

## SMARTTECH PLUS

Smart Chrono-thermostat  
Code 3.030909

immergas.com

Immergas S.p.A. 42041 Brescello (RE) - Italy  
Tel. 0522.689011 Fax 0522.680617

Code 1.044741ENG - Rev. ST.005019/007 - 04/2024

ENG - The version of the instruction sheet in this language can be downloaded from the website [www.Immergas.com](http://www.Immergas.com) or by pressing "Download Instructions and warnings" from the Smarttech App after downloading it from the appropriate App Store: App Store (Apple) or Play Store (Android).

The manufacturer Immergas S.p.A., hereby declares that the "Smarttech Plus" radio appliance complies with directive 2014/53/EU.

For further details on the product CE marking, request a copy of the Declaration of Conformity from the manufacturer, specifying the appliance model and the language of the country.

## FOREWORD.

Smarttech Plus is a Smart chrono-thermostat designed to guarantee ideal room temperature conditions at any time of the day and night for each individual day of the week. If connected to the Internet via home Wi-Fi, this device is able to remotely control the air-conditioning system in a simple and efficient way directly from one's smartphone. Smarttech Plus consists of Smarttech Plus Chrono-thermostat (hereinafter Chrono-thermostat) and Smarttech Plus Gateway (hereinafter Gateway).

It can be installed in a few minutes: the Gateway is powered at 230 Volt AC by the mains and must be connected to the generator via communication bus or operation request contact.

While the Chrono-thermostat, with independent battery power supply, does not require any electrical connection and is equipped with an e-ink technology display for displaying the main information such as room temperature, operation mode, etc. The Chrono-thermostat can be positioned on its table base (supplied in the package), or it can be wall-mounted.

Communication between Gateway and Chrono-thermostat is performed via Bluetooth connection, while between Gateway and Immergas Cloud via Wi-Fi.

The system is completed by the "Smarttech" application which can be downloaded from the iOS and/or Android Store and installed on the mobile device (smartphone). On completion of installation, the chrono-thermostat is already operational thanks to the pre-set program inside. Use of the dedicated app makes it extremely easy to program the Smarttech Plus system and to completely control all the set values.

## GENERAL WARNINGS.

This manual has been drafted for the installer and also includes basic instructions for the end user.

- Carefully read the warnings contained in this document as they provide indications on the technical features as well as the installation, assembly, programming, adjustment and use instructions.
- The device must be installed in compliance with electrical installation standards in force.
- This instruction manual and the "Smarttech" application manual must be "kept for future reference".
- After having removed the packaging, check the integrity of the Gateway, of the Chrono-thermostat and of the power cable supplied. If in doubt, do not use them and contact the Dealer or Manufacturer.
- The Gateway and the Chrono-thermostat are only intended for the use which they have been specifically designed for. Any other use must be considered improper and therefore dangerous.
- Our products are manufactured in compliance with current safety standards. During installation and use, it is recommended to observe all the precautions to avoid harming persons or damaging objects.
- Do not disassemble parts of the Gateway or the Chrono-thermostat when they are in operation.
- Do not use the Gateway and the Chrono-thermostat exposed to heat sources or direct sunlight.
- The manufacturer will not be held responsible in the following cases:
  - Incorrect installation.
  - Generator functioning defects to which the Chrono-thermostat and the Gateway module are connected.
  - Changes or interventions not authorised by the manufacturer.
  - Total or partial failure to comply with instructions.
  - Exceptional events etc.

**N.B.:** the Gateway and the Chrono-thermostat must be installed at least 2 m above the ground;

**BUL -** Версията на листовката с инструкции на този език може да бъде изтеглена от [www.Immergas.com](http://www.Immergas.com) или чрез натискане на бутона „Изтегляне на инструкции и предупреждения“ от приложението Smarttech, след като го изтеглите от съответния магазин за приложения: App Store (Apple) или Play Store (Android).

**FRA -** La version de la fiche d'instructions dans cette langue peut être téléchargée sur le site [www.Immergas.com](http://www.Immergas.com) ou en appuyant sur « Télécharger les instructions et les mises en garde » dans l'application Smarttech après l'avoir téléchargée à partir du magasin d'applications approprié : App Store (Apple) ou Play Store (Android).

**N.B.:** the Gateway and the Chrono-thermostat cannot be installed outdoors;

**N.B.:** the Gateway and the Chrono-thermostat cannot be installed less than 20 cm from the human body.

## CLEANING THE COVER.

Use a dry cloth to clean the cover of the Gateway and of the Chrono-thermostat. Never use abrasive or powder detergents.

## WARNING.

Immergas reserves the right to make improvements and changes to details and accessories of the product, excepting the essential features of the model described and illustrated herein.

## 1. INSTALLATION.

## 1.1 Installation recommendations.

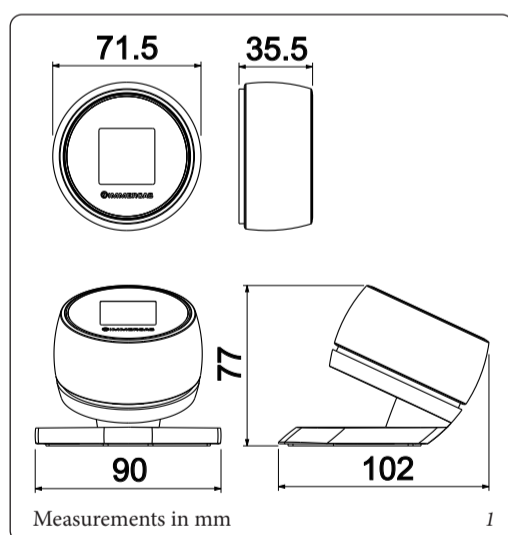
The Gateway, including the relative cables and connections to the generator, must be installed by specialised staff specifically trained for this purpose. On the free initial check of the Immergas generator, when the Gateway is inserted into the system, the Immergas authorised After-sales Centre checks the electrical connection and regular operation. The free check just of the Gateway is not envisioned by the Immergas authorised After-sales Centre if this is requested after the generator warranty has started, or if the Gateway is not connected to an Immergas generator.

**Attention:** laying the Gateway cables is excluded from the free Immergas generator checks; it is the responsibility of the installer company.

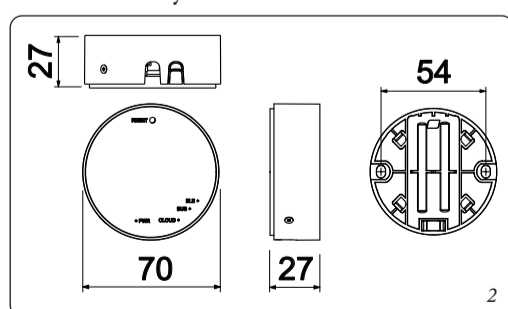
## 1.2 Package contents.

Ref	Description
1	1 Instruction sheet
2	1 chrono-thermostat installed on the table base
3	1 Gateway
4	1 cable with a built-in 230 Vac - 5 Vdc power supply is to connect the power supply to the Smarttech Plus Gateway including sheaths and 120 Ohm resistance for Modbus connection
5	2 wall-mounted installation supports equipped with spirit level, screws and plugs
6	2 LR03 (AAA) 1.5V batteries

## 1.3 Main Chrono-thermostat dimensions.



## 1.4 Main Gateway dimensions.



**GRE -** Η έκδοση του φύλλου οδηγιών σε αυτή τη γλώσσα μπορεί να ληφθεί από τη διεύθυνση [www.Immergas.com](http://www.Immergas.com) ή πατώντας "Λήψη οδηγιών και προειδοποιήσεων" από την εφαρμογή Smarttech App μετά τη λήψη της από το σχετικό κατάστημα εφαρμογών: App Store (Apple) ή Play Store (Android).

**NLD -** De versie van het instructieblad in deze taal kan worden gedownload van de website [www.Immergas.com](http://www.Immergas.com) of door op "Download Instructies en waarschuwingen" te drukken in de Smarttech-app nadat u deze hebt gedownload van de relevante app-store: App Store (Apple) of Play Store (Android).

**POR -** A versão da folha de instruções nesta língua pode ser descarregada a partir de [www.Immergas.com](http://www.Immergas.com) ou premindo "Descarregar instruções e avisos" a partir da

## 1.5 Gateway electrical connection.

**N.B.:** before performing any electrical connection, make sure that all the involved appliances are disconnected from the mains.

**N.B.:** the Gateway must only be powered by the power cable supplied as per standard with the product. Should the power cable be damaged, do not use the device and contact an authorised Immergas After-sales Centre.

**N.B.:** for correct installation prepare a dedicated power line for the connection of the Gateway according to the Standards in force regarding electrical systems. If this is not possible, interference due to other electric cables could cause it to malfunction.

The electrical connections of the Gateway must be carried out following the diagrams illustrated in chapter 4, or the instructions supplied in the Immergas generator installation manual.

If used coupled to a generator not manufactured by Immergas, the Gateway power cable must be connected to a 230Vac / 50Hz mains in compliance with standards in force regarding electrical installation, which anyhow must include a class III overvoltage category omnipolar disconnection device.

## 1.6 Configuration of generator connected to Smarttech Plus.

## 1.6.1 Boilers.

(wiring diagram of reference:

- Fig. 7 for appliances equipped with communication bus (IMG BUS), modulating operation.


- Fig 8 for appliances without communication bus (IMG BUS), On/Off operation).

Boilers require no configuration.

## 1.6.2 Magis Pro V2 - Magis Combo V2.

(wiring diagram of reference Fig. 9)

**N.B.:** make sure that terminals 40-1/41 on the connection terminal block of the generator are short-circuited.

**N.B.:** communication between Gateway e Magis Pro V2/Combo V2 is established correctly when the symbol  appears on the display of the generator.

Set the functional parameters on the Magis Pro V2/Combo V2 generator panel, as described below:

- Check that a single zone is set (parameter A13 = 1).
- Set the date, time and day with parameters U21...U26
- Set at maximum the maximum flow setpoint that the machine can reach in heating mode (parameter R04 = max).
- Set at minimum the minimum flow setpoint that the machine can reach in heating mode (parameter R05 = min).
- Set at minimum the minimum flow setpoint that the machine can reach in cooling mode (parameter R12 = min).
- Set at maximum the maximum flow setpoint that the machine can reach in cooling mode (parameter R13 = max).

For any further settings, follow the instructions in the generator manual, taking into account the functions available on it coupled to the Smarttech Plus kit. When you have completed the settings, it is advised to switch the Gateway off and back on.

**N.B.:** for air-conditioning systems with several climatic zones, you must use one or more Expansion kits for Smarttech Plus.

The following Magis Pro V2/Combo V2 functions are only available by electrically disconnecting the Gateway from the generator:

- Manual controls in maintenance menu.
- Automatic vent.
- Manual vent.
- Scree heater.
- Outdoor unit Test mode.
- Chimney sweep.
- Outdoor Unit Pump Down.
- Fan speed calibration (only on Magis Combo V2 and Combo Plus V2).
- Converting the heat generator to other types of gas (only on Magis Combo V2 and Combo Plus V2).
- Adjusting air-gas ratio (only on Magis Combo V2 and Combo Plus V2).

When coupled to Smarttech Plus, the following functions will not be available on Magis Pro V2/Combo V2 generators:

- Operation requested by external room thermostats (done exclusively by Smarttech Plus).

aplicação Smarttech depois de a descarregar a partir da loja de aplicações relevante: App Store (Apple) ou Play Store (Android).

**RUM -** Versiunea fișei de instrucțiuni în această limbă poate fi descărcată de pe [www.Immergas.com](http://www.Immergas.com) sau apăsând „Download Instructions and Warnings” (Descărcare instrucțiuni și recomandări) din aplicația Smarttech după ce ați descărcat-o din magazinul de aplicații relevant: App Store (Apple) sau Play Store (Android).

**SPA -** La versión de la hoja de instrucciones en este idioma puede descargarse de [www.Immergas.com](http://www.Immergas.com) o pulsando «Descargar instrucciones y advertencias» desde la aplicación Smarttech, tras descargarla de la tienda de aplicaciones correspondiente: App Store (Apple) o Play Store (Android).

2. Management of zones 2 and 3 controlled by Magis Pro V2/Combo V2.

3. Management of pumps and zone valves controlled by Magis Pro V2/Combo V2.

4. Safety thermostat zone 2/3 managed by Magis Pro V2/Combo V2.

5. Dehumidification mode.

6. System setpoint correction function.

7. Heating / cooling selector.

8. Error reset via Smarttech Plus thermostat.

When coupled to Smarttech Plus, the following external devices cannot be used on Magis Pro V2/Combo V2 generators:

1. Zone remote panels.

2. Room thermostats.

3. Humidistats.

4. Humidity sensors.

5. Dehumidifiers.

6. Dominus.

7. System manager.

## 1.7 Wall-mounting of appliances.

**N.B.:** make sure that the area of installation of the Gateway receives the signal of the home Wi-Fi network properly and the Chrono-thermostat Bluetooth (see the quality of the Bluetooth signal in the 'Diagnostic' menu of the Thermostat).

**N.B.:** the wall-mounted support installation is the same both for fixing the Gateway and the Chrono-thermostat.

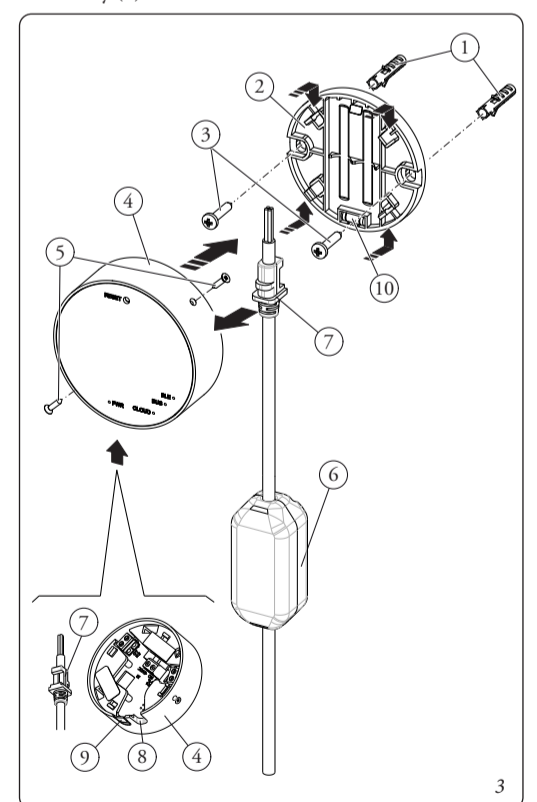
## Gateway wall-mounting (Fig. 3):

install the mount (2) fixing it to the wall with expansion plugs (1) and the supplied screws (3).

**N.B.:** pay attention to correctly position the spirit level (10) downwards.

After having wired the Gateway (4) as indicated in the connection diagrams illustrated in chapter 4, position the cable gland (7) in the specific slot (8). If additional cables were used to connect the IMG BUS and/or ModBus communication ports, break the pre-cuts (9) to allow these cables to come out of the Gateway enclosure.

Press-fit the Gateway (4) to the mount (2) already fixed to the wall and secure it by tightening the two fixing screws (5) the way (5).

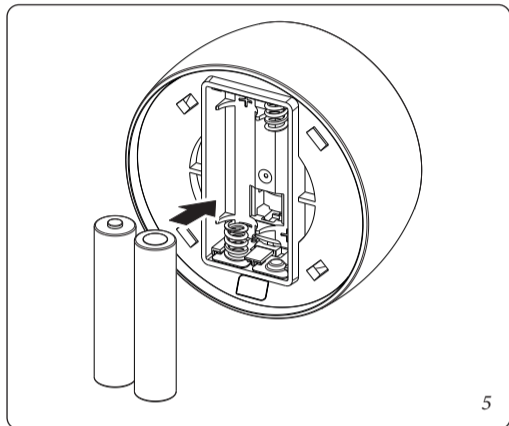
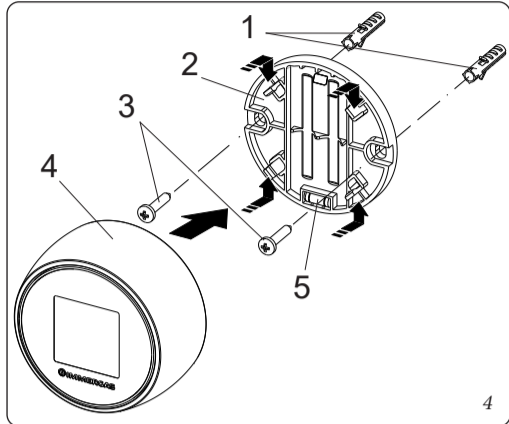


**Chrono-thermostat wall-mounting (Fig. 4):** install the mount (2) fixing it to the wall with expansion plugs (1) and the supplied screws (3).

**N.B.:** pay attention to correctly position the spirit level (5) downwards.

Release the body of the Chrono-thermostat (4) from the table base by pulling it, then insert the 2 LR03 (AAA) batteries supplied in the specific compartment (Fig. 5), then press-couple the Chrono-thermostat on the mount (2). To replace the batteries, release the Chrono-thermostat (4) from the wall mount (2) by pulling it and repeat the above operations.

At the end of the installation, remove the protective film from the display of the chrono-thermostat.



### 1.8 Gateway - Chrono-thermostat coupling.

After having powered the generator, the Gateway and the Chrono-thermostat, wait 30 seconds before performing any setting on the system so that communication between the Gateway, generator and Chrono-thermostat is properly established.

**N.B.:** all "Smartechn Plus" chrono-thermostats are already configured to work correctly with your Gateway, so they do not need any additional configuration to make them work.

In case of a malfunction, the Gateway and Thermostat can be re-coupled by proceeding as follows:

- make sure you have turned on the Gateway for at least 5 minutes;
- Keep the "Reset" button on the Gateway pressed until the indication on the "BLE" LED switches from 5 quick blinks a second to one blink a second;
- with Chrono-thermostat set on the main window, press and hold the same key for 3 seconds until the "Mode" or "Program" menu appears, then rotate the Chrono-thermostat to display the "Settings" menu. At this point again press and hold the key to select the "Diagnostic" menu and press to confirm and to enter the menu;
- press the Chrono-thermostat again, the message "Pairing" will appear on the display. When "Disconnected" appears, the Chrono-thermostat is paired to the Gateway;
- press and hold the Chrono-thermostat to go back to the main menu;
- switch off (removing power) and switch the Gateway back on.

### 1.9 Application download and installation on mobile devices (smartphone).

Using the mobile device on which to install the application, connect to the App store of reference: App Store (Apple) or Play Store (Android) and type in "Immergas Smartech" in the search field. The app works with IOS 12 operating system or higher (Apple) and Android 10 or higher. Select the free "Smartechn" application and wait for its download and installation on the mobile device used. Open the "Smartechn" App and download the instruction manual by pressing "Download Instructions and warnings". Follow its instructions to register and pair it with the installed Smartech Plus system. The manual can be downloaded from the website [www.immergas.com](http://www.immergas.com).

**N.B.:** the encryption method of the Wi-Fi network must be WPA2 PSK; otherwise malfunctions could occur.

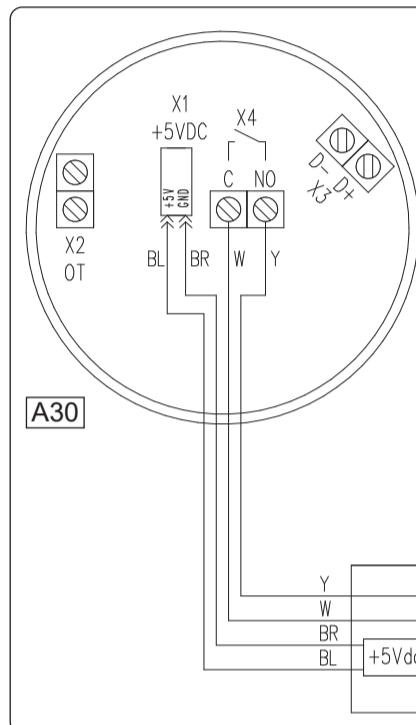
### 1.10 Type of system configuration without Wi-Fi connection.

The Smartech Plus system is paired to the type of generator connected by completing the user registration procedure on the "Smartechn" app (paragraph 1.9). If there is no Wi-Fi connection available when first starting the system (and therefore the above-mentioned procedure cannot be performed), the type of generator connected can be selected temporarily as follows:

- make the electrical connections on the Gateway as described in Paragraph 1.5, then power the device;
- insert the batteries in the Chrono-thermostat;
- once the Immergas logo is displayed, keep the Chrono-thermostat pressed until a dot is shown and then press again until the list of the type of generators appears;
- rotate the Chrono-thermostat to the desired type of generator;
- press the Chrono-thermostat to confirm.

## 4. WIRING DIAGRAMS

### GATEWAY CONNECTION WIRING DIAGRAM



Key:

- A30 - Smartech Plus Gateway
- G4 - Gateway DC power supply unit
- X3 - Modbus RS485
- X4 - Potential-free contact Max. 0.5 A - 230 Vac (generator operation request)
- L/N - 230 Vac / 50 Hz power supply
- X1 - +5 Vdc power supply
- X2 - IMG BUS

- BR - Brown
- BL - Blue
- W - White
- Y - Yellow

**N.B.:** this mode is not activated if the generator is controlled by the Gateway only via the operation request contact (in this case, if communication with the Chrono-thermostat fails, the Gateway removes the operation request and any system antifreeze protections are fully controlled by the generator).

**N.B.:** in this mode, room antifreeze protection is no longer available; only that of the generator remains active.

### 3. TECHNICAL CHARACTERISTICS

#### CHRONO-THERMOSTAT:

- Dimensions: ... diameter 71,5 mm, thickness 35,5 mm
- Wireless technology: ..... Bluetooth 4.1 BLE
- Thermostat / Gateway communication distance: .....Max. 10mt (\*\*)
- Reading range: .....from 0°C to 40°C
- Reading accuracy: ..... +/- 0.1°C
- Setting range: .....from 4.5°C to 30°C
- Temperature increase range: ..... 0.5°C
- Power Supply: ..... 2 LR03 (AAA) 1.5V batteries (not rechargeable) battery life about 1 and a half years (\*).

**N.B.:** IMG BUS is a communication protocol only used by certain Immergas appliances, (see the instruction booklet of the appliance);

**N.B.:** ModBus RS485 is a communication protocol only used by certain Immergas appliances, (see the instruction booklet of the appliance);

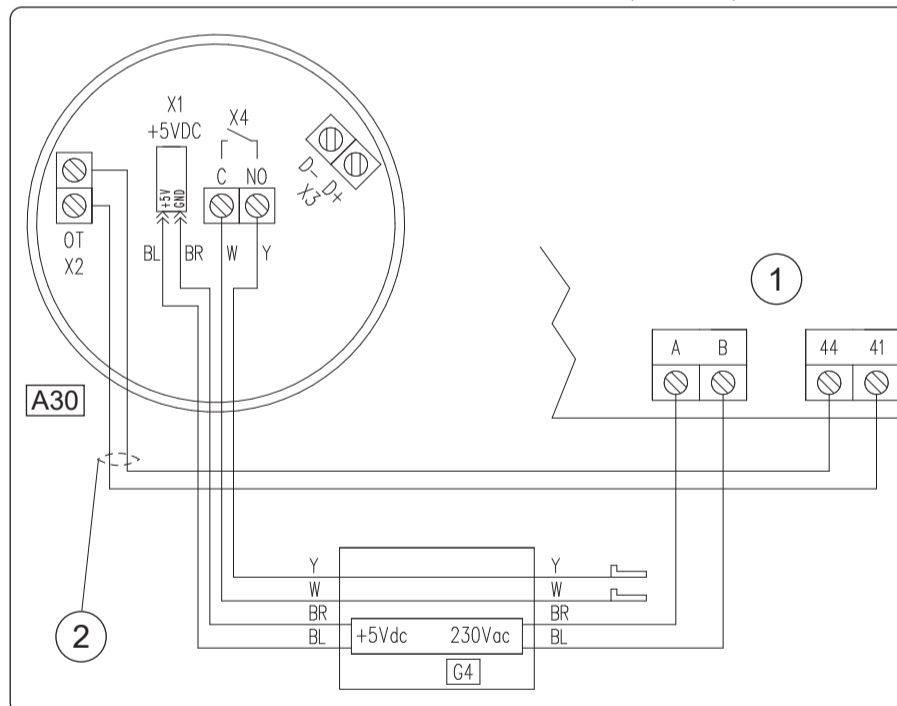
**N.B.:** the X2 (IMG BUS) and X3 (ModBus RS485) connectors must be connected to SELV devices.

**N.B.:** the cables to be used for X2 and X3 connections must have an adequate cross-section and minimum isolation of 300V;

**N.B.:** use the two wire sleeves supplied with the power supply unit, inserting them on the White (W) and Yellow (Y) wires on the side of the terminal block (X4), to further isolate them from the Gateway inside;

**N.B.:** For connection via ModBus RS485, apply the 120 Ohm resistance supplied on the relative terminals of the appliance in parallel with the Modbus connection, (see the instruction booklet of the appliance).

### CONNECTION TO BOILER VIA COMMUNICATION BUS (IMG BUS)



Key:

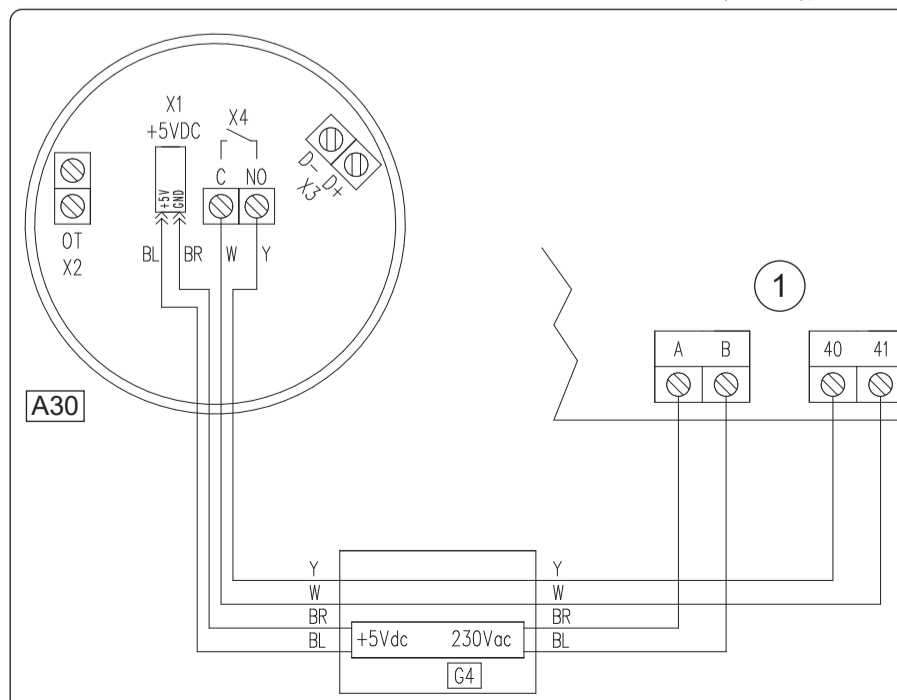
- A30 - Smartech Plus Gateway
- G4 - Gateway DC power supply unit
- 1 - Boiler
- 2 - Cable not supplied by Immergas

- BR - Brown
- BL - Blue
- W - White
- Y - Yellow

**N.B.:** connect the X2 terminals to the IMG BUS boiler terminals normally provided for CAR X2 communication, indicated as 44 (or 40) and 41. (See the instruction booklet of the appliance);

**N.B.:** the Gateway can be powered by being connected to terminals A (L line) and B (N Neutral) (230 Vac / 50 Hz auxiliary boiler power supply) if available, (see the instruction booklet of the appliance).

### CONNECTION TO BOILER VIA ROOM THERMOSTAT CONTACT (On/Off), from models without communication bus



Key:

- A30 - Smartech Plus Gateway
- G4 - Gateway DC power supply unit
- 1 - Boiler

- BR - Brown
- BL - Blue
- W - White
- Y - Yellow

**N.B.:** connect the terminals X4 of the Gateway to the boiler terminals provided for connection of the Room Thermostat, indicated as 40 and 41, (see the instruction booklet of the appliance);

**N.B.:** the Gateway can be powered by being connected to terminals A (L line) and B (N Neutral) (230 Vac / 50 Hz auxiliary boiler power supply) if available, (see the instruction booklet of the appliance).

**GATEWAY:**

- Dimensions: ..... diameter 70mm, thickness 27mm
- Power supply dimensions: ..... 59 x 27 x 23 mm
- Power Supply: ..... 230 Vac +10%-15%
- Frequency: ..... 50/60 Hz
- Functioning room temperature: ..... 0 - +40°C
- Warehouse temperature: ..... -10 - +50°C
- Protection class: ..... IP 20
- Transmission power: ..... 100 mW
- Transmission technology: ..... Wi-Fi 802.11 b/g/n 2,4 GHz
- Bluetooth transmission technology: ..... 4.1 BLE
- Length of Gateway power cable ..... 80 cm
- Maximum ModBus / IMG BUS cable length ..... 50 m
- ModBus / IMG BUS cable type (not supplied) ..... bipolar - twisted and/or screened cable where necessary cross-section 0,5 mm<sup>2</sup> minimum, 1,5 mm<sup>2</sup> maximum
- Absorption: ..... 2 W
- Maximum generator operation request relay current: ..... 0.5 A (230Vac)

(\* ) Battery life with a room temperature between 16°C and 27°C and with a good BLE connection.

(\*\* ) The maximum effective distance could be shorter if there are walls, ceilings or obstacles between the two devices.

**3.1 Product fiche.**

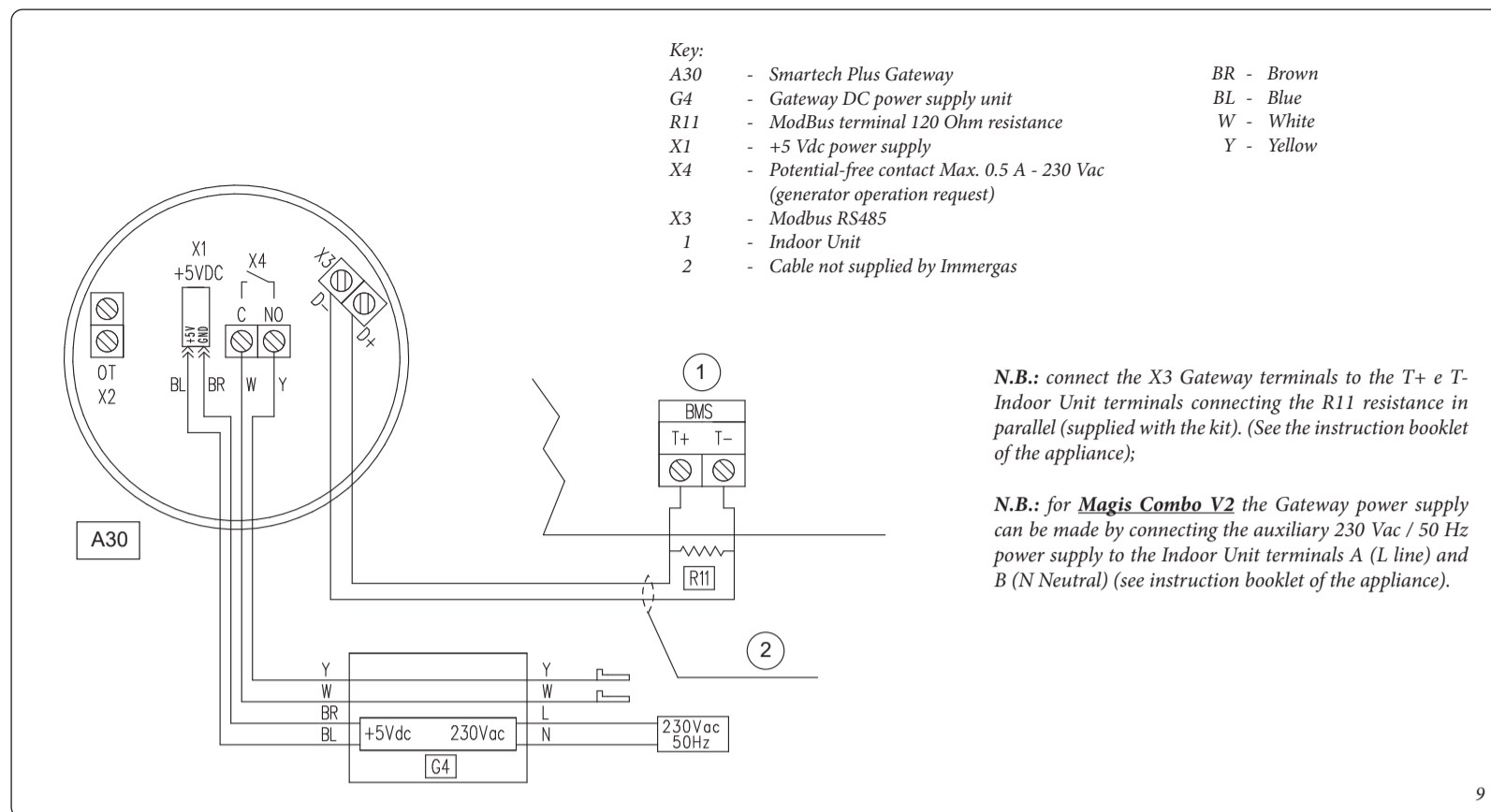
In compliance with Regulation EU 811/2013, the class of the temperature control device is:

Class	Contribution to room central heating seasonal energy efficiency	Description
V	+3%	Smartech Plus with outdoor temperature compensation disabled or unavailable
VI	+4%	Smartech Plus

**3.2 Description of Gateway LEDs**

LED	Description
<b>LED Power</b>	Indicates that the Gateway is powered properly. This LED must always be on steady and green.
<b>LED BLE</b>	It signals the Bluetooth connection of the Gateway with the Smartech Plus chrono-thermostat: <ul style="list-style-type: none"> <li>• <b>1 blink every 4 seconds:</b> it means that communication between the Gateway and the Chrono-thermostat is established correctly;</li> <li>• <b>5 blinks per second:</b> it means that the Gateway is trying to connect to the chrono-thermostat, if this warning is frequent, try to bring the Gateway closer to the chrono-thermostat or vice versa..</li> </ul>
<b>LED Bus</b>	It is a service Led managed separately from the Gateway. If it flashes at a high frequency there is communication with the generator, if it flashes at a low frequency the communication is absent.
<b>LED Cloud</b>	Signals the connection to the home Wi-Fi network and the Cloud of the chrono-thermostat: <ul style="list-style-type: none"> <li>• <b>Off:</b> it means that the Gateway is not connected to any Wi-Fi network or no Account has been connected to this Gateway, the chrono-thermostat works regularly even without a Wi-Fi connection, through the BLE connection;</li> <li>• <b>1 blink per second:</b> it means that the Gateway is connecting to the Wi-Fi network or associated Account, if this warning persists check that the Wi-Fi network is active and verify that you have entered the correct password in the Gateway;</li> <li>• <b>Steady on:</b> it means that the Gateway is connected to the Wi-Fi network and Cloud and is working properly..</li> </ul>

**WIRING DIAGRAM OF CONNECTION TO SINGLE ZONE WITH MAGIS PRO V2 - COMBO V2**



- Key:**
- A30 - Smartech Plus Gateway
  - G4 - Gateway DC power supply unit
  - R11 - ModBus terminal 120 Ohm resistance
  - X1 - +5 Vdc power supply
  - X4 - Potential-free contact Max. 0.5 A - 230 Vac (generator operation request)
  - X3 - Modbus RS485
  - 1 - Indoor Unit
  - 2 - Cable not supplied by Immergas
- BR - Brown
  - BL - Blue
  - W - White
  - Y - Yellow

**N.B.:** connect the X3 Gateway terminals to the T+ e T- Indoor Unit terminals connecting the R11 resistance in parallel (supplied with the kit). (See the instruction booklet of the appliance);

**N.B.:** for **Magis Combo V2** the Gateway power supply can be made by connecting the auxiliary 230 Vac / 50 Hz power supply to the Indoor Unit terminals A (L line) and B (N Neutral) (see instruction booklet of the appliance).

