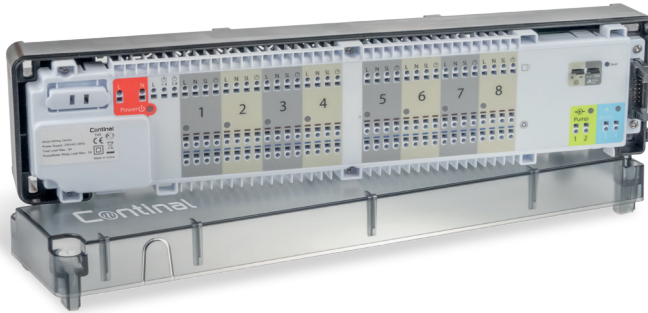


# Quantum wiring centre



The Quantum wiring centre is at the heart of our Quantum range.

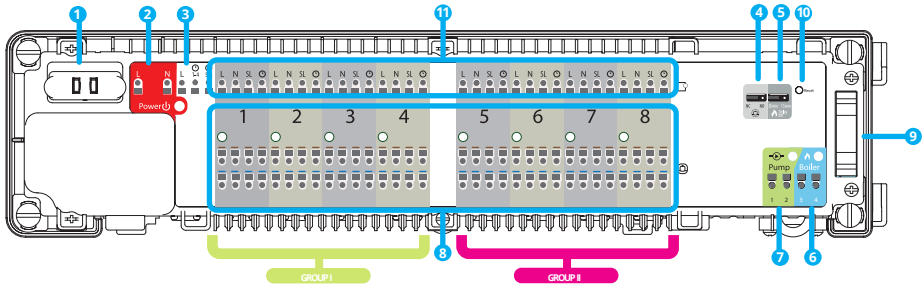
Easy to install, it provides quick and easy push-fit connection for all connected devices (including actuators, up to 8 thermostats, pump heat source and our Quantum hub). Built-in overload protection and LED status indication ensure safe and reliable operation.

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## 1. Wiring centre description

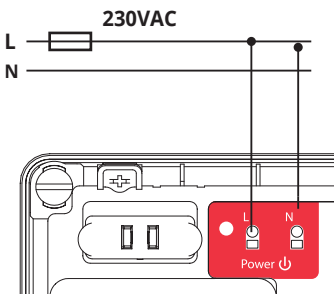


- |                                   |                          |  |
|-----------------------------------|--------------------------|--|
| 1. Cartridge fuse 5 x 20 mm 12A   | 5. Delay jumper          | 9. Serial connector for the Quantum wiring extension |
| 2. Power supply                   | 6. Boiler control output | 10. Reset button                                     |
| 3. NSB function terminals         | 7. Pump control output   | 11. Thermostat connection                            |
| 4. NC / NO jumper (actuator type) | 8. Actuators connection  |  |

## 2. Power supply

Note: Only replace the fuse when the wiring centre is disconnected from the power supply.

The fuse is located under the housing cover next to the power supply terminals, and secures the wiring centre and the devices connected to it. Use ceramic tube fast blow 250V ROHS fuses (5x20 mm) with a nominal max current 12.5A. To replace the fuse remove the fuse holder with a flat screwdriver and pull out the fuse.



The power supply for the wiring centre is 230VAC.

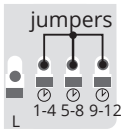
Two wire installation should be made in accordance with the applicable regulations.



### 3. Night set back

NSB is activated in non-programmable Continal thermostats via an external signal. The signal is sent via an external timer or programmable thermostat connected to the Quantum wiring centre. Non-programmable thermostats receive NSB signal and reduce setpoint temperature (by switching to eco mode). All thermostats must be connected using a 4-wire cable (min. 4 x 0.75mm<sup>2</sup>, max. 4 x 1.5mm<sup>2</sup>).

#### • OPTION 1



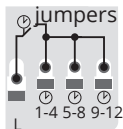
One master thermostat that is common for thermostats from Group 1, Group 2 and Group 3 (one programmable thermostat, other thermostats are non-programmable).

#### • OPTION 2



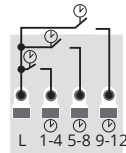
Three master thermostats. One for Group 1, one for Group 2 and one for Group 3 (three programmable thermostats, other thermostats are non-programmable).

#### • OPTION 3



One external clock that is common for thermostats from Group 1, Group 2 and Group 3 (one external clock + daily regulators).

#### • OPTION 4



Three external clocks. One for Group 1, one for Group 2 and one for Group 3 (three external clocks + non-programmable regulators).

Note: Terminals 1-4 and 5-8 are located in the Quantum wiring centre, while terminals 9-12 are located in the Quantum wiring extension module.

### 4. NC / NO jumper



Select the type of the actuator connected to the wiring centre:

NC – actuator normally closed (default)

NO – actuator normally opened

Jumper position change must be refreshed in the memory by short pressing the Reset button.



## 5. Delay jumper



Boiler off delay time.

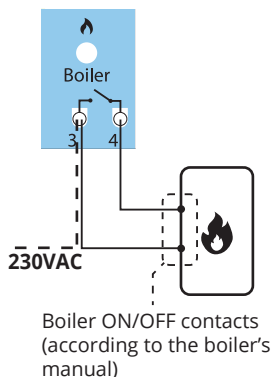
**Note:** Pump (Pump output) and boiler (Boiler output) starts 3 minutes after receiving the heating signal from thermostats connected to wiring centre. The pump stops 3 minutes after the last call for heat sent by the thermostat. The heat source (boiler) will turn off after the time set on the delay jumper.

A jumper position change must be refreshed in the memory by short pressing the reset button.



- used to refresh the data, after switching jumpers 4 or 5.

## 6. Boiler control output

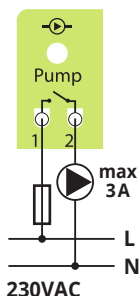


Boiler output - this is a **VOLT FREE** output (COM / NO) that controls the boiler.

The output closes and the boiler turns on 3 minutes after receiving the heating signal from any of thermostats paired with the wiring centre.

The output opens and the boiler switches off when the last thermostat stops sending a heat demand (after the time set on the delay jumper).

## 7. Pump control output



Pump output - this is a **VOLT FREE** output (COM / NO) that controls the circulation pump in the heating system.

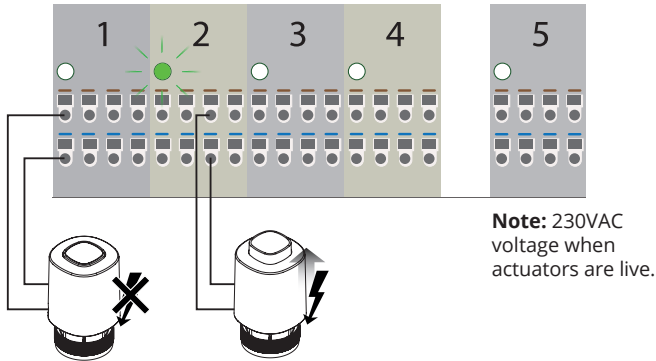
The output closes (pump starts) 3 minutes after receiving the heating signal from any of thermostats paired with the wiring centre.

The output opens (pump stops) 3 minutes after the last demand for heating is sent by the thermostat.



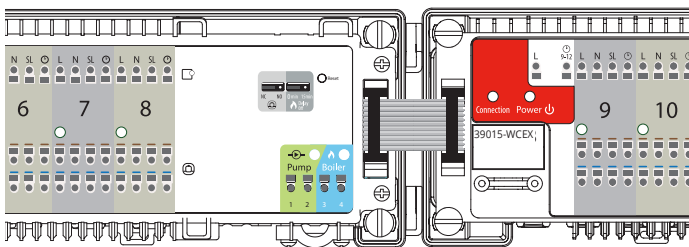
## 8. Actuator connection

The actuator wires should be secured with the self-locking connectors in the appropriate zone. Up to 6 actuators with a load of up to 2 watts each can be connected to a single zone. Should more than 6 actuators be required in a zone use an additional relay to relieve the output.



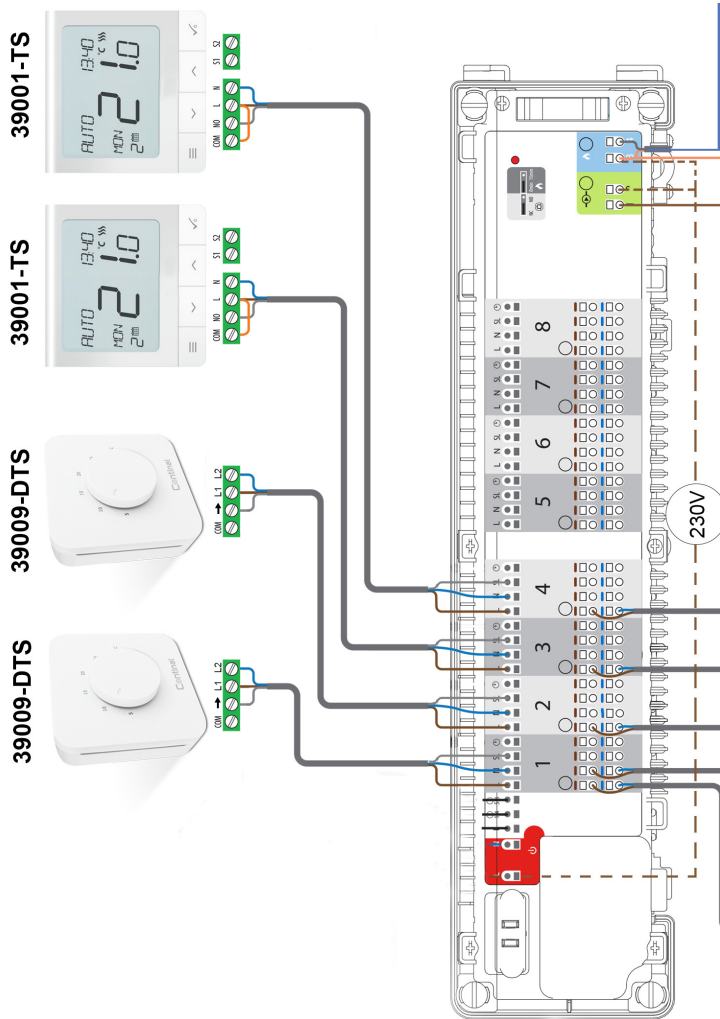
## 9. Serial connector - Quantum wiring extension

The serial connector is used to connect the Quantum wiring centre to the Quantum wiring extension module to add functionality and support for up to 12 zones.



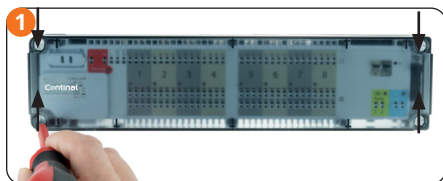


## 10. Thermostat connection

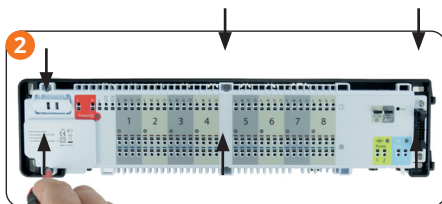




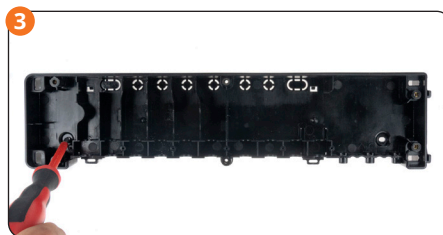
## 11. Installation



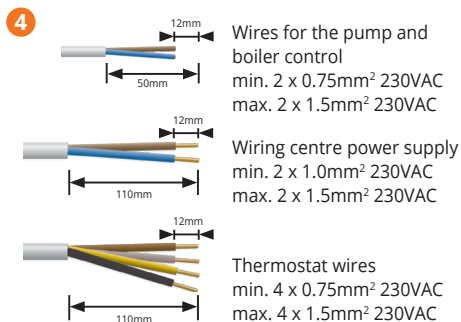
Remove the top cover of the wiring centre.



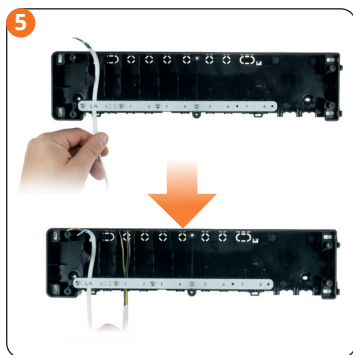
Unscrew the main housing (see picture).



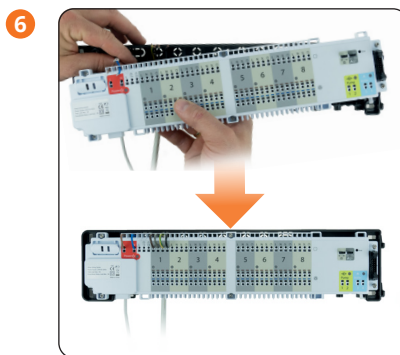
Mount the back side of the housing to the wall.  
When mounting on a DIN rail, open the hooks on the back of the housing.



Remove the appropriate piece of insulation from the wires.

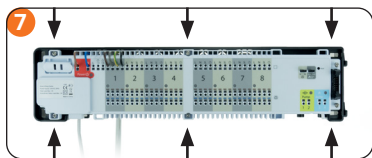


Thread the wires under the mounting belt in the back part of the wiring centre. Includes accessories to support the installation process.

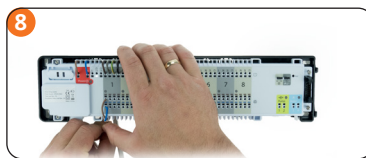


Thread the wires through the slots in the top part of the wiring centre and connect it to the terminals.

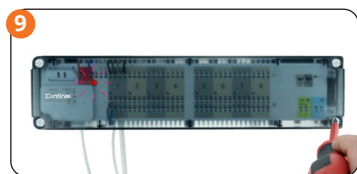




Adjust the wires and screw the main housing for the wiring centre to the rear housing.



Connect the actuators wires.



Make sure that all the wires are properly connected, mount the top cover and power up the wiring centre. The red power indicator LED will illuminate.

## 12. Product compliance and safety information

### Product compliance

This product complies with the essential requirements and other relevant provisions of the following EU Directives: EMC 2014/30/EU, Low Voltage Directive LVD 2014/35/EU, RoHS directive 2011/65/EU.

### Safety information

Use in accordance with national and EU regulations. Product for indoor use only in dry conditions. Installation must be carried out by a qualified person in accordance with national and EU regulations.

Before attempting to setup and install, make sure that Quantum wiring centre is not connected to any power source. Installation must be carried out by a qualified person. Incorrect installation may cause damage to the wiring centre. The Quantum wiring centre should not be installed in areas where it may be exposed to water or damp conditions.

## Want more information?

01 531 4493

[www.continal.ie](http://www.continal.ie)