

COMPUTHERM

User Manual

*Control your devices from anywhere in the world.
Efficiently. Reliably. Easy.*

Control your home through your smartphone!

The product:

- **B220** is a Wi-Fi programmable thermostat controller. The device is an Internet connected relayed module, that includes a weekly schedule. The latter could be programmed and controlled via an Internet connected PC desktop computer or a smartphone.
- **B220** allows the fast automatization of every electrical device, regardless of its manufacturer or model.
- The technology set in **B220** allows it to connect with any wireless Internet, without the need of any additional settings.
- **B220** is a complex system with which you not only open and close your doors, roller shutters and windows remotely but manage and adjust a number of devices in your home, office, house or villa.
- **B220** allows the users to receive real time information for all connected devices — their work and current status.

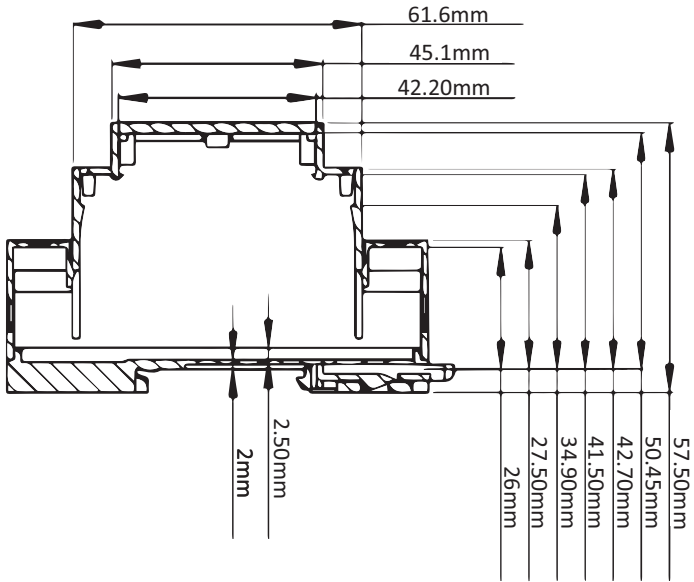
Why choose B220

- Provides comfort and mobility
- Optimizes the work of garage doors, barriers, roller shutters and windows
- Complete integrated control system
- Easy to use and user friendly software interface
- Mobile application running on all mobile OS

B220 could be used for

- Control of garage doors
- Control of entrance doors
- Control of barriers
- Control of interior and exterior roller shutters
- Control of roof windows

Technical specifications



Switching socket	3A
Air humidity during transportation	from 5% till 90% without condense
Charging block	8-36V AC/DC
Working frequency	Wi-Fi (b/g/n) 2,4GHz
Size	90,2 x 53,3 x 56,5 mm (LxWxH)
Working temperature	0° – + 45°C
Storage temperature	-20° – + 60°C
Working humidity	5% – 90% without condense
Ambient temperature during transportation	from –20°C till +60°C
Network topology	Wireless communication
Protection degree, provided by the shell	IP20 – in installation position

Safety instructions

Please, read before using the device for the first time

The outlined safety procedures below are to be followed while using the current product. Please, do follow all warnings in the device's user manual.

General safety instructions

You are the only one responsible for the device's usage, as well as for any caused damages in consequence of that. The device's usage is a subject of the set safety measures for the customers and their environment. Please do not press the device too hard. Always use it and its accessories gently and keep them in a clean place, away from any dust. Do not expose them to open fire or in any proximity to lighted tobacco products. Do not let the device and its accessories to fall down, do not throw or fold them. Do not use any aggressive chemicals, detergents or aerosols for their cleaning. Do not paint them and do not attempt to disassemble the device or its accessories. That could be accomplished only by a qualified professional. The device's working temperature is from 0°C till +45°C and storing temperature of -20°C till +60°C. For removing electric products' waste, the

national and regional legislations are followed. The device is to be installed in electric switchboards or in the device/s it will manage and is created to control household devices and equipment.

Any unauthorized reconstruction and/or product modification is strictly forbidden following the European safety and approval directives (CE). Services, settings and repairs could be accomplished only by an authorised service provider. For its repair use only the original spare parts. The usage of other spare parts could cause significant damages or injuries. If you notice any damage, please stop using the device. Before cleaning the device, disconnect it from the power supply. Do not use any liquids or aerosols.

The device's installation is accomplished according to the manufacturers' instructions, the HD 60364-4-41 regulations and the national legislations.

Attention! Damaged power supply cables are a life treat as could lead to an electric shock.

Do not use the device if there is a damaged cable, power supply cord or network plug. In the case of power supply cable's damage, please leave its repair to a qualified professional!

Do not leave children with the device without supervision!

Do not let children play with the device. They cannot properly assess the danger of using electric devices. The device is not intended for use by individuals (including children) with limited physical, sensory or mental capabilities or without any experience and/or knowledge unless they are controlled by an individual responsible for their safety or have received instructions on how to use it. Use, set and keep the product only in places away from children. Do not leave the packing materials spread aimlessly. They could be a dangerous toy for your children. Your new device contains many small components with sharp edges that could cause injuries and upon disassemble - a swallowing or suffocation risk.

Electric safety

This device could be used only when powered by the specific supply unit. Every other way could be dangerous and terminates the validity of any issued device's certificate. Use the correct external power supply. The device should be powered only by the specific power supply as indicated on the nominal electric power supply's nameplate. If unsure of the power supply's type, please turn to the authorized service provider or to the local electric services company. Please, be extremely careful. Store and use the device in a place far from water or other liquids as those could cause a short circuit.

Dangerous environment limitation usages

Do not use this device in gas stations, gas storages, chemical plants or in places where flow blasting is taking place, locations with potentially explosive environment, for instance in places such as fueling areas, gas storages, ship holds, chemical plants, in installations for fuel or chemical transportation or storage and in zones where the air contains chemicals or particles such as grain, dust or metal particles. The sparks in such places could cause a blast or fire and in consequence - a severe health damage, even death.

In case you are in a flammable materials' environment, the device must be turned off and the user is to follow all instructions and warning labels. The sparks in such places could cause fires or explosions, leading to injuries and even death.

We highly recommend to not use the device in fueling areas, workshops or gas stations. The customers should follow the limitations set for high frequency devices' usage in fuel storages, chemical plants or in places of flow blasting work process.

Damages requiring repair

In case of any of the outlined cases below, unplug the device from the power supply and look for an authorized service provider or turn to the supplier for specialized repair: the product had been exposed to rain or moisture, slipped, hit, damaged or has visible overheating traces.

Even though you are following the user manual, the device is not working correctly. Do not expose it to heating or in a close proximity to a heating source, such as radiators, thermal accumulators, furnaces or other equipment (including amplifiers) that emit heat. Keep your device from any humidity. Never use the product in rain, in a close proximity to sinks, in other moist environment or in such₁₁

with high air humidity. If the device ever gets wet, do not attempt to dry it off in a furnace or a dryer for the risk of damage is high!

Do not use the device after a sudden temperature change. If you are transferring the device between environments with big temperature and humidity level differences, it is possible for the steam to condense on the surface and inside of the device. In order to avoid the device's damage, please do wait for the moisture to evaporate before using the device. Do not insert any elements in the device that are not part of its original accessories!

EU-regulations and disposal

The device fulfills all needed standards for the free movement of goods within the EU. This product is an electric device and as such must be collected and disposed of according to the European directive on waste electrical and electronic equipment (WEEE)

This product is in accordance of the regulations in Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of

the use of certain hazardous substances in electrical and electronic equipment (RoHS) and its recasts.

Burns and fire prevention

Do not use the device if the premises' temperature goes above 40°C. Keep the highly flammable materials away from the device. Make sure free air access around the device is available.

B220 is a Wi-Fi programmable thermostat, suitable for domestic and industrial buildings without the need of additional wiring.

With **B220** you can easily control the movements of garage and portal doors, external doors, interior and exterior roller shutters, as well as other electric devices such as electric light bulbs, irrigation systems and more, all through your smartphone, smartwatch or tablet.

B220 guarantees the high security level and data and login storage via a secure server.

B220 has a user friendly interface and a smartphone application running on all mobile OS. There is also an option for control via a smartwatch.

B220 connects very easily to a chosen Wi-Fi router. This is accomplished via the **COMPUTHERM** application for your smartphone, smartwatch, PC or tablet. You can add a new device in three quick and easy steps. Upon installation of the product the customer is to install **B220** according to the user manual to the desired device it would be controlling.

The products complies to the requirements of EN 50491-3.

B220 is created to work on the following environmental conditions:

- For premises' work;
- For altitude up to 2000m;
- For ambient temperature from 0°C till +45°C;
- For average maximum air humidity for temperature of up to 31°C - 80%, linear decreasing to 30% average humidity for 45°C temperature;

Attention! The protection against inflation and fire spreading is provided by the terminal equipment in which you would be embedding your device. Please keep all devices for remote control away from children.

Please watch the installation and product usage video at: <http://quantrax.hu/>

Installation guide

Step 1:

- 1.1 Every **B220** set includes:
- 1 pcs central control block;
 - 1 pcs user manual for installation

Unpack the device and take the two main elements out of the box (**Scheme 1**).



Scheme 1

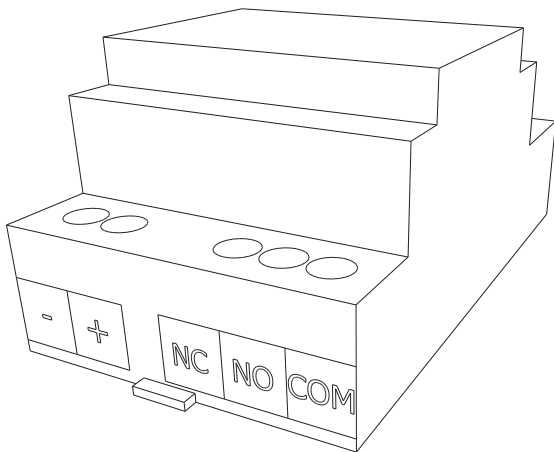
Connect **B220** to a chosen electric device or appliance.

Attention! Switch off the power supply before installing **B220**.

We highly recommend the installation to be performed by a qualified technician. If you do not possess the needed knowledge and qualification, please do turn to an authorized retailer!

Attention! Do not modify or influence the built in protection of the electric device in any way!

Connect the two connection points of the device you wish to control to the outputs **NO** and **COM**, that is to the relays' normally open outputs. The device's installation is outlined in **Scheme 2**. The device must be installed and connected by a qualified professional.



8-36V AC/DC

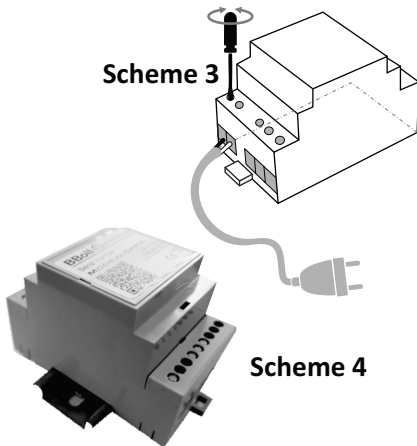
Scheme 2

1.2 Central control block's installation

Connect the power supply cable to the **B220's** main control block. After that, connect it to the power supply (**Scheme 3**).

1.3 Installation possibilities

B220 is a product, constructed for installation in limited access zones and must be installed to the switchboard using a Eurorim (**Scheme 4**).



1.4 A few requirements must always be considered and followed during installation:

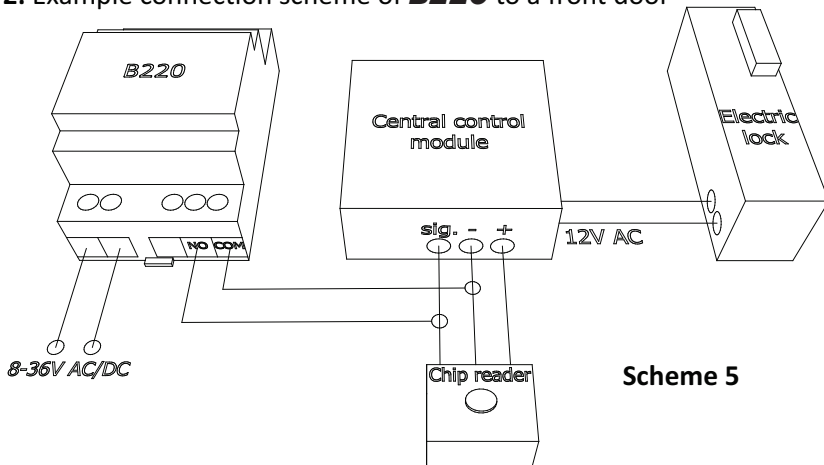
- The device's installation and connection must be accomplished according to the national legislation for electrical installations.
- All activities on the device's installation, uninstallation, service and repair are to be made only after it had been securely removed from

the power supply (the controller itself, as well as the chain it controls through the relayed exit).

- The device is to be installed only in places with limited access with the assistance of an instrument or key and are accessible only to the service personnel or a user who has passed the initial training.
- The wiring must be completed using double insulated wires.
- Disengagement tool must be provided for the electric installation during the device's installation and the needed safety is to be ensured for the service provided.
- All connections to the relay's outputs in the device must be conducted with conductors with an insulation resistance not lower than that of the insulated conductors of PVC T 105°C.
- The device's installation is conducted by the manufacturer's instructions and following the HD 60364-4-41 requirements, as well as the national legislation.
- Installation of the controller in a way that the terminals are positioned less than 5mm from the metal parts and the device's surface, is strictly forbidden.

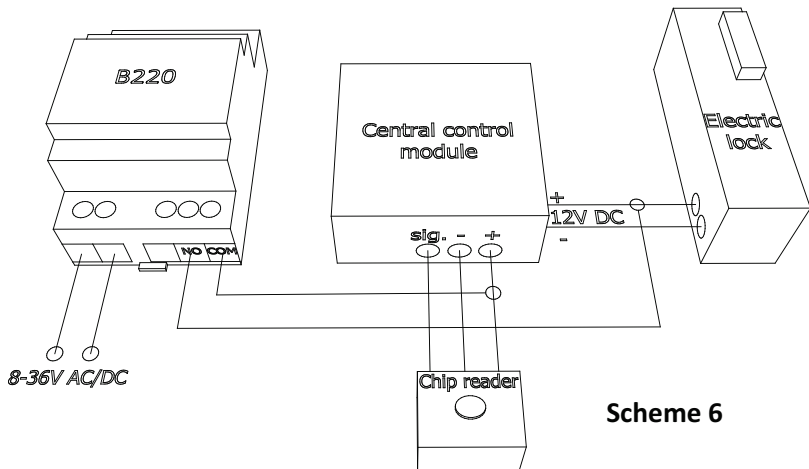
- The device is installed only in a shell allowing the needed level of protection of the end product. Its installation on accessible surfaces and covers, allowing the easy access without the use of any instrument, is strictly forbidden.
- The device's installation must be accomplished in such a way as to deem it impossible to accidentally activate the reset button.

Step 2: Example connection scheme of **B220** to a front door



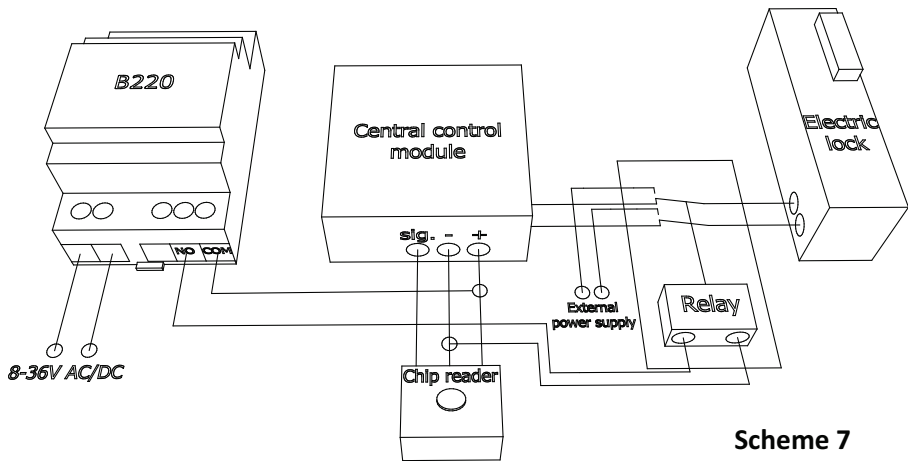
2.1 **B220** is parallelly connected to the chip reader (**Scheme 5**). A signal is sent to the central control module's 'sig' entrance through the **B220** relay's **NO** contact. Depending on central control module's model and work mode, a '+' or '-' are connected to the **COM** entrance of the **B220**'s relay.

Note: On the example scheme connected is the '-'.



Scheme 6

2.2 **B220** is parallelly connected to the central control module (**Scheme 6**) and sends direct charge through the **NO** contact to the lock + 12V DC. This type of connection is allowed if the electric lock uses a direct current and its supply voltage is the same as the central control module one. Supply voltage could be sent to the central control module's exit. **B220** could be used for control of central control modules with relayed exit.



Scheme 7

2.3 **B220** controls external relay through an **NO** contact (**Scheme 7**) which is powered by the central control module's power supply.

With this external relay, the electric lock could be triggered by an external power source and to not influence the work (exits) of the central control module.

Step 3: Initial setting up and connection to a chosen Wi-Fi network

In order for the device to work properly, it must be connected to an Internet network. After the installation is finished, provide a supply voltage to the device and **B220**. Wait 10 seconds, press and hold the button for three seconds and follow the device's light indication.


Attention! In **Access Point** and **SmartConfig** upon pressing the button for three seconds, the device would be nullified with default settings!

3.1 SmartConfig mode

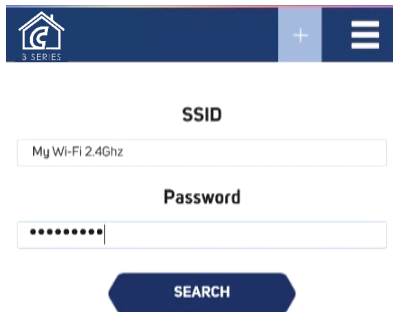
The central block's blue light emitting diode starts blinking very rapidly for a quick period of time. That indicates the device is in **SmartConfig** mode. Please connect your mobile device to the Wi-Fi network where **B220** will be operating in. Open the **COMPUTHERM B series** mobile app on your smartphone or tablet. If you still do not have the mobile app installed, you can download it from **Google Play store**, **Apple store** or **Windows Phone Store**.



Log in to your profile with your email and password. If this is your first **B220** device purchased and you have not registered yet, you can do that in **COMPUTHERM's** webpage: <https://computhermbseries.com/>

Press the 'Add' button  for adding a new device, located in the upper hand side of the screen.

Press the button 'SMART CONFIG' (Scheme 8), type in the password of your selected Wi-Fi network and click on 'SEARCH' (Scheme 9).



Scheme 9

Take a look at the blue light emitting diode and when its light goes off, and then stays on permanently, **B220** is all set up for work.

Look at the mobile device's screen. The app is now ready to control **B220**.

If you have used **Smart Config** mode, please proceed to Step 4.

3.2 **AP (Access Point)** mode

If you do not wish to use this mode, press twice the button quickly and the device will be transferred to standard connection mode **AP**.

The blue light emitting diode's blinking in a second's interval, signifying that the device's Wi-Fi module is in **AP** mode and you can connect to it through your PC or mobile device.

3.2.1 Initiate a wireless network search from your smartphone or laptop and connect to the **B220's** AP (the wireless network). Every device creates a network with its own name, starting with PSGate_xxx and a combination of letters and numbers. For example PSGate_254 and it does not require a password for access.

WiFi Settings

To connect to a WiFi network, please select one of the detected networks...

Scanning...

WiFi password:

Mode:

IP address:

IP mask:

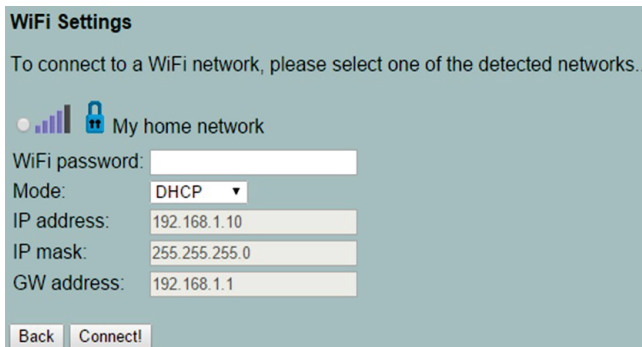
GW address:

Scheme 10

3.2.2 After connecting, your browser will automatically open a new page giving you the chance to choose the wireless network, to which you want to connect the device (**Scheme 10**).



If your browser does not open automatically, please open it manually for the automatic opening of the browser is a manual setting and thus it could be turned off.

3.2.3 If your smartphone, tablet or laptop did not automatically load the settings page, as shown in **Scheme 11**, it could be accomplished manually. Open your browser and write the following address: **192.168.10.1**



WiFi Settings

To connect to a WiFi network, please select one of the detected networks...

  My home network

WiFi password:

Mode:

IP address:

IP mask:

GW address:

Scheme 11

3.2.4 Choose the desired **Wi-Fi network**, type in your password and click on the **'Connect'** button - **Scheme 11**

3.2.5. In up to 20 seconds **B220** will switch to a working mode and the light indicator will be on all the time, blinking shortly per every second.

Congratulations! You connected your device successfully and can now add your profile in <https://computhermbseries.com/> so you can control and monitor its work.

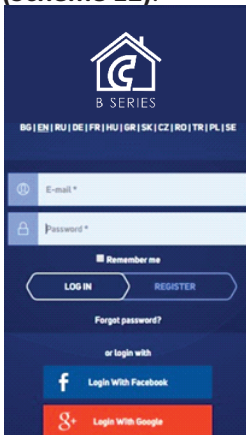
3.3 Working mode – When the blue light emitting diode is always on and goes off between two seconds, it indicates that **B220's** central block is in working mode. Upon holding the button for three seconds, **B220** will transfer to Settings mode in **SmartConfig** mode.

Step 4: User profile creation:

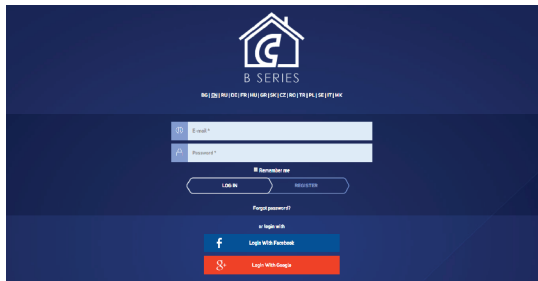
4.1 Once connected to the Internet, **B220** becomes invisible to the other devices in the network. The only way to connect with **B220** is via the user profile, associated with the particular device. If you do not have one, you can load the **COMPUTHERM's** page: <https://computhermbseries.com/> or download and install the **COMPUTHERM B Series** app in your smartphone or tablet:



4.2 If you choose to use a browser, open <https://computhermbseries.com> in your PC desktop or mobile device and press the ‘**Log in**’ button in the upper right corner (Scheme 12).



Scheme 13



Scheme 12

4.3 If you access the website or the app for the first time, you need to register or log in with your Facebook or Google + accounts just by clicking the particular button. (Scheme 13).

4.4 New user registration.

Fill in the registration form's fields and click the '**Register**' button. You are now registered and may enter the app.

(Scheme 14).



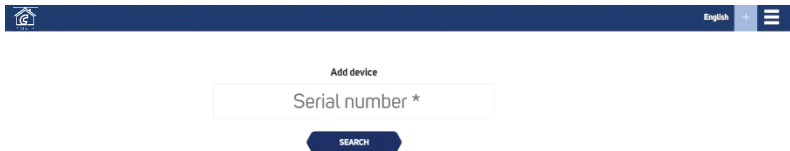
The image shows a registration form for the 'B Series' app. At the top, there is a logo consisting of a house outline with a stylized 'G' inside, and the text 'B SERIES' below it. Underneath the logo is a horizontal line of country codes: BG | EN | RU | DE | FR | HU | GR | SK | CZ | RO | TR | PL | SE | IT. The form itself consists of five input fields stacked vertically: 'E-mail *', 'Name *', 'Phone', 'Password *', and 'Repeat password *'. At the bottom of the form, there are two buttons: 'LOG IN' and 'REGISTER', both with rounded corners and a slight shadow.

Scheme 14

Step 5: Adding a device

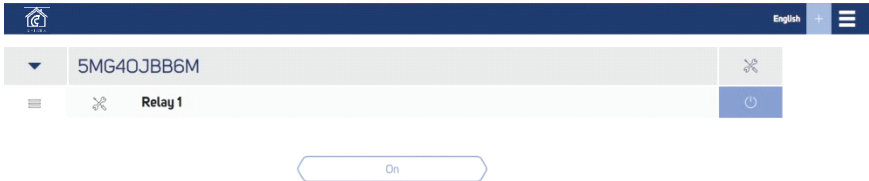
If you have used **SmartConfig** mode from step 3, please proceed to step 5.3.

5.1 Home Screen —After the successful login with username and password, you should already be seeing the home screen in your profile and can add the device you have received. Enter the serial number of your **B220** device that you previously connected to the wireless network (**Scheme 15**).




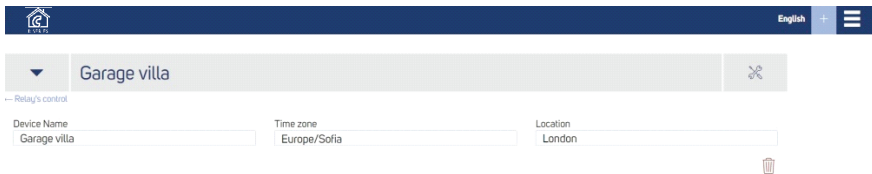
Scheme 15

5.2 Click on the **'Search'** button and after successfully finding your device, the application will redirect you to the main controlling screen (**Scheme 16**).



Scheme 16

In order to set a name for your device, as well as a time zone and location, press the  button in the upper right corner and fill in the fields **(Scheme 17)**. From that window you can also delete the device from your profile via clicking the deletion button in the bottom right corner.



Scheme 17

5.3 You can now set and control your device.

In the upper left corner you can find two buttons: **Main screen** and **Settings (Scheme 18)**.

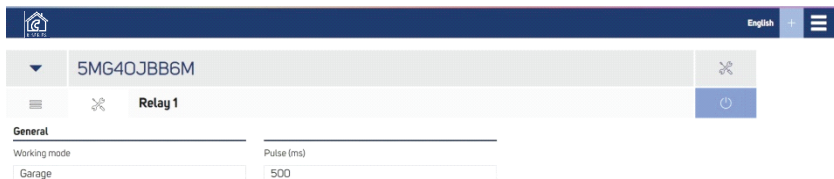


Scheme 18

Step 6: Main screen

6.1 In the main page you can find a button for opening and closing or turning on and off of the connected system. By pressing the button, an impulse is sent with predefined length (**Scheme 16**).


6.2 Settings screen



Scheme 19

In the **Settings** you can also find a menu for choosing the impulse length in milliseconds (**Scheme 19**).

6.3 Sharing devices

From the Shared devices menu via a button  , placed in the upper right corner of the **COMPUTHERM** application's screen, every device's owner can share them with other registered users via an email.

Step 7: **B220** servicing

7.1 **B220** is cleaned with a dry or slightly dampened with water towel.

The use of aggressive or abrasive cleaning liquids is strictly forbidden.

7.2 The condition of the terminals, terminal connections, as well as the connection reliability of external wires needs to be checked every six months, and strengthened if needed.

The **COMPUTHERM B220** Wi-Fi remote switch complies with the requirements of standards RED 2014/53/EU and RoHS 2011/65/EU.



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Made in EU