- ② Fill-in all the boxes and click on "back arrow" to confirm.
- ③ MyThermowatt starts to assess the energy consumption and related cost of your TMEC Wi-Fi. (\*)

\* Missing Wi-Fi connection or interrupted power supply from the mains could generate incomplete reports.





### 1 TIME

You can select from the dropdown menu the period to monitor (day / month / year).

### 2 PREVIOUS / CURRENT

You can select with the arrows the current selected period or the previous one.

### 3 TOTAL

The total amount of energy consumption (or cost) for the whole selected period.

### 4 ENERGY CONSUMPTION / COST

You can select to monitor the energy consumption (4a) or the cost (4b).

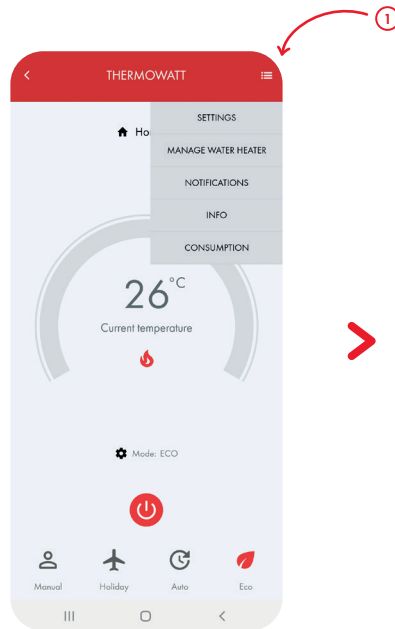
### 5 PRICE / POWER

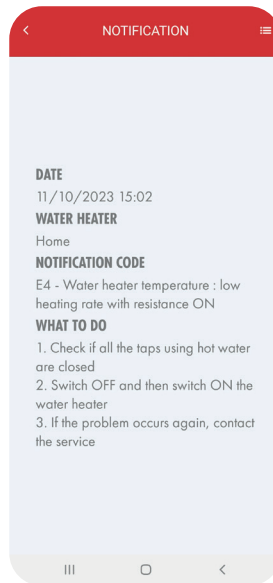
Whether you would modify the TMEC Wi-Fi power and/or the energy price, click on the dropdown menu and click on "SET PRICE/POWER".

## NOTIFICATIONS

MyThermowatt sends you notification in case of TMEC Wi-Fi info or malfunctioning suggesting you how to proceed (troubleshooting).

For notification history click on the dropdown menu and click on "NOTIFICATIONS".





## |||| TECHNICAL DATA SHEET

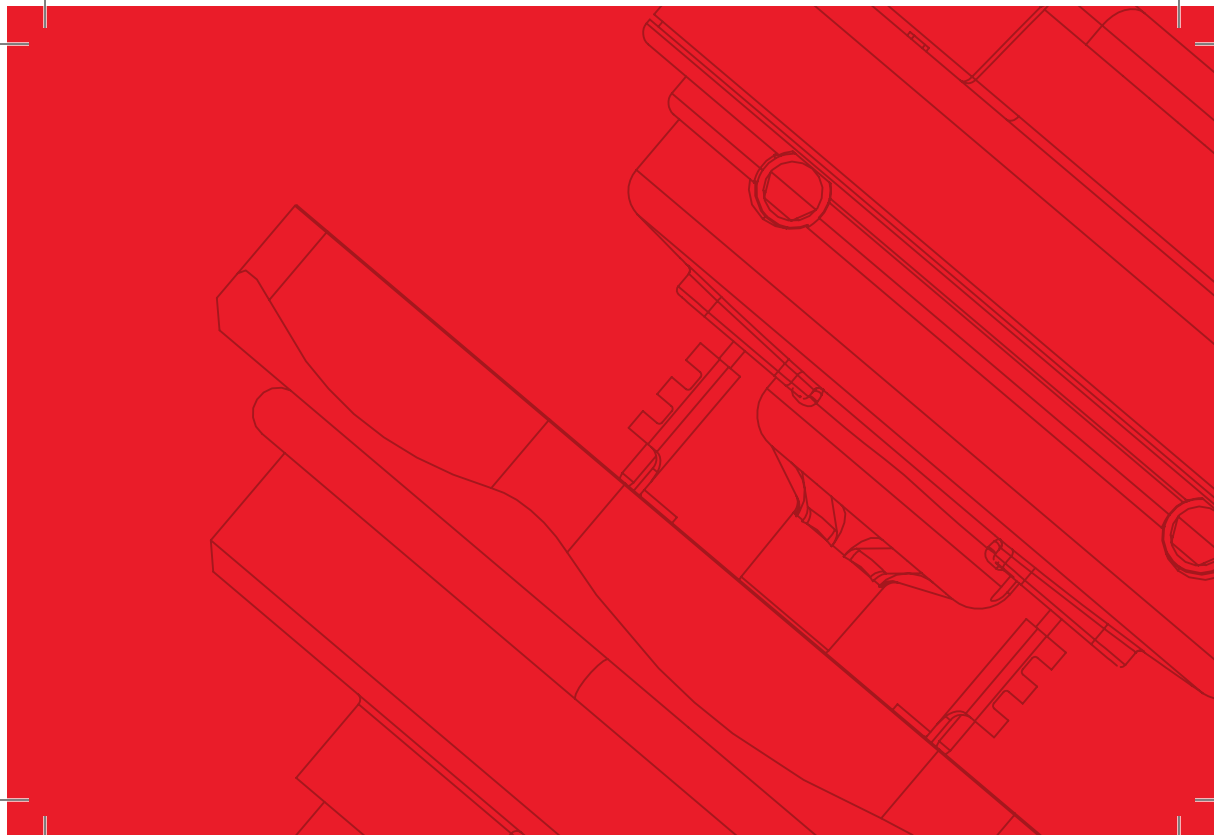
Thermostat type	Patented Wi-Fi SMART mechatronic thermostat with electronic temperature control and mechanical safety
Rated current / voltage	15 A / 127 - 240 V~
Max room temperature	70°C
Functional cut-off	Unipolar
Safety cut-out	Bipolar
Safety reset	Manual
Max functional temperature	70°C +/- 2°C
Stem safety reaction temperature	85°C +/- 5°C except in case of TMEC Wi-Fi Immersion Heaters for vertical fitting with top entry (90°C +8/-5°C) and in case of SOLTMEC Wi-Fi Immersion Heaters (110°C +8/-5°C)

Temperature selection range	From 20°C to 70°C
Thermal hysteresis	12°C except in case of SOLTMEC Wi-Fi Immersion Heaters (8°C)
Standard stem length	280 mm
Electrical connection	Screw terminals
IP Protection Rating	Designed to be IP20
External regulation	MyThermowatt APP
Wi-Fi protocol	IEEE 802.11 b/g/n (2.4 GHz band only)
Approvals	Conformity CE   UKCA for all the TMEC Wi-Fi WRAS available for TMEC Wi-Fi Immersion Heaters and SOLTMEC Wi-Fi Immersion Heaters BEAB available for TMEC Wi-Fi Immersion Heaters 1"3/4 and 2"1/4

The manufacturer reserves the right to make product improvements which may deviate from the specifications and descriptions stated herein, without obligation to change previously manufactured products or to note the change.

# TMEC Wi-Fi

PUT YOUR CYLINDER  
IN YOUR POCKET





QR code for  
Installation Guide  
download from  
Thermowatt website:



 [thermowatt.com](https://www.thermowatt.com)  
[thermowattservice@thermowatt.com](mailto:thermowattservice@thermowatt.com)

Installation Guide v03