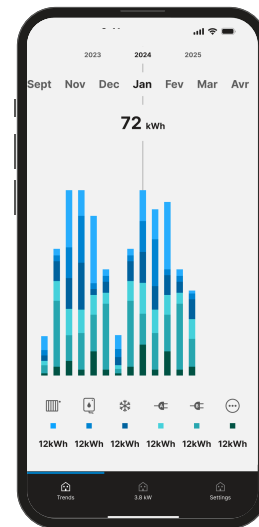
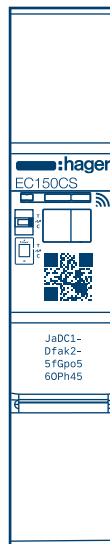


Energy indicator Hager Wattview



Energy indicator 1M

EC150CS

Energy indicator pack 1M

EC153CS



1 Safety instructions.....3

2 Function.....4

3 Description of the device.....5

4 Assembling and electrical connection.....7

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1 Safety instructions

Electrical devices may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, and safety and accident prevention regulations of the country of installation.

Danger due to electric shock. Disconnect mains supply before working on the device or load. Take into account all circuit protection devices that supply dangerous voltages to the device or load.

Failure to comply with these installation instructions may result in damage to the device, fire or other dangers.

These instructions are an integral component of the product and must be retained by the end user.

2 Function

The energy indicator measures the overall and individual consumption of up to five electrical connected loads (for example: heating, air conditioning, domestic hot water, socket outlets...). The overall consumption is recorded using an input from a TIC connection or a current transformer (CT5).

In case of TIC connection, the device supports both TIC modes available on your Linky meter (Historic & Standard).

By using the 'Hager Wattview' app connected via Bluetooth®, it is possible to visualize the real-time instantaneous energy consumption per line in W or kW, or the consumption log per month in kWh.

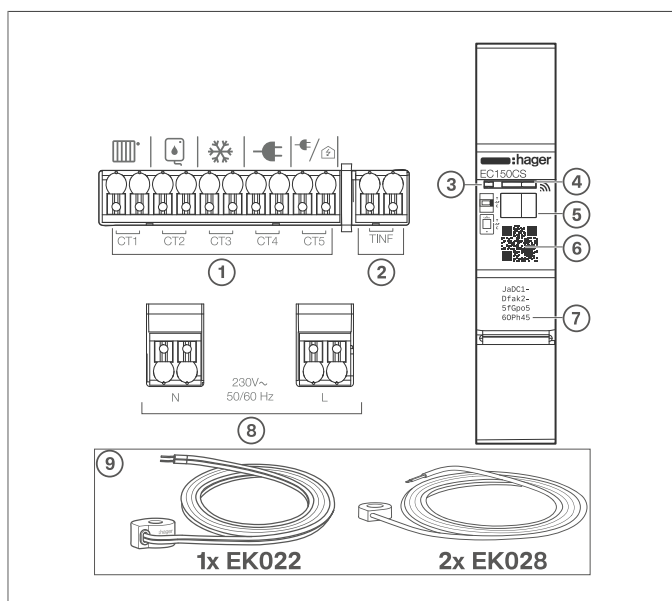
This solution contributes to meeting the energy consumption and carbon footprint reduction targets set by regulations RT2012 and RE2020 (France).

In addition, the energy indicator associated with the 'Hager Wattview' application makes it possible to view the photovoltaic energy production.

For more details:

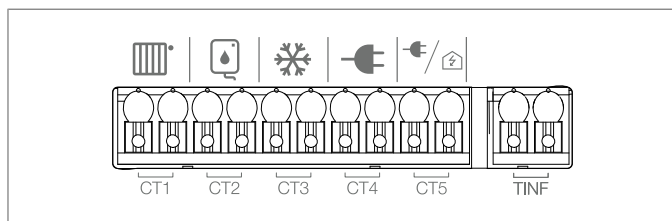
- [see Chapter 5.2, "Use with photovoltaic application"](#)
- [see Chapter 8.2.4, "Visualization with TIC and photovoltaic"](#)
- [see Chapter 8.2.6, "Visualization without TIC and with photovoltaic"](#)

3 Description of the device



- ① **Metering inputs using current transformers (5x)**
- ② **TIC Teleinformation Client input**
- ③ **LED: TIC status**
- ④ **LED: State of the product**
- ⑤ **Push button**
- ⑥ **QR code: For commissioning and product information**
- ⑦ **UID: If the QR code is faulty, the UID can be used for commissioning.**
- ⑧ **Power supply terminal: N & L**
- ⑨ **Current transformers (included in the EC153CS KIT)**

Default configuration of CT inputs



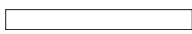
- ⓐ **CT1** Electric heating
- ⓑ **CT2** Domestic hot water
- ⓒ **CT3** Air conditioning
- ⓓ **CT4** Socket outlet 1
- ⓔ **CT5** Socket outlet 2 / overall consumption



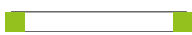
When the TIC is connected, the CT5 input can be used to measure the consumption of a socket outlet circuit . If no TIC is available, it is a must to assign CT5 input to measure the overall consumption.

Description of the device

Product LED status

LED	Description
 Off	Unpowered / powered with ECO mode (display OFF)
 O / G	Startup/Firmware Update
 R	Factory reset
 R	Date and time problem (power cut off for too long)
 G	Bluetooth pairing in progress*
 G	Active, Bluetooth* OK

LED status of TIC connection

LED	Description
 G	TIC communication established
 G	TIC communication not established

O: Orange; G: Green; R: Red

Description of push button

Short pressing:	Turns on the product LED
Long pressing > 5 s:	Resets to factory settings, see chapter Factory reset
Pressing < 3 s:	Activates the Bluetooth* pairing mode for 10 minutes

4 Assembling and electrical connection



Danger

Touching live parts can result in an electric shock!

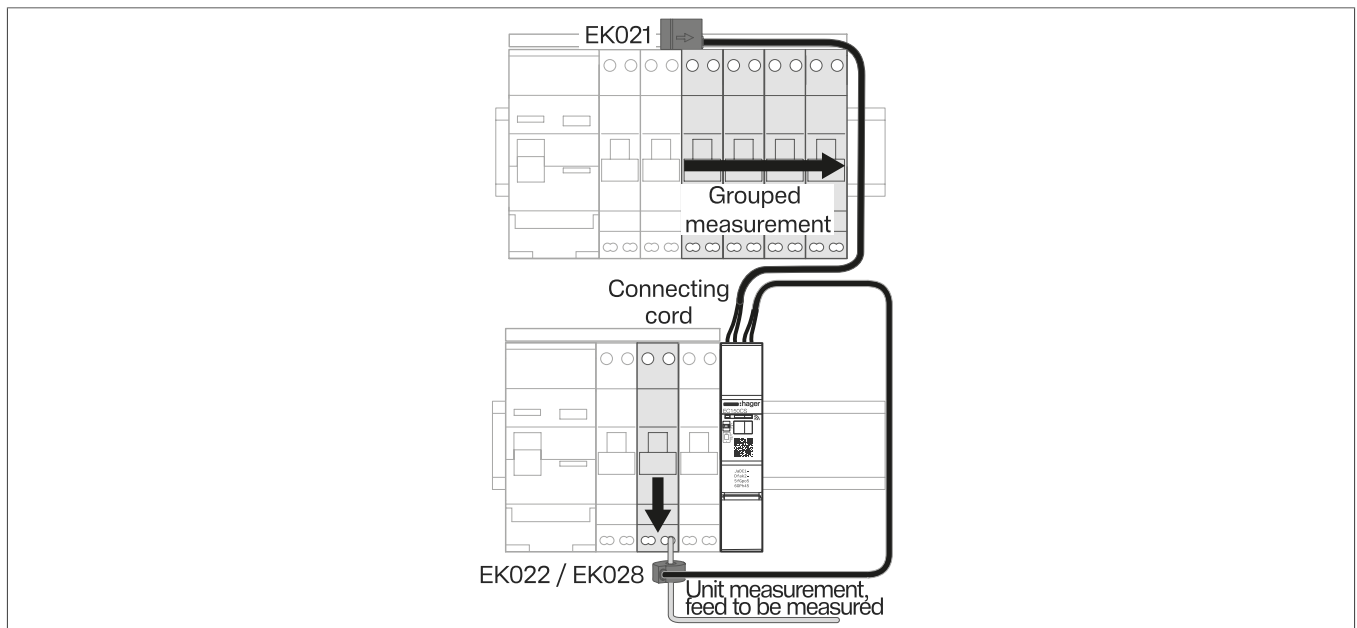
Electric shocks can cause death!

Before working on the equipment, disconnect the 230 V~ connection and cover any nearby conductive parts.



Danger

- Before proceeding to any wiring, make sure that the current transformers and the TIC inputs are completely powered off.
- Never route wires through the current transformers unless they are either connected to the EC150CS or properly short-circuited. Risk of electric shock and destruction of the transformers.



Installation recommendations

EK021 (optional accessory)

- Measurement of power consumption upstream of a group of circuit breakers (e.g. electrical outlets...) up to 63 A.
- Compatible with screwed or screwless systems.
- Can be mounted directly after the differential switch or between 2 circuit breakers.
- Connecting cord: - length = 1m (cuttable) - cross-section = 2 x 0.5 mm² rigid, non-polarised

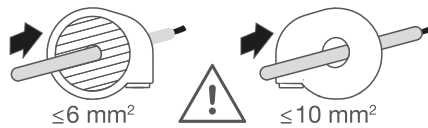
Assembling and electrical connection

EK022

- Measurement of unit consumption (e.g. hot water, heating...) up to 40 A.
- Cable holding system.
- Connecting cord: - length = 1m (cuttable) - cross-section = $2 \times 0.5 \text{ mm}^2$ rigid, non-polarised
- Cable cross-section to be measured: 1×1.5 to 10 mm^2 / $2 \times 2.5 \text{ mm}^2$



The **CT EK022** is suitable for simple measurements of unit consumption.



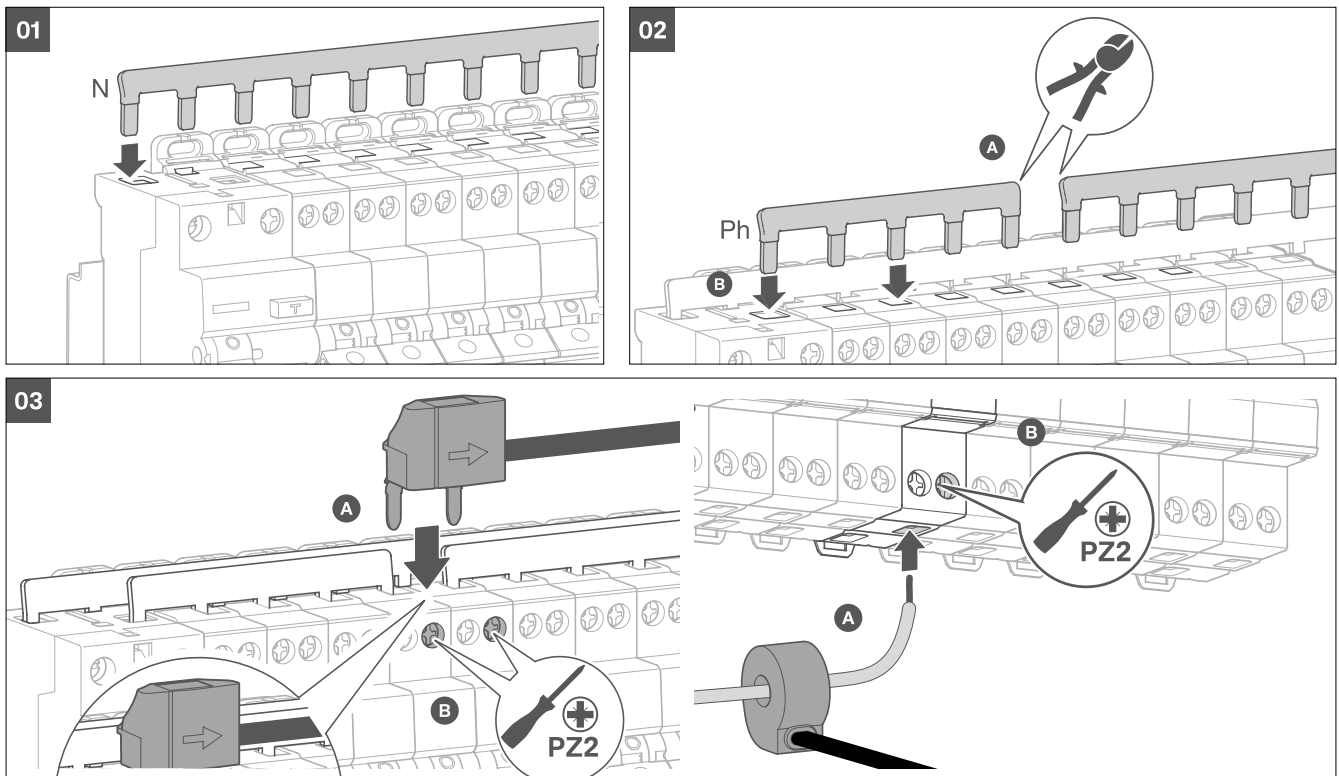
EK028

- Measurement of combined power consumption (e.g. hot water, heating...) up to 90 A.
- Cable holding system.
- Connecting cord: - length = 1m (cuttable) - cross-section = $2 \times 0.5 \text{ mm}^2$ rigid, non-polarised
- Cable cross-section to be measured: Up to $12 \times 2.5 \text{ mm}^2$

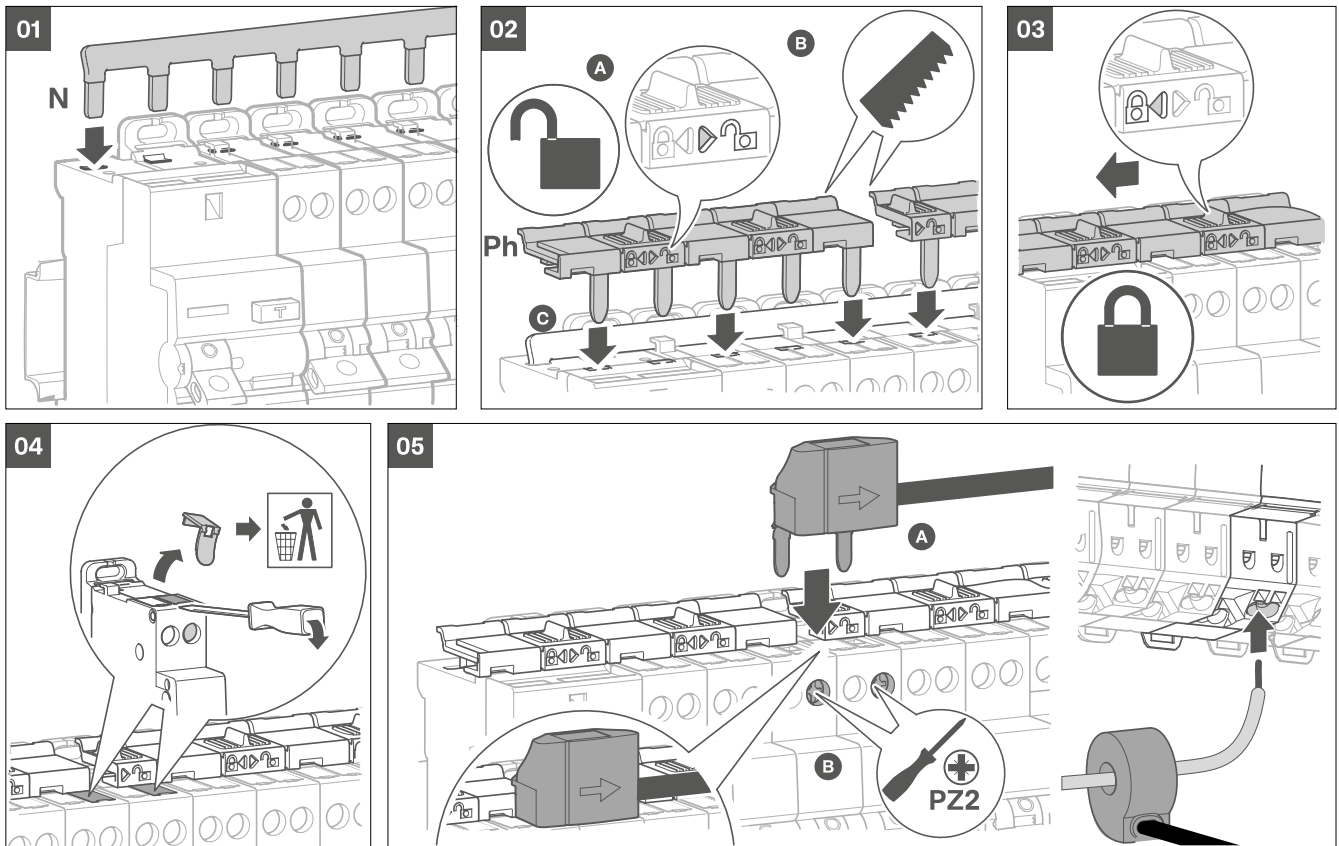


The **CT EK028** is recommended for installations with a photovoltaic system, especially when production is likely to exceed consumption, to ensure better separation of energy flows.

Screw system: bridging bars KB163N-NG / KB163P-PG

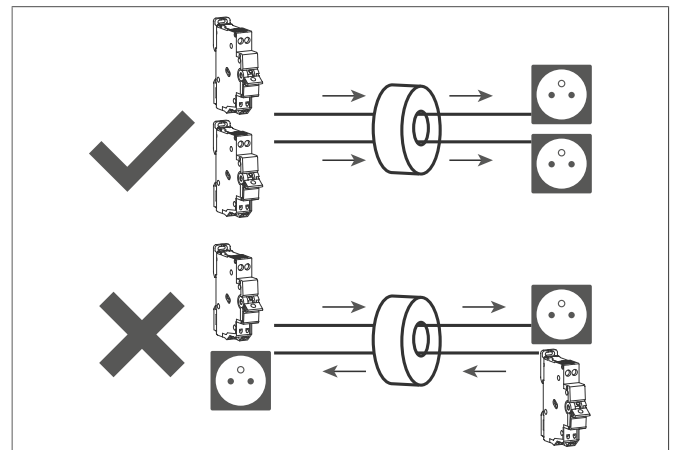


Screwless System: bridging bars KBS763 / KBS763G



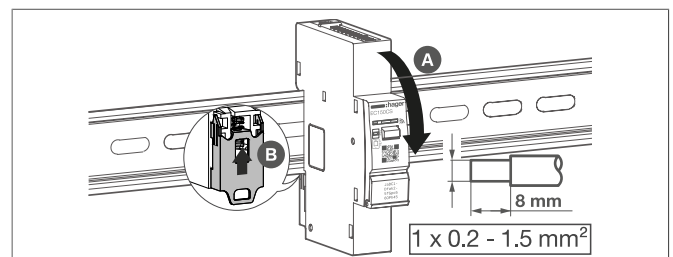
Caution

Ensure the conductor goes through the current transformer in the correct direction. Only Hager CTs can be used with the energy indicator.



Before achieving electrical connections, the energy indicator must be installed under normal conditions of use:

- in an electrical enclosure
- On 35mm DIN rail (EN/EIC 60715)



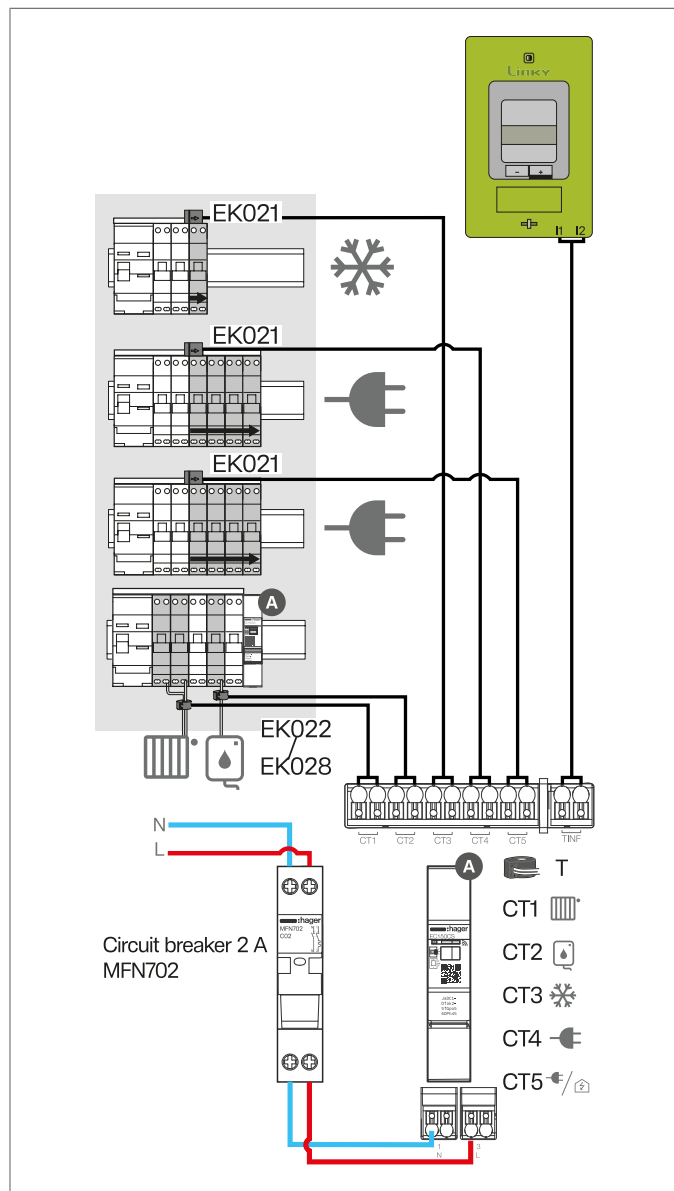
5 Use case

5.1	Normal use.....	11
5.2	Use with photovoltaic application.....	12

5.1 Normal use

Two configurations are available to measure the overall consumption of your home.

Connection with TIC

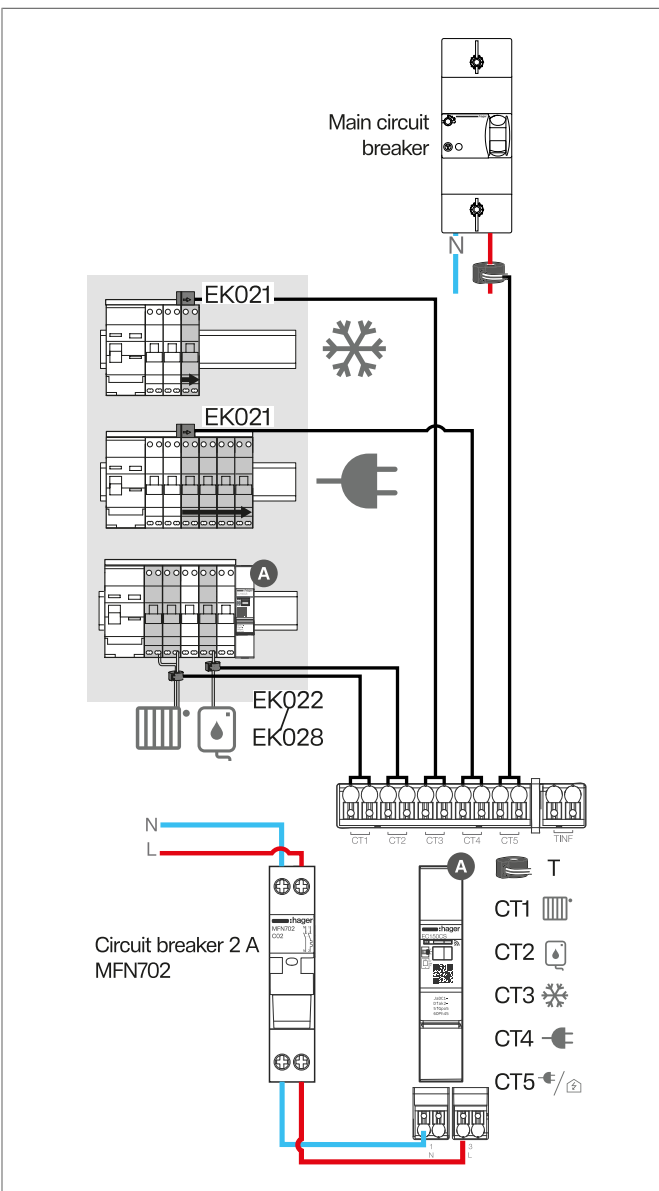


In such a configuration, **CT5** is available to measure an additional appliance.

This provides a complete view on the application screen:

- the global consumption via TIC
- 5 usages measured separately (CT1 to CT5),
- the consumption for the rest of your home.

Connection without TIC



In such a configuration, the **CT5** measures the overall consumption of your home. Only 4 appliances can then be measured individually (CT1 to CT4).

The application displays the following information:

- the overall consumption,
- 4 usages measured separately,
- the consumption for the rest of your home.

5.2 Use with photovoltaic application

If the energy indicator is used to view the energy produced, proceed with the following configuration steps below, either with a TIC connection or not.

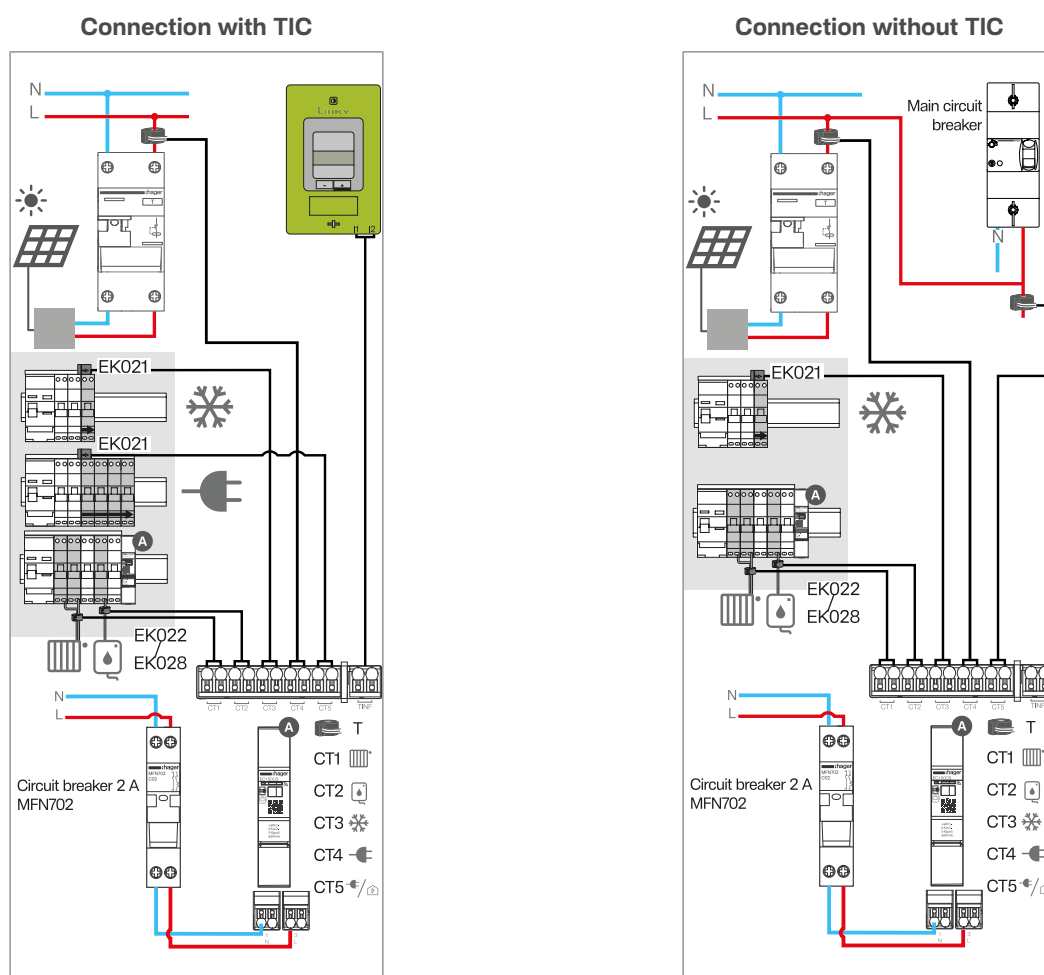
CT4 is dedicated and exclusively for the measurement of photovoltaic production. It will not be used for calculating the consumption of the home.

The current transformer CT4 must be installed upstream of the distribution system so that it measures only the energy generated by the photovoltaic system.



The **CT EK028** is recommended for installations with a photovoltaic system, especially when production is likely to exceed consumption, to ensure better separation of energy flows.

A dedicated power line is mandatory for Plug & Play panels. This line must be equipped with a modular protection device that is exclusively dedicated to the panels, ensuring proper isolation and safety.



CT4 is for measuring your energy produced. **CT5** is for measuring an additional appliance if a TIC connection is available.

CT4 is for measuring the energy produced. Without any TIC connection, the **CT5** measures the overall consumption of your home.



This use case does not represent or meet the requirements of RT2012 or RE2020

6 Factory reset

6.1 Product.....14

6.2 Application..... 14

6.1 Product

To perform a complete reset of the product, please proceed as follows:
Press and hold the push button **> 5 sec.** .

The LED indicates:



Within 5 seconds, press and hold **> 5 seconds** again to validate the factory reset.



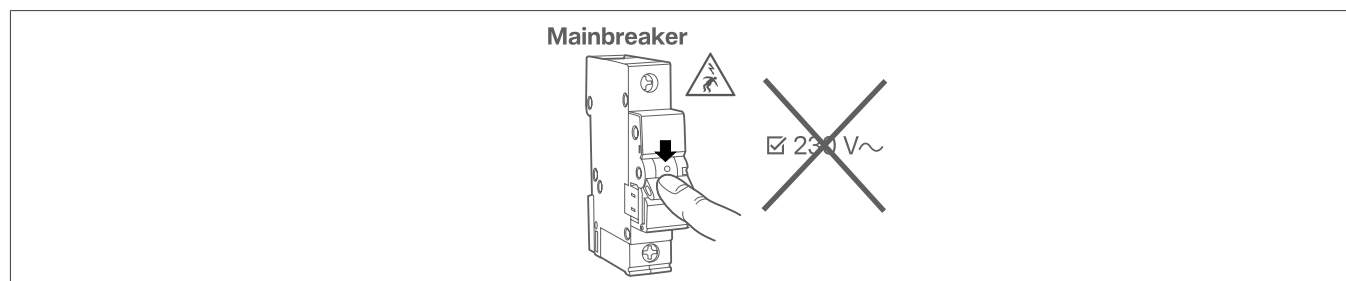
A factory reset permanently deletes your settings and consumption log. The mobile needs to be reconnected to the product via Bluetooth®.

6.2 Application

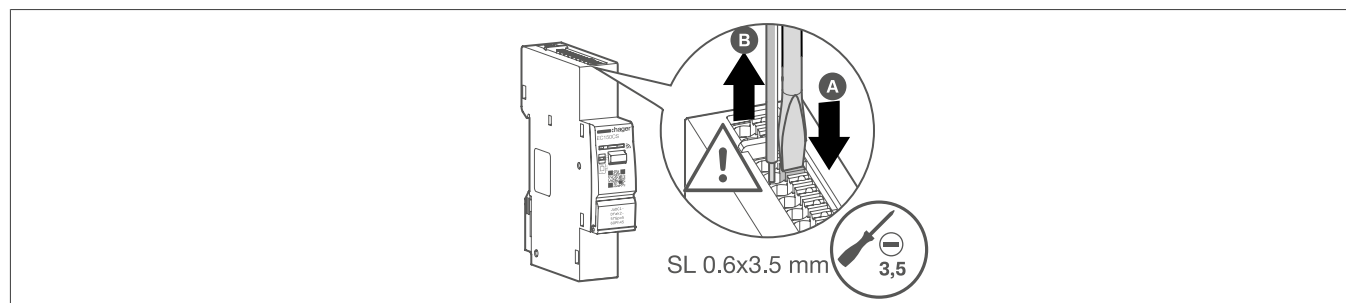
To reset the product using the 'Hager Wattview' application, [see Chapter 8.2.7.2, "Factory reset"](#) .

7 Uninstall

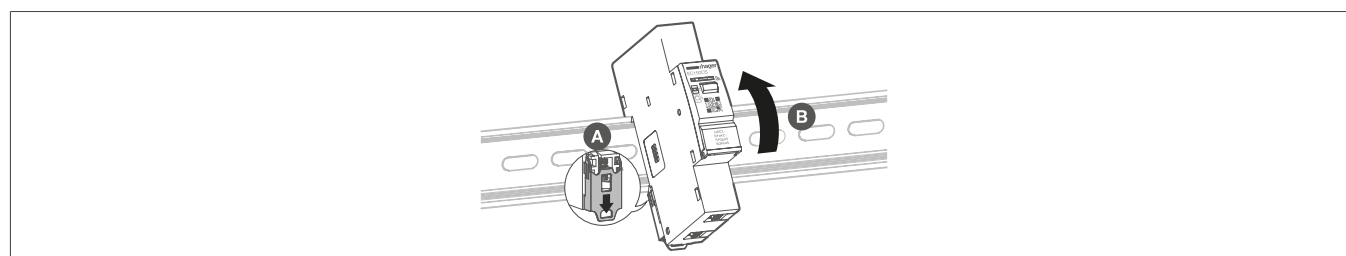
Before working on the equipment, switch off the main circuit breaker to ensure the 230 V~ supply is completely disconnected.



Disconnect the CTs from the circuits before disconnecting them from the energy indicator. Hold the flat screwdriver in the terminal and remove the wire.



Remove the contactor from the DIN rail.

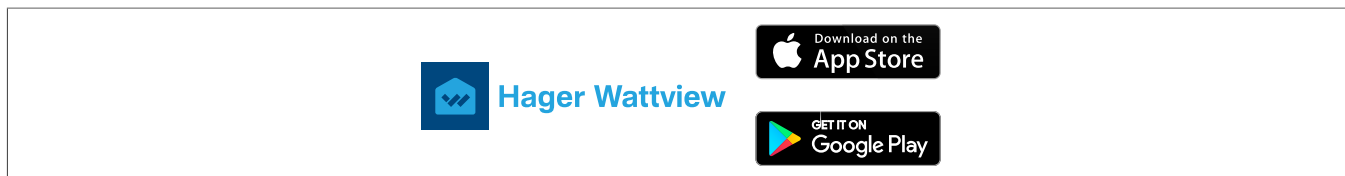


8 Hager Wattview application

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8.1 Installation of the application

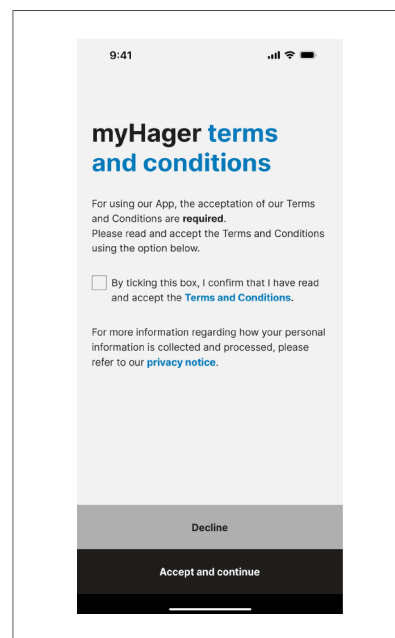
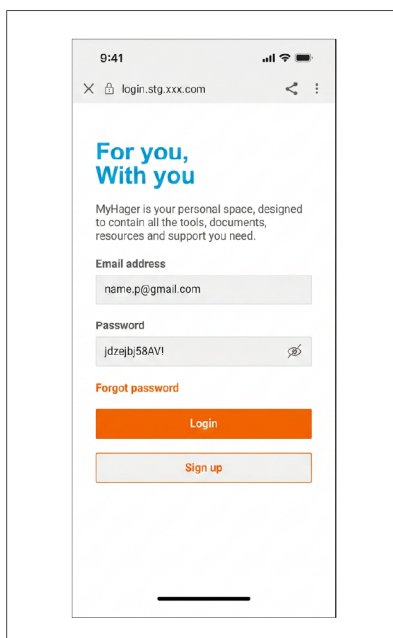
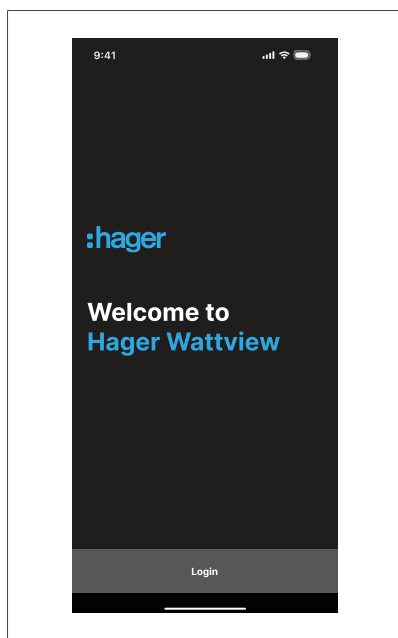
Search for and download 'Hager Wattview' from the App Store or Google Play Store, and install the app.



8.2 Setting up the product

8.2.1 myHager account

Once the app is installed on your device, create your Hager account (or sign in if you already have one). Validate the Terms and conditions to complete the setup.

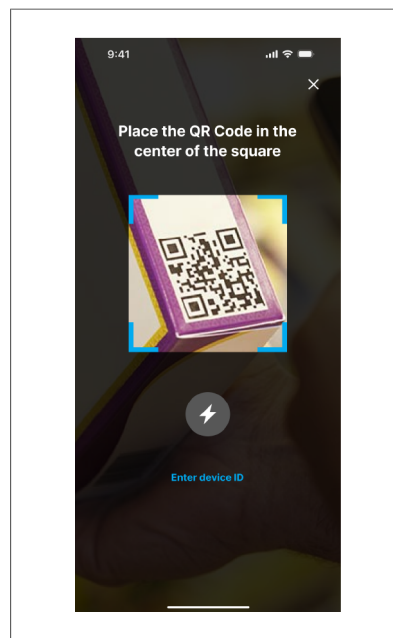
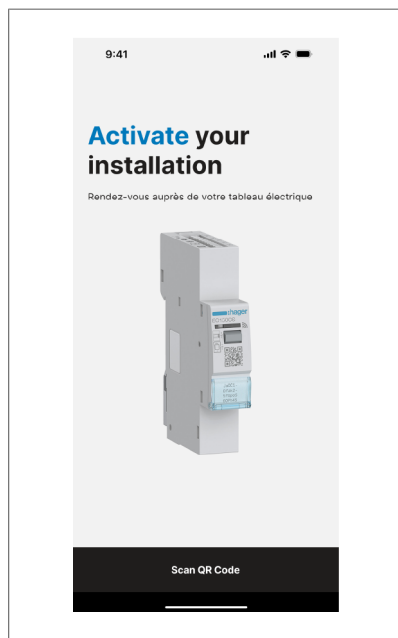


8.2.2 Activation and pairing

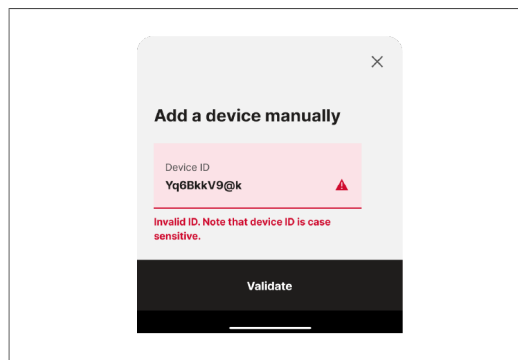
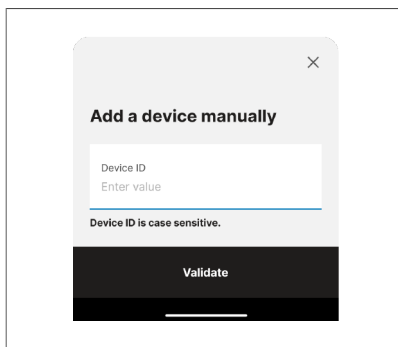
For the first activation and pairing of the installation, please follow the instructions on the mobile app.



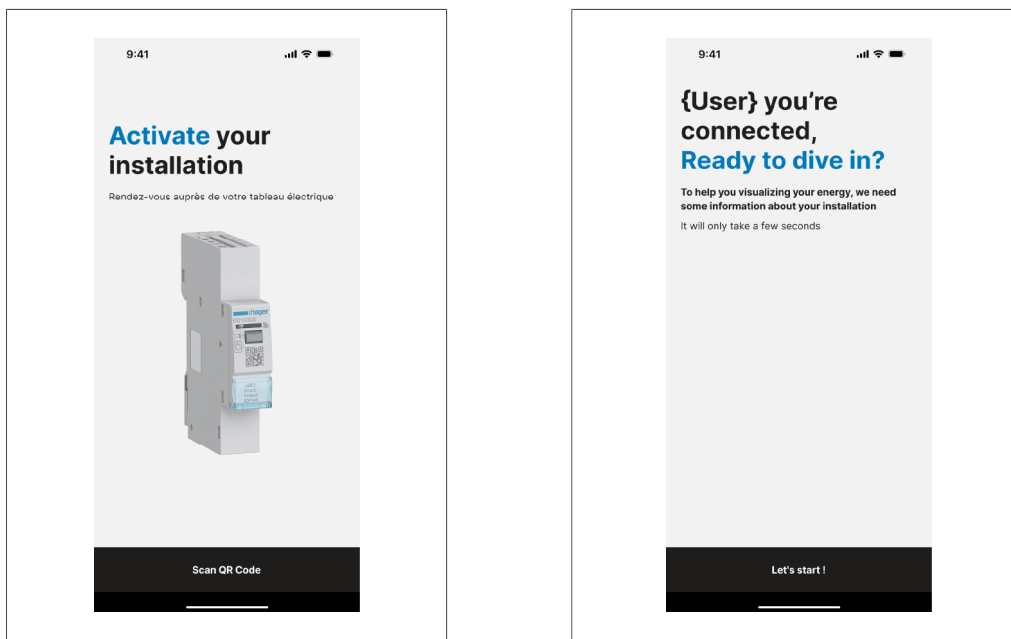
Each account and app can only be used with one dedicated device. To use an additional energy meter, you need an additional device and a separate account.



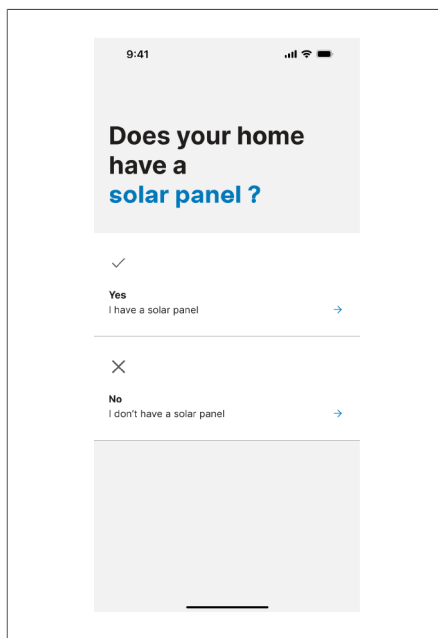
If it is not possible to scan the device's QR code, it can be added manually by entering the specific device ID located below the QR code on the front of the device.



Follow the steps below to connect the device to the 'Hager Wattview' app via Bluetooth®. The device's Bluetooth® activation remains available for 10 minutes. If this period expires before the connection is completed, restart the pairing process. Once connected, the device is ready for use.



You can also integrate an existing solar panel into the application. The wiring and display will then differ. When starting the application, you will be asked whether a solar panel is installed. For further details, [see Chapter 8.2.4](#) and [see Chapter 8.2.6](#).



8.2.3 Visualization with TIC and without photovoltaics

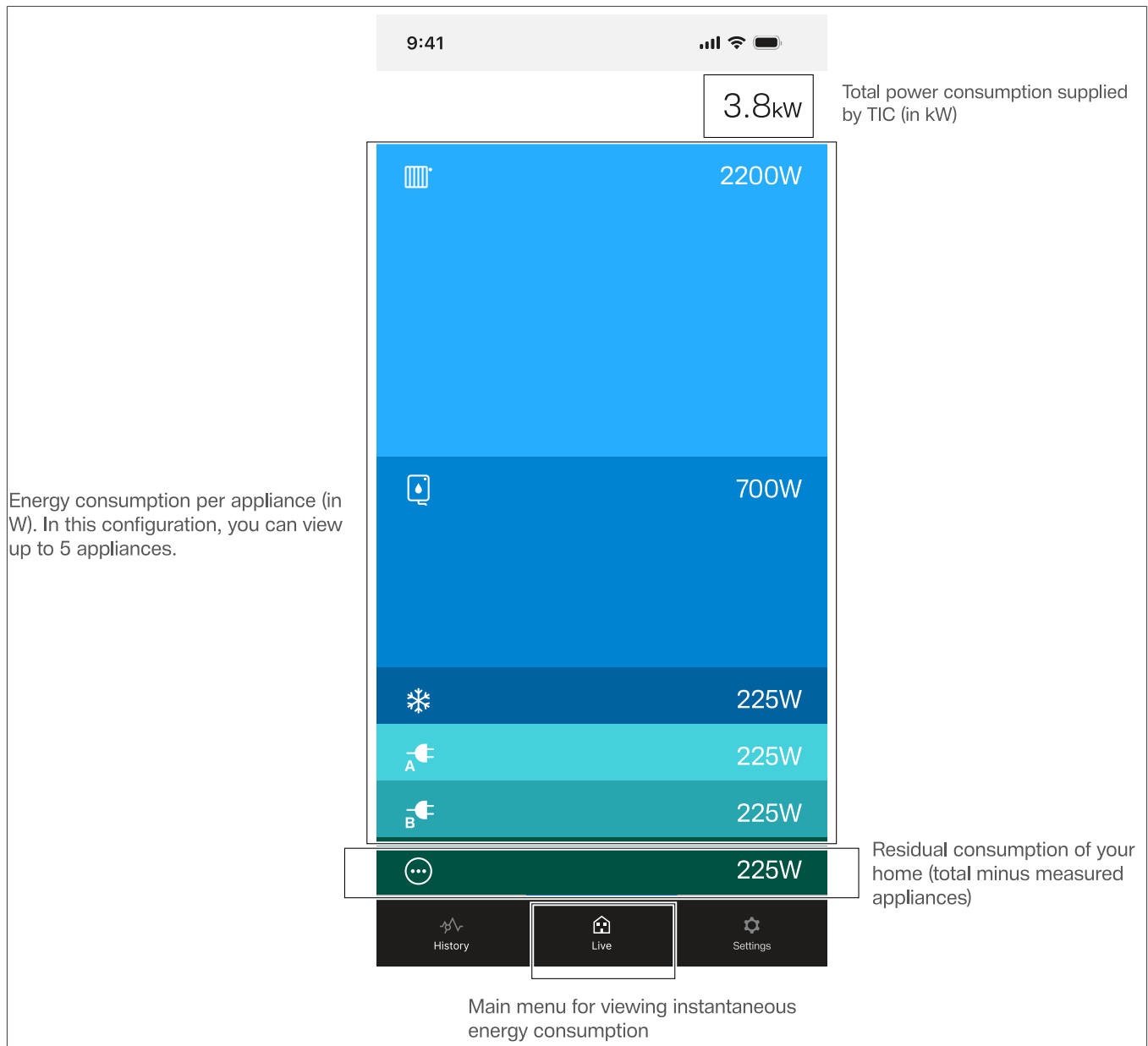
In such a configuration:

- The energy indicator is connected to the Linky meter (mainly used or available in French households).
- CT1 / CT2 / CT3 / CT4 and CT5 are available to measure the consumption of the electrical appliances.

Real-time visualization

On the main screen, the menu  in the central lower part of the screen displays the instantaneous energy consumption per line in **W** in real time and the total consumption in **kW**.

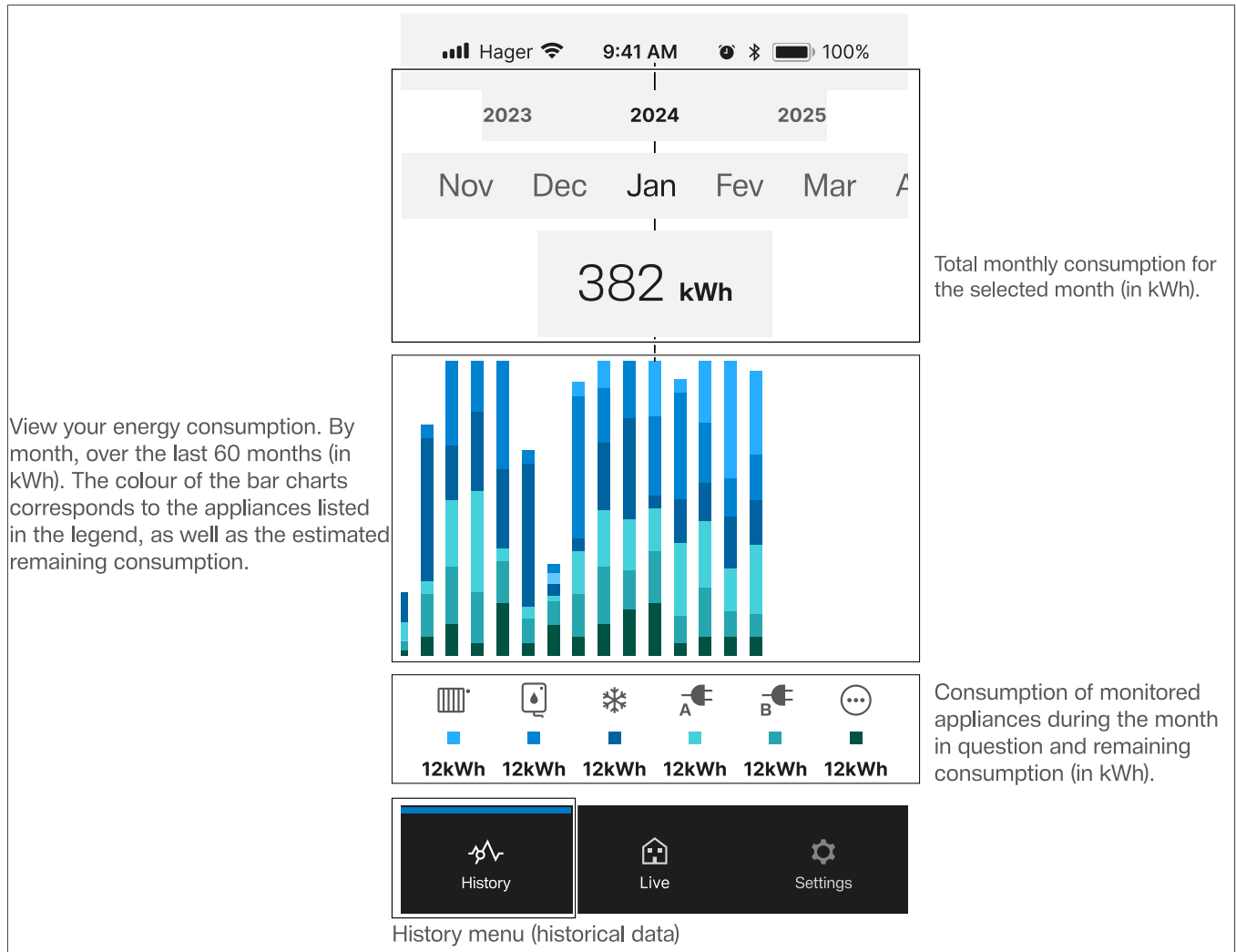
The following screen will be displayed:



Visualizing the historical consumption

The 'History' menu on the bottom left section of the screen gives access to the past consumption data. You can view the monthly consumptions over the latest 60 months.

The following screen will be displayed:



8.2.4 Visualization with TIC and photovoltaic

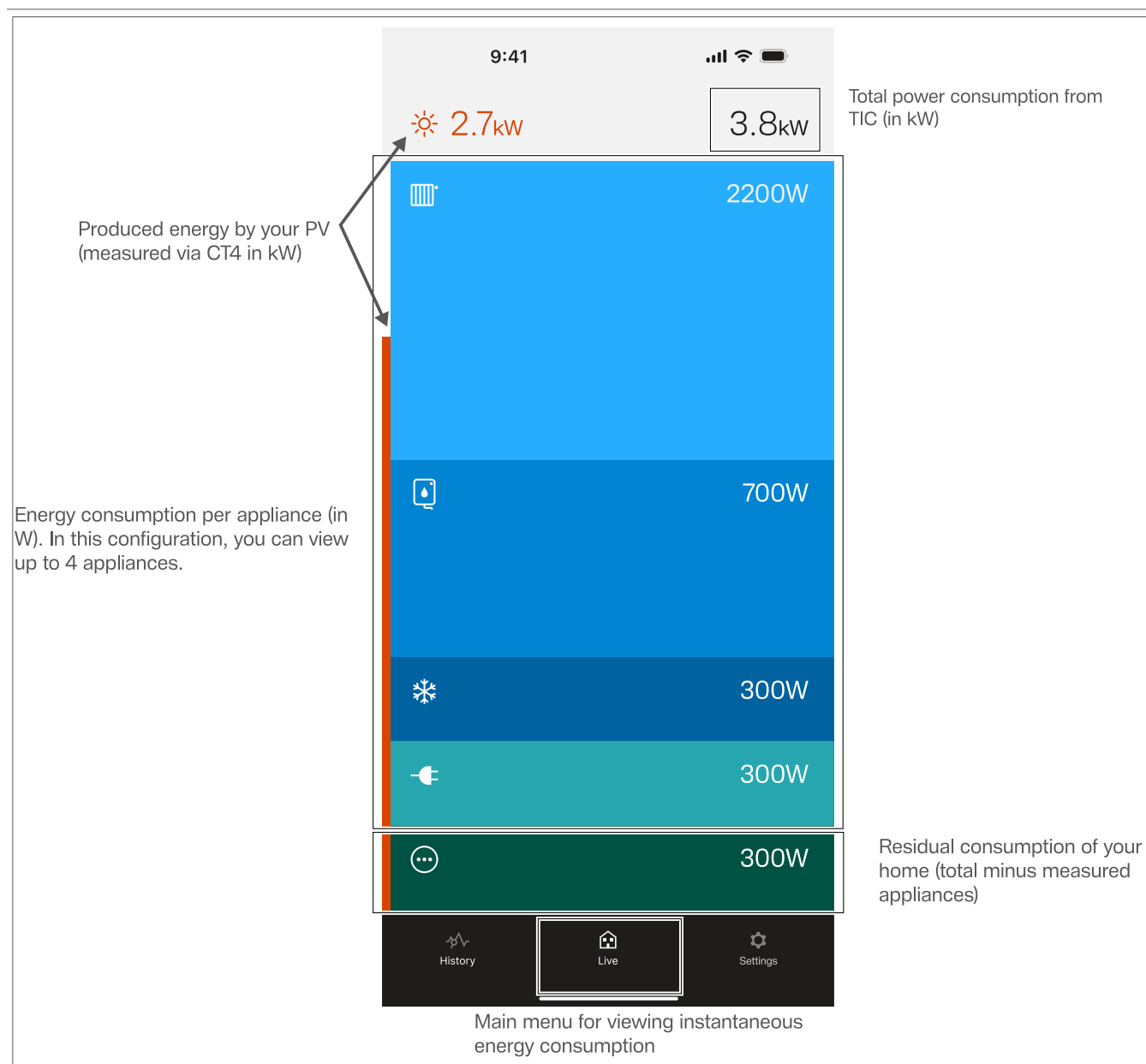
Select the relevant configuration to monitor the photovoltaic production and proceed with the following steps:

- The energy indicator is connected to the Linky meter (mainly used or available in French households).
- The CT4 is dedicated to the photovoltaic system (which means that this CT will not be available for other appliances).
- The CT1 / CT2 / CT3 and CT5 are available to measure the consumption of your appliances.

Real-time visualization

On the main screen, the menu  in the lower central part of the screen now displays in real-time the instantaneous energy consumption and PV production data in **W** and **kW**.

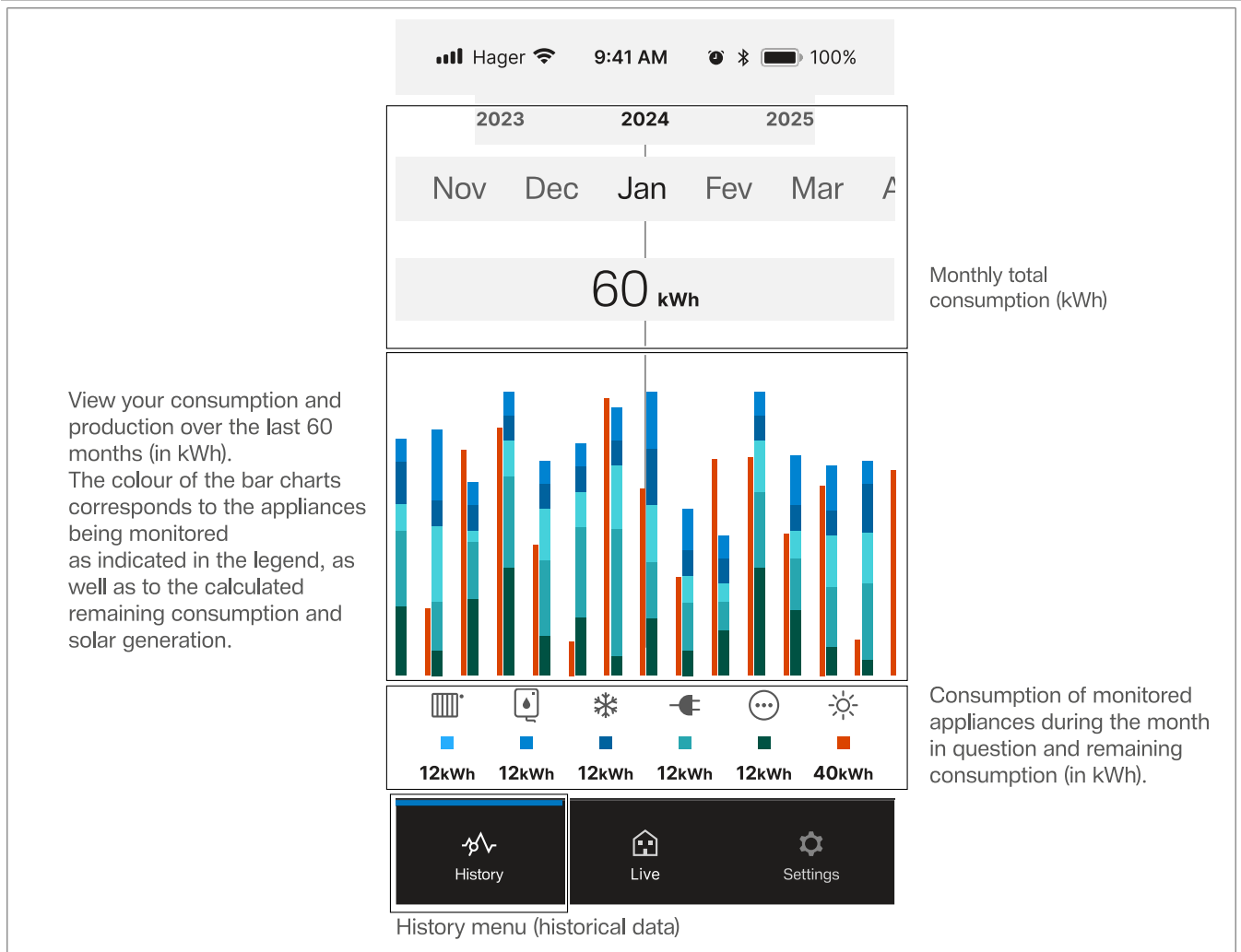
The following screen will be displayed:



Visualizing the historical consumption

In the historical dashboard, you can retrieve the photovoltaic production data measured over the past few months.

The following screen will be displayed:



8.2.5 Visualization without TIC and without photovoltaics

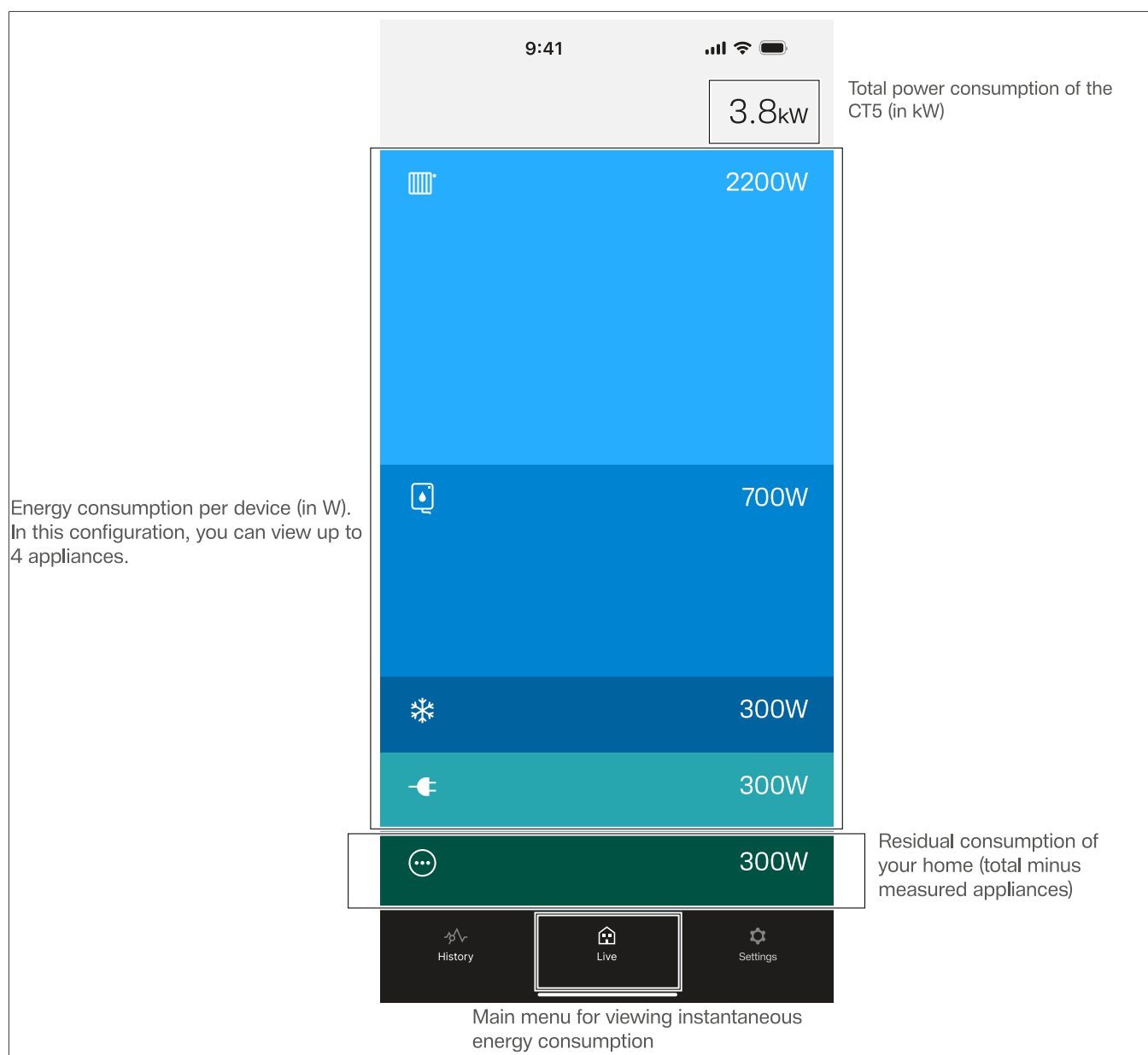
In such a configuration:

- The TIC terminals of the device are not wired and are not used.
- The CT5 must be assigned (wired) to measure the overall consumption.
- CT1 / CT2 / CT3 / CT4 models are available to measure the consumption of your electrical appliances.

Real-time visualization

On the main screen, the menu  the lower part of the screen gives access to the instantaneous energy consumption per line in **W** in real-time and the total consumption in **kW**.

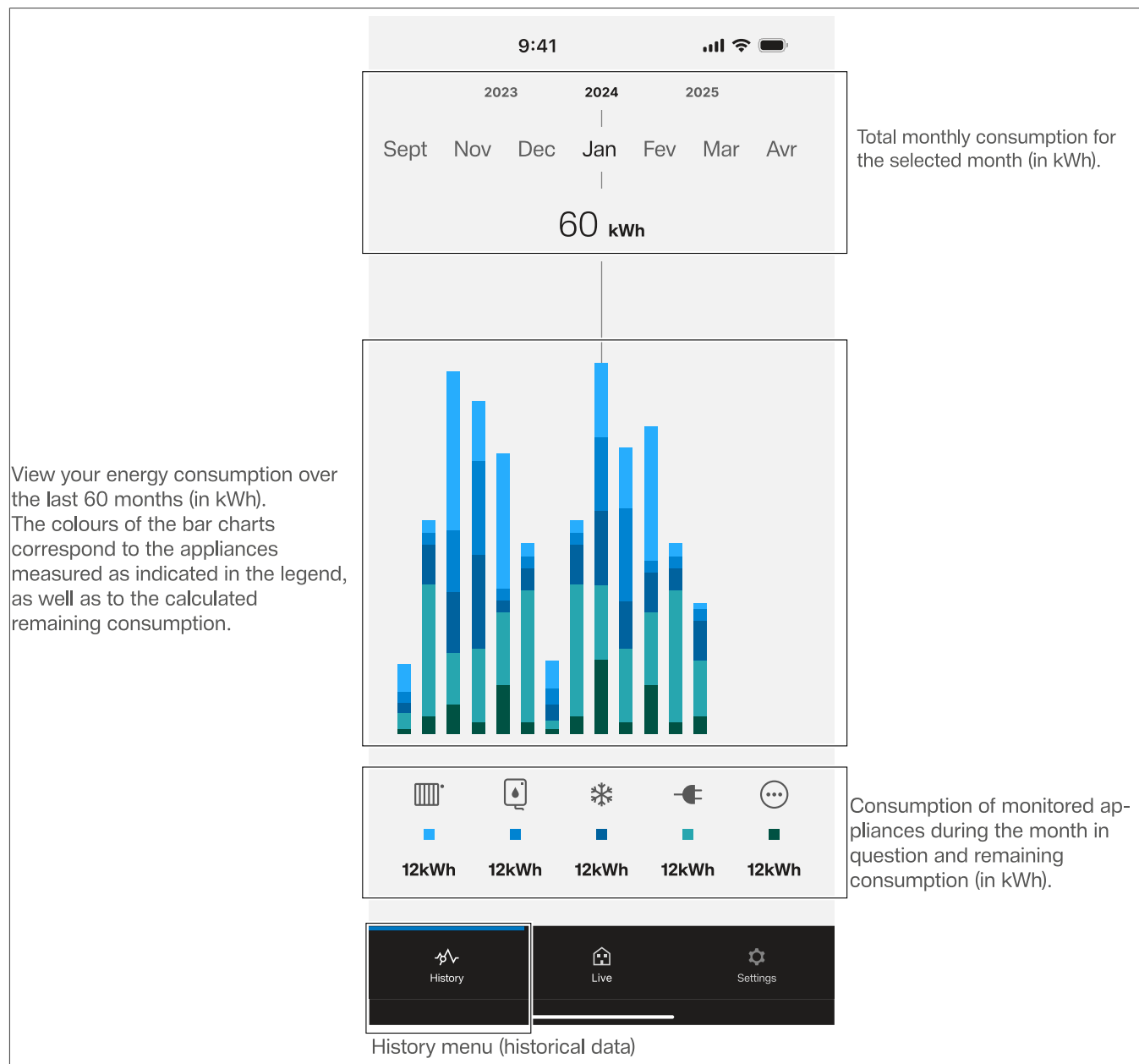
The following screen will be displayed:



Visualizing the historical consumption

The 'History' menu on the bottom left section of the screen gives access to the past consumption data. You can view the overall consumption per month over the latest 60 months.

The following screen will be displayed:



8.2.6 Visualization without TIC and with photovoltaic

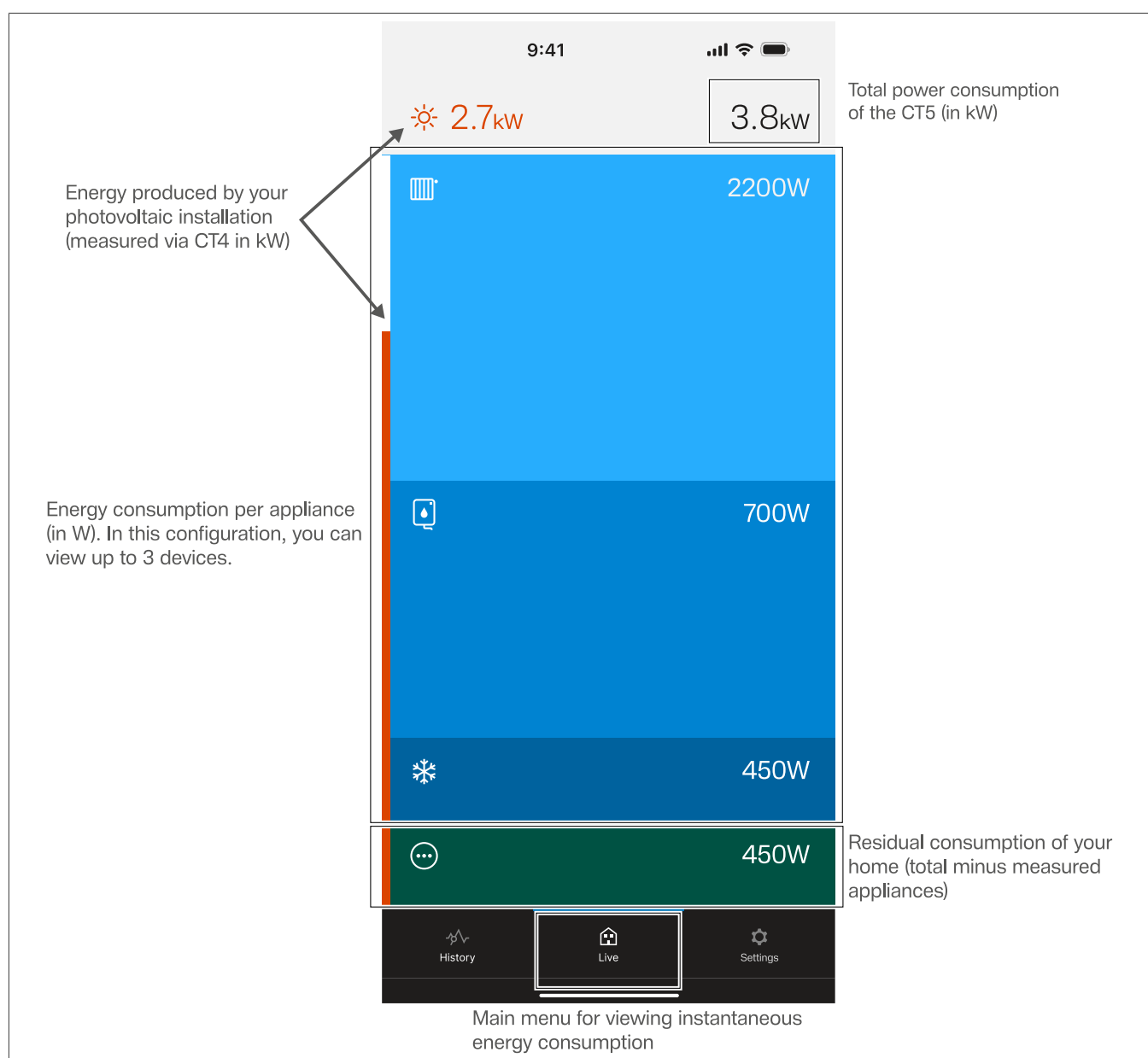
Configuration for monitoring photovoltaic production:

- The TIC terminals of the device are not wired and are not used.
- The CT5 must be assigned (wired) to measure the overall consumption.
- The CT4 is intended to be used for your photovoltaic system (which means that this CT will not be available for other appliances).
- CT1/CT2/CT3 are available to measure the consumption of the electrical appliances.

Real-time visualization

On the main screen, the 'Live'  menu of the lower part of the screen gives access to the instantaneous energy consumption and the photovoltaic production (in **W** or **kW**).

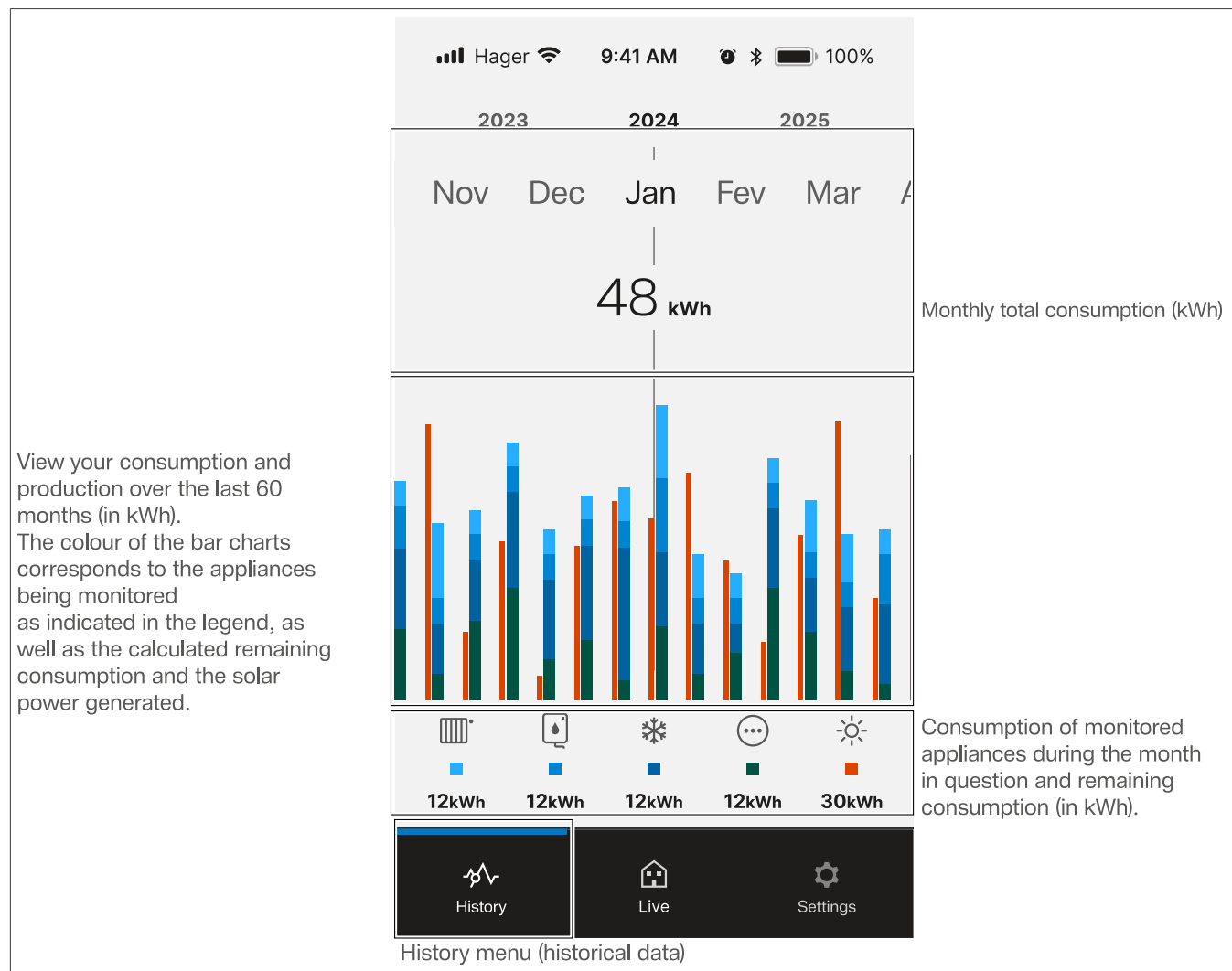
The following screen will be displayed:



Visualizing the historical consumption

The 'History' menu on the bottom left section of the screen gives access to the past consumption and production data. You can view the overall consumption per month over the latest 60 months.

The following screen will be displayed:

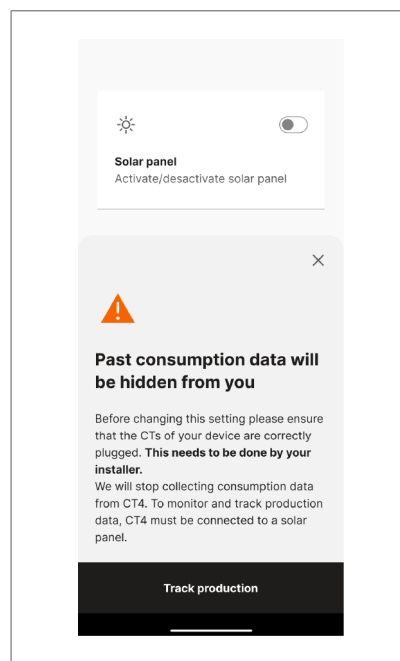
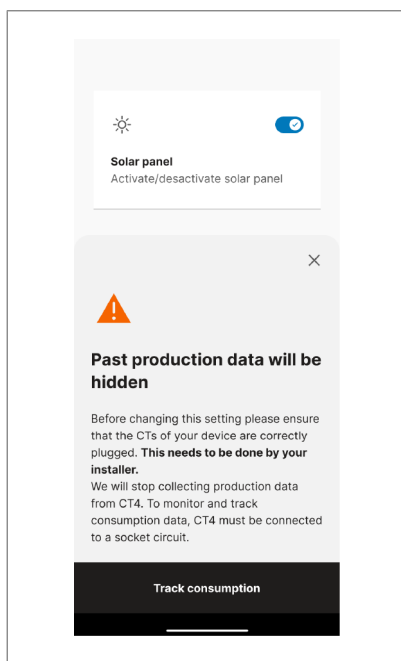


8.2.7 Setting of the application

In the settings of the 'Hager Wattview'  application, you can modify your myHager account, set the photovoltaic system or reset the device.

8.2.7.1 Activate / Deactivate the photovoltaic configuration in your application

When activating/deactivating the configuration of a photovoltaic system, be aware that your data visualization screens will change.

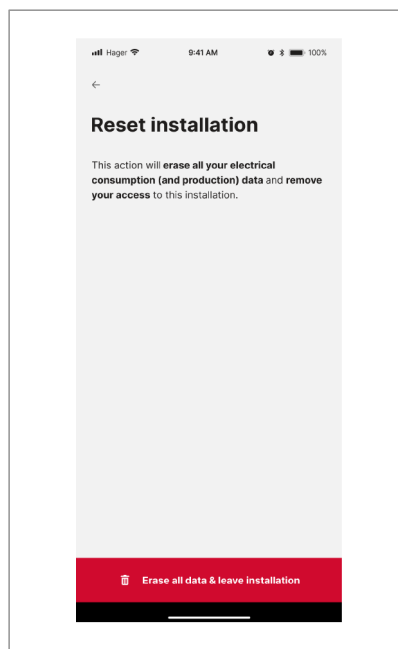
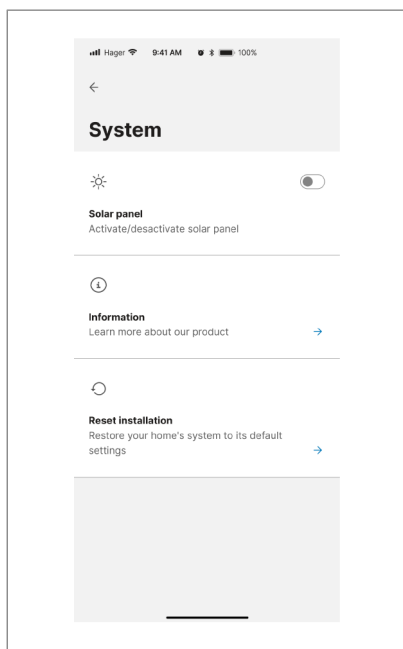


8.2.7.2 Factory reset

Within the 'Hager Wattview' application, you can reset the installation of your device to factory settings.

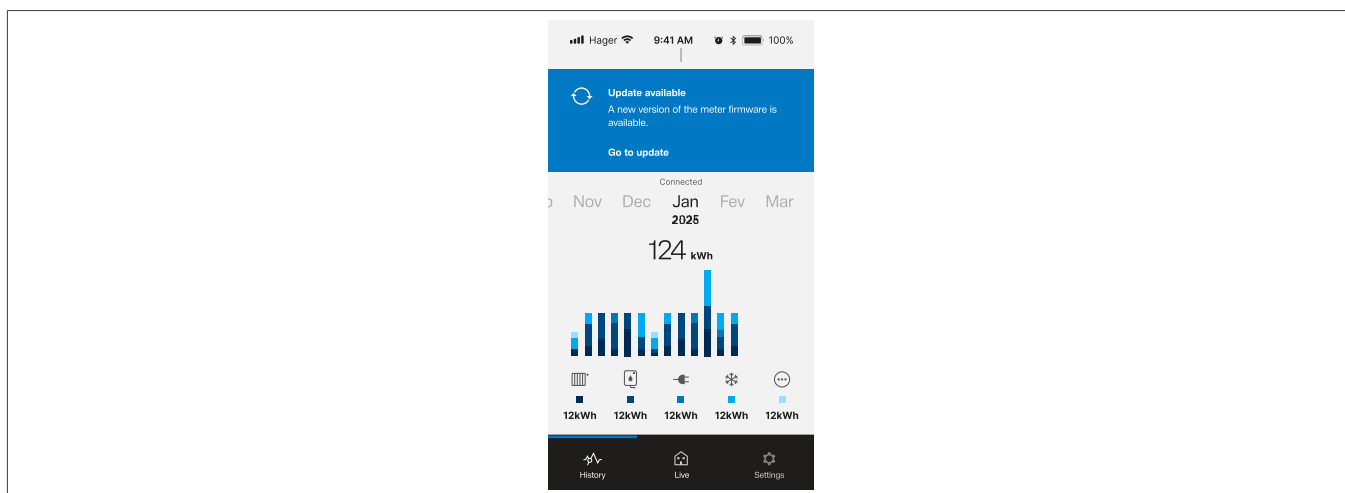


A reset action permanently deletes all your data and access to the installation is denied.



8.2.7.3 Updating the firmware

Once a new firmware update is available, an email notification is sent or a pop-up window is shown in the application.



Please follow the steps on your mobile app.

8.2.8 Configuration changes and maintenance

8.2.8.1 Switching from a non-TIC configuration to a TIC configuration

If your system is currently installed without a TIC connection and you want to add one while the system is already operating, please contact your installer to perform the upgrade.

Following this configuration change:

- Global consumption information is now provided directly by the Linky meter (mainly used or available in French households).
- The CT5, which was previously used to measure overall energy consumption, will now be available to measure the consumption of an additional appliance.

This change may affect the current month's data, which may not be fully representative. From the following month onwards, the recorded data will be accurate again and will include TIC data.

8.2.8.2 Synchronising the date and time

If the device displays a date and time error after a power cut and no TIC input is connected, connect the device to the configuration app via Bluetooth® to reset the date and time.

9 Technical specifications

Rated voltage	230 V~ +10/-15 %
Frequency	50 / 60 Hz
Insulation class	II
Maximum power consumption	< 500 mW
Typical power consumption	< 150 mW
Operating temperature	- 5°C to + 45°C
Storage temperature	- 20°C to + 70°C
Operating altitude (max)	2000 m
Pollution degree	2
Protection class	IP20
Max. current (I _{max})	90 A (via external measuring toroid)
Cable cross-section	1 x 0.2 to 1.5 mm ²
Connection terminals	Spring terminal block
Pole type	Single-phase
Bluetooth® radio frequency	2.4 - 2.4835 GHz
Maximum transmission power	< 10 mW
Dimensions L x H x D (mm)	1 module 17.7 x 90 x 67.2

Hager Controls hereby declares that the EC150CS and EC153CS energy indicators comply with the essential requirements and other relevant provisions of Directive 2014/53/EU. The CE declaration may be viewed at: www.hager.com



Hager Controls

BP10140

67703 Saverne Cedex

France

+33 (0) 3 88 02 87 00

info@hager.com

hager.com