



# SALUS GGPC1 Main Switch User Guide

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**SALUS GGPC1 Main Switch**



## Product Information

### Mains Switch Model GGPC1

The Mains Switch Model GGPC1 is an RF solution that allows for the switching ON or OFF of a Heating Ventilation and Air Conditioning (HVAC) pump under direct control from the boiler. The product is designed and manufactured by SALUS Controls, a member of the Computime Group, with headquarters located at Units 8-10, Northfield Business Park, Forge Way, Parkgate Rotherham, S60 1SD. SALUS Controls is committed to continuous product development and as such, reserves the right to change the specification, design, and materials of products listed in this brochure without prior notice. The product is compliant with Directives RED 2014/53/EU and RoHS 2011/65/EU.

### Product Compliance

The Mains Switch Model GGPC1 complies with the essential requirements and other relevant provisions of Directives RED 2014/53/EU and RoHS 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following internet address: [www.saluslegal.com](http://www.saluslegal.com).

### Safety Information

It is important to use the product in accordance with regulations and for indoor use only. Keep the device completely dry and disconnect it before cleaning it with a dry cloth. The Mains Switch must be fitted by a competent person and installation must comply with the guidance, standards, and regulations applicable to the city, country, or state where the product is installed. Failure to comply with relevant standards could lead to prosecution.

### Utility

The Mains Switch Model GGPC1 eliminates the need for cabling when switching ON or OFF an HVAC pump

located away from the boiler. The relay can also be used in other similar applications with other devices.

## RF Communication

The product uses RF communication at 868.0-868.6MHz.

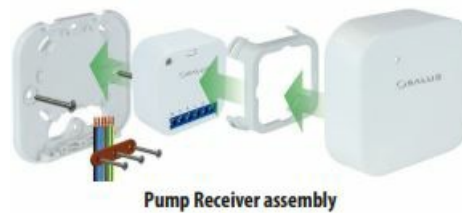
## Product Usage Instructions

Before using the Mains Switch Model GGPC1, ensure that the device is installed by a competent person and in compliance with the guidance, standards, and regulations applicable to the city, country, or state where the product is installed. Follow these usage instructions:

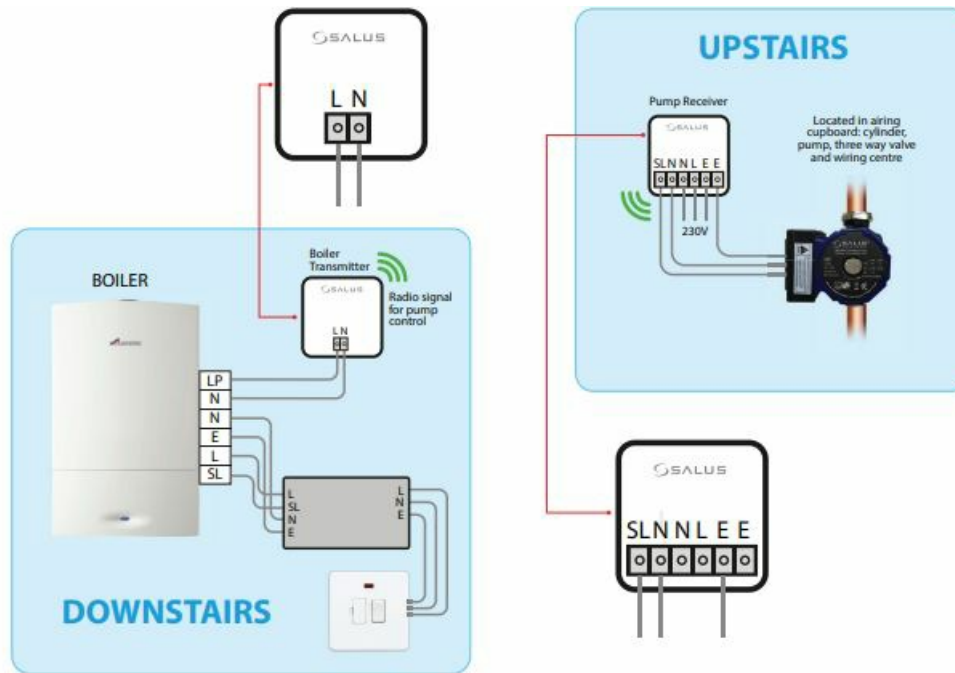
1. Locate the Boiler Transmitter and Pump Receiver assemblies.
2. Connect the Boiler Transmitter assembly to the boiler by connecting the L and N terminals.
3. Connect the Pump Receiver assembly to the pump by connecting the SL, N, and L terminals.
4. Ensure that the Boiler Transmitter and Pump Receiver assemblies are within range of the radio signal for pump control.
5. To switch ON or OFF the HVAC pump, use the Mains Switch Model GGPC1.

Remember to use the product in accordance with regulations and for indoor use only. Keep the device completely dry and disconnect it before cleaning it with a dry cloth.

## assembly



## WIRING



## Introduction

The mains Switch is an RF solution to switch ON or OFF a Heating Ventilation and Air Conditioning (HVAC) pump under direct control from the boiler.

### Product Compliance

This product complies with the essential requirements and other relevant provisions of Directives RED 2014/53/EU and RoHS 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following internet address: [www.saluslegal.com](http://www.saluslegal.com)

## Safety Information

Use in accordance with the regulations. Indoor use only. Keep your device completely dry. Disconnect your device before cleaning it with a dry cloth. This accessory must be fitted by a competent person and installation must comply with the guidance, standards and regulations applicable to the city, country or state where the product is installed. Failure to comply with the relevant standards could lead to prosecution.

### Utility

The pump is not normally located close to the boiler, in which case a mains cable must be run from the boiler to the pump. Using Mains Switch eradicates the need for cabling.

The relay can be used in other similar applications (with other devices).

## RF Communication

868.0-868.6MHz; <13dBm

### Range:

- approximately 100 meters in open space
- **typical indoor range:** 35 meters (depends on the indoor structure)

## Pairing code

- The Boiler Transmitter and the Pump Receiver will share one unique factory pre-matched 3-byte pairing code.

The number of combinations (16,777,216) ensures no adjoining units should share the same pairing code.

## Components

**Mains Switch consists of two units:**

- 1. The Boiler Transmitter
- 2. The Pump Receiver

Also included are two mounting brackets for each unit.



## The Boiler Transmitter

The Boiler Transmitter is connected to the boiler which both powers the unit and detects the presence of the 230VAC pump signal output from the boiler.



## Terminals

Please wire the Boiler Transmitter in accordance with the wiring diagram below:

<b>L</b>	Live
<b>N</b>	Neutral

## Temporary power backup:

The Boiler Transmitter uses a super capacitor to backup power in order to transmit an OFF command twice at 5 second intervals, when it detects the boiler output off.

## Device Function

### Normal Mode

The Boiler Transmitter keeps detecting the 230VAC input.

When 230VAC is detected, an RF ON signal is transmitted to the RF Pump Receiver and repeated every 5 seconds.

When power is removed from the Boiler Transmitter, a temporary power backup (Super Capacitor) will be used to

transmit an OFF command twice at 5 second intervals.

### Pairing Mode

The Boiler Transmitter keeps broadcasting pairing code every 5 seconds until 60 second timeout.

### Button Operation & LED Indicator

Button operation	LED State	Description
Press the button 3 times within 1 second	Orange Flash	When the user presses the transmitter button 3 times within 1 second, the transmitter will send the pairing information at 5 second intervals for one minute. The transmitter LED will flash orange (red/ green ON) at 0.5Hz for one minute.
N/A	Green On	The LED will be lit green when the unit is powered.
N/A	Red On	The LED will be lit red for 1 minute when the unit is powered off.

### The Pump Receiver

The Pump Receiver keeps listening for the RF ON/OFF signal. The pump will be switched ON when an RF ON signal is received. The Pump Receiver will switch off the pump upon receiving an OFF command or if an ON command is not received within 21 seconds.



### Terminals

Please wire the Pump Receiver in accordance with the wiring diagram below:

<b>SL</b>	Switch Live-out
<b>N</b>	Neutral out
<b>N</b>	Neutral input
<b>L</b>	Live Input
<b>E</b>	Earth
<b>E</b>	Earth

### Device Function

#### Normal Mode

The Pump Receiver keeps listening for the RF ON/OFF signal. The Pump will be switched ON when an RF ON signal is received.

Once switched ON the Pump Receiver will switch OFF the pump upon receipt of an OFF command or if an ON

command is not received within 21 seconds (RF Watch Dog).

### Pairing Mode

The Pump Receiver keeps listening for the pairing code until the pairing code is received or it will time out after 60 seconds.


The received pairing code will replace the pre-attached pairing code.

### Button Operation & LED Indicator

Button operation	LED State	Description
Press the button 3 times within 1 second	Orange Flash	When the user presses the receiver button 3 times within 1 second, the LED of the receiver will flash orange (red/green ON) at 0.5Hz for 1 minute waiting for pairing information from the transmitter.
N/A	Green On	The LED will be lit green when the unit is powered and the pump is switched ON.
N/A	Red On	The LED will be lit red when the unit is powered and the pump is switched OFF.

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- SALUS Controls is a member of the Computime Group.
- Maintaining a policy of continuous product development SALUS Controls pc reserves the right to change the specification, design, and materials of products listed in this brochure without prior notice.
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### Documents / Resources

	<b><a href="#">SALUS GGPC1 Main Switch</a></b> [pdf] User Guide GGPC1 Main Switch, GGPC1, Main Switch, Switch
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### References

- [🌐 Choose your country – Salus](#)
- [🌐 Legal – Salus](#)