SALUS CONTROLS

WQ610 / WQ610RF

Installer's Quick Guide

- The schedule part is in the "End User Guide" -

Introduction

The SALUS Quantum WQ610 and WQ610RF thermostats are Boiler Plus compatible thermostats, designed specifically to control central heating boilers and also in the case of the RF versions, electrical panel heaters. They have our new load compensation (ITLC) software with Volt free switch and also Opentherm 4.0 connections, so you can choose the method of control to suit your boiler / installation. Please note that the Boilers need to have an OpenTherm Association license to be fully compatible with WQ610 range(should you wish to connect to the OpenTherm terminals A and B). Please verify if this requirement is met with your Boiler Manufacturer.

Product Compliance

This product complies with the essential requirements and other relevant provisions of the following EU Directives:RED:2014/53/EU and RoHS 2011/65/EU. Full text of the EU Declaration of Conformity is available on: www.saluslegal.com WQ610RF: 2405-2480MHz; <14dBm

Safety Information

Use in accordance with national and EU regulations. Use the device as intended, keeping it in a dry condition. Product is for indoor use only. Installation must be carried out by a qualified person in accordance with national and EU regulations.

WARNING! Always ensure the AC mains power is switched off before installing or working on any components.

Technical Specification

	WQ610 Thermostat	WQ610RF Thermostat
Thermostat supply	230 V AC	Lithium Battery (Rechargable)
Thermostat rating max	3 (1) A	-
OpenTherm terminals	A / B	-
Outputs	Voltage free NO / COM terminals	-
Temperature range	5℃ – 35℃	5℃ – 35℃
Thermostat display accuracy	0.5°/ 0.1℃	0.5°/0.1℃
Thermostat display resolution	0.5℃	0.5℃
ErP control class	Class V	Class V
Radio Frequency	--	2.4 GHz
Dimension [mm]	86 x 86 x 27 [mm]	86 x 86 x 11[mm]

WQ610 Receiver	
Receiver supply	230 V AC
Receiver rating max	16 (5) A
OpenTherm terminals	A / B
Outputs	Voltage free NO / COM terminals
Radio frequency	2.4 GHz
Dimension [mm]	98 x 98 x 32[mm]

Button Functions

**WQ610 / WQ610RF Thermostat**

WQ610RF Receiver

1. **MENU** - enter the menu options, press and hold for 3 seconds to return to main screen without saving changes.
2. **DOWN** - decrease the temperature and move through the menus.
3. **UP** - increase the temperature and move through the menus.
4. **TICK** - confirm changes and enter menus. Press and hold for 3 seconds to exit User Menu and save changes. Press and hold to cancel BOOST feature or temporary override (whilst in normal screen).

5. **ON** - When in Manual Mode, ON will turn the boiler on.
6. **OFF** - When in Manual Mode, OFF will turn the boiler off.
7. **AUTO** - Receiver operates in automatic mode according to the thermostat.
8. **MANUAL** - Receiver output is controlled by the On/Off slide switch.

LCD Icon Description
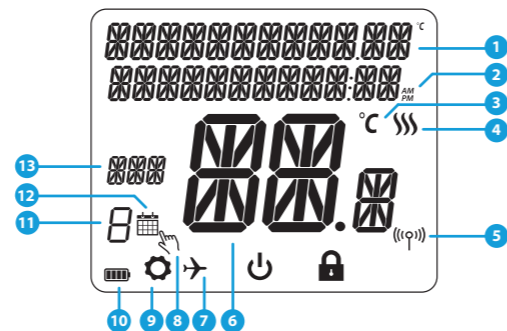
1. Menu/Settings description
2. Clock 24hr/AM/PM
3. Temperature unit
4. Heating indicator (icon is animating when there is heating demand)
5. RF Connection indicator
6. Current Temperature / Setpoint Temperature
7. Holiday mode indicator
8. Temporary override mode
9. Settings icon
10. Battery indicator
11. Schedule program number
12. Schedule mode icon
13. Day indicator/ SET information

WQ610 Thermostat Terminals Description

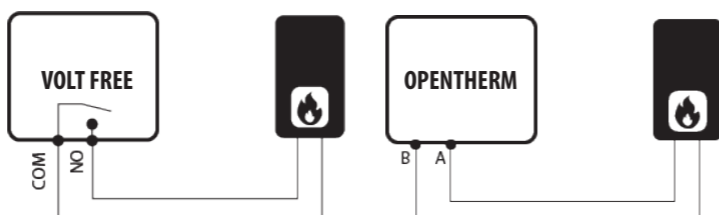| Terminal	Description
A/B	OpenTherm Communication Wires only
NO	Volt free connection (Switch)
COM	Volt free connection (Common)
L;N	Supply (230 V AC)

WQ610RX Receiver Terminals Description

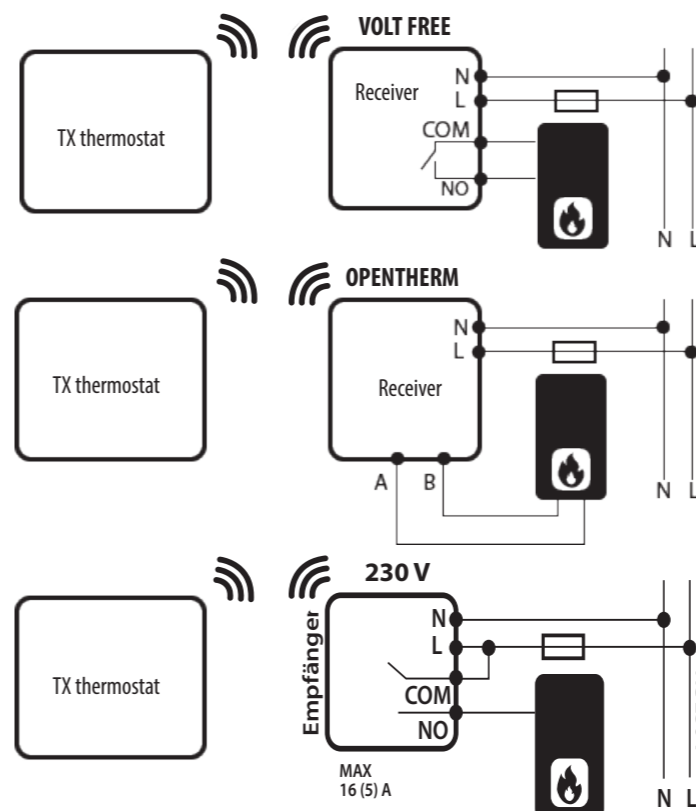| Terminal	Description
B / A	OpenTherm Communication Wires only
NO	Volt free connection (Switch)
COM	Volt free connection (Common)
L; N	Supply (230 V AC)

WQ610 Wiring Diagram

DO NOT connect to OpenTherm terminals unless your boiler is OpenTherm Association approved and has the OpenTherm Logo.

VOLT FREE

COM   NO

OPENTHERM

B   A

WQ610RF Wiring Diagram

TX thermostat — **VOLT FREE**
Receiver
N / L / COM / NO
AC 230 V
N L

TX thermostat — **OPENTHERM**
Receiver
N / L
A   B
AC 230 V
N L

TX thermostat — **230 V**
Empfänger / Receiver
N / L / COM / NO
MAX 16 (5) A
AC 230 V
N L

⚠ Please ensure the boiler has 230 V switching before wiring in this way.

Power Up and Configuration

ℹ The WQ610RF thermostat contains a re-chargeable Lithium battery. When the battery level is below 10%, the thermostat will display "PLEASE RE-CHARGE BATTERY". Please re-charge for a full 24 hours using a standard Micro USB charger. Thermostat operation will not be affected during the charging period
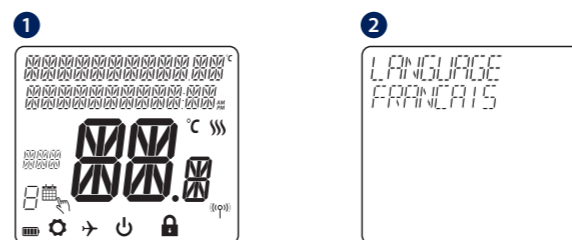
1
To activate thermostat, press TICK button for 3 seconds (RF version) only.

2 LANGUAGE FRANCAIS
Language "ENGLISH" is flashing, press UP or DOWN, choose your language, then TICK to confirm.
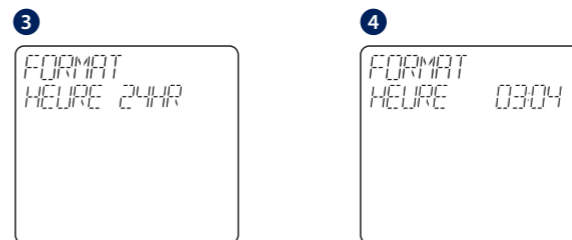
3 FORMAT HEURE 24HR
Using UP or DOWN, choose the time format between 24 hr and 12 hr format.

4 FORMAT HEURE 03:04
Using UP or DOWN, set the hour and then press TICK, which will then move to minutes, that can be changed in the same way.
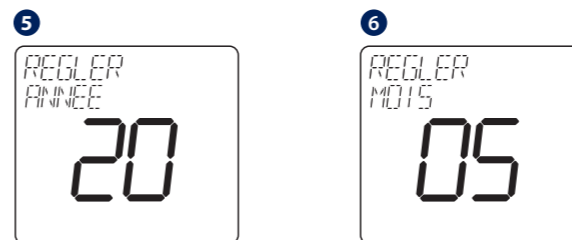
5 REGLER ANNEE 20
Using UP or DOWN, set the year and then press TICK.

6 REGLER MOIS 05
Using UP or DOWN, set the month and then press TICK, which will then move to days, that can be changed in the same way.

7 PARAMETRES AVANCES NON
If you select NO, thermostat will use dafult settings and revert to normal screen.

8 OT AUTO LUN 3 21.5℃
Once you have properly connected your thermostat with the OpenTherm terminals the OT message will be shown on the screen. For more Opentherm details, go to the Opentherm: Configuration section.

Accessing Advanced Settings Menu

Advanced Settings allow the installer / landlord to adjust the thermostat to suit individual installation requirements. Do not adjust the settings unless you are competent to do so. The Advanced Settings may be locked by the creation and activation of a 4 digit PIN code. Please keep your PIN safe and secure.
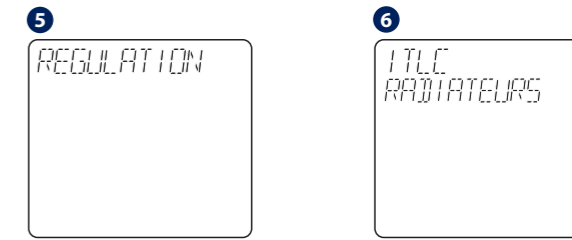
1 AUTO 03:00 LUN 6 26.0℃
Press MENU.
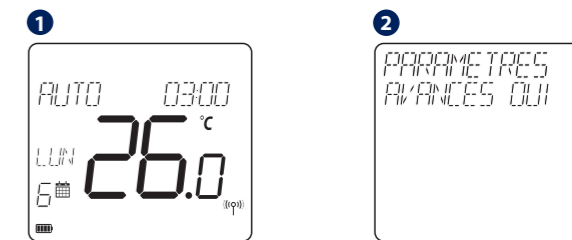
2 PARAMETRES AVANCES OUI
Using UP or DOWN, navigate to Advanced submenu and press TICK.
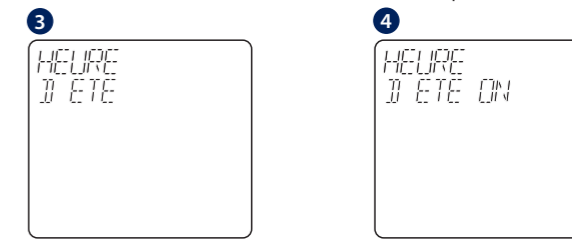
3 HEURE D' ETE
Press TICK to enter Daylight Saving Time Menu.

4 HEURE D' ETE ON
Using UP or DOWN, select ON or OFF. Press TICK to confirm.

5 REGULATION
Press TICK to select the type of heating control you prefer.

6 ITLC RADIATEURS
ITLC helps to improve system efficiency and end user comfort. Default is ITLC Radiators **(disabled if Opentherm connected)**. Press TICK to confirm or DOWN to see the next option.

⑦

```
ITLC
ELECTRIQUE
```
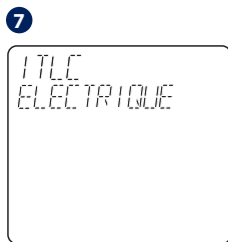
This option is only for electrical radiators. Press TICK to confirm or DOWN to see the next option.

⑧

```
HYSTERESIS
         0.25
```
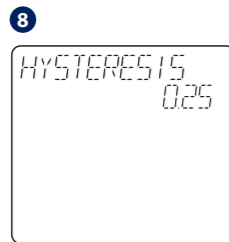
This is a simple ON/OFF algortihm control based on the set point. Using UP or DOWN, you can select the SPAN value. Press TICK to confirm or DOWN to go to next option.

⑨

```
TEMPERATURE
HORS GEL
```
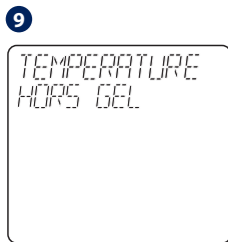
Using TICK, then UP and DOWN you can select FROST value . (5 - 17 degrees C). Press TICK to confirm or DOWN to see the next option.

⑩

```
TEMPERATURE
CONSIGNE MAX
```
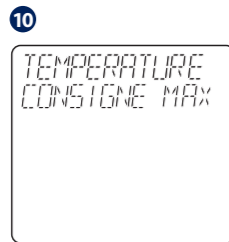
Using TICK, then UP and DOWN you can set the maximum and the minimum room temperature.

⑪

```
ETALONNAGE
THERMOSTAT
```

If you think that the temperature displayed on the thermostat is not accurate due to its location, you can calibrate it using this menu with values between -3.5 / +3.5 degree.

⑫

```
OPTIMIUM
START
```

This will start your boiler early to improve energy saving.

⑬

```
OPTIMIUM
STOP
```
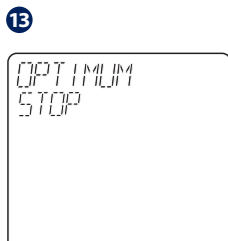
This will stop your boiler early to improve energy saving.

⑭

```
ENTRETIEN
CHAUDIERE
```
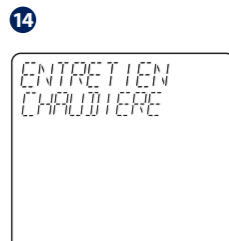
Press TICK to allow installer or landlord to set service reminder and lock temperature level.

⑮

```
ENTRETIEN
CHAUDIERE

OUI
```

Using UP or DOWN, you can select YES and press TICK to confirm,or you can select NO and go to point 20.

⑯

```
ENTRETIEN
CHAUD JOURS

365
```
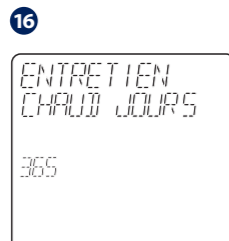
Using UP or DOWN, select the number of days service alert should last for.

⑰

```
PERIODE
DE PREAVIS

31
```
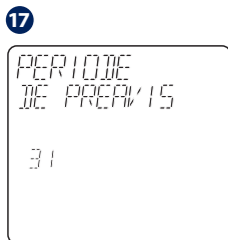
Using UP or DOWN, select the warning period before the service alert will be activated, then press TICK.

⑱

```
TEMP BLOQUE
OUI

18.0
```
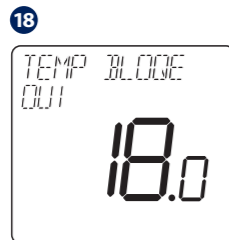
Using UP or DOWN, select the lock temperature and then press TICK.

⑲

```
ENTRER PHONE
-----------
```

Press TICK and enter installer's phone number using UP and DOWN buttons.

⑳

```
CREER
MDP
```
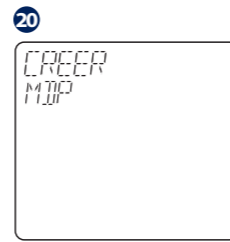
Allows you to create a PIN which may be used to limit access to your settings. Using UP or DOWN, create your PIN access, then TICK to confirm.
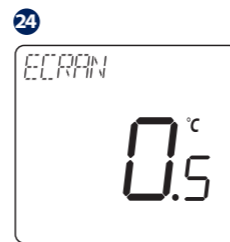
㉑

```
VERROUILLER
PARAM AV
```

This option will allow you to lock your advanced settings using your access PIN. Using UP or DOWN, create your lock advanced settings, then TICK to confirm.
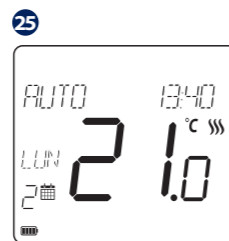
㉒

```
ENTRER
MDP 0000
```

Using UP or DOWN, enter the PIN code number. Press TICK to confirm every digit.

㉓

```
ECRAN
```

This option will allow you to set the displayed temperature accuracy .

㉔

```
ECRAN

          0.5 ℃
```

The temperature display accuracy can be 0.5 or 0.1

㉕

```
AUTO      13:40
LUN       21.0 ℃
2
```

Use your created PIN to lock access to advanced settings menu.

Temporary Manual Override

For overriding the schedule to bring the HEAT on, use the UP button to increase the temperature and press TICK to accept the change.

⚠ **This setting will be valid until the next scheduled program.**

OpenTherm: Configuration

This menu will only be visible if your boiler is OpenTherm compatible and you have connected to terminals A and B.

OpenTherm is a method of control used by modern heating systems. Instead of switching a boiler on and off at intervals, modulating control allows the amount of heat provided by the boiler to be controlled to match the varying demand from the thermostat. This means the customer has greater system efficiency, energy saving and room comfort from our heating controls.
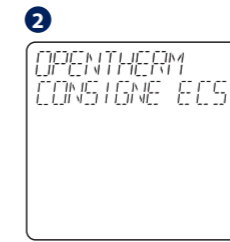
Temperature Values for Opentherm

⚠ Please note that below values can be manually set only if the boiler allows it.

| CH (Central Heating)	HW (Hot Water)
MIN TEMP: 25 ℃	MIN TEMP: 40 ℃
MAX TEMP: 80 ℃	MAX TEMP: 80 ℃
DEFAULT TEMP: 75 ℃	DEFAULT TEMP: 60 ℃

①

```
OT
AUTO
LUN       21.5 ℃
3
```
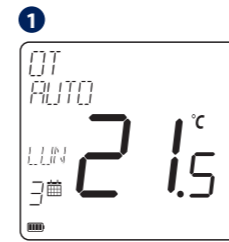
This screen display will be displayed when OT is connected. To change the settings for DHW   and/or CH - press MENU and go to ADVANCED SETTINGS.
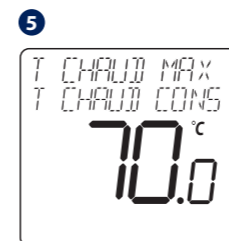
②

```
OPENTHERM
CONSIGNE ECS
```

Using UP or DOWN, navigate to HW SETPOINT and press TICK.

③

```
OPENTHERM
CONSIGNE ECS

50.0 ℃
```
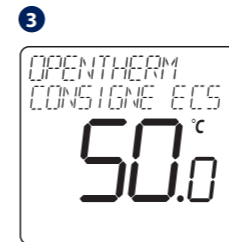
Using UP or DOWN, adjust the temperature and then press TICK.

④

```
T CHAUD MAX
T CHAUD CONS
```
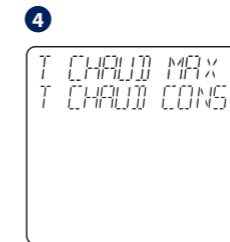
Press TICK to enter menu. Using UP or DOWN, set the maximum opentherm central heating temperature.
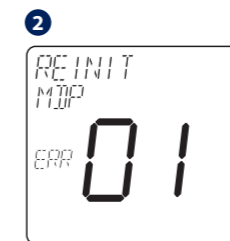
⑤

```
T CHAUD MAX
T CHAUD CONS

70.0 ℃
```

Using UP or DOWN, set the value then press TICK for 3 sec to confirm and exit to main screen.
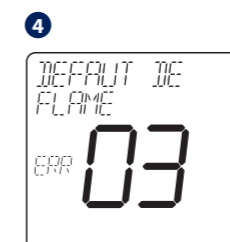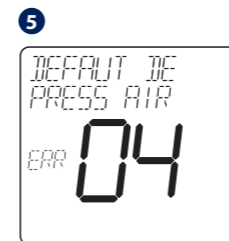
OpenTherm related errors:

①

```
DEMANDE
SERVICE
ERR  00
```
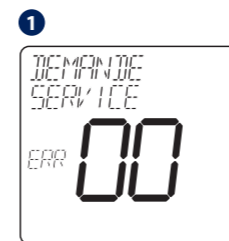
SERVICE REQUEST ERROR

②

```
REINIT
MDP
ERR  01
```

LOCKOUT RESET ERROR

③

```
EAU PRESSION
BAS
ERR  02
```
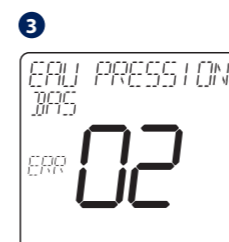
LOW WATER PRESSURE ERROR

④

```
DEFAUT DE
FLAME
ERR  03
```

GAS FLAME FAULT ERROR

⑤

```
DEFAUT DE
PRESS AIR
ERR  04
```

AIR PRESSURE FAULT ERROR

⑥

```
SURCHAUFFE
ECS
ERR  05
```
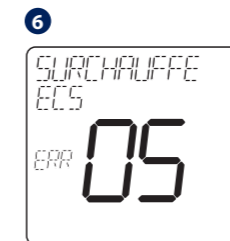
WATER OVER TEMPERATURE ERROR

ⓘ If an Opentherm fault is detected on the boiler, the thermostat will display the above messages. These errors are not related to the thermostat.

WQ610RF: Pairing with the Receiver

Remarques générales

ⓘ Les thermostats Salus, RT520RF inclut, sont jumelé en usine. Si vous souhaitez réassocier le thermostat avec le récepteur, assurez-vous que l'appareil est débranché de l'alimentation et que les commutateurs du récepteur ont été réglés sur AUTO et ON.

⚠ Pendant la procédure de jumelage, assurez-vous que le thermostat et le récepteur sont à au moins 1 mètre l'un de l'autre.

① Mettez le récepteur en mode jumelage

Pour mettre le récepteur en mode jumelage glissez rapidement le bouton On/Off en position Off et tout de suite en position On. Le voyant LED rouge clignote quand le récepteur est en mode jumelage.

②

```
JUMELAGE
RECEPT
```
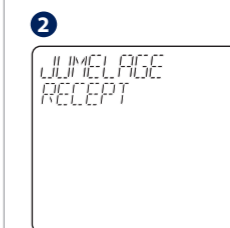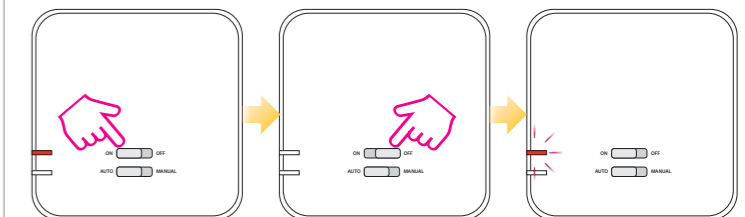
Turn the receiver OFF and ON twice to reset. Ensure receiver switches are ON and AUTO. Red LED should be flashing. Enter thermostat MENU and scroll down until you see the "PAIR WITH RECEIVER" option. Select YES to proceed with Pairing.
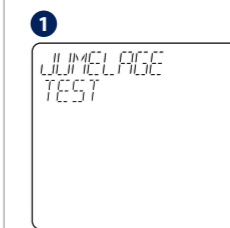
③

```
JUMELAGE

10
```
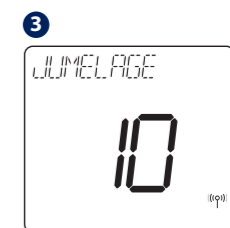
Now your thermostat is looking for the receiver. A 10 minute counter will appear on the screen.

④

```
JUMELAGE
REUSSI

5
```
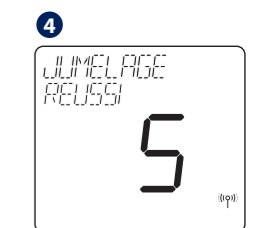
Upon connecting to the receiver, the thermostat will display the message "PAIRING SUCCESSFUL" and return to normal operation afterwards. The red LED will stop flashing when the pairing is successful.
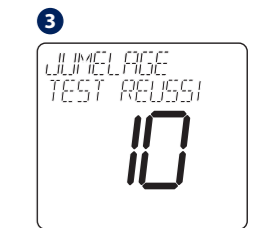
WQ610RF: Testing Link

①

```
JUMELAGE
TEST
```

Enter MENU and scroll down until you will find the "TEST LINK" option. Press TICK button to continue.

②

```
JUMELAGE
TEST

10
```
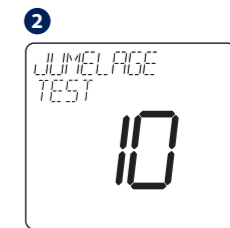
Now your thermostat is sending a TEST message to the receiver with the expectation of receiving a response. While testing, both red and green LED will be intermittently flashing.

③

```
JUMELAGE
TEST REUSSI

10
```

Your thermostat will indicate that the connection has been tested successfully and will return to normal operation.

Additional installation notes for WQ610:

Greifen Sie OBEN UND UNTEN zum Trennen der beiden Teile

MENUE / ⏎ 🄂 SALUS