

How to connect Nefit 1010H heat pump with Reduxi controller

Add the Nefit ModuLine 1010H room thermostat of your Nefit heat pump to the Reduxi Controller and read its values.

🔧 Nefit ModuLine 1010H · Reduxi Controller

🌐 EMS-Bus via Reduxi Converter to RS485 (Modbus)

📡 Modbus unit ID: 1 (normally)

👁️ Integration level: Read



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1 Prepare the connection

1.1 Technical documentation

Documents of the manufacturer:

- [Nefit Bosch: Moduline 1010](#) – Instructions on the manufacturer web page (Dutch)
- [Nefit short user instruction \(PDF\)](#) – Air-to-water heat pump operated with the ModuLine 1010H room thermostat (Dutch)

1.2 Required equipment

These components connect the Reduxi Controller to the device:

- ☐ Reduxi Controller
- ☐ Reduxi Converter EMS-Bus to RS485
- ☐ RS485 cable
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

2 Connect the device to the Reduxi Controller

2.1 Overview of the connection

The connection from the device to the Reduxi Controller has three parts:

- The device communicates over the EMS-Bus.
- The Reduxi Converter converts the EMS-Bus to RS485.
- The RS485 line goes to the Reduxi Controller. For cabling and the connection diagram see [Wiring, cable types and connection diagram](#).

3 Log in to the Reduxi web interface

You can open the Reduxi web interface in two ways:



REMOTE

Reduxi app

Via tunnel connection · works from anywhere



Web browser

In the local network · via IP address or `reduxi.local`

3.1 Via the Reduxi app

1 Open the app and log in

Launch the Reduxi app on your smartphone or tablet and log in with your credentials.

2 Open Reduxi devices

Tap the menu icon (three lines, top left) and select **Reduxi devices**.

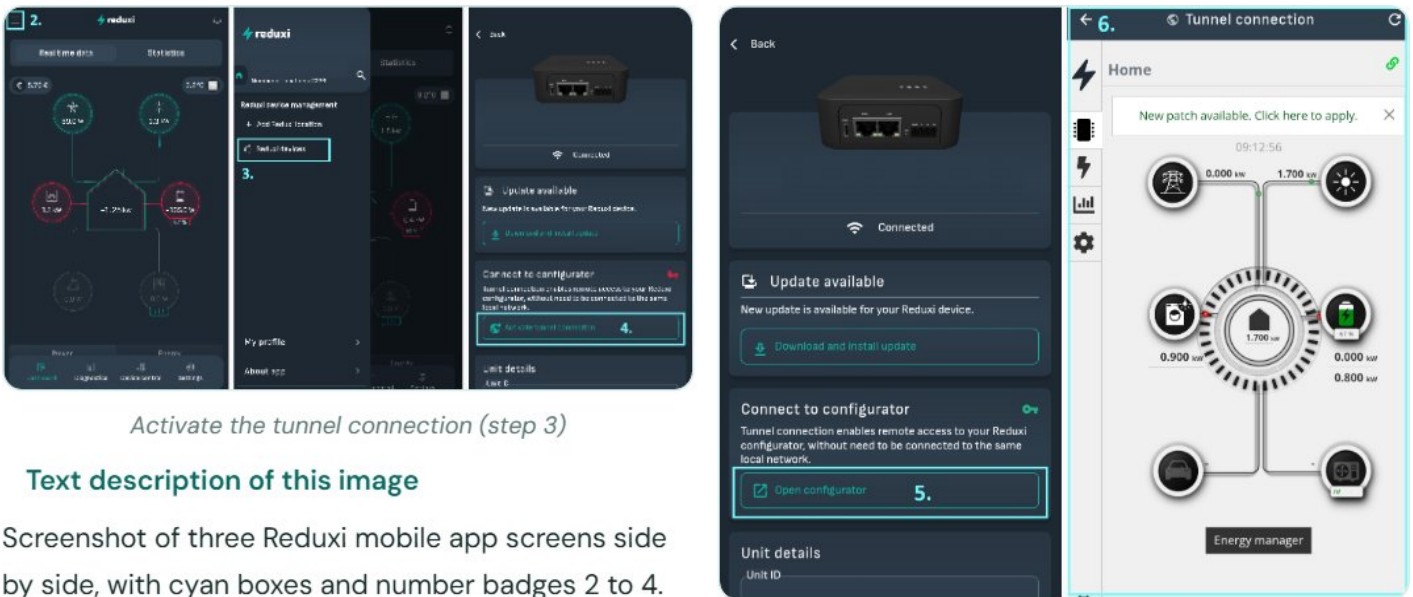
3 Activate the tunnel connection

Switch on the tunnel connection and wait a moment until it is active.

4

Open the configurator

Tap **Open configurator**. The Reduxi web interface opens.



Activate the tunnel connection (step 3)

Text description of this image

Screenshot of three Reduxi mobile app screens side by side, with cyan boxes and number badges 2 to 4. Left screen (dashboard, dark theme): menu icon at top left marked with a box and badge 2; 'reduxi' logo; tabs 'Real time data' (active) and 'Statistics'; price 5.79

Text description of this image

Open configurator (step 4)

3.2 Via a web browser

1

Open the login page

On a device in the same network, open a web browser and enter the controller's IP address or **`http://reduxi.local`**. You can find the controller's IP address in your router's device list or in the Reduxi app under **Reduxi devices**.

2

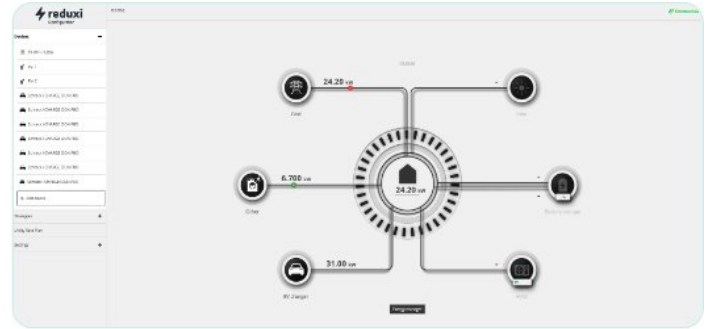
Log in

Username: **admin** · Password: **admin** (factory default)



Reduxi Controller login screen

Text description of this image



Controller web interface after login

2. Text description of this image

Screenshot of the Reduxi Configurator web interface

4 Add the device to Reduxi

Use these steps to add a new device or to edit an existing one.

4.1 Basic settings

Log in locally to the [Reduxi Configurator](#) on the controller (see [Point 3](#)) and click **Add device**.

reduxi Configurator

Devices —



Elwe 2



Fronius SYMO



Schrack NA96



Sunways Hybrid Inverter



Thor



Add device

The Add device button

Text description of this image

Enter the basic settings of the device:

- Device type: **HVAC**
- Type: the entry **EMS Bus - Thermostat - RC300/RC310/Moduline 3000/1010H/CW400/Sense II/HP** from the List of supported devices
- Name: a name of your choice, for example **Nefit 1010H**

Then click **Next**.

4.2 Communication settings

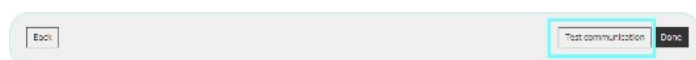
Select the communication channel (the RS485 line to the converter) and enter the device configuration:

PARAMETER	VALUE
Modbus unit ID	Normally 1

Then enter and select the advanced settings.

4.3 Test communication

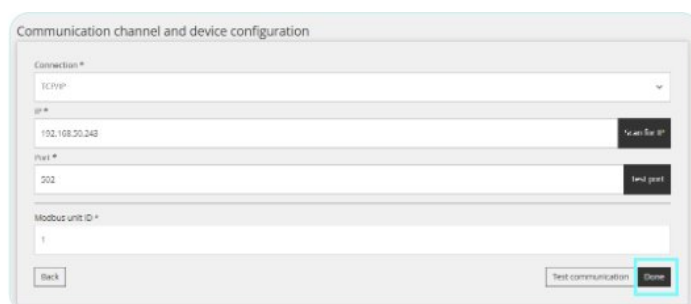
Click **Test communication** at the bottom of the wizard. It reads the Nefit 1010H once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



The **Test communication** button

Text description of this image

Screenshot of the bottom button bar of a Reduxi Configurator page. Left: button 'Back'. Right: button 'Test communication' (marked with a cyan box) and dark button 'Done'.



The **Done** button

2. Text description of this image

Communication channel and device configuration

5 Check the readings

5.1 Last measurements

After communication is established, check the values under **Devices – Nefit 1010H** in the **Reduxi Configurator** as an additional test.

5.2 Control by Reduxi

The List of supported devices shows this device with the integration level **Read**. Reduxi reads the values. Strategy commands do not control the device.

Reduxi strategies are described in [Strategies for Reduxi controller](#).

✓ Summary

Preparation (Point 1): Open the manufacturer documents. Get the Reduxi Controller, the Reduxi Converter EMS-Bus to RS485 and an RS485 cable.

Nefit 1010H (Point 2): Connect the device over the EMS-Bus and the converter to the RS485 line of the Reduxi Controller.

Add to Reduxi (Points 3–4): Log in to the Reduxi web interface. Add the device with type HVAC, set Modbus unit ID 1 and test the communication.

Go live (Point 5): Check the last measurements. The device is read only.

→ Common issues

ISSUE	SOLUTION
No data from the device	Check the RS485 A/B polarity, the cable type and the bus termination (see Wiring, cable types and connection diagram). Check the Modbus unit ID (normally 1) (see Point 4).
Device type is not in the list	Update the Reduxi Controller to the latest software. Then select the entry EMS Bus - Thermostat - RC300/RC310/Moduline 3000/1010H/CW400/Sense II/HP Point 4
Strategy does not control the device	The device is read only in Reduxi (see Point 5).
Open configurator does not open or stays empty	The tunnel is not active yet. Wait about 30 seconds and check that the controller is online.
Login with admin is rejected	The password was changed during installation. Ask the installer. The Reduxi account password does not work here.
reduxi.local does not load	Your device is not in the same network as the controller. Use the IP address or the tunnel connection.
Communication test fails, device shows offline	Check reachability, IP address / port / unit ID, and that the protocol is enabled on the device.



Related articles

Matching guides from the Reduxi knowledge base:



Supported Protocols at Reduxi

RS485, Modbus and the EMS-Bus converter at a glance



Device setup guides

All step-by-step guides for connecting devices to the Reduxi Controller



Strategies for the Reduxi Controller

Energy manager and other strategies explained