Legrand PowerControlStation

User guide

Part. LE08866AD-01/26-01 GF

Legrand PowerControlStation

EN ENGLISH 3

Version 5.0.X

Index

1. Hardware and Software requirements 4
1.1 PC requirements 4
1.2 Device requirements 4

2. Installation 5

3. Connection to the PC 8
3.1 USB connection 8

4. Basic operating concept 10
4.1 Menus and toolbar 11
4.2 Work Tabs 13

5. User profiles 16

6. PIN management 19
6.1 Change PIN 19
6.2 Reconfigure the PIN with the unlock file 20

7. Monitoring 23

8. Device Configuration 24

9. Report (Print to file) 31

10. Test execution 32

11. Update Date and Time on MP2.10 and MP4.10 34

1. Hardware and Software requirements

1.1 PC requirements

Hardware requirements recommended

- Intel core i5 / AMD Ryzen 5
- RAM memory 8GB
- Resolution 1920 x 1080
- 1GB free space on hard disk

Software requirements recommended

- Windows 10 19H2

1.2 Device requirements

For devices which support the monitoring function (listed below) check the device technical version (note 1) or firmware version;

Product	Version	Range	Minimum compatible release
DMX³	MP4	2500-4000-6300	Display firmware 2.5.X
	MP6	2500-4000-6300	Display firmware 3.2.X
	MP2.10	1600-2500-4000-6300	All versions compatible
	MP4.10	1600-2500-4000-6300	All versions compatible
DMX-SP	MP2.10	2500-4000	All versions compatible
	MP4.10	2500-4000	All versions compatible

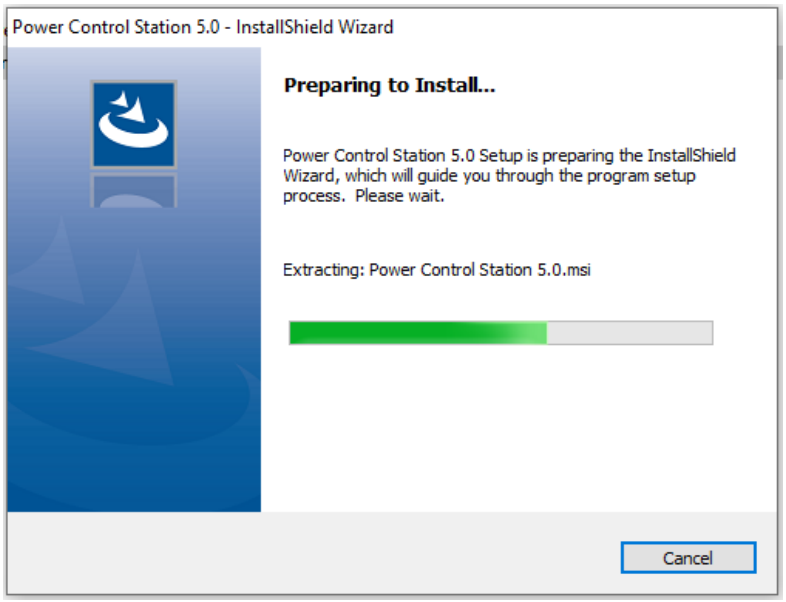
Product	Version	Range	Minimum compatible release
DPX³	160	Thermal magnetic with earth leakage protection	rev. 10
		Earth leakage protection only	rev. 10
	250	Thermal magnetic with earth leakage protection	rev. 10
		Earth leakage protection only	rev. 10
		Electronic S2, Sg	rev. 4
		Electronic with earth leakage protection	rev. 4
	250 HP	Electronic S10	rev. 3
		Electronic S10 with earth leakage protection	rev. 3
	630	Electronic S2, Sg	rev. 4 (Legrand) / rev.1 (Bticino)
		Electronic S10	rev. 0
	1600	Electronic S2, Sg	rev. 2
		Electronic S10	rev. 0

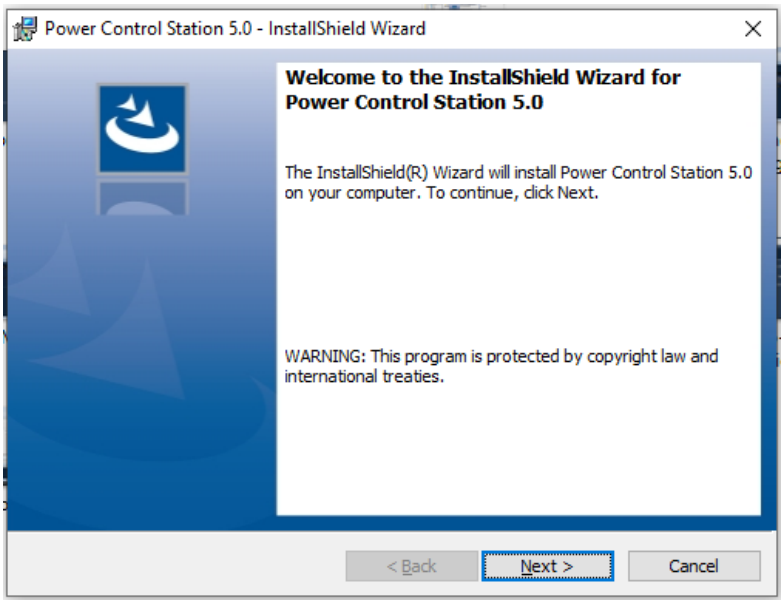
- note 1: the technical version is the 6th digit of the traceability code written on the product label (e.g. 11W40 **1** 80);

2. Installation

In order to install the Legrand PowerControlStation software, proceed as follows:

1. Launch the application installer;
2. The installation program will start copying the system files needed for the installation of the Legrand PowerControl-Station software. If previous versions of the software are found, it's necessary uninstall it before to proced with new installation. Follow the guided steps of installation wizard.

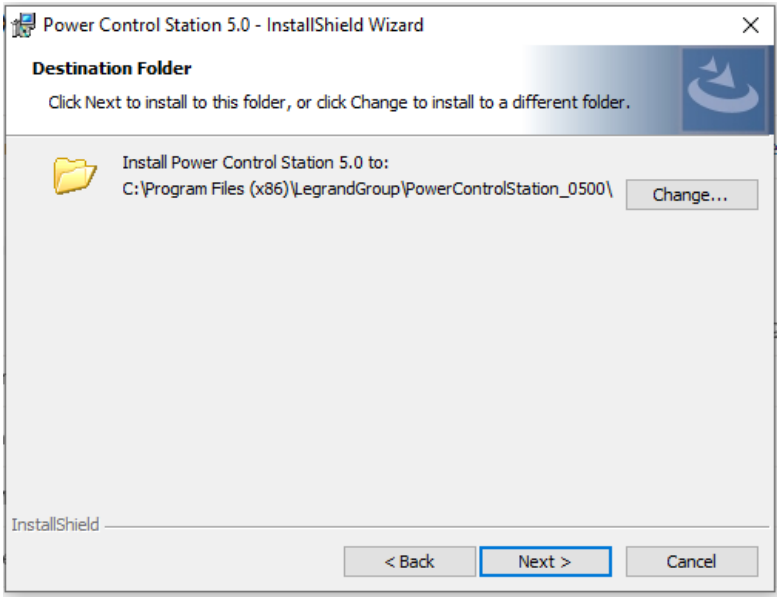


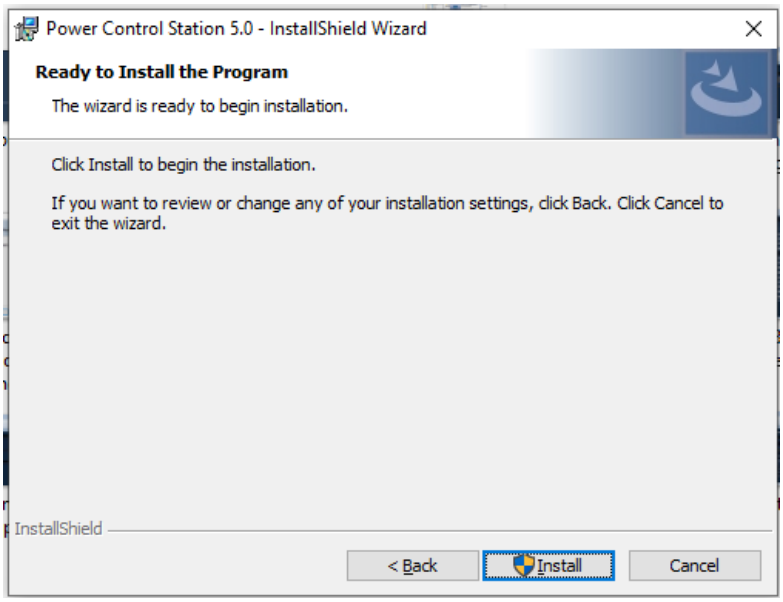


The language can be changed when running the application, without the need for reinstalling the program.

2. Installation

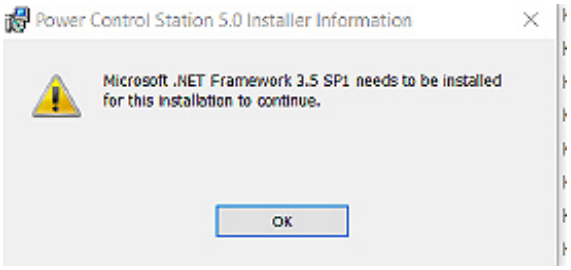
The system will prompt to enter the destination folder where Legrand PowerControlStation will be installed.
The installation procedure will suggest the folder:
C:\Program Files (x86)\LegrandGroup\PowerControlStation_0500.
If desired, the user can select another hard drive location.





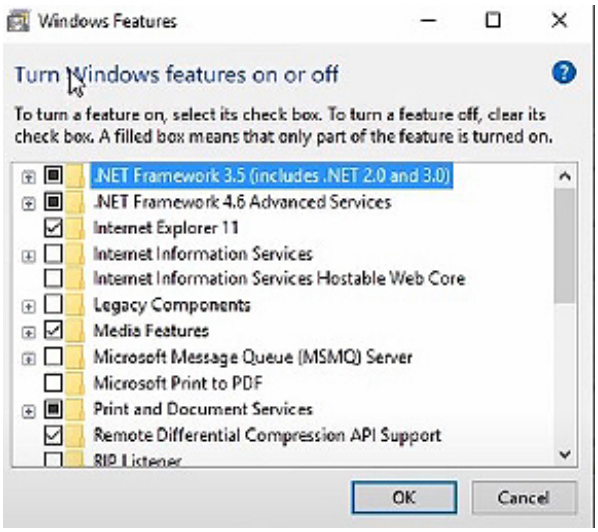
WARNING
Problem with .NET

It is possible that, during the installation, the following error is displayed:



To fix this, you must enable the framework on your PC.

Go into "Control Panel", then click on "Programs and Features". Once there, click on "Turn Windows features on or off": search for the required framework, and enable it.



Then click "OK" and retry to install the software.

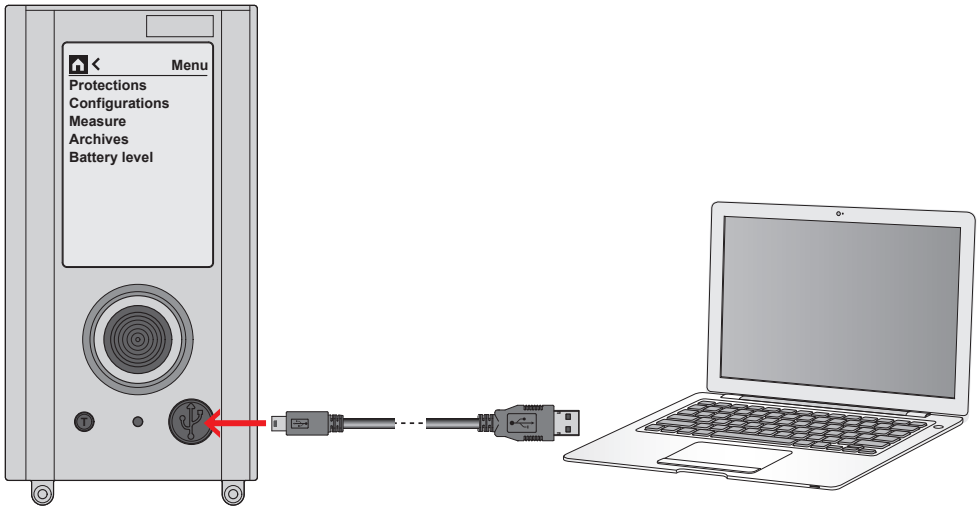
3. Connection to the PC

In order to use Power Control Station software the electronic device has to be connected to the PC using a USB-miniUSB (type B) cable or USB-micro USB cable, depending on breaker.

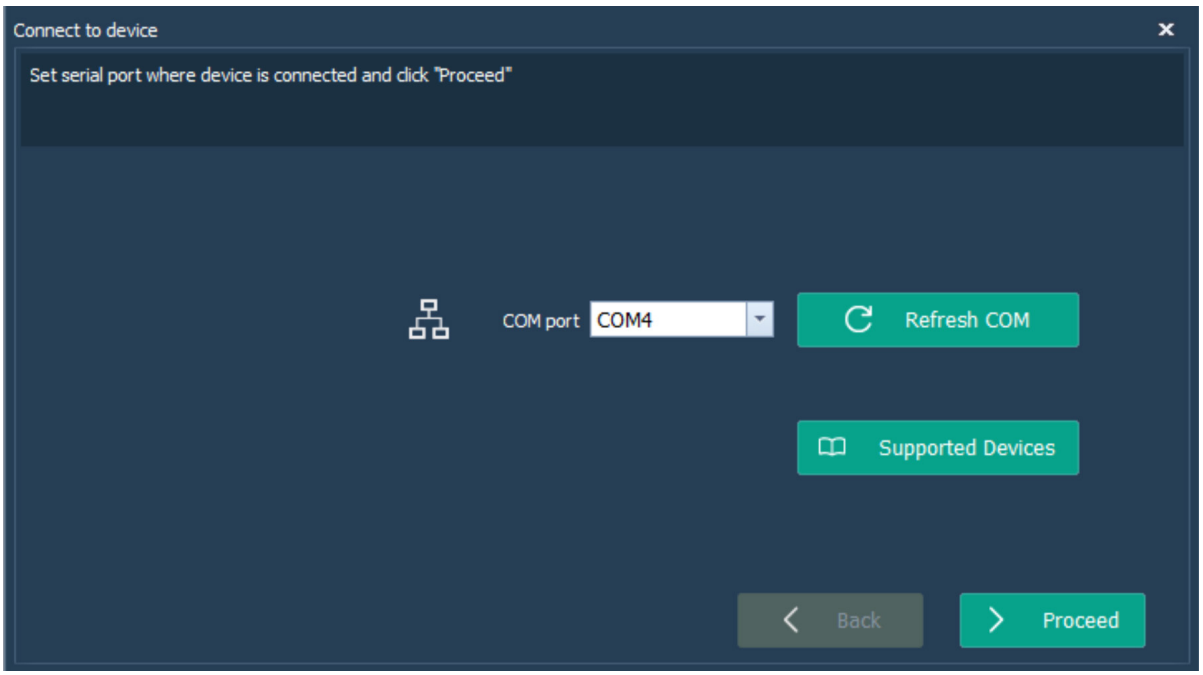
ATTENTION
ONLY FOR MP4/MP6: Before connect the device to the PC, be sure the protection unit is powered up and stably connected to auxiliary supply module. An incorrect operations sequence can lead to protection unit damage.

Once the device is connected via USB, Microsoft Windows will begin to search for the correct drivers for the associated device.
Whenever the automatic search is not successful, the installation of the correct driver can be forced, downloading the latest version of the virtual COM driver from the page web: www.ftdichip.com/drivers/vcp-drivers/.
in case also this last procedure will fail, contact technical support.

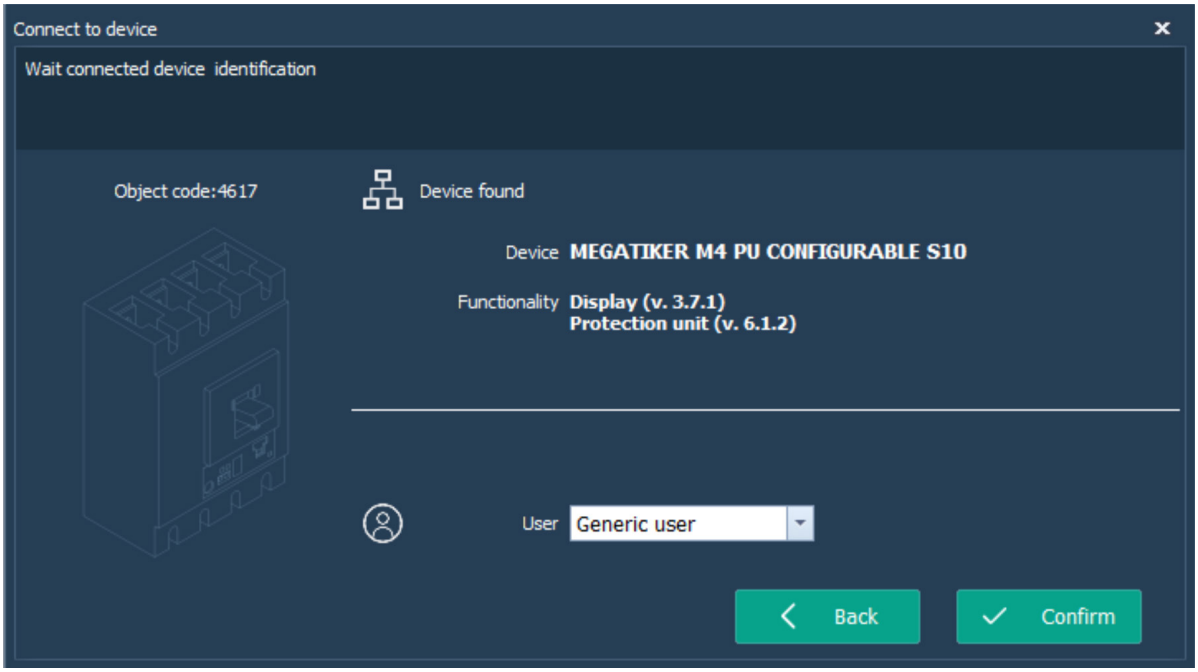
3.1 USB connection



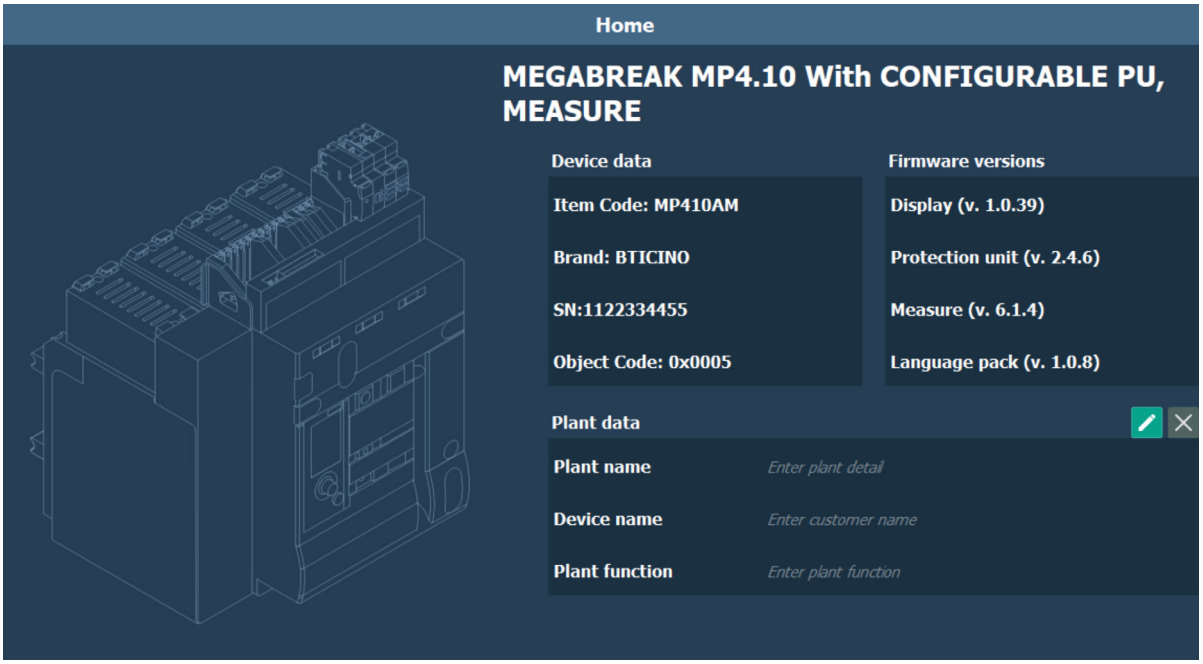
Once the connection has been established, click on connect button and select the COM port.



The device will be recognized automatically.
Then set the proper user profile (default profile is "Generic user"). A PIN could be required, check procedure at chapt. 6 "PIN management".

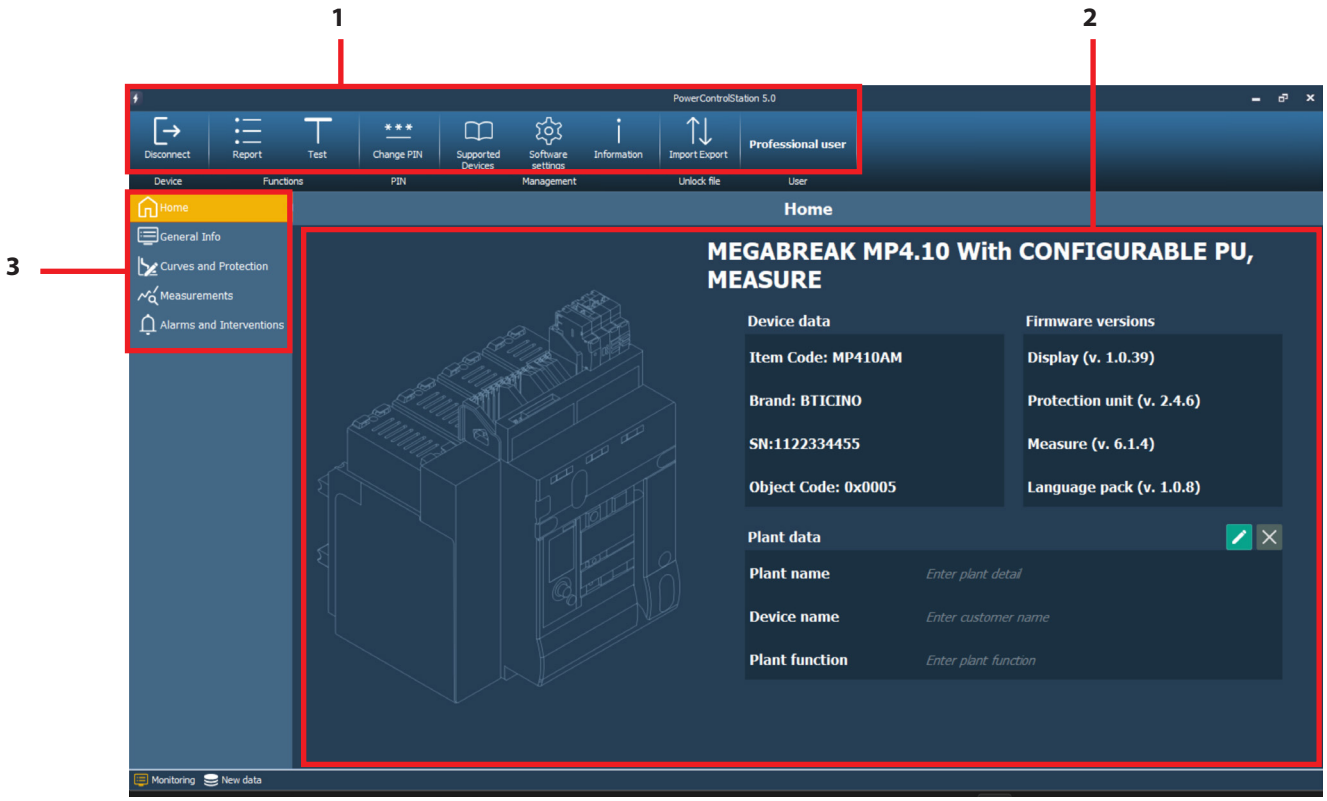


Once the device will be confirmed, the dialog main page will be open to operate.



4. Basic operating concept

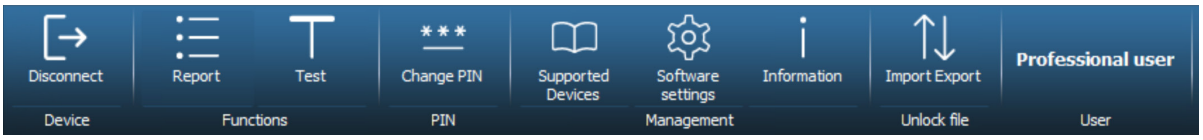
The Legrand PowerControlStation tool enables managing the information contained in the electronic devices.



1. **Menus and toolbar**: it includes the pushbuttons and the bars used for accessing all the Legrand PowerControlStation functions
2. **Display window**: it displays the detailed information relating to the item selected.
3. **Work tabs**: used to move through the pages. Each page contains several information or allow the access to different modalities.

4.1 Menus and toolbar

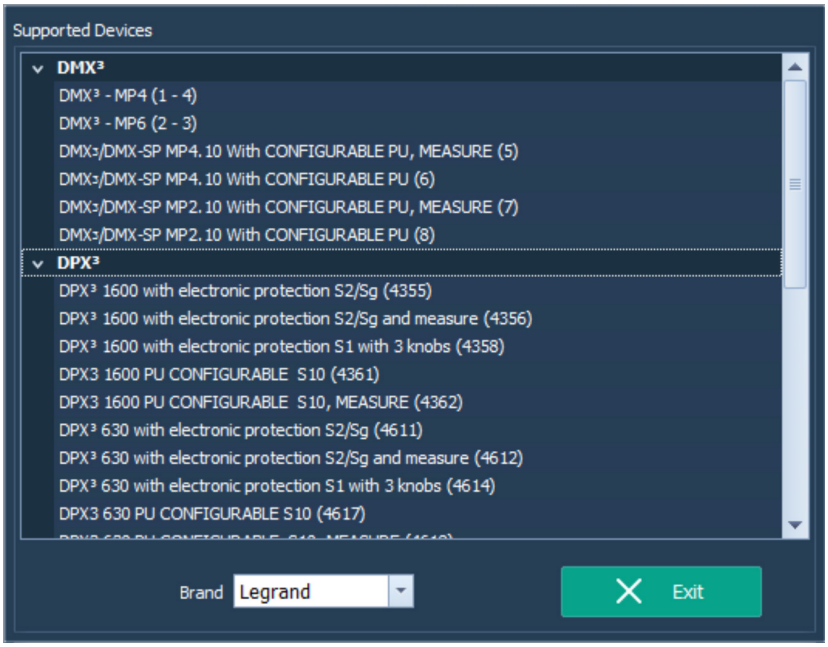
The window menus show the following functions:



Tools:

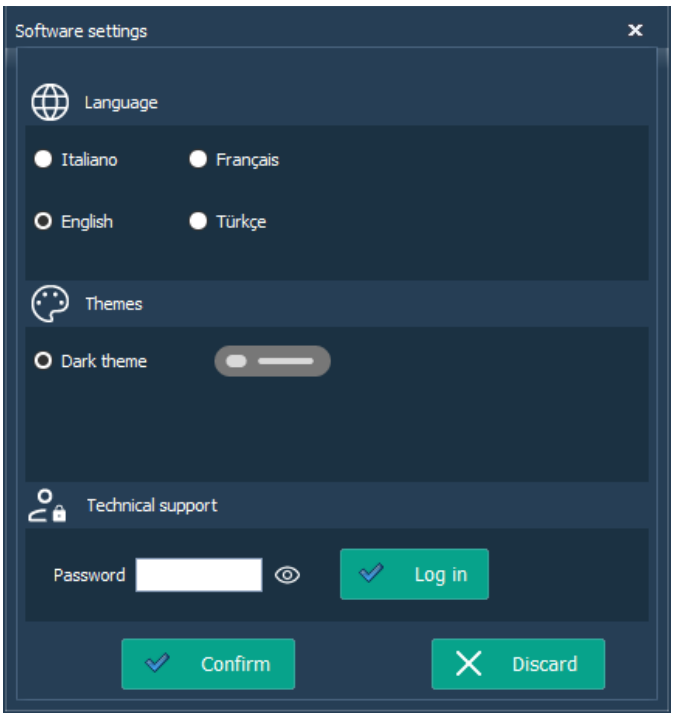
- **Disconnect**: to disconnect the device and go to home page
- **Report**: to generate .xlsx file with all data present on the device read by the software and during monitoring/ configuration
- **Test**: to perform diagnostic tripping test (starting from Professional User)
- **Change PIN**: to change device PIN, if present (only Professional User)
- **Supported devices**: to see all the devices supported by Power Control Station software.

Some functions could be disabled on the base of device or profile selected.

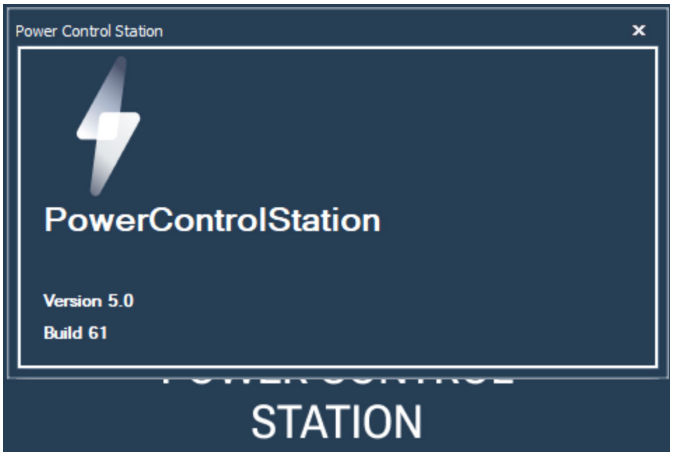


4. Basic operating concept

- **Software settings**: To open windows for software setting management (language, themes and technical support reserved area)



- **Information**: to see Software details



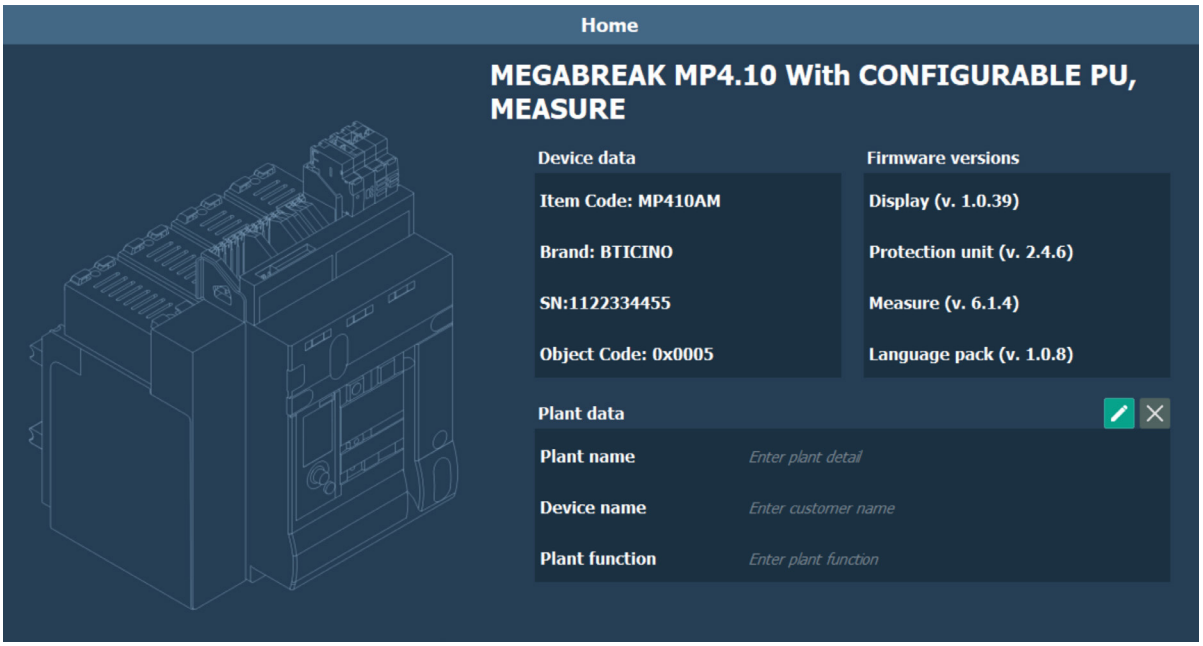
- **Import-Export**: To manage the un-lock file for reconfiguration of device PIN
- **User**: show the current user profile selected

* only for Technical support profile: **Update firmware**, to update the device firmware.

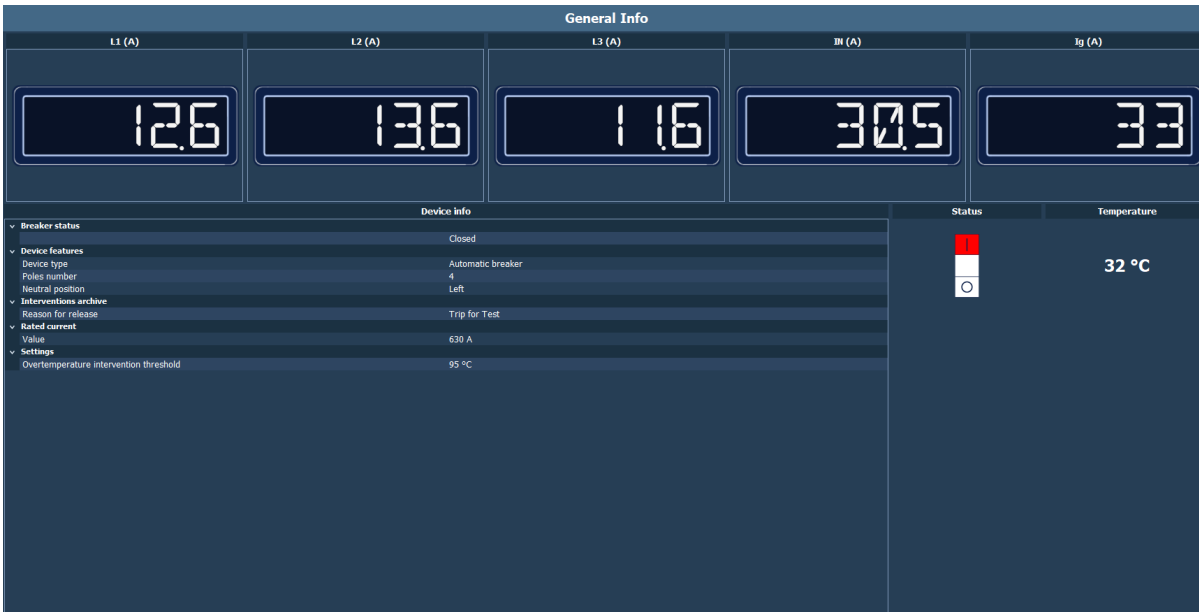
4.2 Work Tabs

The Legrand PowerControlStation software offers different work tabs. These can be selected with a click.

- **Home**: Main page, activated as default when the monitoring starts; it shows the main device information (device data, firmware versions, plant details).

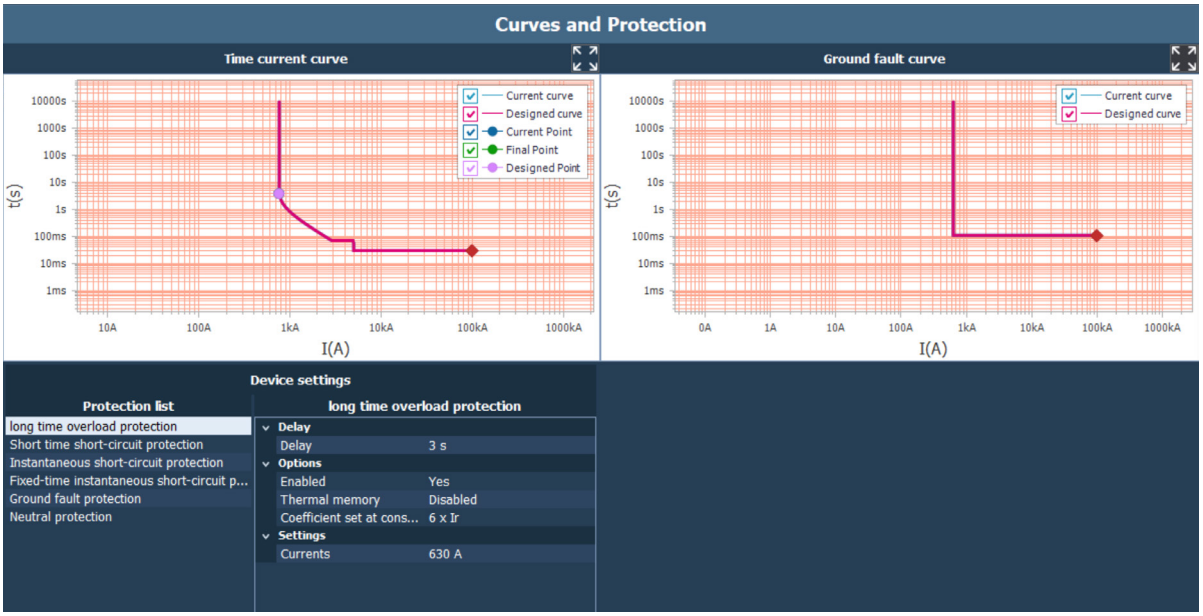


- **General Info**: Shows the main information and details of conencted device (Breaker status, real time currents, device info, temperature,...)

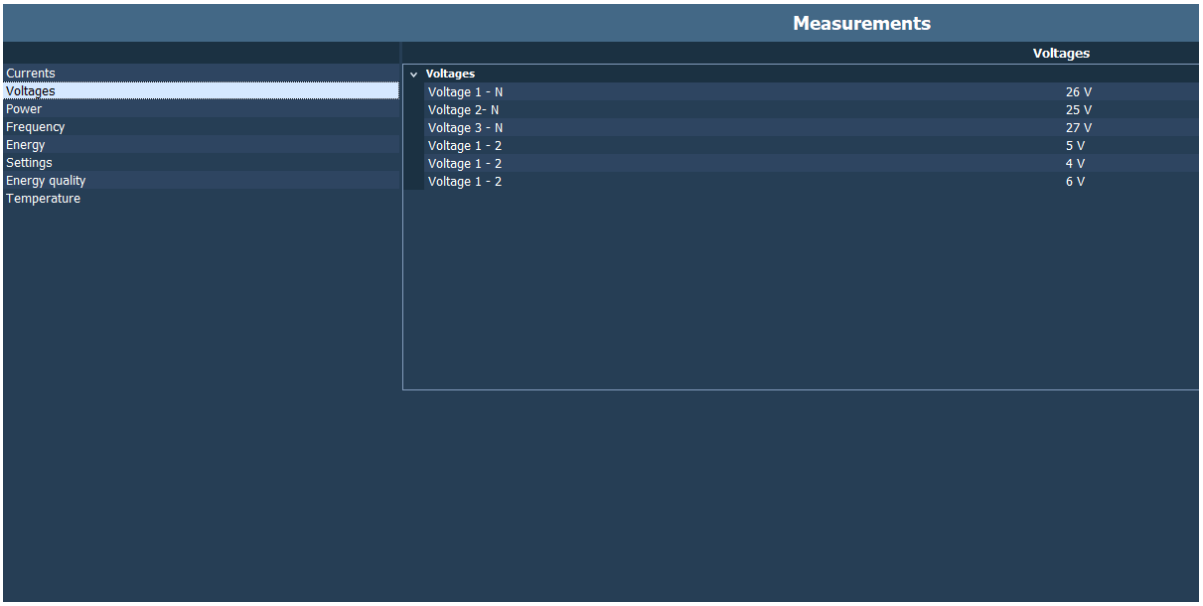


4. Basic operating concept

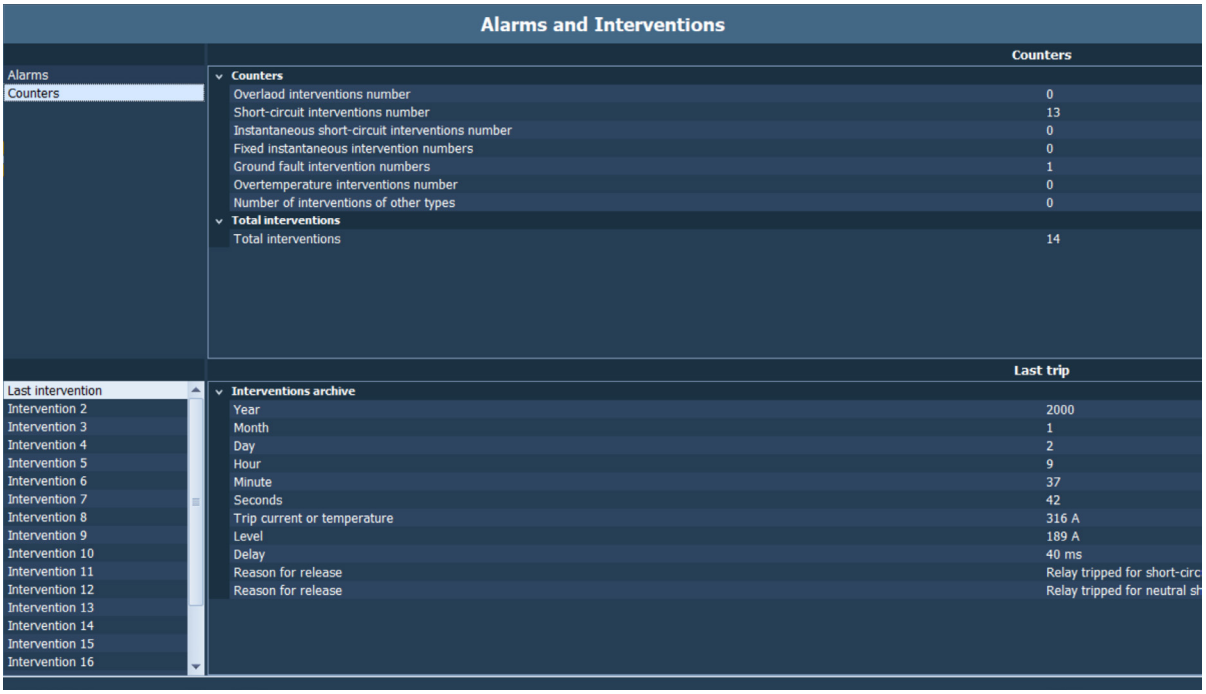
- **Curves and protection**: Shows the current protection values set, the intervention curve and allow to configure the breaker, if possible (change tripping points, range, draw the curve,...)



- **Measurements**: Shows the values of measurments for devices with the function embedded (Current, Voltage, Power, Energy, Frequence, Temperature,....).

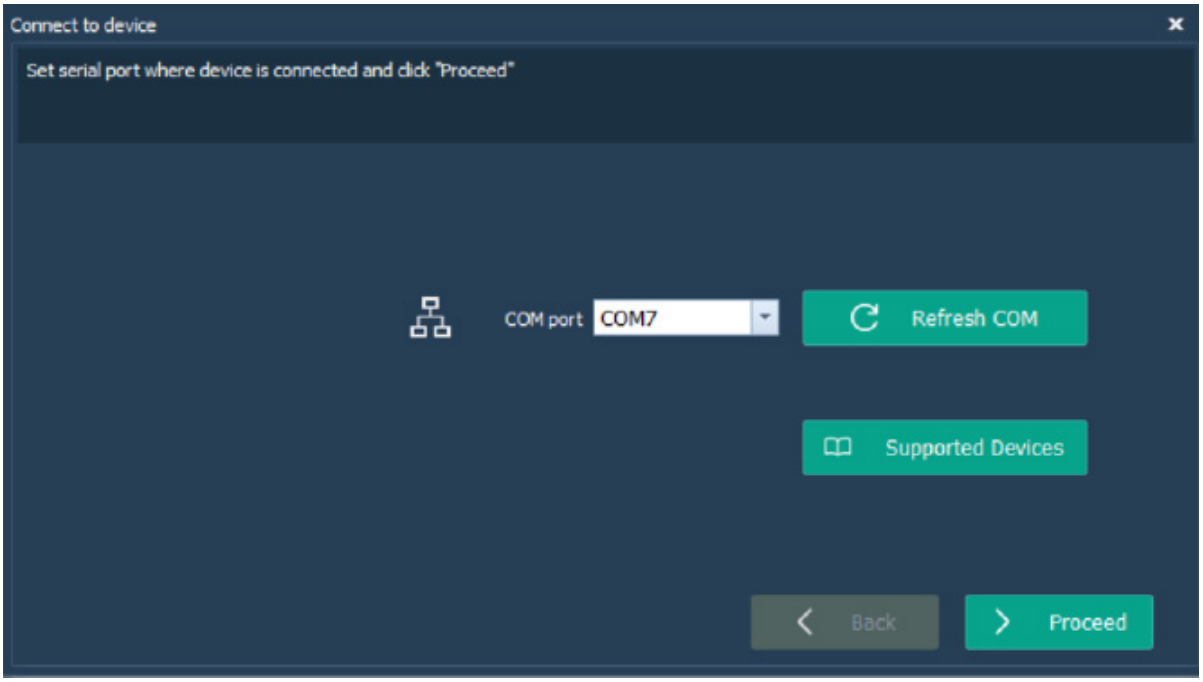


- **Alarms and interventions**: Shows the last alarms/intervention occurred, the counter and the archive/list of events.



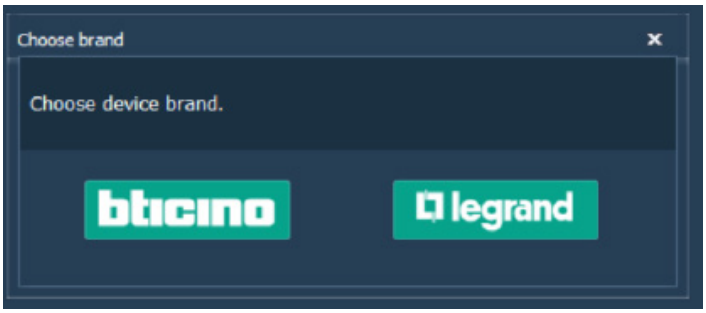
5. User profiles

The software can manage different user profiles, to which correspond diversified accesses to the various functions of the application.
Firstly, please click on the "Connect" button on the upper menu, under the tab "Device". Then, verify if the Com port is correct and click on "Proceed".



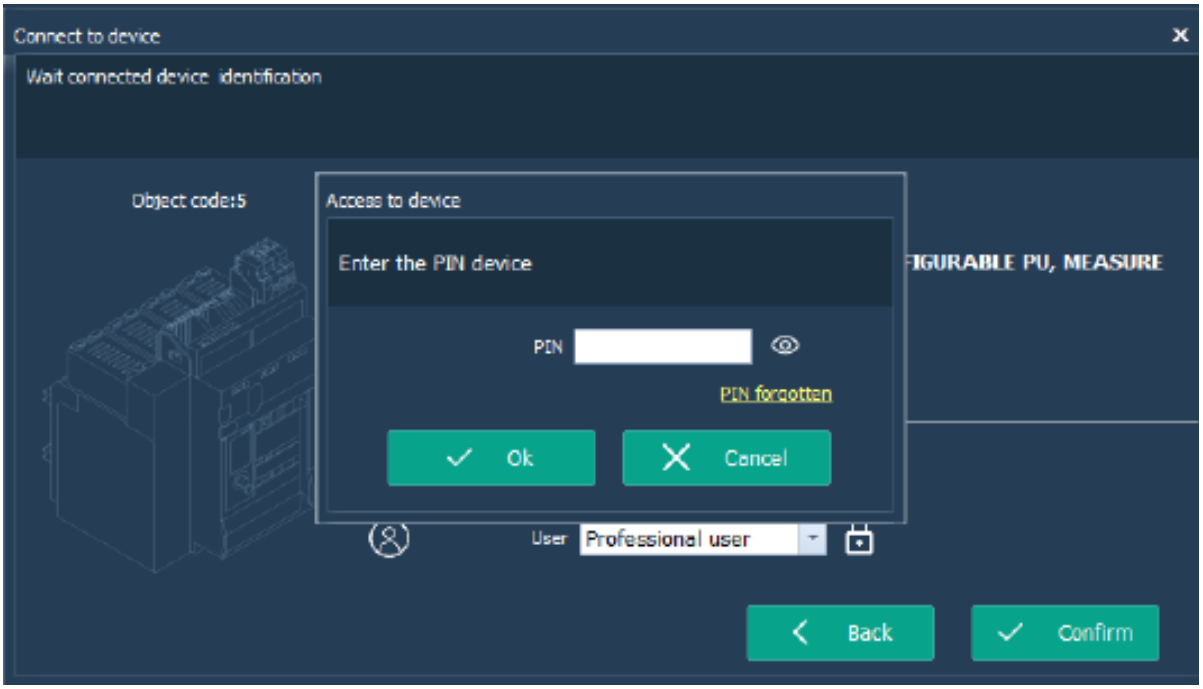
The software will try to recognize the connected product.

NOTE: it is possible that, with some devices, you should select the the correct brand.



Select desired user and click on "Confirm".

For some profile it's necessary put the PIN to get access. In this case, at the first connection of your breaker to the PCS, you need to enter the default PIN if you have not changed it on the device (for S10/MPx.10 the default PIN is 99999).



5. User profiles

The default profile is “generic user”.
This profile can perform basic operations; the advanced functions are instead forbidden.
To have access to advanced functions (Test, configuration, Change PIN,...) it’s necessary log in with a Professtional user profile.

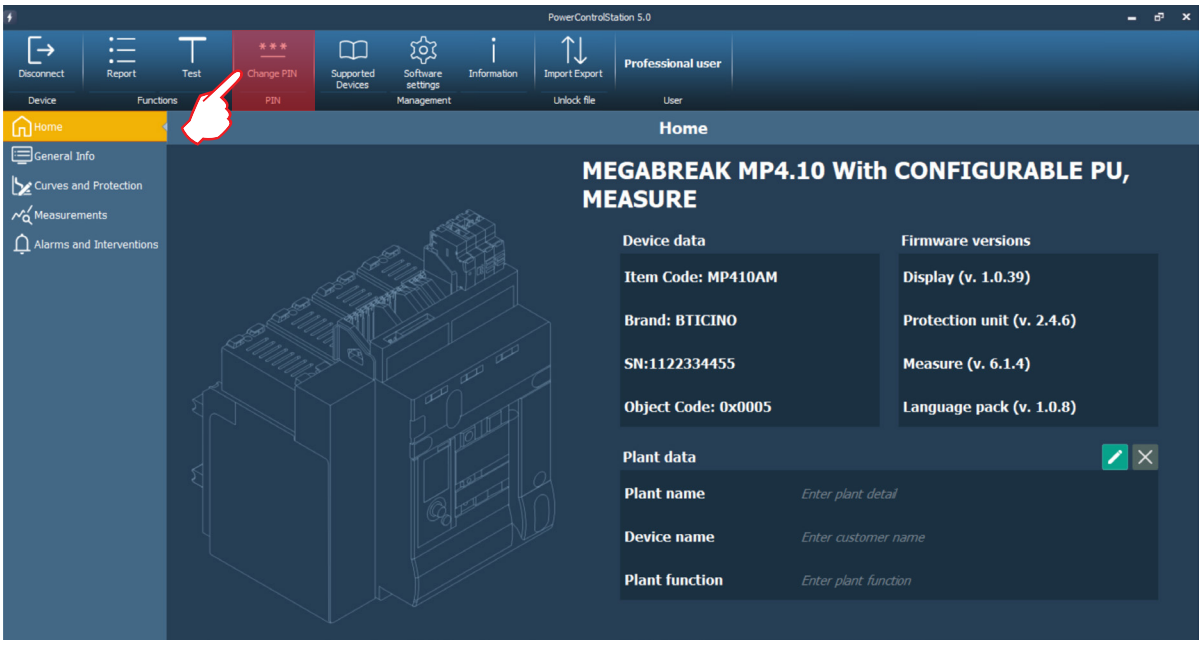
The profiles available are listed in the following table.

User profile table		
Profile name	**User task**	**Password**
Generic user (default)	Final customer, basic user	No password
Professional user	Installer, panel builder, maintenance engineer	if required: device PIN (default 99999)
Technical assistance	Legrand technical assistance/support	Confidential
Restricted area	Legrand developers area	Confidential

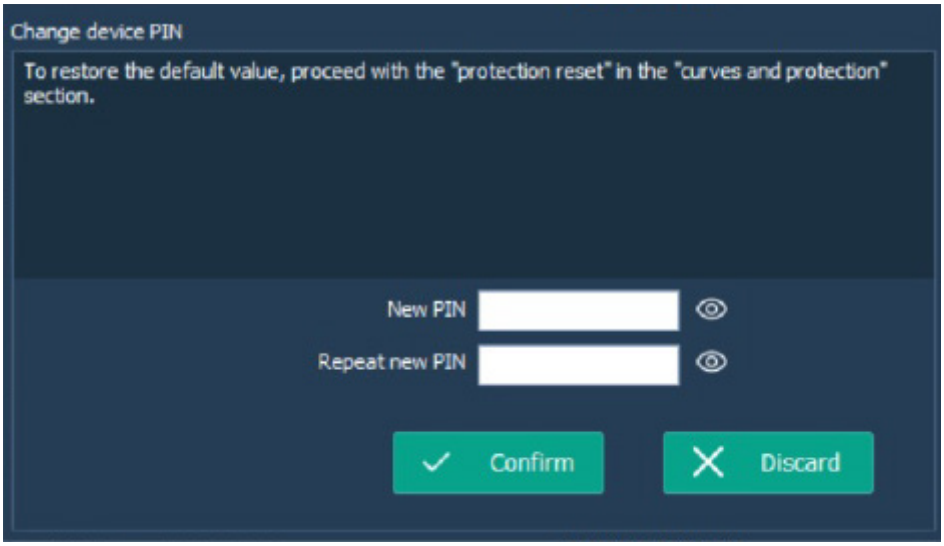
6. PIN management

6.1 Change PIN

To change the PIN, click on "Change PIN" in the "PIN" tab.



Insert the PIN you want to set and repeat it.



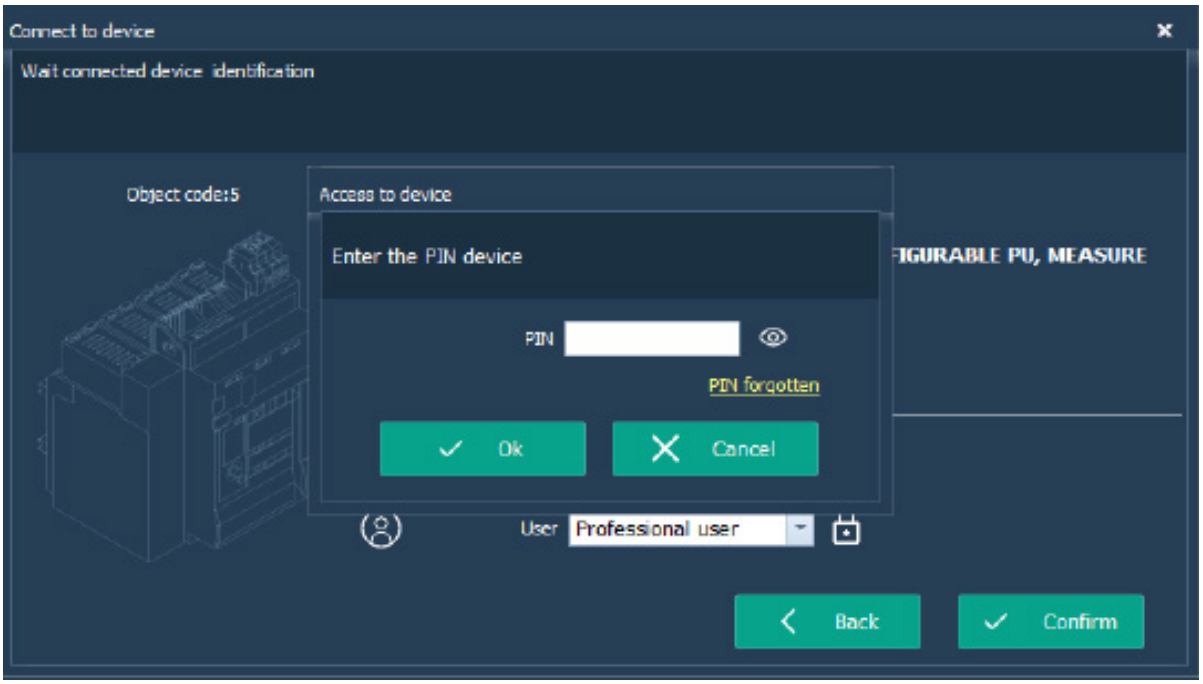
Click on "Confirm" to write the new PIN on the device.

WARNING
For some devices, once PIN has been changed with PCS, the setting modification couldn't be done locally from display until the "protection reset" (as indicated into above message). PCS inform user about the complete procedure.

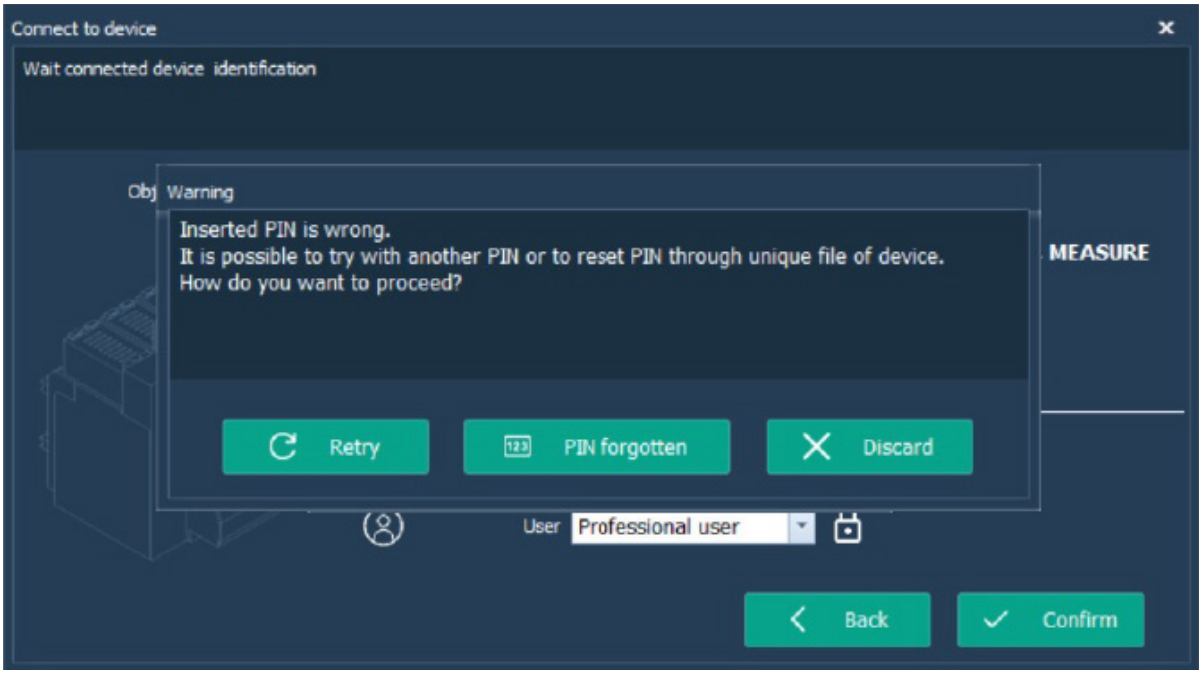
6. PIN management

6.2 Reconfigure the PIN with the unlock file

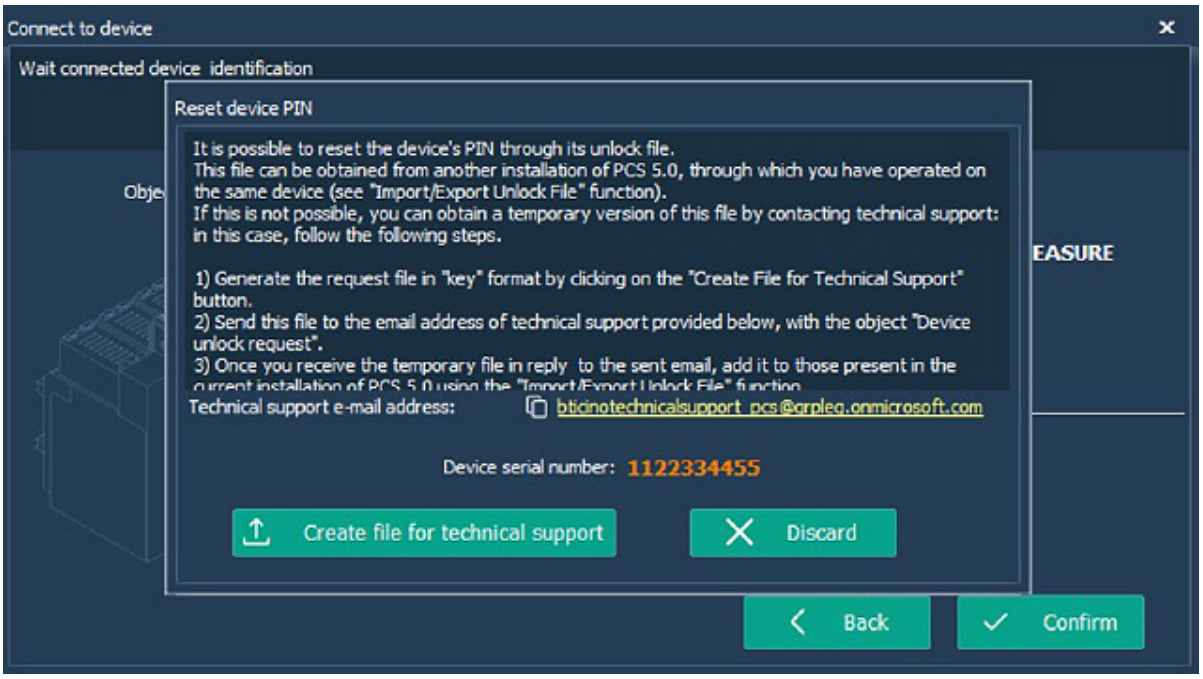
During the connection to the breaker:



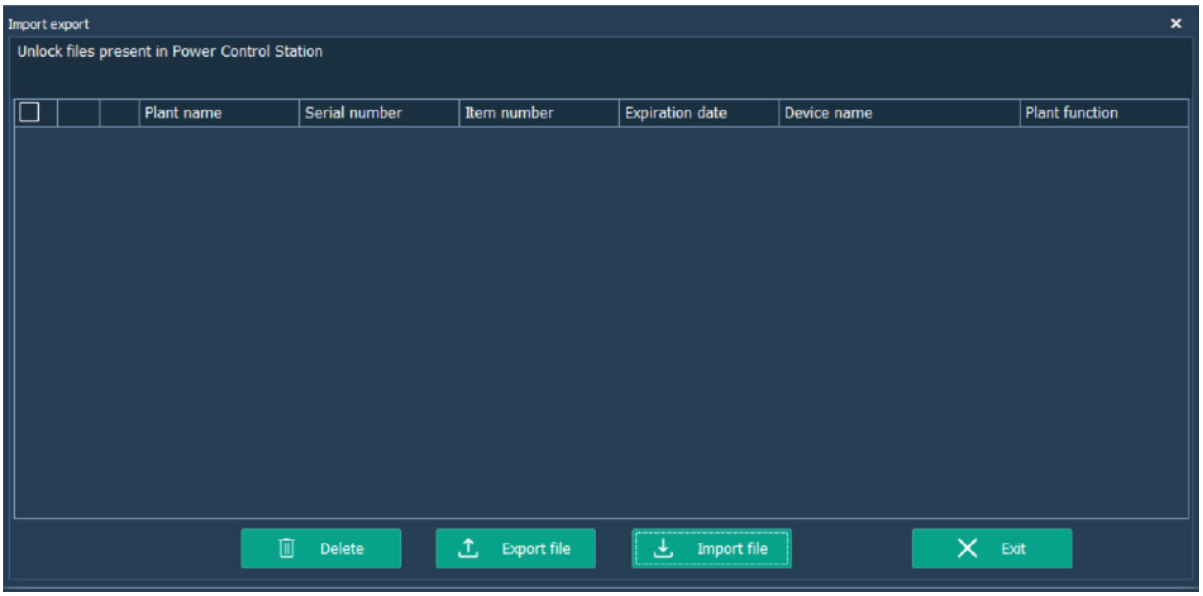
If you enter the wrong PIN (or click on "PIN forgotten"), you will see this page.



To start the reconfiguration process for the PIN, click on the "PIN forgotten" button.

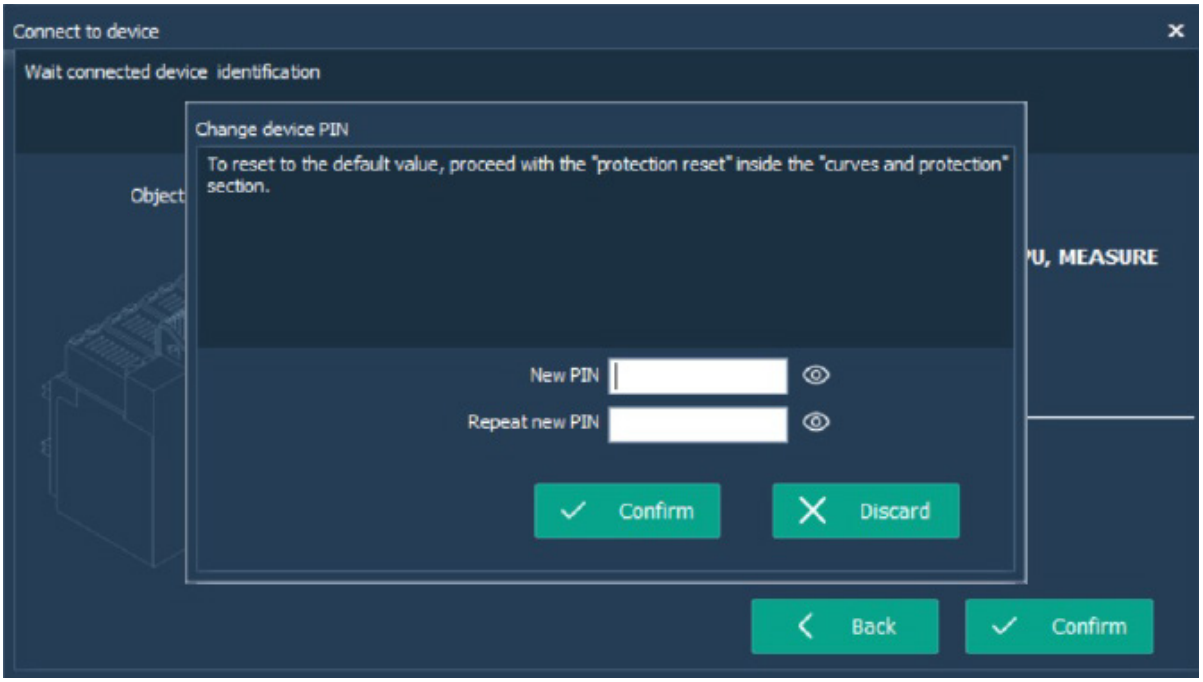


Following the reported instructions, it is possible to create a request to the technical assistance to obtain a temporary unlock file.
Once you have received the temporary unlock file, import it in your PCS installation through the "Import Export" button in the "Unlock file" tab:



6. PIN management

Repeat the steps: if everything was done correctly, instead of the "Reset device PIN" window you will be asked to set a new PIN. The temporary unlock file will be converted automatically into a one with no expiration date.



NOTE: if you have access to another PCS installation that has an unlock file for the target device, you can directly export that one (through the "Import/Export" tab) and import it in the current PC instead of asking for a temporary one to the technical assistance. An unlock file without expiration date will be always created locally the first time the user inserts a valid PIN for a device.

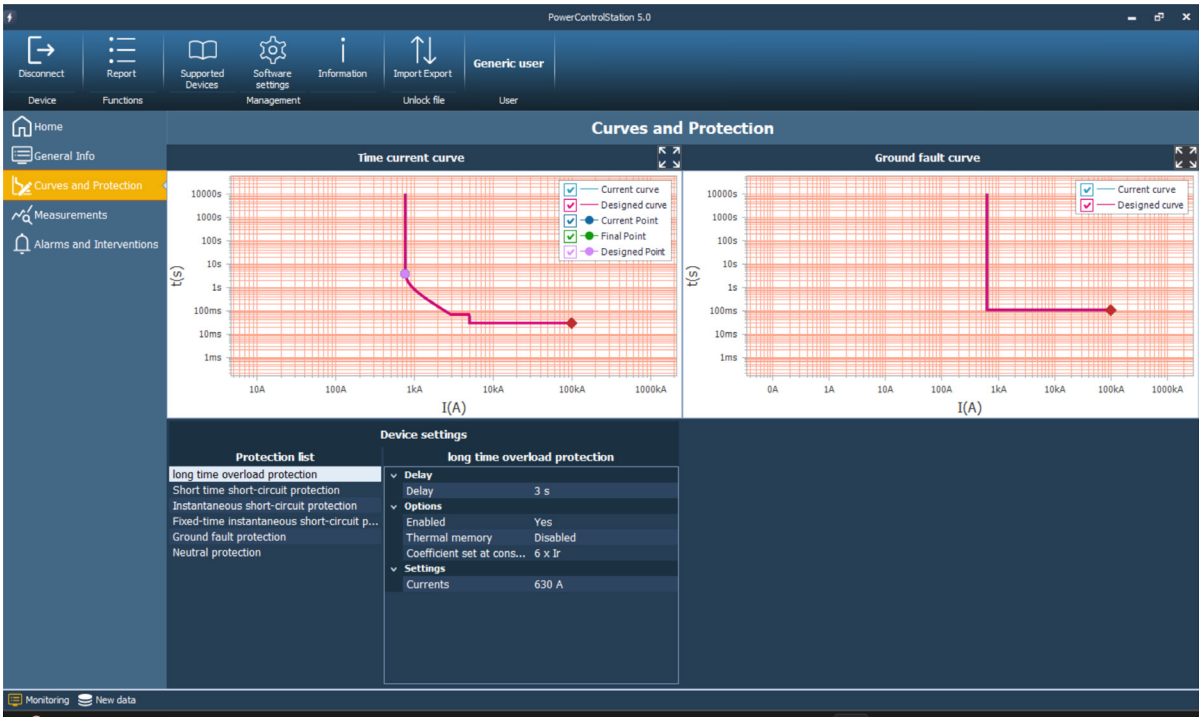
7. Monitoring

The monitoring function is available for all the user profiles.

The reading of the information contained in the device starts immediately after the connection (see chapt. 3).
Using the work tabs it's possible to consult the data that will be updated real time: general info, curves and protection, measurements (if device with measure embedded), alarms and interventions.

Inside the work tab "curves and protection" , also for generic user, it's possible get the status of protection set on device and see it graphically, as trip curve and ground fault trip curve (or RCD trip curve).
It is possible also zoom the curve at full page, clicking on the proper icon at the graph corner.

Changing values of protection on device, graphical representation on software will change automatically run-time.

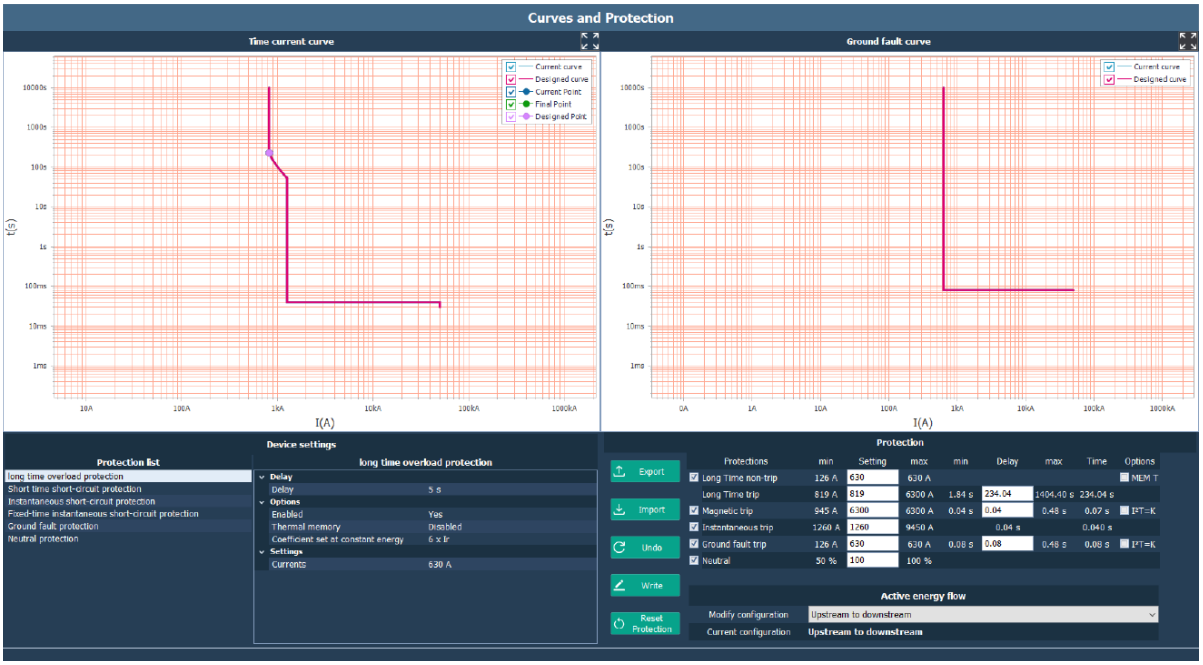


8. Device Configuration

You can use the software to change the configurations of your device.
This function is available only for Professional Users (not for generic).

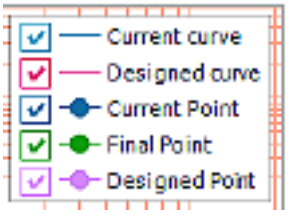
You have two possibilities to configure your device in the “Device” tab:
1. “Connect”: you can configure it when it is connected to your PC.
2. “Offline configuration”: you can prepare the configuration file without any need to connect your device to the PC. Then, as soon as you will be on-site and you have your PC connected to the breaker, you can load the file and send the configuration to your device.

On-site configuration:



On “Curves and Protection” page, you can configure your device.

On the graph, you can see the following table:



- Current curve: it is the actual tripping curve of the breaker.
- Designed curve: it is the tripping curve drawn from the parameters set in the “Protection configuration” section.
- Designed Point: it is the point (for the “Long Time trip”) that has been set in the “Protection configuration" section.
- Current Point: it is the point (for the “Long Time trip”) that has been read from the device.
- Final Point: it is the point (for the "Long Time trip”) that will be read from the device if the current parameters in the “Protection configuration" section will be written on the device.

Errors will be indicated in red color, and you need to correct them before writing the configuration on the breaker. The possible situations are:

- Long Time non-trip (current)
  - The value is outside the reported range.
- Long Time trip (current)
  - The value is outside the reported range.
  - The value is greater than the one set for the Magnetic trip current.
- Long Time trip (delay)
  - The value is outside the reported range.
- Magnetic trip (current)
  - The value is outside the reported range.
  - The value is less than the one set for the "Long Time trip" current.
- Magnetic trip (delay)
  - The value is outside the reported range.
  - The value is greater than the one set for the "Long Time trip" delay.
- Instantaneous trip (current)
  - The value is outside the reported range.
- Ground fault trip (current)
  - The value is outside the reported range.
- Ground fault trip (delay)
  - The value is outside the reported range.
- Neutral (percentage)
  - The value is outside the reported range.

In case a value falls between two discrete valid steps, it will be indicated in yellow color. In that case, it is possible to correct it or to leave it as it is (but it will be rounded down to the closest valid value if a write operation is tried).

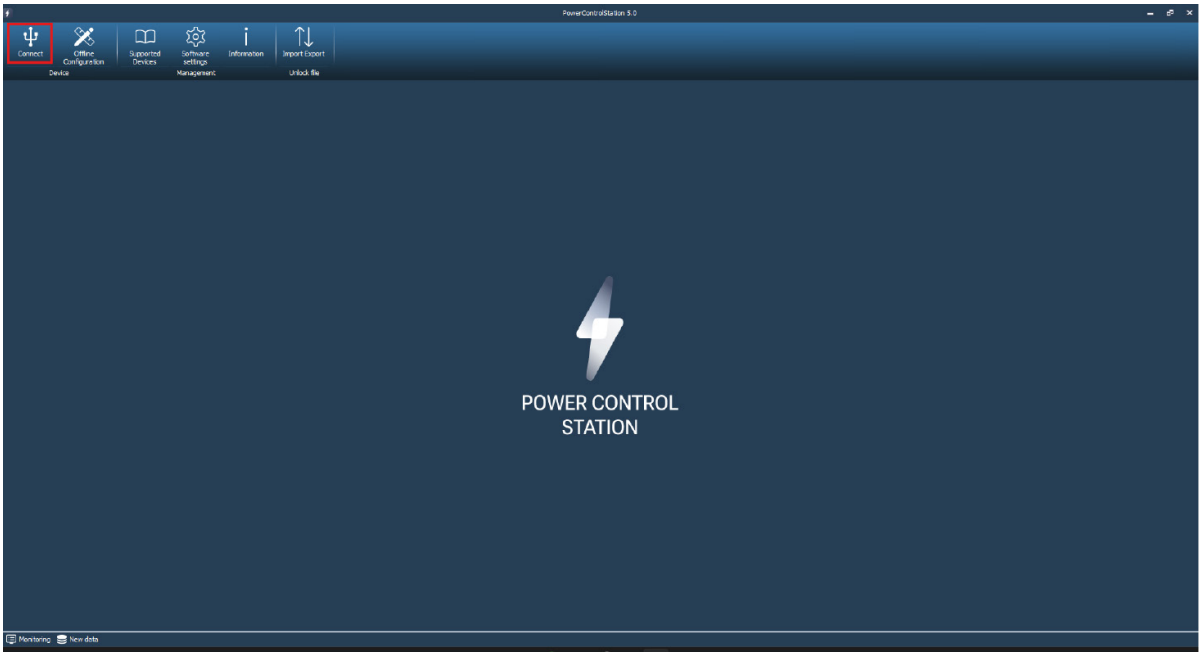
Now, let's see the functionality of different buttons on this page:

- Undo: it restores the parameters in the "Protection configuration" section to the actual ones of the device.
- Write: It writes your configurations to the device.
- Export: You can save the configuration files for future use, or for sending it to the others.
- Import: You can load an existed configuration file.
- Reset Protection: It resets the configuration of the device, writing the default parameters and restoring the default pin.

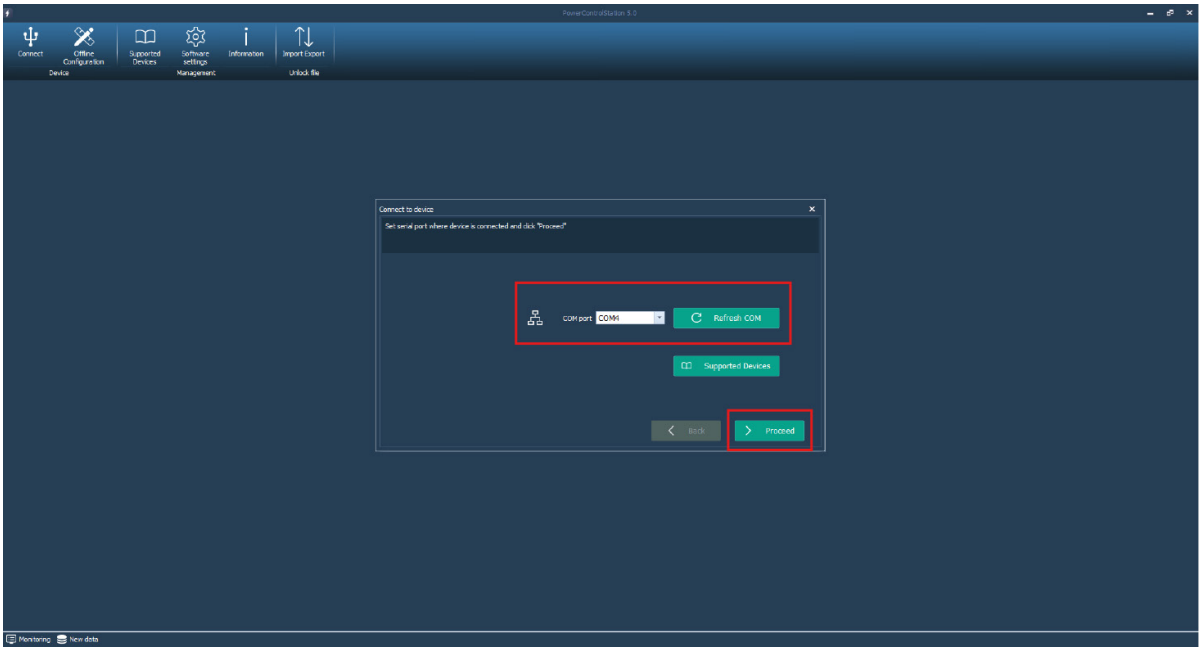
8. Device Configuration

Switch to S10/MPx.10

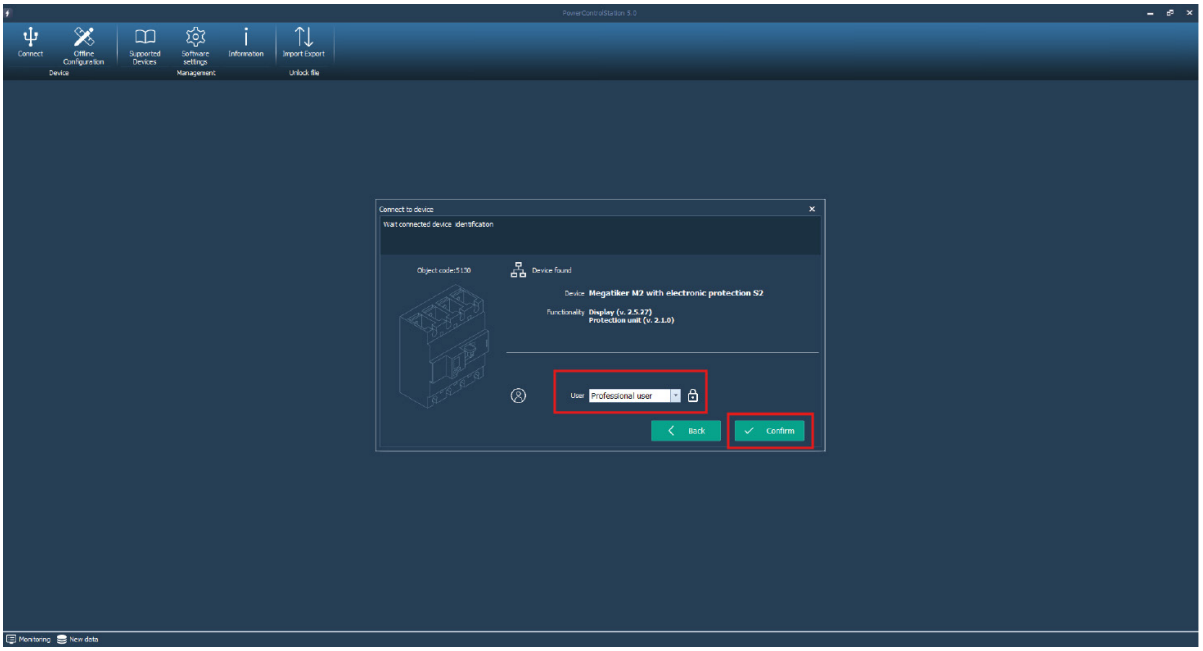
It is possible to read and to export the protection parameters from non S10/MPx.10 device to compatible S10/MPx.10 ones. In the top bar, in the "Device" section, click on the "Connect" button to start the communication with the device:



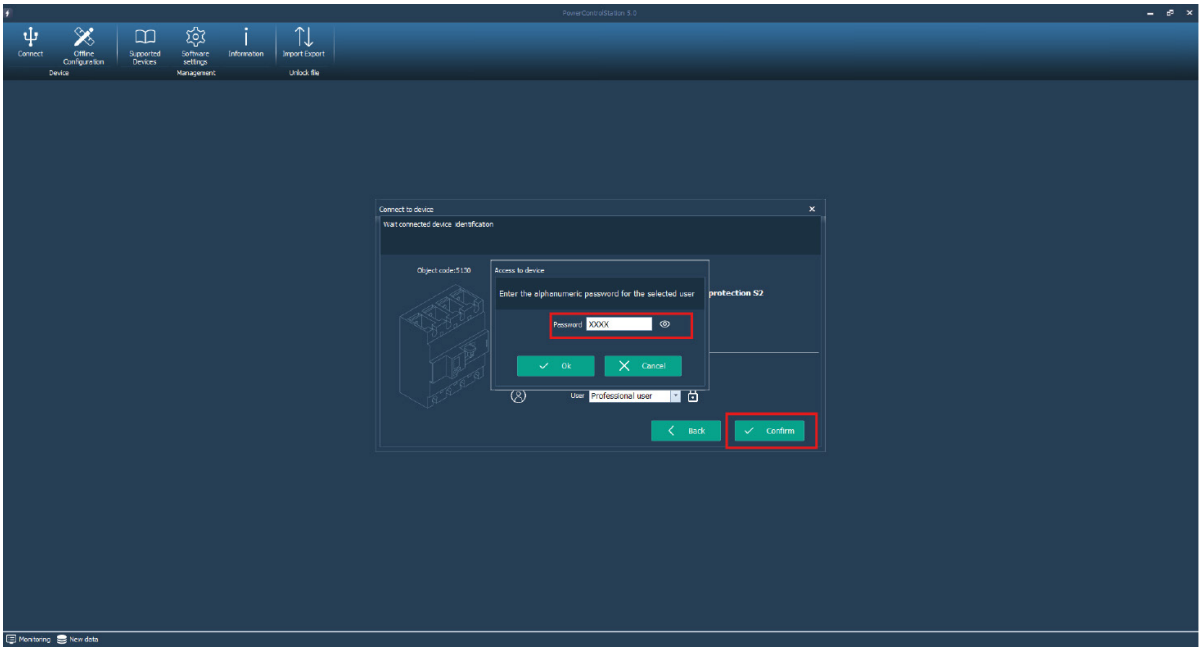
In the "Connect to device" dialog, select the correct COM port and click on "Proceed" button:



Select the "Professional user" and click on "Confirm" button:



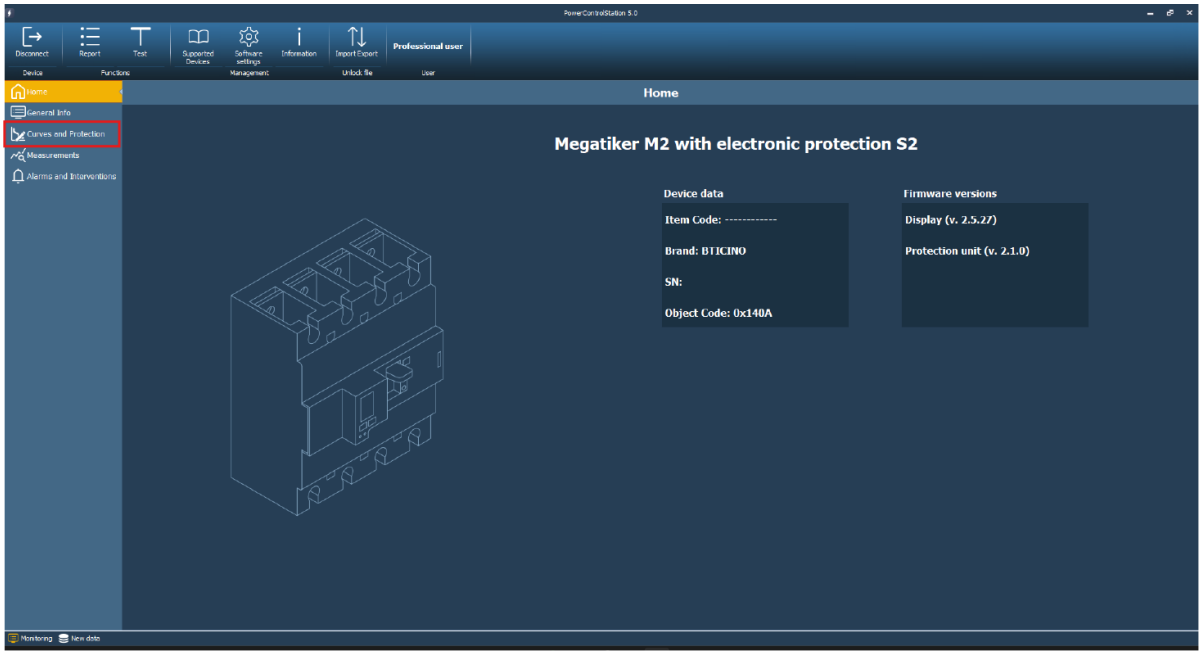
Insert the PIN of the device, and click "Ok" button:



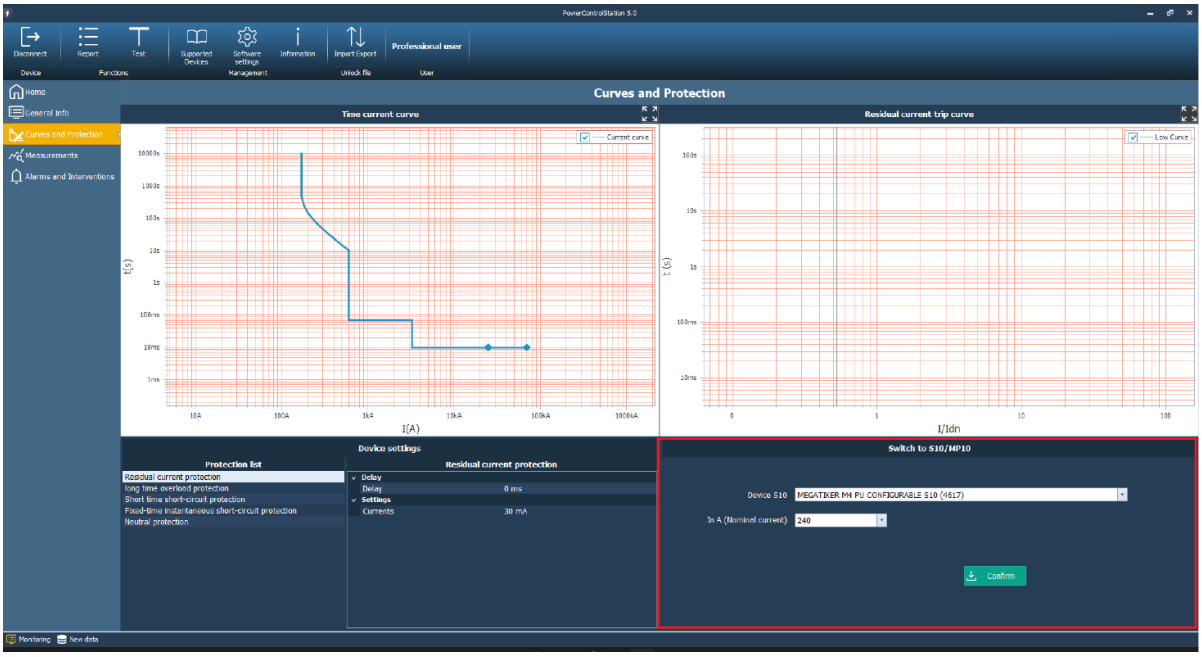
NOTE: by default, the PIN is "0000" on non S10/MPx.10 devices.

8. Device Configuration

In the side bar, click on “Curves and Protection”:

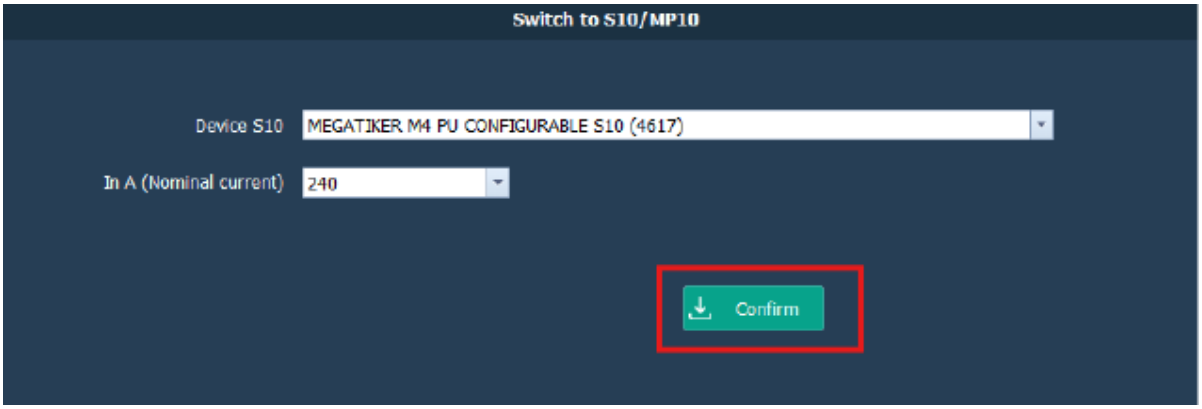


In the bottom right corner, the new section “Switch to S10/MPx.10” will be available:

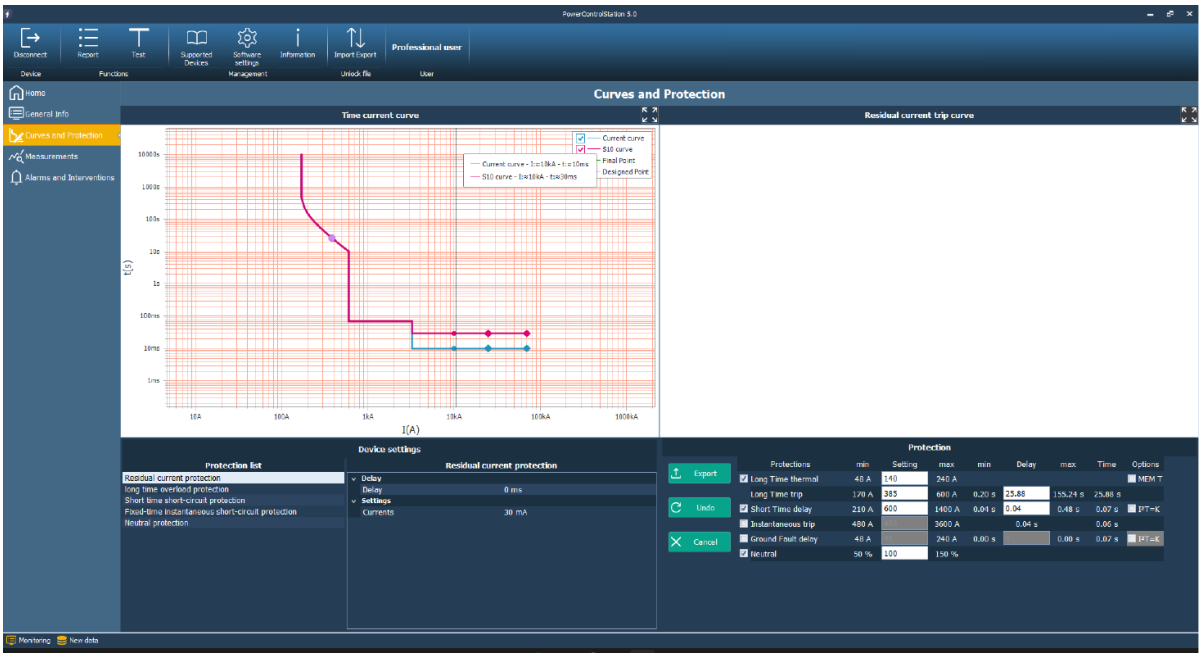


In the section “Switch to S10/MPx.10” it is possible to select (if available) one S10/MPx.10 device that is compatible with the connected one, according also to the current device’s nominal current.

Once selected the desired device, click on "Confirm" button to start the editing process:



The "Switch to S10/MPx.10" section will be replaced by the "Protection" one, and the "S10 curve" (expected on the selected device) will be shown together with the current one:



This allows the user to fine tune the export-candidate parameters, taking into account possible differences between the starting device and the destination one.

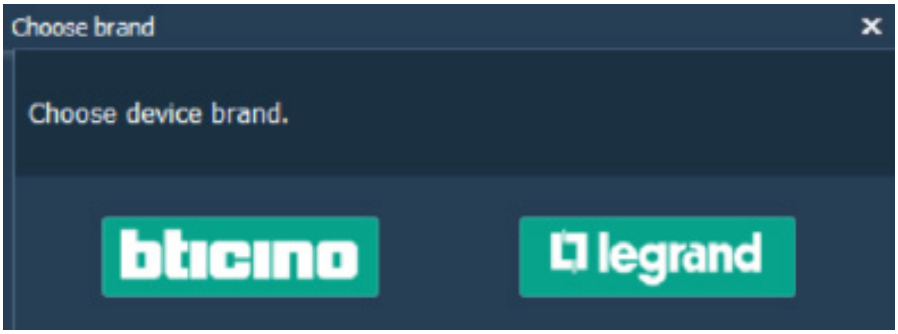
Once completed, click on "Export" button to save the configuration file: it will be possible to import it once connected to the previously selected S10/MPx.10 device to perform the protection parameters write operation.

If the user wants to change the selected S10/MPx.10 device, it is possible to do it by clicking on the "Cancel" button in the "Protection" section: this will replace the "Protection" section with the "Switch to S10/MPx.10" one.

8. Device Configuration

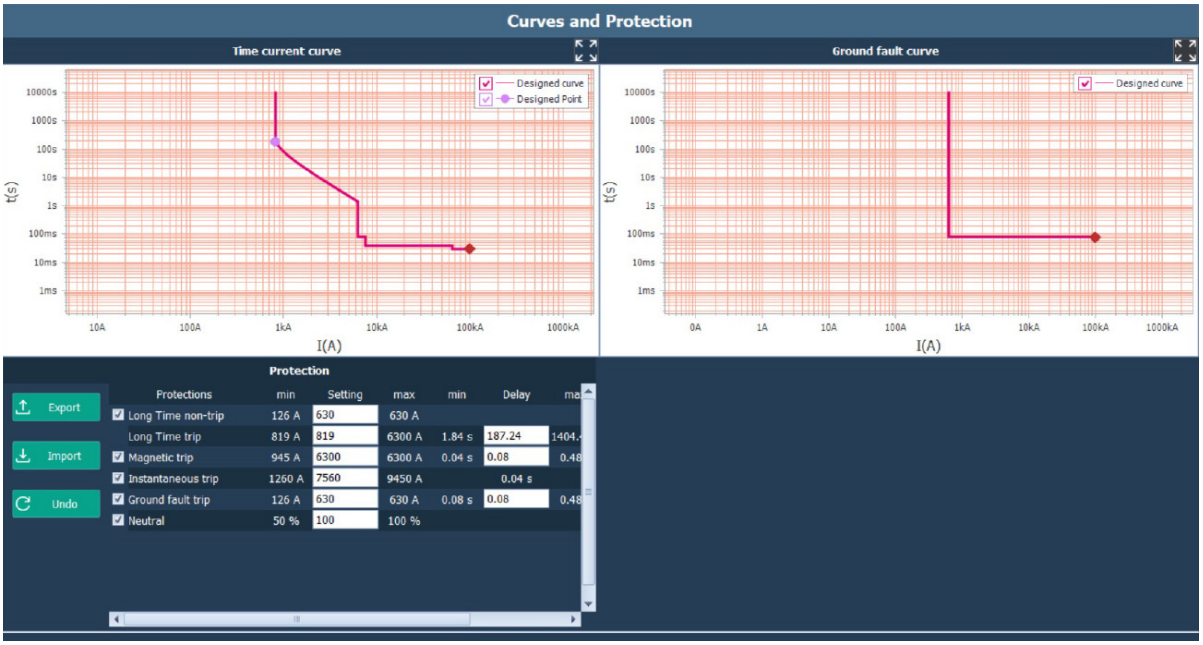
Offline configuration:

1. Click on "Offline Configuration" button under the "Device" tab.
2. Select the brand of the device you want to configure.



3. Select the device and its rated current, then click on "Confirm".

4. Prepare the configuration: once you have done, click on "Export" button to save it. It is also possible to modify an existing exported configuration by importing it through the "Import" button.



9. Report (Print to file)

This function is available for all user profiles.

The function report allows to export the data transmitted by the device (configuration, adjustments, alarms, event history, measurements...) in an editable format.
By pressing on the pushbutton, the software generates a report (in .xlsx format) containing the information shown by software.
This report, already formatted and ready for print, is saved in the folder chosen by the user.

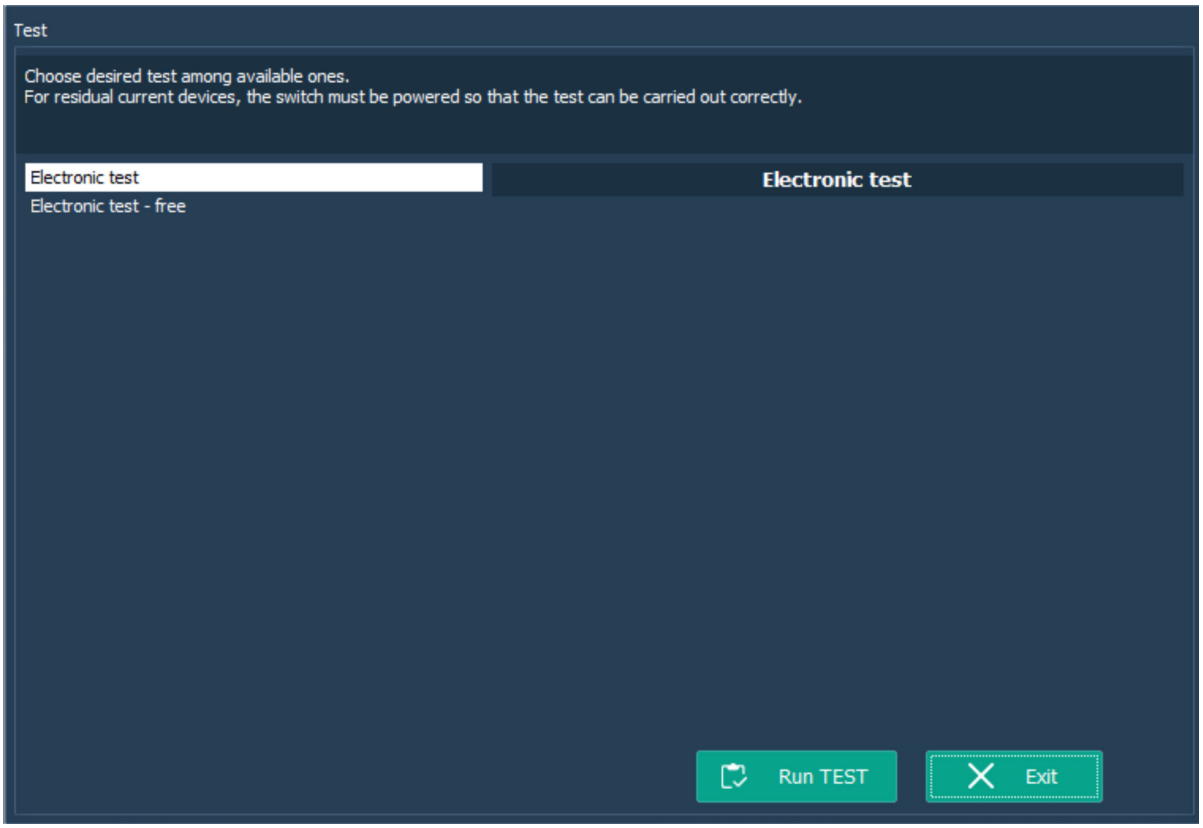
10. Test execution

This function is available exclusively for some devices and/or user profiles.

This function can command the device to perform some diagnostic tests via software.

Click the“Test” button on the toolbar to open the following window (the Test icon will be visible only for devices supporting the test function).

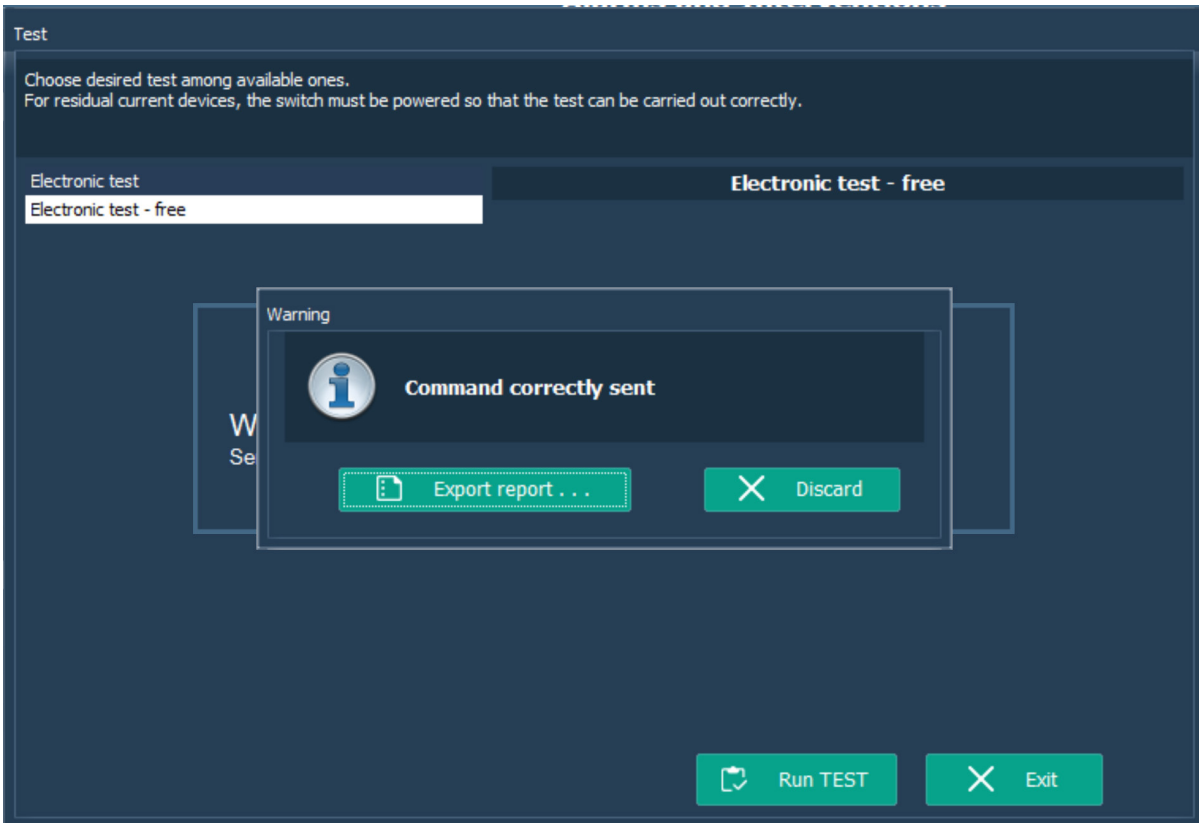
ATTENTION
Some tests, for instance the diagnostic trip test, could cause the breaking of main contacts.
By the way, **make sure there are no consequences to the installation.**



Select the test to be performed among the ones available on the list, verify that the breaker is in “ON” position and click “Run test”.

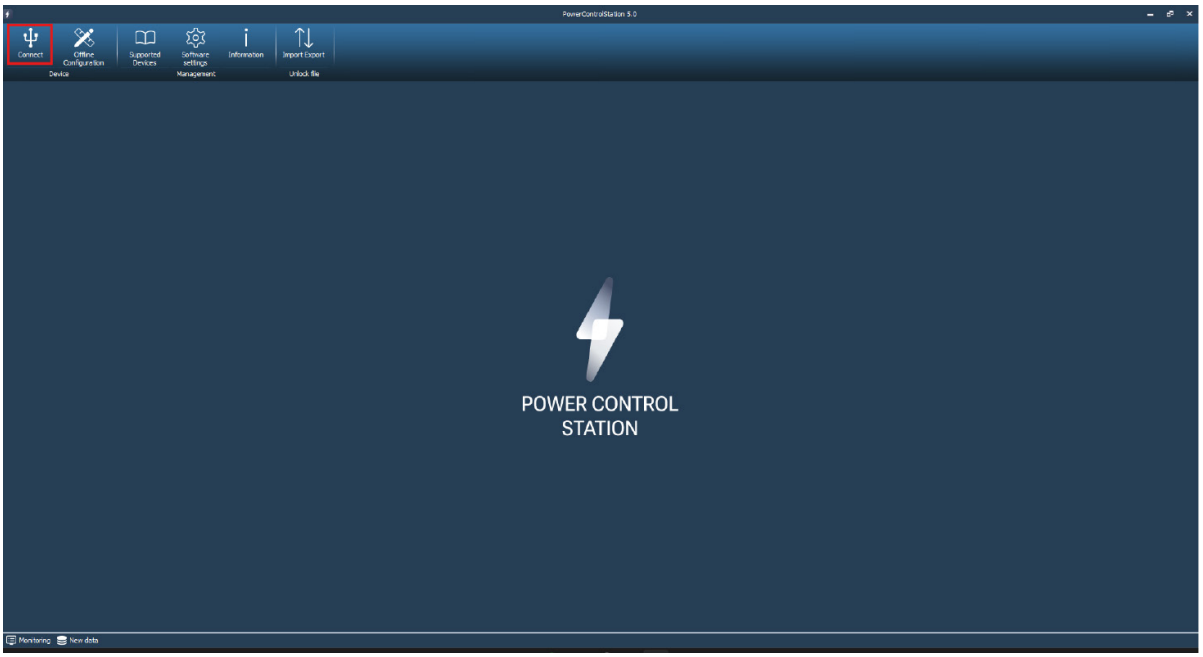
After a while a message will inform you about the conclusion of the test.
It will be possible generate the test report in .xlsx format.

Please note some devices need to be correctly supplied in order to guarantee the tripping of the device.

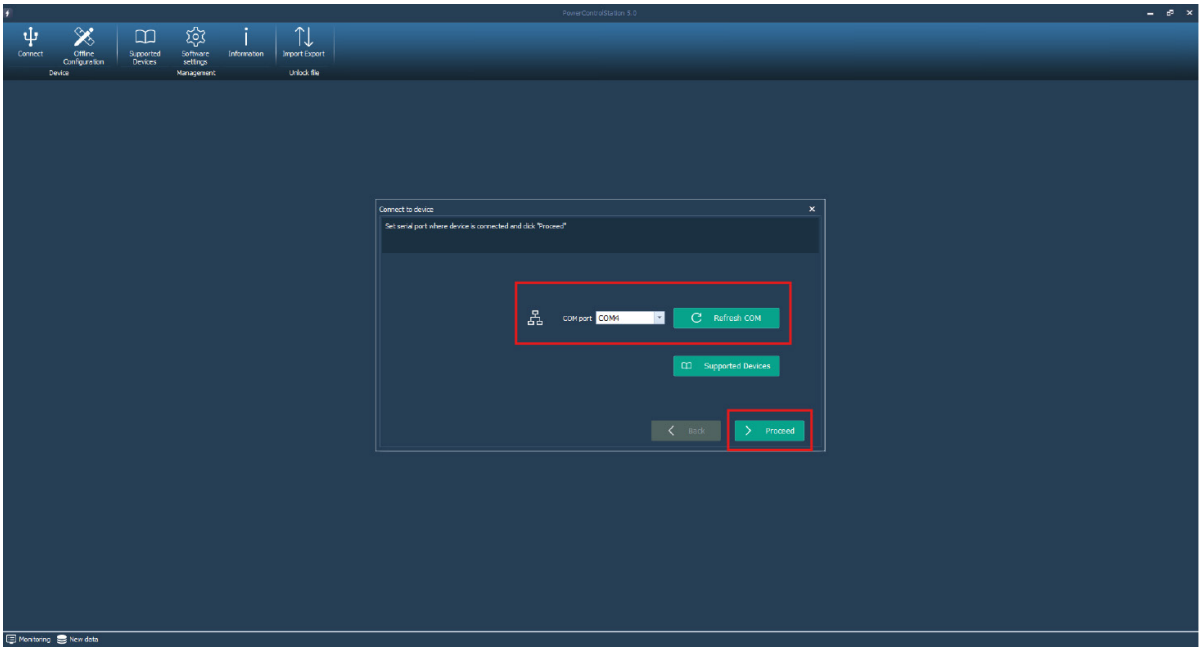


11. Update Date and Time on MP2.10 and MP4.10

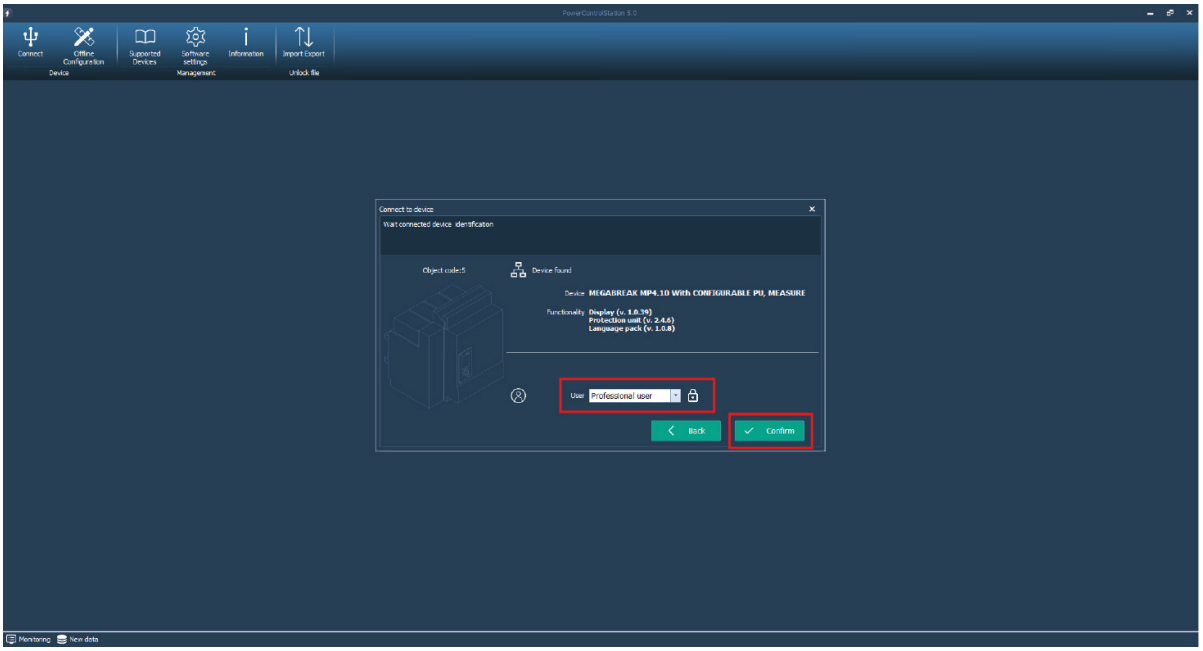
It is possible to read and write the date & time on MP2.10 and MP4.10 protection units.
In the top bar, in the "Device" section, click on the "Connect" button to start the communication with the device:



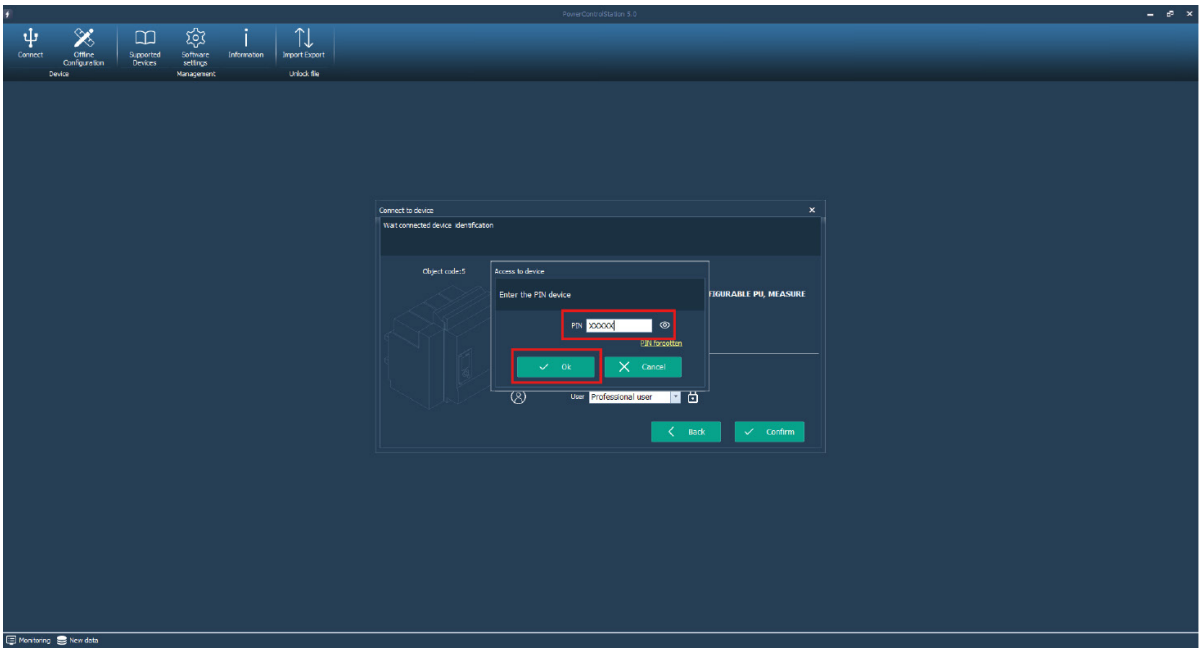
In the "Connect to device" dialog, select the correct COM port and click on "Proceed" button:



Select the "Professional user" and click on "Confirm" button:

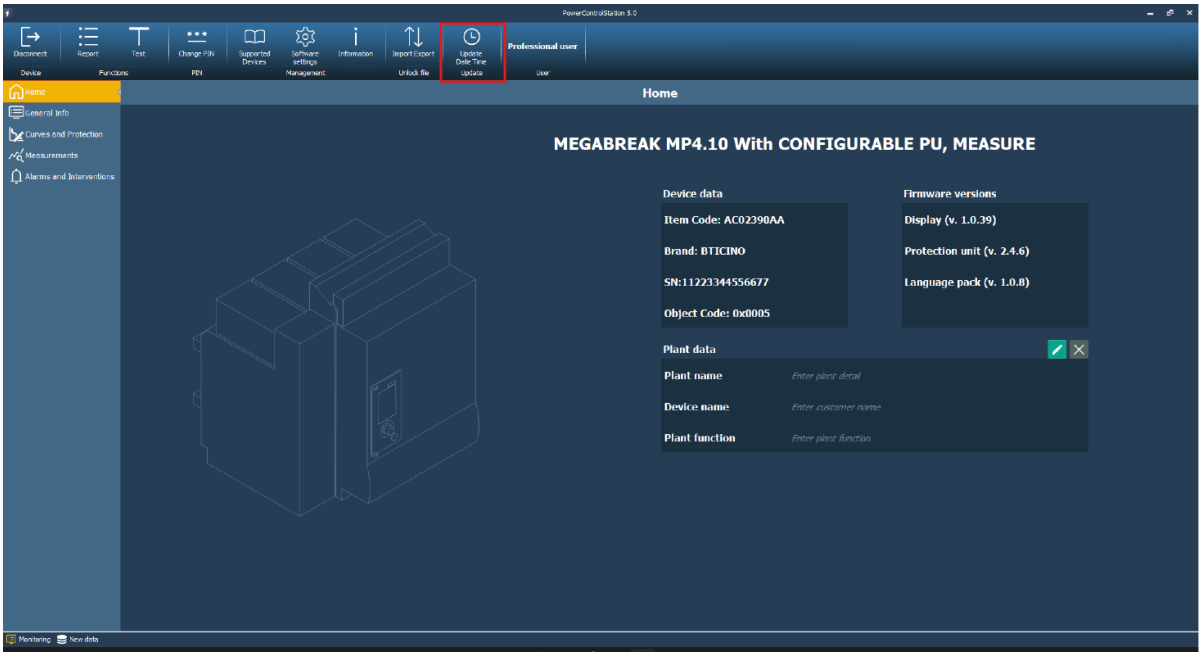


Insert the PIN of the device, and click "Ok" button:



11. Update Date and Time on MP2.10 and MP4.10

In the top bar, in the “Update” section, click “Update Date Time”:



The “Update Date Time” dialog will be displayed:

Inside it, it is possible to read the actual date & time of the device or to write it, using an user selected value or the PC one.

NOTE: if the software discovers that the device date & time has not been initialized yet, the user will be prompted to perform a first write operation before accessing the “Update Date Time” dialog.

LEGRAND
Pro and Consumer Service
BP 30076 - 87002
LIMOGES CEDEX FRANCE
www.legrand.com

Installer stamp

Legrand reserves at any time the right to modify the contents of this booklet and to communicate,
in any form and modality, the changes brought to the same.