proSmart

User Manual

Control your devices from anywhere in the world.
Efficiently. Reliably. Easily.

Save and control your home through your smartphone

- The product:
- **BBoil** 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.
- **BBoil** allows the fast automatization of every electrical device, regardless of its manufacturer or model

- The technology set in **BBoil** allows it to connect with any wireless Internet, without the need of any additional settings.
- **BBoil** is a complex system with which you not only turn on and off your devices remotely, but manage and adjust a number of devices in your home, office, house or villa.
- **BBoil** allows the users to receive real time information for all connected devices — their work and current status.

We have two types of **BBoil** devices: **BBoil Classic** which has a wired temperature sensor and **BBoil RF** with wireless temperature sensor.
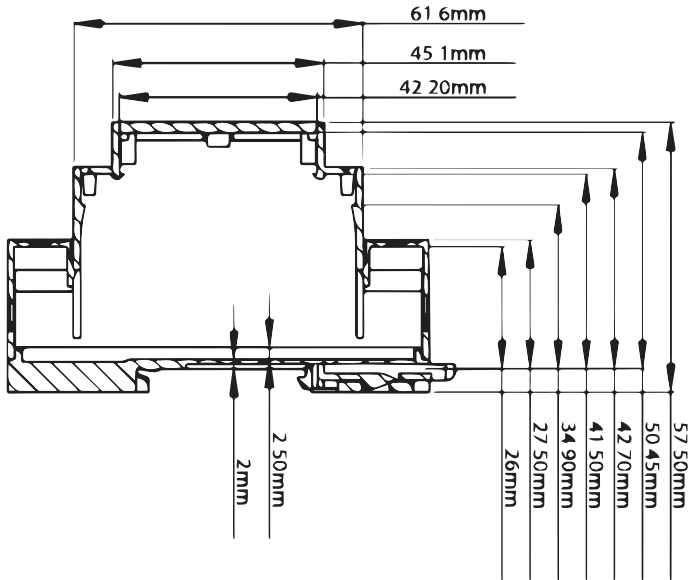
Why choose BBoil:

- Saves you money from your electricity bill
- Optimizes the use of every connected electrical device or appliance
- Complete integrated control system
- Easy to use and user friendly software interface
- Flexible work modes – thermostat and on/off
- Work with up to four wireless sensors
- Work with up to four wireless sensors for **BBoil RF** and four wired ones for **BBoil Classic**.

BBoil could be used for:

- Control of electric water heaters
- Control of gas boilers and solid fuel boilers
- Control of solar systems
- Control of irrigation systems
- Control of indoors and outdoors lighting
- Control of various types of electric devices and appliances

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Technical specification

Temperature measurement range	-55°C — +125°C (0,1°C range)
Temperature range set	-55°C — +100°C (0,1°C range)
Temperature accuracy	±0,5°C (from -10°C till +85°C)
Clock	Internet NTP, accuracy up until 100 ms
Programme	Switching Modes: • Turned off • Weekly schedule work • Manually set temperature
Upper and lower hysteresis (set by the user in the outlined ranges)	0°C — ±75°C (0,1°C range)
Switching socket	Max. 230V~; 16 A (4 A inductive load)
Central charging block	100-240V~ 50/60Hz 35mA T45
Central block – consumption	<5W
Central block – working frequency	Wi-Fi (b/g/n) 2,4GHz
Central block – size	90,2 x 53,3 x 56,5 mm (L x W x H)
Temperature sensor - voltage*	3V (2×1,5V type AA) alkaline batteries (LR6)
Temperature sensor – working frequency*	433 MHz
Temperature sensor – range*	Minimum of 100m of empty space
Temperature sensor – size*	105 x 85 x 30 mm (LxWxH)
Working temperature	0° — +45°C
Storage temperature	-20°C — +60°C
Working humidity	5% — 90% without condense
Protection degree, provided by the sheath	IP20 - at installation position

Ambient temperature during transportation	from −20°C till +60°C
Air humidity during transportation	from 5% till 90% without condense
Main unit fuse	FF1 T 250mA 250V 35A
Wireless temperature sensor's fuse	F1 IH 0,30A IT 0,60A U 30V Imax 10A 0,1s max
Overvoltage category	II
Chain type	SELV
Network topology	Wireless communication

* It concerns the **BBoil RF** modification

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 unauthorised reconstruction and/or product modification is strictly forbidden following the European safety and approval directives (CE). The device works at supply voltage of 100-240V~/50/60 Hz. 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. The device is intended for direct connection to TN / IT AC power supply 100-240V, 50/60Hz. Before cleaning the device, disconnect it from the power supply. Do not use any liquids or aerosols.

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

Attention! Damaged power supply cables are a life treath 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 authorised 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 authorised service provider or turn to the supplier for specialized repair: the product had been exposed to rain or moisture, slipped, hit, ₁₀

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, furnices or other equipments (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 such with high air humidity. If the device ever gets wet, do not attempt to dry it off in a furnice 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 differencies, 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 dispose 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.

BBoil is a programmable thermostat controller set up to work with a wired or wireless temperature sensor. It is suitable for building and home installations, without the need of additional wiring. The wireless sensor communicates directly with **BBoil,** sending real time information regarding the recorded temperature in the premises, where it is installed. Using the received data, **BBoil** controls the heating and/or cooling installation, maintaining the previously set values from the user.

The innovative design and the independent power supply of **BBoil RF's** wireless sensor allows the easy installation and exploitation of the device in various professional and home systems for heating or cooling.

BBoil Classic package includes central control unit and a wired temperature sensor. **BBoil RF** package includes central control unit and a wireless temperature sensor. The two devices are already united and ready for use. During the set's installation, the user installs **BBoil** according to the user manual to the desired device or appliance to control.

The product complies with the requirements of EN 50491-3.

BBoil 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;
- For power supply deviation of ±10% to the measured range of power supply;
- For use under the conditions of the overvoltage category II;
- For environment with level 2 pollution (Pd2).

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 product's video installation and usage instructions on the following link: prosmartsystem.com/en

Installation guide

Step 1:

1.1 Every **BBoil RF set** includes:

1 pcs central control block;

1 pcs wireless temperature sensor;

1 pcs user manual for installation

and usage;

1 pcs mounting bracket;

2 pcs dowel nails;

2 pcs fasteners

Scheme 1a

Unpack the device and take the two main elements
out of the box **(Scheme 1a)**.
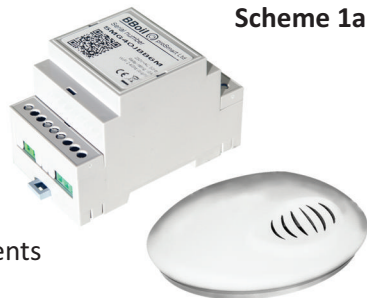
1.2 Every **BBoil Classic set** includes:

1 pcs central control block;

1 pcs wired temperature sensor;

1 pcs user manual for installation and usage;

1 pcs mounting bracket;

2 pcs dowel nails;

2 pcs fasteners

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Unpack the device and take the two main elements out of the box
(Scheme 1b).
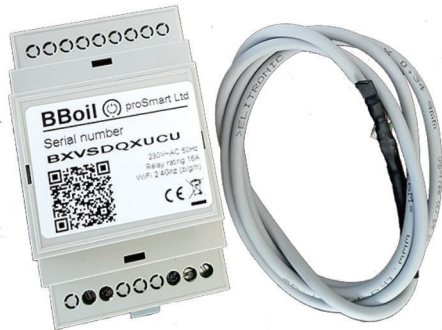
Attention! Switch off the power supply before installing **BBoil RF**.
We highly recommend the installation to be performed by a qualified
technician. If you do not possess the needed knowledge and qualification,
please do turn to an authorised retailer!
Attention! Do not modify or influence the built in protection of the electric
device in any way!

The device can be used for control of electric devices and appliances, heating systems or low-current systems that allow interruption of input fuse or are controlled by normally open/normally closed circle.

The **BBoil's** thermostat can easily connect to every gas/pellet boiler or other heating system that has a double core connector for room thermostat.
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 thermostat's installation is outlined in **Scheme 2a**. The device must be installed and connected by a qualified professional.

100-240V~
50/60Hz
35mA T45
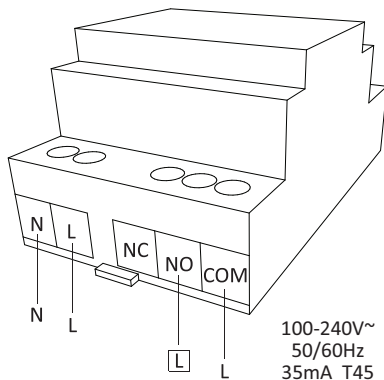
Scheme 2a

Bboil RF could be used as a room thermostat. For that type of installation the temperature sensor is positioned in the premise where the temperature is to be measured.

Scheme 2b shows an example of a **BBoil Classic** connection to an electrical boiler.
The temperature sensor could be used for measuring the temperature in the device by placing it in the specialized plug.
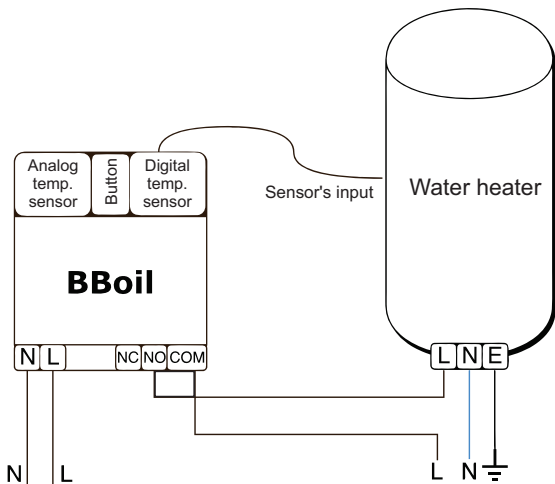
Scheme 2b

The thermostat can also be used in cooling mode. In that case, the output terminals **NO** and **COM** are closed above the set temperature. Please contact the manufacturer/distributor of the cooling equipment for the installation. The cooling mode can be chosen in section **'Settings'** from both the web page and the mobile application after **'Login'** into the system.

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

Scheme 3

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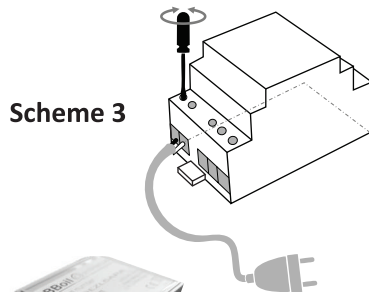
Scheme 4

1.5 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.

- Automatic circuit breakers 25Amax 250V must be installed to the electric installation to ensure the protection against short circuits and possible overload.

- 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: Temperature sensor connection and usage. If you have **BBoil Classic**, please proceed to step 2.2

2.1 If you have **BBoil RF**, unscrew the four screws from the wireless sensor and remove the bottom lid. Then, place 2xAA alkaline batteries (**LR6** type) in the batteries holder **(Scheme 5).**
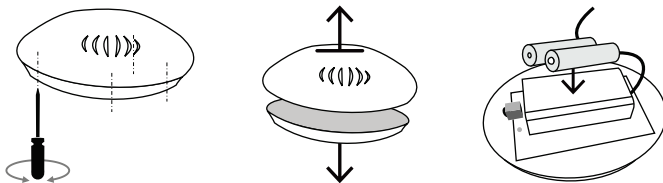
Scheme 5

The main block and the temperature sensor are already paired. The pairing procedure is performed upon change or adding of additional temperature sensor. If you do not need to perform any of those two actions, please proceed to closing the temperature sensor's box, screw back the four screws and continue to **Step 3**.

Pairing **BBoil RF** central block with the wireless temperature sensor
- Install **BBoil RF's** main block, as instructed in **Section 1.3**.
- Enter the **'Settings'** mode of the central block by pressing and holding the button for 5 seconds. In **'Settings'** mode the light emitting diode starts blinking rapidly. **(Scheme 6)**.
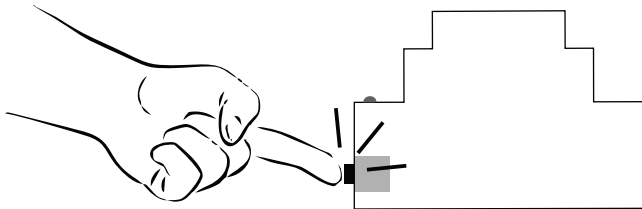
Scheme 6

- Press the temperature sensor's button once (**Scheme 7**). This way the temperature sensor goes to **'Settings**' mode for 30 seconds during which time the light emitting diode will be blinking every second.
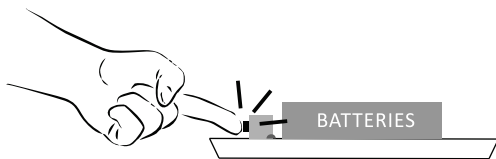
Scheme 7

- When the two devices are in **'Settings'** mode, press the button on the central block once in order to send the configuration to the wireless sensor. The wireless sensor is set up when the light emitting diode starts blinking rapidly for 2-3 seconds, then it stops.

- Place the wireless sensor's lid and screw the four screws.

- After the successful pairing of the two elements, they start working normally.

- If the two elements do not successfully pair with one another during the 30 seconds in which the temperature sensor is in **'Settings'** mode, it continues to work upon the previously set settings.

2.2 If you have **BBoil Classic**, you have a wired temperature sensor. In order to connect the wired sensor to the device, please remove the plastic lid from the side of the button. Insert the temperature sensor jack into the device's connector, then put the lid back on **(Scheme 8)**.

Scheme 8
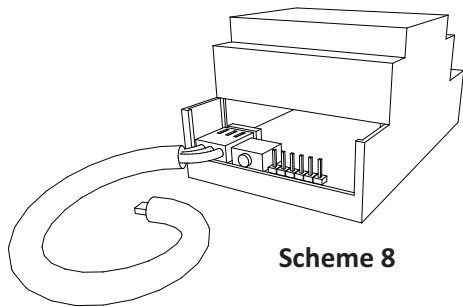
Step 3: Initial setting up and connection to a chosen Wi-Fi network

In order for the device to work properly, it must be connected to an Internet network. After the installation's finished, provide a supply voltage to the device and **BBoil**. Wait 10 seconds, press and hold the button for 5 seconds and follow the light indication on the device.

Attention! In **Access Point** and **SmartConfig** modes, upon pressing the button for five seconds, the device will be nullified with default settings.

3.1 **SmartConfig** mode

The blue light emitting diode on the central block starts blinking very rapidly for a quick period of time. This indicates the device is in **SmartConfig** mode. **Important!!!** The Wi-Fi network must be 2.4 Ghz.

Open the proSmart 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 BBoil device purchased and you have not registered yet, you can do that in **proSmart**'s webpage: **prosmartsystem.com/en**

Press the **'Add'** button for adding a new device, marked with a '**+**' sign and located in the upper hand side of the screen.

Press the button **'SMART CONFIG' (Scheme 9)**, type in the password of your selected Wi-Fi network and click on **'SEARCH' (Scheme 10).**

Scheme 9   **Scheme 10**

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

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

If you have used **Smart Config** mode, please proceed to **Step 4**.
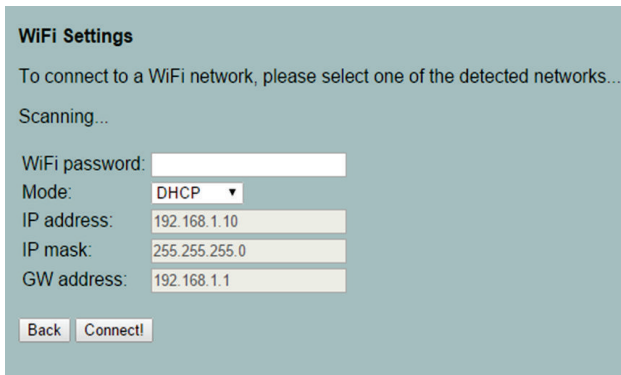
3.2 **AP** (**Access Point**) mode

To switch to **AP**, quickly press the button on the device twice. The blue light emiting diode blinks every second, signifying that the Wi-Fi module of the device is in **AP** mode and you can connect to it through your PC or smartphone.

3.2.1 Initiate a wireless network search from your smartphone or laptop and connect to the **BBoil's** AP (the wireless network) Every device creates a network with its own name, starting with BBoil_xxx and a combination of letters and numbers. For example, BBoil_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:	DHCP ▼
IP address:	192.168.1.10
IP mask:	255.255.255.0
GW address:	192.168.1.1

Back Connect!

Scheme 11

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 11)**.

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: DHCP ▾

IP address: 192.168.1.10

IP mask: 255.255.255.0

GW address: 192.168.1.1

Back   Connect!

Scheme 12

3.2.4. Choose the desired **Wi-Fi network**, type in your password and click on the **'Connect'** button - **Scheme 12**

3.2.5. In up to 20 seconds **BBoil** 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 prosmartsystem.com so you can control and monitor its work.

3.3 Working mode – When the blue light emitting diode is permanently on and goes off every 2 seconds, it indicates that the central block is in working mode. Hold the button for 5 seconds to go to **'Settings'** – **SmartConfig** mode.

Step 4: User profile creation:
4.1 Once connected to the Internet, **BBoil** becomes invisible to the other devices in the network. The only way to connect with **BBoil** is via the user profile, associated with the particular device. If you do not have one, you can load the **proSmart's** page: prosmartsystem.com/en or download and install the **proSmart** app in your smartphone or tablet:

4.2 If you choose to use a browser, open **prosmartsystem.com/en** in your PC desktop or mobile device and press the **'Log in'** button in the upper right corner **(Scheme 13)**.
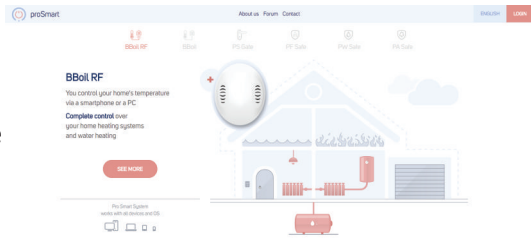
Scheme 13
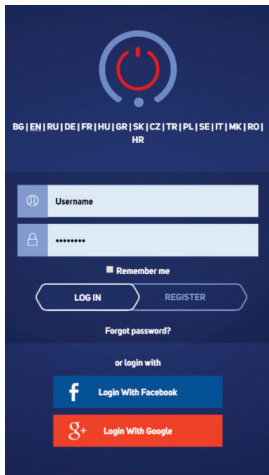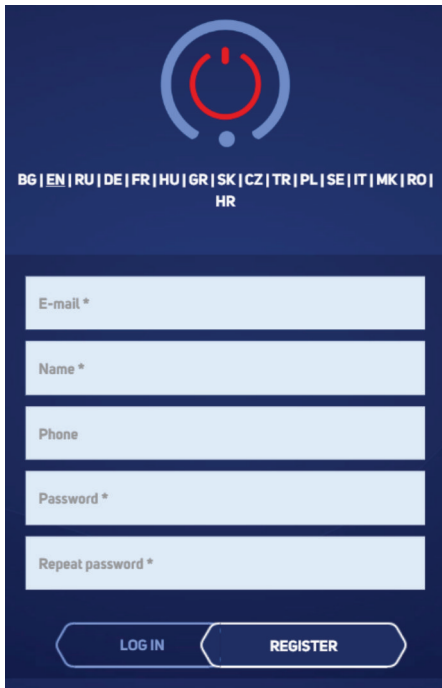
4.3 If you access the website or the app for the first time, you need to register or log in with your Facebook or Google + accounts just by clicking the particular button. **(Scheme 14)**.

Scheme 14

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 15)**.

BG | EN | RU | DE | FR | HU | GR | SK | CZ | TR | PL | SE | IT | MK | RO | HR

E-mail *

Name *

Phone

Password *

Repeat password *

LOG IN   REGISTER

Scheme 15

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 **BBoil** device that you previously connected to the wireless network **(Scheme 16)**.

⏻ proSmart	English + ≡

Add device

Serial number *
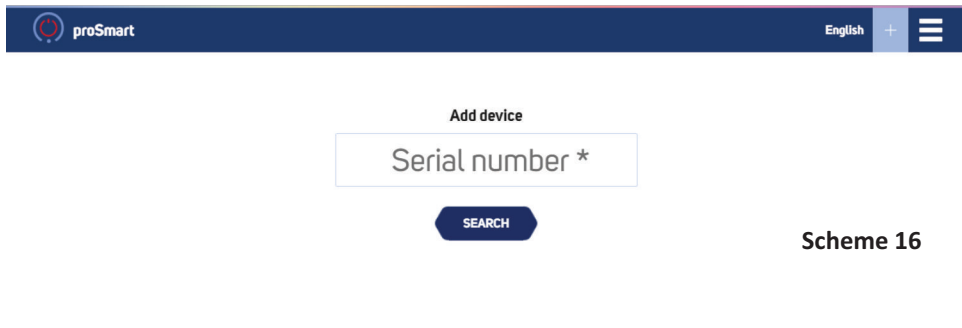
SEARCH

Scheme 16

5.2 Click on the **'Search'** button and after successfully finding your device, the application will redirect you to the main controlling screen **(Scheme 17)**.

Scheme 17

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 18).** From that window you can also delete the device from your profile via clicking the deletion button in the bottom right corner.

Scheme 18

Now you can set and control your appliances.

Step 6: Control and preferences **(Scheme 19)**
6.1 Main screen
On the top left of the screen, you will find a blue circle that indicates the current measured temperature. On the top right, you find a slider used for the manual setting of the desired temperature. Next, you can find the timer for **Turbo mode**. Upon choosing **Turbo mode** the appliance is on until the desired temperature is reached and remains on for the chosen period of time. Once the time is up, **BBoil** automatically goes back to its previous working mode **(Scheme 20)**. Next, you can find the three main buttons for choosing a working mode.

- **Off -** the device is not working
- **Manual -** the device is on and working until reaching the set temperature from the right slider
- **Schedule -** the device follows the set schedule

☰	Main Page
∿	Charts
✖	Settings
◷	Schedules
24°C	Slider
25.50°C	Temperature Now
100%	**BBoil RF**'s battery status
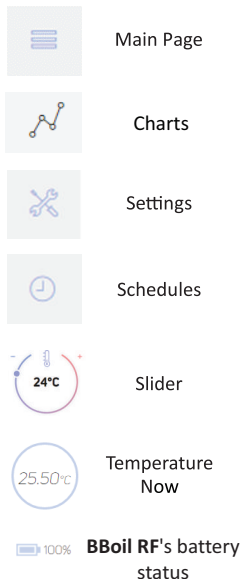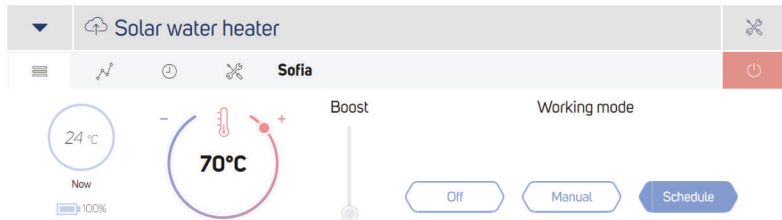
Scheme 19

6.2 Data visualization

In the **'Charts'** tab you can find a graph with the temperature fluctuations registered by the device. Click on the curve to get more detailed information regarding the chosen point of time.

Select a point on the curve to get more detailed information about it.
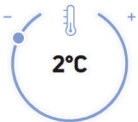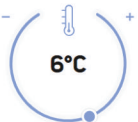
6.3 General scheme on Settings screen

Scheme 21

In the **'Settings'** page, you can locate the two sliders for the Upper and Lower hysteresis. Their main purpose is keeping the set temperature with the highest possible energy savings and extending the electrical appliance's life.

You can manually set the value range between the lower and upper hysteresis and temperature. The range depends on the functionality of the controlled device.**(Scheme 22)**

Hysteresis /Low/	Hysteresis /High/
2°C	6°C
Ranges of low hysteresis	**Ranges of upper hysteresis**
Minimal	Minimal
0	0
Maximal	Maximal
20	10

Scheme 22

In the General menu you can find the relay's working modes:

- **Thermostat** – Default mode with active thermostat function. BBoil monitors the temperature and manages the controlled device.
- **ON / OFF** – Temperature monitoring mode and with a turned off thermostat function. The connected device could be turned on and off manually or via the weekly schedule.
- **Garage** – A mode without monitoring the temperature and a turned off thermostat function. A short impulse is sent to the connected device. The impulse's length is set via the specific setting.

Attention! If you do not possess the needed knowledge or qualification, please do not change that setting.

You can choose working mode **'Heating'** or **'Cooling'** depending on the desired work and the controlled device or appliance. With the Temperature precision you can set the degrees' visualisation – **'0'** or **'0.0'**. In **"Emergency mode setpoint"** fill in the temperature that you want your appliance to maintain when **BBoil** is switched on by pressing the hardware button.

Fill in the desired temperature range in **'Main sensor's notification limits'**. **BBoil** will notify you when the room temperature is out of the chosen range. In the field **'Temperature groups'** you can fill in the name of a group of sensors. In the field **'Temperature sensors'** you can fill in the names of the different sensors. In the field **'Temperature ranges'** you can set the values of the temperature slider on the main screen. **(Scheme 23)**

| General	
Working mode	
Thermostat	
Working mode	
Heating	
Temperature accuracy	
0	
Emergency mode setpoint	
32	
Main sensor's notification limits	
Min	Max
15	75
Temperature groups	
Group: 1	
Temperature sensors	
Group: 1, Sensor 1	
Down	
Temperature ranges	
Minimal	
20	
Maximal	
75	

Scheme 23

6.4 In the **'Schedule'** page, you can see a form for setting a weekly schedule for autonomous control of the connected device to **BBoil**. **Scheme 24a** shows an example of an empty schedule on a laptop's browser, and **Scheme 24b** - on a smartphone. It is possible to save individually created schedules and use them as templates for different scenarios.
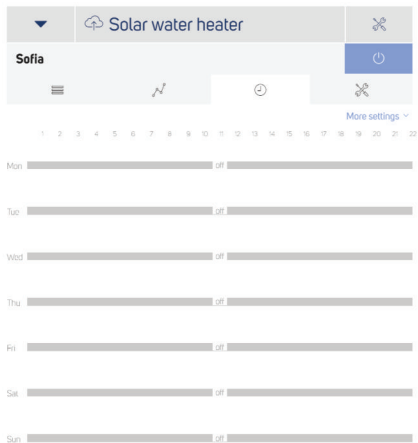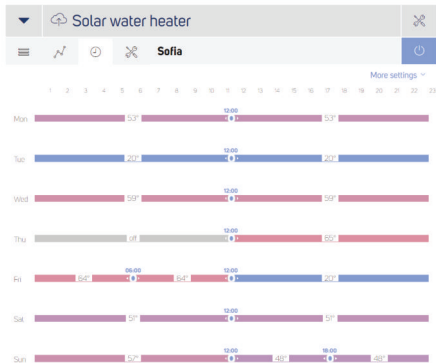

Scheme 24a
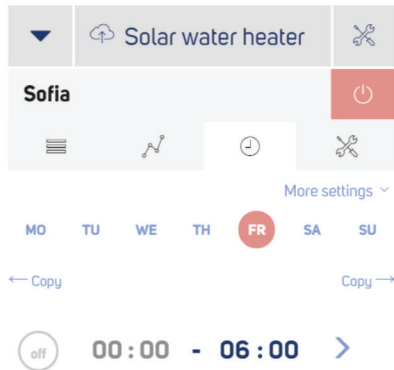
Scheme 24b

6.4.1 Press the axis on the desired day of the week. On the window that opens up, you can locate the buttons for splitting the set period – the day is split in two there is also a drop down menu for turning the chosen period on and off. When it is turned on, you see a slider for setting the desired temperature for that period.
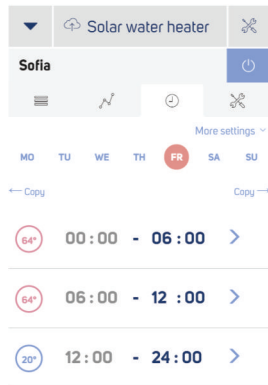

Scheme 25

To add a new period and come back to the schedule creation form, press the **'Add period'** button **(Scheme 25)**

6.4.2 This is an example of a weekly schedule's view on a laptop **(Scheme 26a)** and on a smartphone **(Scheme 26b)**.
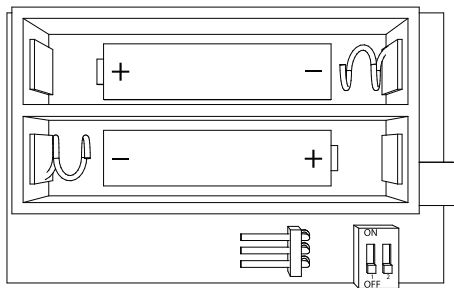

Scheme 26a

Scheme 26b

Important! We highly recommend to always update your browser to the latest version. The use of outdated browser versions could cause issues with the user interface's functions.
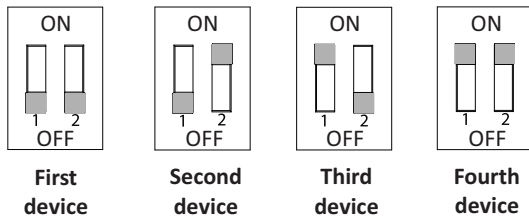
Step 7: Additional temperature sensors' connection. If you have a **BBoil Classic** device, please proceed to **Step 8**.

7.1 **BBoil RF** can work with up to four wireless temperature sensors in the same time. In order to add one or more wireless sensors, unscrew the temperature sensor's four screws and remove the bottom lid **(Scheme 5)**. Next to the battery holder, there are two switches in various positions **on/off**. **(Scheme 27)**
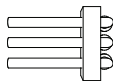

Scheme 27

Following the position outlined in **Scheme 28**, place the switches depending on which following sensor you are connecting. In order to pair the wireless temperature sensor to the main controlling block, follow the steps as explained in **point 2.1.**

ON	ON	ON	ON
1 2	1 2	1 2	1 2
OFF	OFF	OFF	OFF
First device	**Second device**	**Third device**	**Fourth device**

Scheme 28

7.2 Wired temperature sensor – For every wireless temperature sensor, a wired one with a 'probe' can be added. In order to add a wired sensor, unscrew the temperature sensor's four screws and remove the bottom lid **(Scheme 5).**

There is a connector next to the battery holder to which you can connect the wired sensor's jack **(Scheme 29).**

Scheme 29

Step 8: Servicing of **BBoil**

8.1 **BBoil** is cleaned with a dry or slightly dampened with water towel. The use of aggressive or abrasive cleaning liquids is strictly forbidden.
8.2 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.

Attention! When the Internet connection is interrupted, **BBoil** continues working at the set mode. By pressing the device's hardware button, you can turn it on and off in the Manual mode, depending on its current status. In this case, when the Internet connection is restored, the device will follow the mode that had been set by the hardware button.

Warranty

The warranty of the device is 24 months from the date of purchase. The serial number of the BBoil device is unique and you need to present it in the event of a problem during the warranty period.

The warranty will not be recognized if any of the following events occur:

- Lost or counterfeited warranty card;
- Damages, caused from wrong installation and exploitation;
- Attempted repair from an unauthorized service provider;
- Chemical, electrical or other influence on the product, which is not part of its natural usage.
- Distorted physical integrity of the device

All claims under the warranty are to be directed at the shop the device had been bought from or directly at the manufacturer Pro Smart Inc.

The Wi-Fi programmable thermostat **BBoil** complies to all of the following standards and regulations: EU EMC 2014/30/EU, LVD 2014/35/EU, RED 2014/53/EU, WEEE 2012/19/EU and the RoHS 2011/65/EU.
BDS EN 55022:2010 (CISPR 22:2008); BDS EN 55024:2010 (CISPR 24:2010); BDS EN 55016-2-3:2010+A1:2010 (CISPR 16-2-3:2010+A1:2010); BDS EN 61000-4-3:2006+A1:2008+A2:2010 (IEC 61000-4-3:2006+A1:2007 +A2:2010); BDS EN 61000-3-2:2014 (IEC 61000-3-2:2014); BDS EN 61000-3-3:2013 (IEC 61000-3-3:2013); BDS EN 61000-4-2:2009 (IEC 61000-4-2:2008); BDS EN 61000-4-4:2012 (IEC 61000-4-4:2012); BDS EN 61000-4-5:2014 (IEC 61000-4-5:2014); BDS EN 61000-4-6:2014 (IEC 61000-4-6:2013); BDS EN 61000-4-11:2006 (IEC 61000-4-11:2004); BDS EN 60730-1:2012; BDS EN 60730-2-9:2010; BDS EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013 (IEC 60950-1:2005+A1:2009+A2:2013); EN 60730-1:2011 (BDS EN 60730-1:2012), EN 60730-2-9:2010 (BDS EN 60730-2-9:2010); EN 50491-1:2014 (BDS EN 50491-1:2014); EN 50491-3:2009 (BDS EN 50491-3:2009)