

# Quantum wiring centre-RF

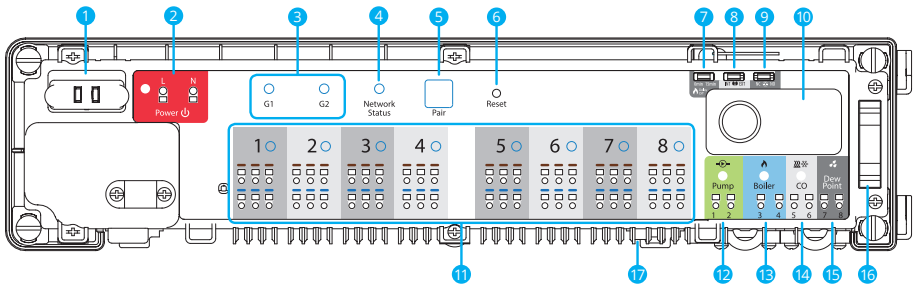


Simple to use, the Quantum wiring centre-RF enables easy pairing of RF thermostats. It provides easy push-fit wired connection for actuators, the pump heat source and our Quantum hub. Built-in overload protection and clear LED status indication ensure safe and reliable operation.

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## 1. Wiring centre description



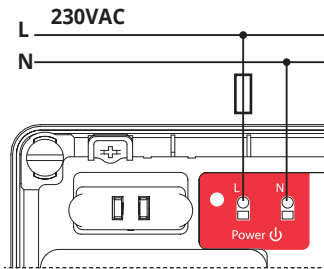
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| 1. Cartridge fuse 5 x 20mm 12A | 10. ZigBee network coordinator                       |
| 2. Power supply                | 11. Actuator terminals                               |
| 3. Thermostat grouping status  | 12. Pump control output                              |
| 4. Network status indicator    | 13. Boiler control output                            |
| 5. Pair button connector       | 14. CO terminal                                      |
| 6. Reset button                | 15. Dew point sensor                                 |
| 7. Delay jumper                | 16. Serial connector for the wiring centre extension |
| 8. INT / EXT antenna jumper    | 17. External antenna                                 |
| 9. NC / NO actuators jumpers   |  |

## 2. Power supply

### Fuse

The fuse is located under the housing cover at the main terminals and protects the wiring centre and devices connected to it. Use a cartridge fuse-type 5 x 20mm - nominal burn rate 12A. To remove the fuse, lift the socket with a flat-head screwdriver and pull out the fuse. Only replace the fuse when the wiring centre is disconnected from the power supply.

## Power supply



Power supply for the wiring centre is 230V 50Hz.

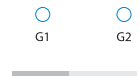
Features of the installation:

- Two-wire, with PE protective conductor
- Made in accordance with applicable regulations

## 3. Thermostat grouping status

This function is only available in Offline mode (together with the Quantum coordinator).

The master thermostats will affect the slave thermostats within the specific group. This is only possible when the thermostats are paired with the Quantum wiring centre-RF (optional + Quantum wiring extension-RF) and have been assigned to group 1 (G1) or group 2 (G2).



**Note:** Within one group there must only be one master thermostat (programmable) and the rest must be slave thermostats (non-programmable).

**How it works:** If all the thermostats for a given group operate in automatic mode, then each of the thermostats will work in the same way as the master for this group. For example, if the master thermostat of group 1 maintains a comfort mode according to its programmed schedule, then all slave thermostats from group 1 will also maintain the comfort mode (where the temperature is set individually for every thermostat). Similarly, if the master thermostat is set to party or holiday mode, the slave thermostats in this group will also work in these modes.

The grouping function is optional: thermostats do not have to be grouped and can operate independently.

## 4. Network LED

### LED statuses:



(LED is blinking) - wiring centre is not connected to the network, but it is ready for pairing with the Quantum coordinator for the ZigBee network or the Quantum hub.



(LED is lit steady) - wiring centre is added to the ZigBee network and paired with the Quantum coordinator or the Quantum hub.

## 5. Pair button

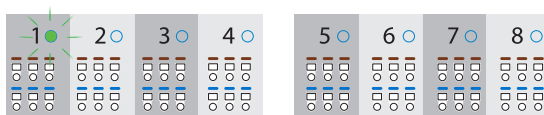
### Functions of the Pair button:



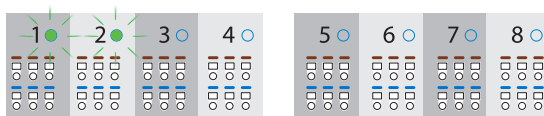
Checking the address of the wiring centre. To check the address of the wiring centre in the ZigBee network press the Pair button.

The wiring centre number is indicated by the number of LEDs at the zones:

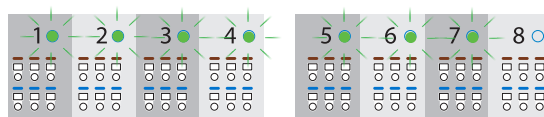
#### Address 1



#### Address 2



#### Address 7



Address 9 is indicated by lighting up 8 LEDs of all the zones and the network status LED.

## 6. Reset button



Used to refresh the data, after moving jumpers 7, 8 or 9.  
The reset button does not remove the wiring centre from the ZigBee network.

## 7. Delay jumper



Boiler off delay time.

Note: Pump (pump output) and boiler (boiler output) start 3 minutes after receiving the heating signal from any thermostats paired with wiring centre. The pump stops after 3 minutes when the last thermostat stops calling for heat, while the heat source (boiler) will turn off after the time set with the jumper.

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

## 8. NC / NO actuators jumper



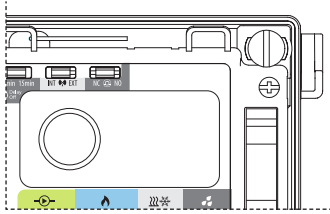
Select the type of the actuator connected to the wiring centre:

NC – actuator normally closed

NO – actuator normally opened

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

## 9. Quantum coordinator

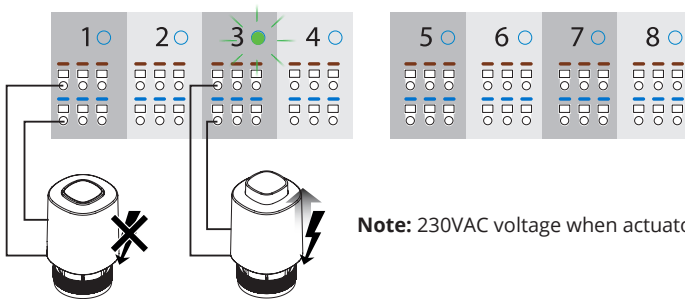


The Quantum coordinator is used for Offline mode and is included with the wiring centre. It enables wireless control of all of the devices installed in the network. One network can be connected to a maximum of 9 wiring centres. If there is more than one wiring centre in the network, you can use one coordinator and store the remaining ones in a safe place.

**Note:** Do not use Quantum coordinator with Quantum hub simultaneously.

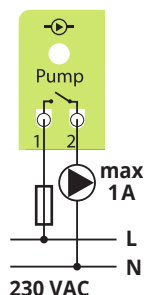
## 10. Terminals for actuators

Wires for the actuators should be plugged into the self-locking connectors in the appropriate zones. You can connect 3 actuators directly to one zone. The current load of one zone is adapted to operate with up to 6 actuators with a power of 2 watts. If there is a need to connect more than 6 actuators, please use an additional relay to relieve the output of the zone.



**Note:** 230VAC voltage when actuators are live.

## 11. Pump control output

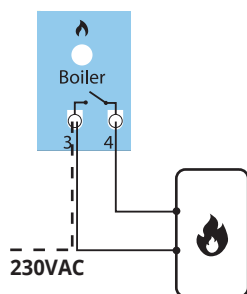


The pump output is a **VOLT FREE** output (COM / NO) that controls the circulation pump in the heating system.

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

The output opens (pump stops) after 3 minutes, when the last thermostat stops calling for heat.

## 12. Boiler control output

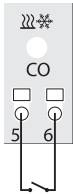


The boiler output is a **VOLT FREE** output (COM / NO) that controls the boiler in the heating system.



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

The output opens and the boiler switches off when the last thermostat stops calling for heat (after the time set on the Delay jumper).

## 13. CO terminal (input)

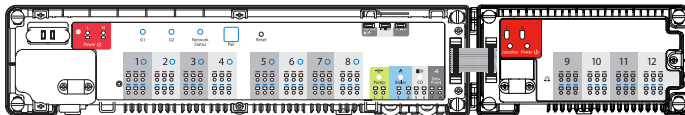


Opened CO input contacts (changeover) means the system is working in heating mode.

CO terminal	LED	Mode
Opened contacts	 Red	 Heating
Closed contacts	Blue	Cooling

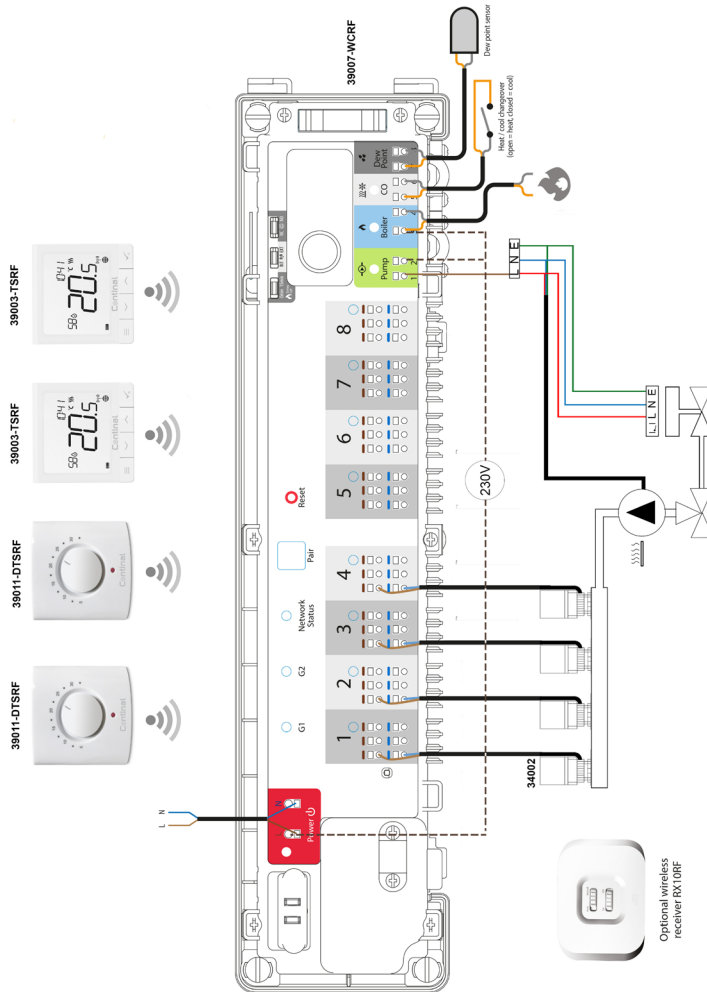
## 14. Serial connector for the Quantum wiring centre-RF

Used for communication between the Quantum wiring centre-RF and the Quantum wiring extension-RF module. The Quantum wiring extension-RF increases functionality and expands support for up to 12 zones.

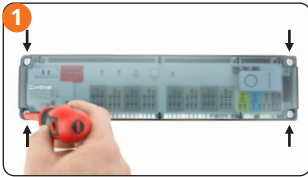




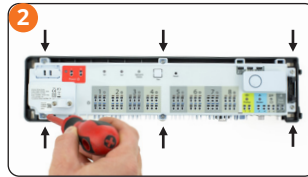
## 15. Wiring diagram



## 16. Mounting



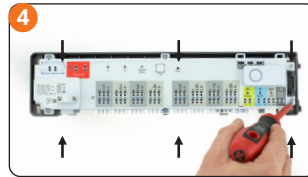
Remove the top cover of the wiring centre.



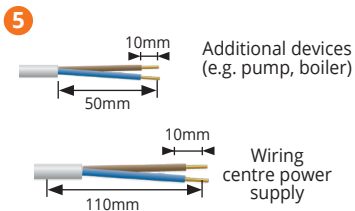
When wall mounting, unscrew the main part of the housing (see picture). When mounting on the DIN rail, tilt the hooks on the back of the housing.



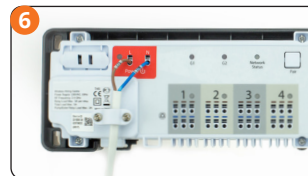
Attach the back of the wiring centre to the wall.



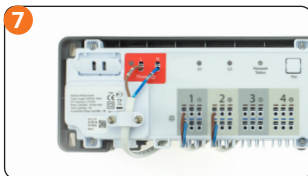
Screw the main part of the wiring centre to the back of the housing.



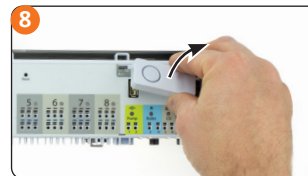
Remove the appropriate section of insulation from the wires.



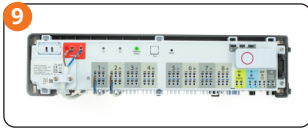
Connect the power cord.



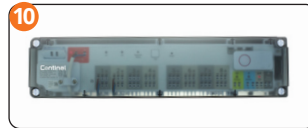
Connect the rest of the wires.



Remove the Quantum coordinator if you use the Quantum hub.



Make sure that all the wires are properly connected, then connect the power cord to the 230VAC power supply. The red LED will light up.



After finishing installation, mount the top cover of wiring centre.

## 17. Linking in offline / online mode

Refer to the linking quick guides for instructions on how to link the Quantum wiring centre-RF. This can be found at [www.continal.eu/quantum](http://www.continal.eu/quantum)

## 18. Factory reset

To factory reset the Quantum wiring centre-RF, first ensure all thermostats are reset then hold the pair button until the G1 & G2 LEDs come on and go off again. Once this happens, press and hold the circle button on the coordinator until the light goes orange. Press the coordinator button again for 5-6 seconds until it flashes red. After this, use a small pin to press the “reset button.” The wiring centre will now be reset. Remove the coordinator if connecting to the Quantum hub.

## 19. Product compliance and safety

### Product compliance

This product complies with the essential requirements and other relevant provisions of Directives: EMC 2014/30/EU, LVD 2014/35/EU, RED 2014/53/EU and RoHS 2011/65/EU.

### 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. Must be fitted by a competent person, and installation must comply with the guidance, standards and regulations applicable to the country where the product is installed. Failure to comply with the relevant standards could lead to prosecution.

## Want more information?

030 8903441

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