EN

MANUAL

01 | 08-2024

INTERNET MODULE

SR-100 S-therm remote

S-THERM | sinclair HEAT PUMPS

„ORIGINAL INSTRUCTIONS“

IMPORTANT NOTE:

Read this manual carefully before installing or operating your new air conditioning unit.
Make sure to save this manual for future reference.

Table of contents

1. Informations

The SR-100 S-therm remote internet module is intended for:

- wireless cooperation with a WiFi router - connection to the local WiFi,
- wireless cooperation with a mobile device:
  – S-therm service mobile application (only via BT connection),
  – S-therm remote mobile application for the https://www.s-thermremote.com website (only via WiFi connection),
- RS485 (Modbus RTU) wired cooperation with the ONTARIO and YUKON heat pump.

Module features:

- cooperation with an https://www.s-thermremote.com website, thanks to which it is possible to access the operating parameters of the heat pump installation via the Internet,
- ability to view the current operating parameters of the heat pump,
- ability to view and edit most heat pump operating parameters,
- registration of key operating parameters of the heat pump installation,
- ability to be notified by e-mail about an alarm condition.

2. Safety recommendations

- Use the device as intended, keep it in a dry environment, and install it indoors only.
- Connecting the device inconsistently with the manual or incorrectly may cause the device to malfunction or interrupt its operation.
- The device should be started and connected only by a person familiar with these manual.
- The device is not a toy. Install it out of reach of small children.
- Under no circumstances may any modifications be made to the structure of the device.

3. Information about documentation

The manual is a supplement for the heat pump manual. In particular, except for this manual, the heat pump manual should also be observed. We are not responsible for any damages caused by failure to observe these manual.

4. Applied symbols

In this manual the following graphic symbol is used:

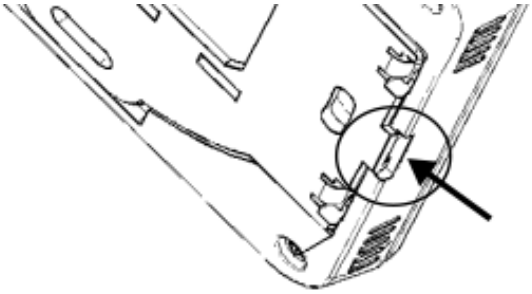
 - symbol indicates additional advice and information.

 - symbol indicates important information.

Note: Important information is marked with symbols to make it easier to read the manual. However, this does not exempt the user from complying with requirements not marked with symbols.

5. Installation

Attention. If the mounting frame is attached to the rear housing of the module (the frame is attached with latches), it should be disconnected by inserting a flat element, e.g. a screwdriver, into the slot indicated below.

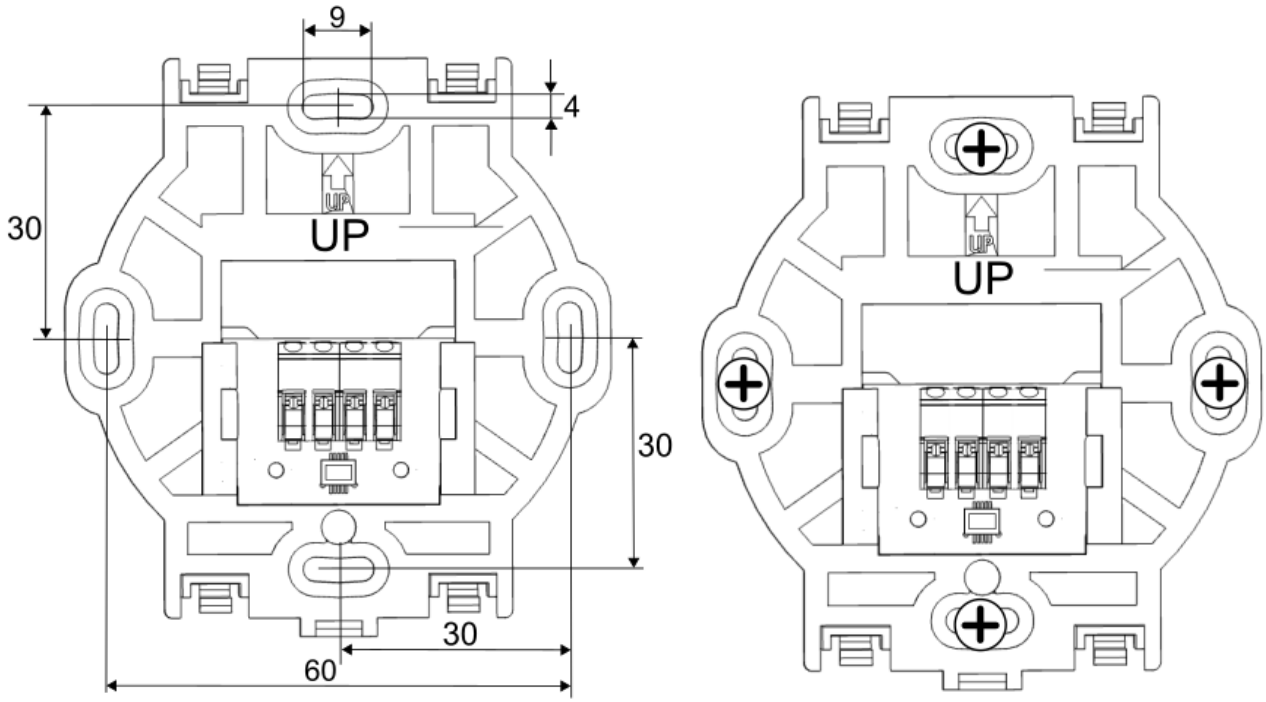


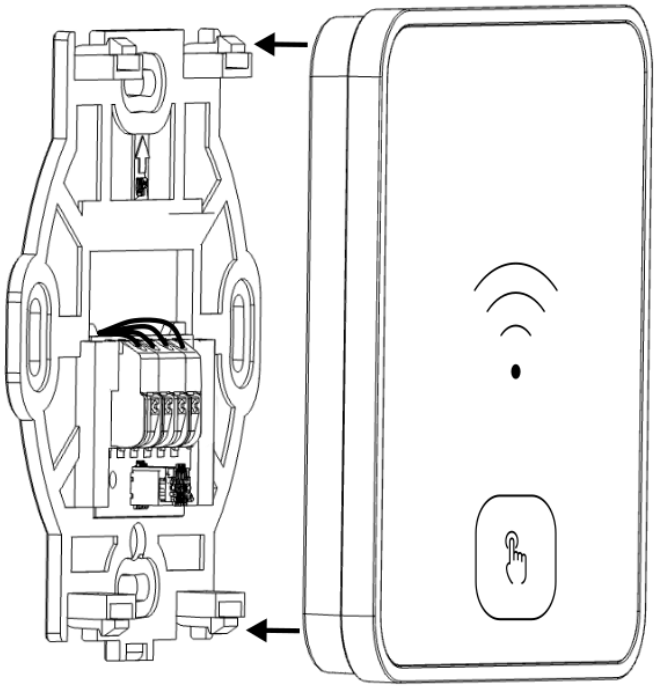
Before installing the module, write down the FN factory number, e.g. 1006194719, located on the label plate, which will be necessary for configuration.

Connect the 2-wire transmission cable connecting the module with the heat pump panel and the 2-wire external power cable to the self-clamping according to point: 6

The transmission cable cannot be run together with the building's electrical network cables or near devices emitting a strong electromagnetic field.

Drill holes in the wall and use screws to fix the mounting frame in the selected place on the wall - keeping the appropriate position (UP). Then attach the module to the mounting frame with the use of latches.





The uninstallation described in point. 12

6. Electrical connection

The module only works with selected types of ONTARIO and YUKON heat pumps. Information is available from the heat pump manufacturer.

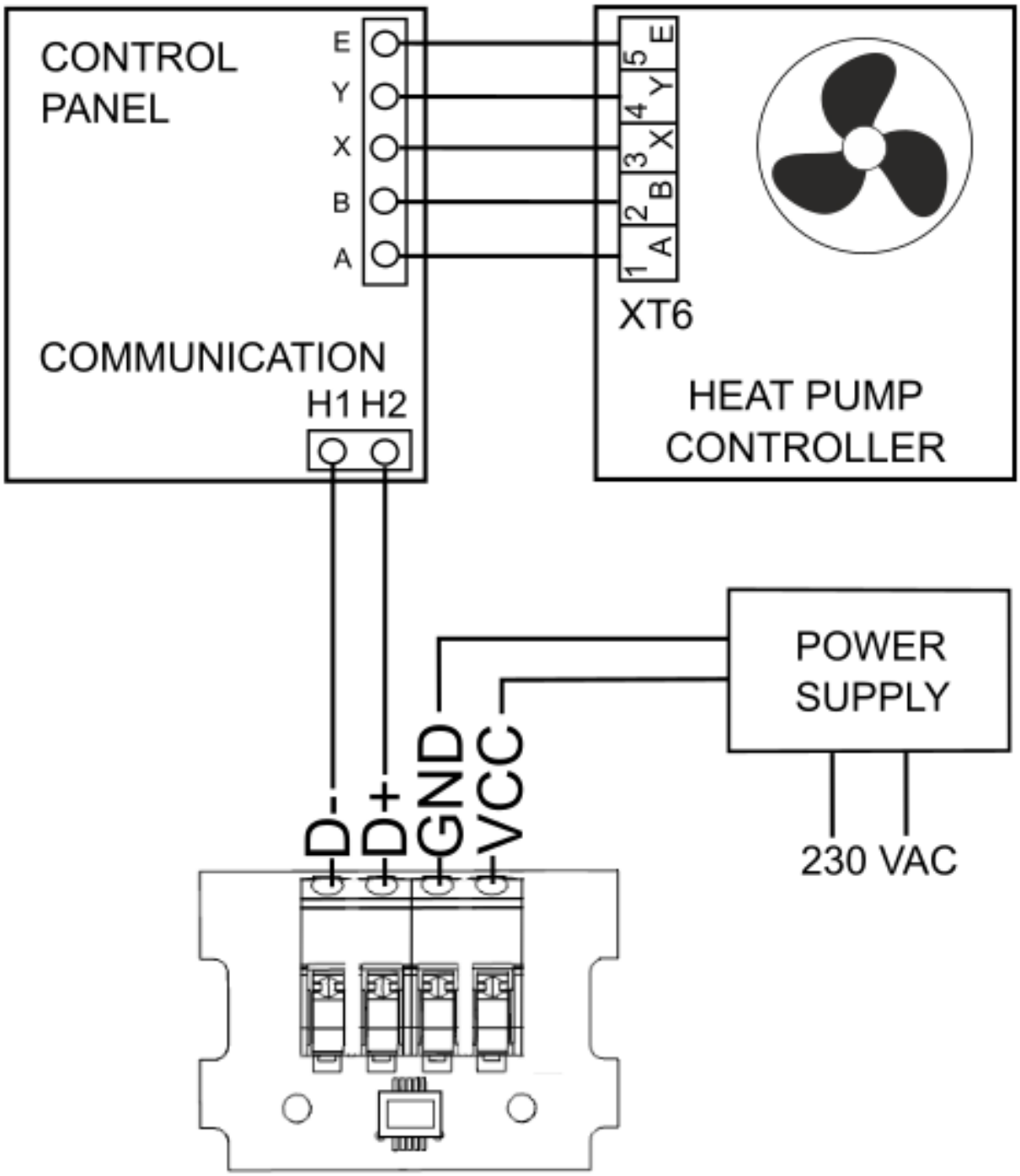
When connecting the wires of the transmission and power cables, pay attention to the appropriate polarity of the D+, D- and power supply GND, VCC signals between the module, the control panel and the external power supply. Inappropriate connection may result in damage to the module or errors in the operation of the module and the heat pump control panel.

The previously installed external power supply for the module should be inserted into the power socket. The external power supply must meet the standards specified in the technical data table (if the external power supply is included with the module, it meets the required standards). Correct installation of the module will be confirmed by the LED diode flashing.

When selecting a transmission cable connecting the control panel with the heat pump module, the rule should be followed that the resistance of one core in the cable should not exceed 8 Ω and the total length of the cable should not exceed 100 m. The cross-section of the core should not be less than 0.25 mm^2. As the length of the transmission cable increases, its cross-section should also increase.

The YUKON heat pump connection.

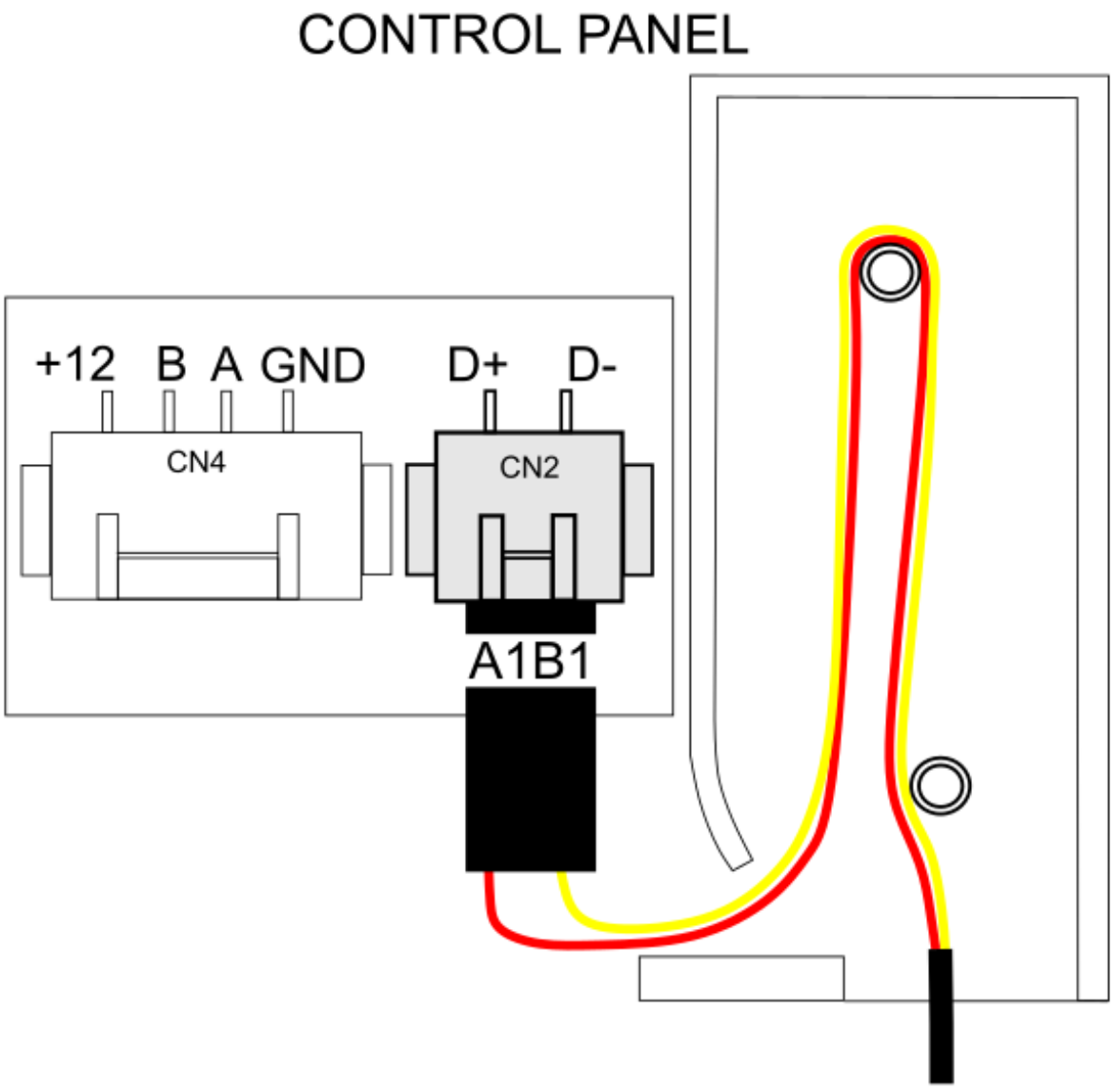
The transmission cable should be connected directly to the **H1**, **H2** socket of the heat pump control panel (first disconnect the rear cover protecting the control panel) and to the **D+**, **D-** socket of the module. Attention. After connecting the transmission cable to the control panel socket, replace the rear panel cover. The **+12 V**, **GND** wires of the external power supply cable should be connected to the **GND**, **VCC** socket of the module. The external power supply must meet the standards specified in the technical data table (if the external power supply is included with the module, it meets the required standards).

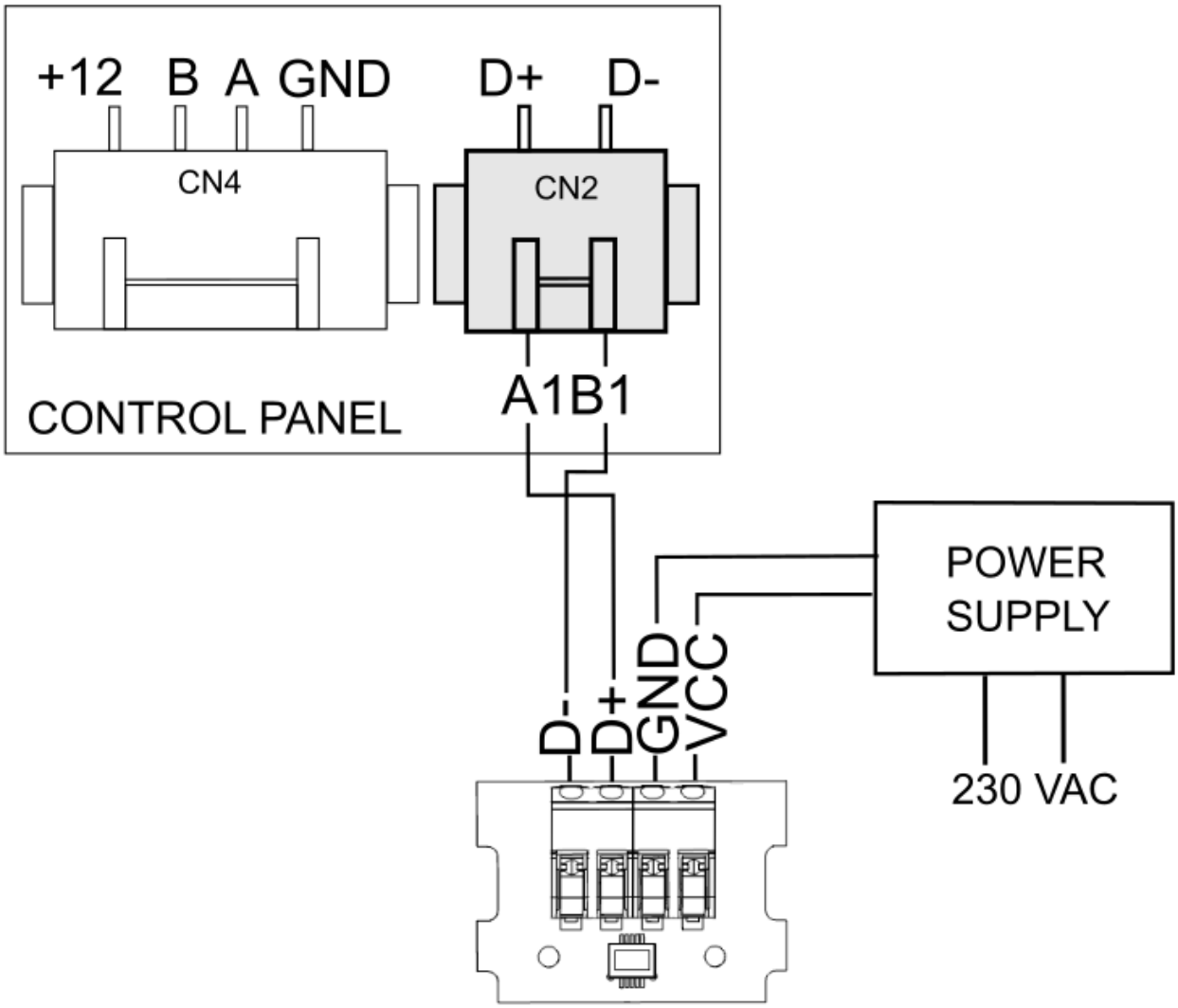


The ONTARIO heat pump connection.

The transmission cable marked with the letters **D+**, **D-**, previously connected to the module, should be connected to the heat pump main controller, using the socket in the control panel marked with the letters **A1B1** - connect **D+** and **A1** and **D-** and **B1**, respectively.

The connected transmission cable must be absolutely secured against being torn out or loosened from the panel socket by properly routing it around the mounting pin, as shown in the drawing below. The transmission cable is standard equipment of the module.




+12 B A GND
D+ D-
CN4
CN2
CONTROL PANEL
A1B1
POWER SUPPLY
D- D+ GND VCC
230 VAC

7. Configuration

Configuring the connection to the WiFi network requires installing the S-therm service mobile application for Android (only from system version 8.0) and iOS and configuring the WiFi network via this application.

During configuration, the installed application on the mobile device requires a permanent BT wireless connection to the module and is intended only for BT connection.

Android

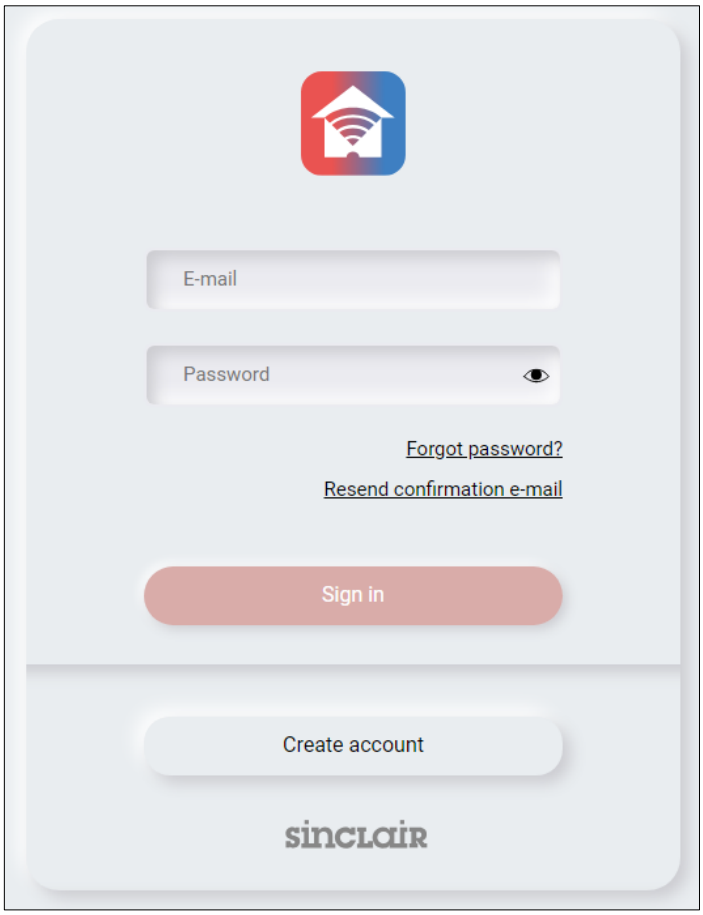
S-therm service

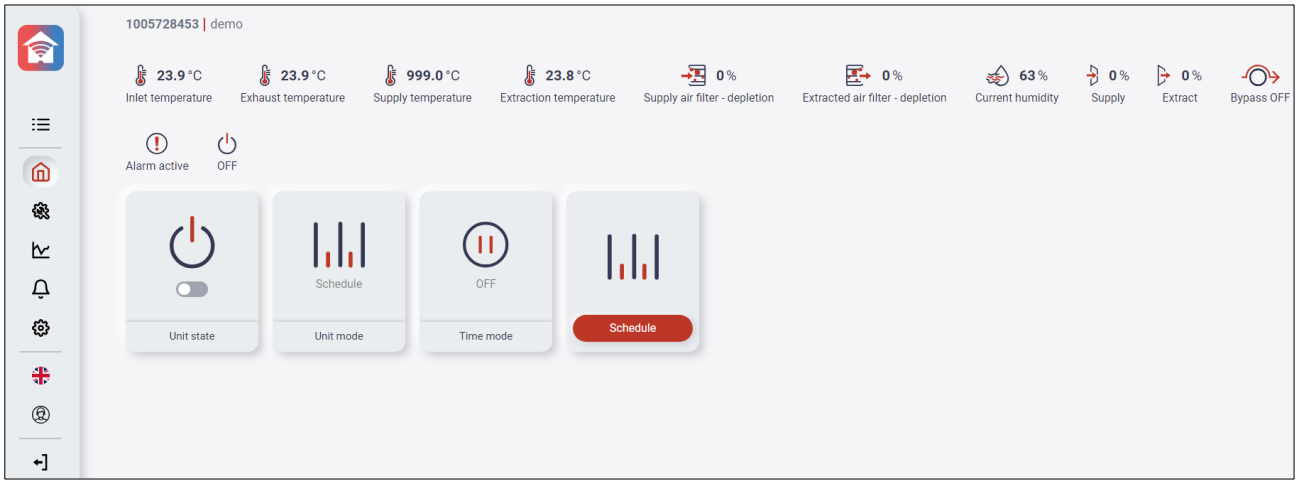
iOS

S-therm service

Correct connection to the WiFi network enables for user full operation and on-line configuration of the heat pump via the https://www.s-thermremote.com website or mobile the S-therm remote mobile application for this website.

https://www.s-thermremote.com





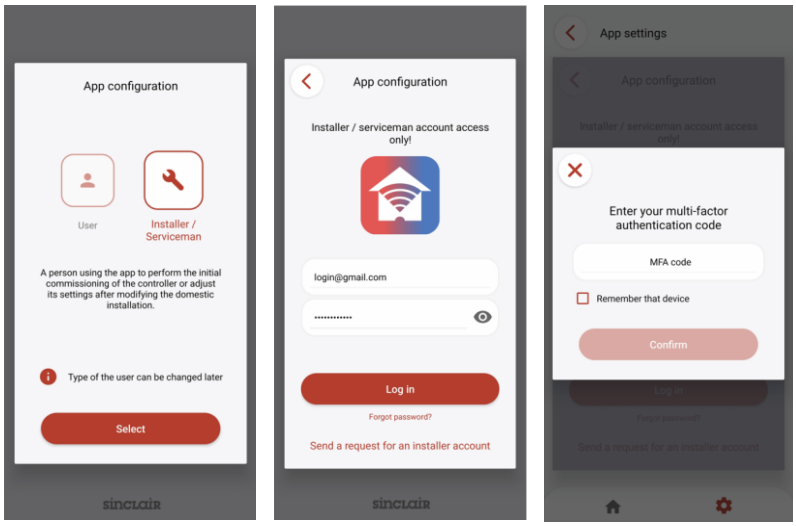
Module configuration:

1. After turning on the module power supply, the module is in BT mode by default, which is indicated by the LED flashing blue. When the LED flashes green, hold down the module's button for approx. 5 sec. to enable the module's BT mode. Otherwise, the module's LED signaling means:

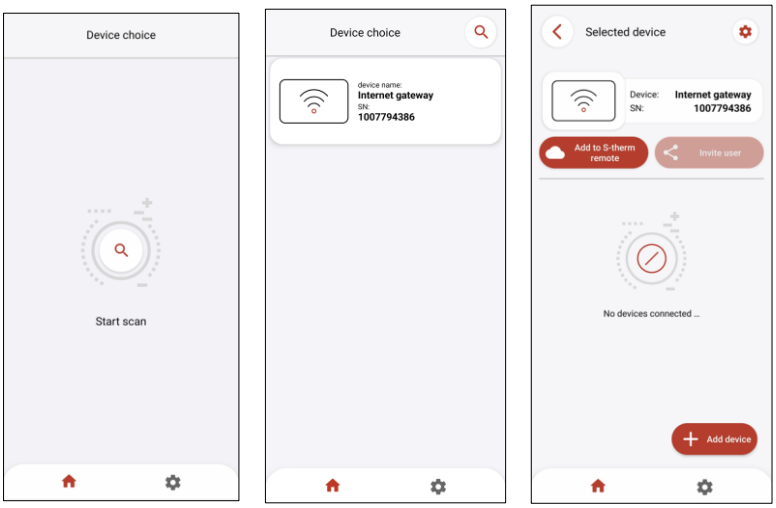
LED	
Flashes green 	Active connection to the WiFi and no connection to the website.
Lights up constantly in green 	Active connection to the WiFi and active connection to the website.
Flashes yellow 	No connection to the WiFi
No lights up	No power the module.
3 x Red flashes 1 x Blue flashes 	The module is in BT mode but there is no wired connection/transmission to the heat pump.
3 x Red flashes 1 x Green flashes 	The module is in WiFi mode but there is no wired connection/transmission to the heat pump.
Lights up constantly in blue 	The BT connection between the module and the mobile device is permanently active.
Flashes blue 	The module has BT mode enabled and is ready to work with a mobile device.
Quickly flashes yellow 	The module changes the operating mode: BT/WiFi.

2. After downloading and installing the S-therm service mobile application, turn it on, on the mobile device and activate all required peripherals and accept the regulations and consent to the processing of personal data.
3. Log in to the previously created installer account.

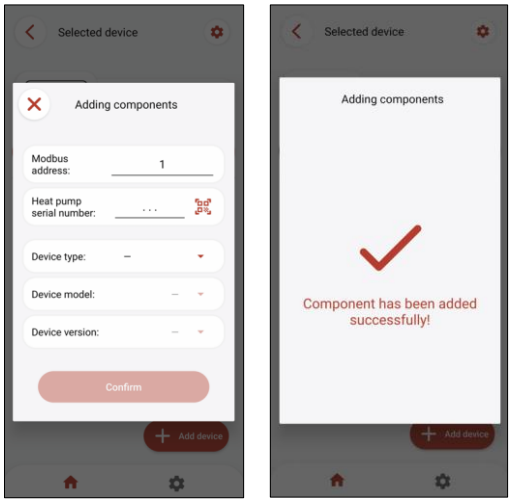
Attention: the installer account is created only by the manufacturer of the module/heat pump. For this purpose, please contact the manufacturer of the device/heat pump.



4. Search in the “Device choice” for the SN factory number (factory number read from the module label plate, e.g. 1007794386) and select the module you want to configure.

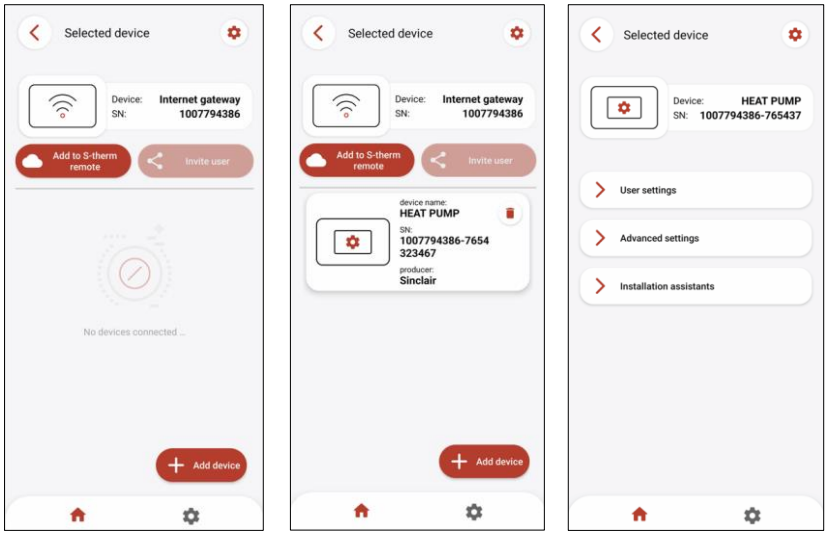


5. Add a “Modbus” device (heat pump) by selecting the "Add device" option. Before adding the device, check the Modbus address of the heat pump in the heat pump service settings menu - by default the Modbus address is set to „1”. Then enter FN number (only heat pump factory number e.g. 1007794386-7654323467). Select: Device type: (default: Heat pump), Device model: (e.g. SMH-40IRBC), Device version: (default V1).

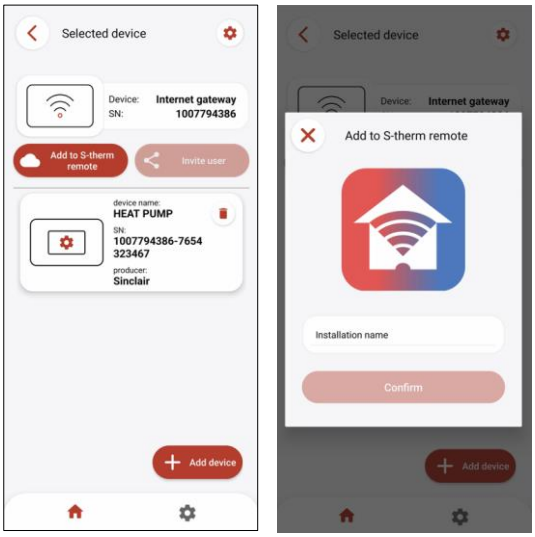


6. Configure the heat pump "locally" from the User settings/Service settings - only optional.

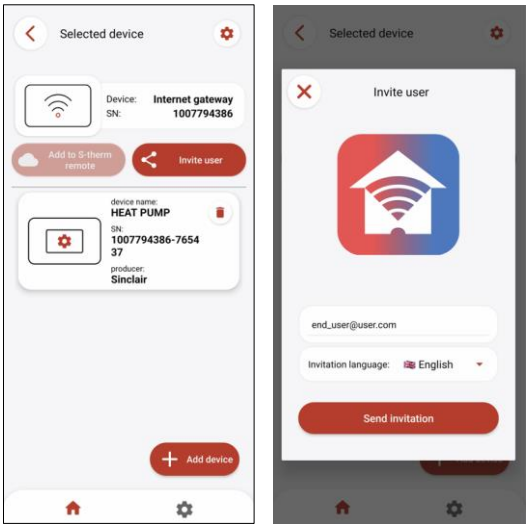
The description of the heat pump operation is available in the main heat pump manual.



7. Add the installation to the installer account (“Add to S-therm remote” button) to gain remote access to the installed heat pump.

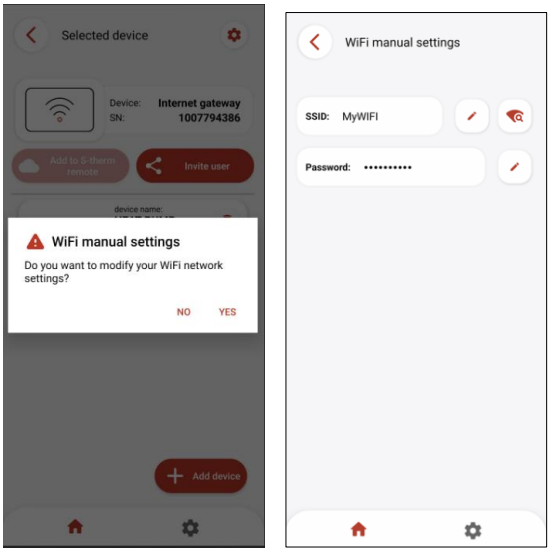


8. Invite the installation user to the website. The installer's remote access to the device will be possible only after the installation user has set up an account in the website and after accepting the invitation sent, accepting the regulations and consents and configuring the WiFi network. After pressing the "Confirm" button, a message with a link to set up an account/log in to the website will be sent to the specified e-mail address.



After the invitation sent by the installer to the user, an additional window appears asking about the WiFi manual configuration– select “YES” and enter the SSID and password of the WiFi network.

ATTENTION - the module only connects to a 2.4 GHz WIFI IEEE 802. 11 B/G/N network.



9. After completing the module configuration, it will be automatically switched to WiFi mode. To repeat the configuration process, switch the module back to BT mode by holding the module button for 5 sec.
10. Wait a few seconds until the module switches to WiFi mode, at which point if the LED is constantly on green, it means that there is an active connection to the WiFi and the website - correct completion of the module configuration.

8. Remote access to the device via the website

Log in to the https://www.s-thermremote.com website or use the S-Therm remote mobile application.

Android

S-therm remote

iOS

S-therm remote

During configuration, the installed mobile application on the mobile device requires a permanent connection to the WiFi network and is designed only for WiFi connection.

Correct connection of the SR-100 module to the WiFi network enables full operation and online configuration of heat pump via the website or the S-Therm remote mobile application.

An installer/servicer account is only created on behalf of the support engineer serving a given region. To do this, contact the appropriate engineer.

Website:

1. Installation successfully added to the installer account but not yet accepted by the user. If you need to change the e-mail address, click the user invitation button from the service technician/installer support panel.

2. The installation has been successfully added to the installer/service technician account. In the case of a correctly configured WiFi and a correctly installed installation by the user (legal consent required), the service technician/installer/manufacturer has the ability to enter and supervise the user's installation.

9. Technical specyfication

Power supply	5… 12 VDC Attention: the module should be powered by an external power supply of the PS2/LPS type according to EN 62368-1 or a companion device intended to power the module.
Power consumption	1.7 W
Degree protection	IP 20
Working conditions	+5…35ºC, 0…95 % RH (no water condensation)
Pollution degree	2 acc. EN 62368-1
Storage temperature	-25…+65ºC
Transmission	• wired: RS485 (Modbus RTU) with heat pump, • 2.4 GHz WIFI IEEE 802. 11 B/G/N with the website and S-therm remote mobile application, • BT v4.2 LE with the S-therm service mobile application.
Max. transmit power	10 dBm
Receiver category	2
Display	1 x LED multicolor
Control	1 x capacitive touch button
Self-clamp connectors	Wire cross-section: 0.25…0.75 mm^2, stripping length: 8…9 mm
Dimensions	80 mm x 80 mm x 10 mm
Weight	55 g
Software class	A
Installation method	On the wall

10. Storage and transport conditions

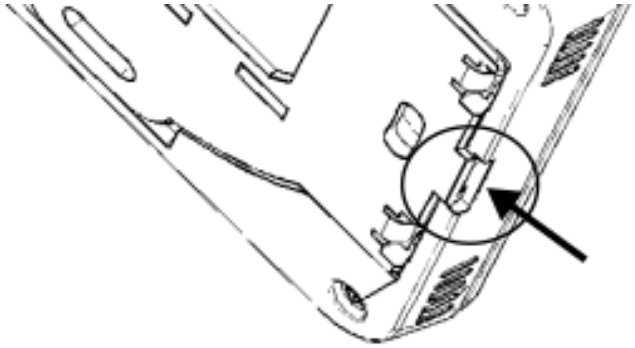
The module must not be exposed to the direct influence of atmospheric conditions, i.e. rain and sun rays, and vibrations higher than typical during road transport.

11. Declaration of conformity

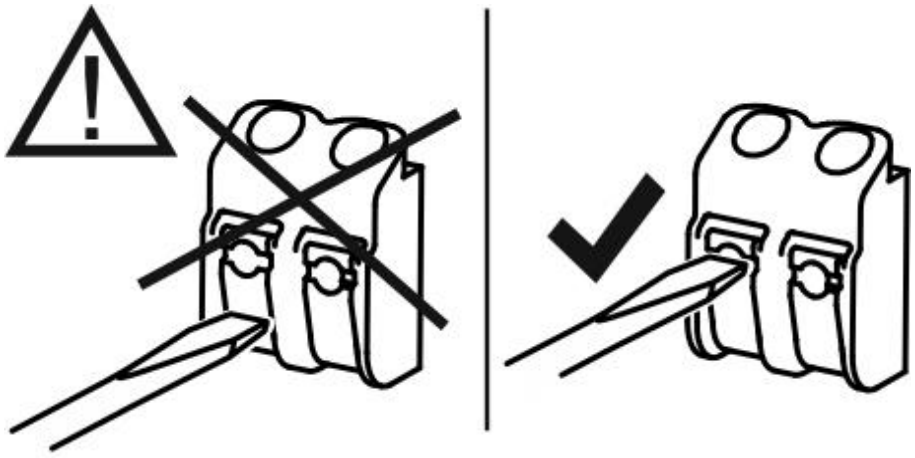
The purchased product meets the requirements of **Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014** on the harmonization of the laws of the Member States concerning making available on the market of radio equipment and does not cause harmful interference with radio communications to other equipment, in a residential area, provided that the product is correctly installed and used in accordance with the requirements of this manual.

12. Uninstallation

To disconnect the module from the mounting surface, insert a flat element, e.g. a screwdriver, into the slot indicated below. This will unclip the mounting frame latches and allow you to disconnect the module.



Removal of the cable requires rotating the conductor of the cable while pulling it out of the self-clamp, with the self-clamp latch depressed at the same time, e.g., with a flathead screwdriver in the appropriate place of the self-clamp, as shown below.



Register of changes:

The module manufacturer reserves the right to make improvements and modifications to the device.

NOTE CONCERNING PROTECTION OF ENVIRONMENT

This product must not be disposed of via normal household waste after its service life, but must be taken to a collection station for the recycling of electrical and electronic devices. The symbol on the product, the operating instructions or the packaging indicate such disposal procedures. The materials are recyclable in accordance with their respective symbols. By means of re-use, material recycling or any other form of recycling old appliances you are making an important contribution to the protection of our environment. Please ask your local council where your nearest disposal station is located.

In case of quality problem or other please contact your local supplier or authorized service center.
Emergency number: 112

PRODUCER

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This product was manufactured in UE (Made in UE)

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