Factron
A BETTER SOLUTION

Range of external control modules

QHVC-S1 Single zone
QHVC-S3 Three zone
QHVC-S33 Three zone 3 controllers

Manual Operation only

External control modules

QHVC-S external control modules

The QHVC-S external control modules are used to replace the front panel control dial on the 18kW QHC18M & 24kW QHC24M 3 phase controllers. These modules can be fitted 10 to 20 meters away from where the QHC18M or QHC24M controllers are located. There are two versions available the QHVC-S3 & QHVC-S33 which can be used with these controllers.

A third version is available too, which is mainly used to manually control the 3kW QHC03M or the 6kW QHC06M controllers, these are single phase controllers.

1) QHVC-S3 3 Zone external control module.

The QHVC-S3 control module is used with only one 18kW or 24kW main controller (QHC18M or 24M). Allowing the user to control each zone separately.

The same 5 power levels which would have been adjusted by the front panel control dial on the main controller.
Can now be controlled by the QHVC-S3 external control module instead.

2) QHVC-S33 3 zone three controllers external control module.

The QHVC-S33 control module is used with more than one controller, in fact it is used to control three individual main controllers independently.

Again the front panel control dial on each of the three main controllers (QHC18M or 24M) is replaced by one of the control dials on the QHVC-S33 module. Allowing the user to control three QHC18M or 24M main controllers from the one location. Which can be up to 20 meters away from where the main controllers are located.

The same 5 power levels which would have been adjusted by the front panel control dial on the main controller.
Can now be controlled by the QHVC-S33 external control module instead.

3) QHVC-S1 Single zone external control module.

The QHVC-S1 control module is mainly used with the 3kW QHC03M or 6kW QHC06M single phase controllers.
Operating 1 zone only.

Generally the 6kW or 9kW controller would be located close or nearby to the heaters it controls.
Here the QHVC-S1 module is mounted in an accessible location for the user to control the 5 power levels, 10 to 20 meters away from where the 6kW or 9kWcontroller is located.

Note: The front panel control dial is disconnected and will not function when an external control module is fitted to the main controller.

Fitting the QHVC-S3

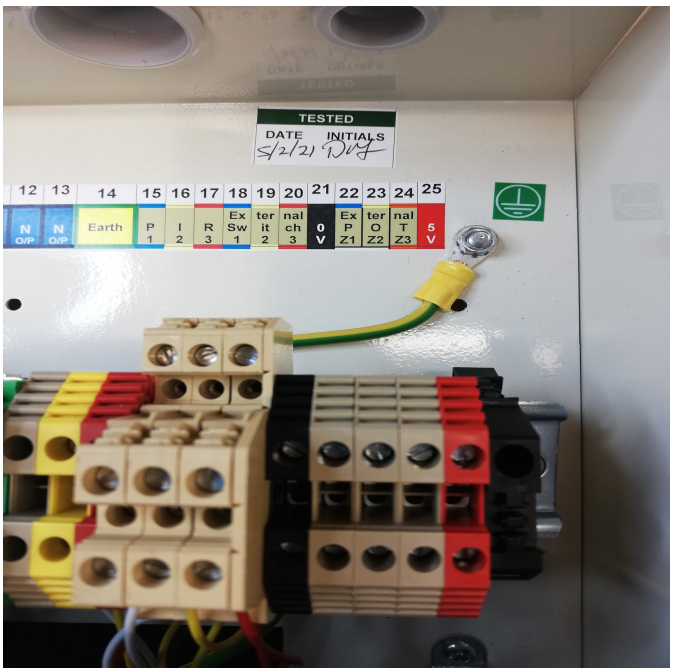


Fig 1

Fig 2

QHVC-S3 Connection & Operation

The purpose of this device is to replace the control dial on the front panel to a more local position close to the operator. This allows the operator to control each zone separately & independently.
The QHVC-S3 is a hard wired device using a low voltage +5v DC supply.

The QHVC-S3 is supplied separately and must be pre-ordered when ordering the QHC18M controller. By pre-ordering, the controller will be fitted with the terminal connectors #21 to 25. See fig. 2
Use Alarm type 6 core cable A/6C, use all the coloured wires except the Green wire.

Remove the back plate from the QHVC-S3, there is a connector block which must be used to connect the Alarm cable to the QHC18M controller. The coloured wires should be connected as follows.
Black to terminal #21, Blue to #22, Yellow to #23, Red to #24 & White to #25 see fig's 2 & 4

Note: The QHVC-S3 conversion kit is used to convert a standard controller which had not been pre-ordered and the conversion is done later.

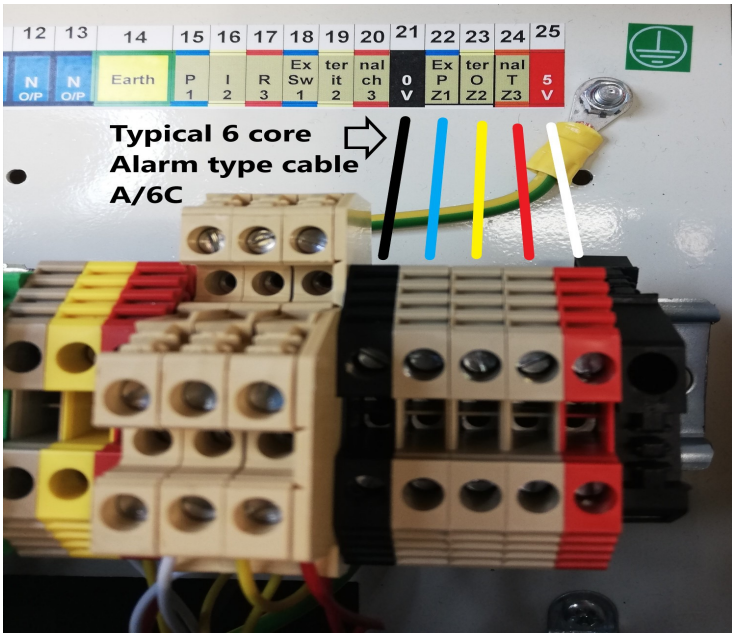
The cable harness provided must replace the one that already pre-exists in the controller. Remove the existing cable harness from the **J9 header** on each of the 3 electronic printed circuit boards 1,2 & 3. Replace with the new QHVC-S3 harness, see fig 5 - **J9 Pot control.** See fig 5

Note: Replacing the old harness with the one provided with the QHVC-S unit will now make the control dial on the front panel **redundant** and this dial will no longer operate.

Fig 3

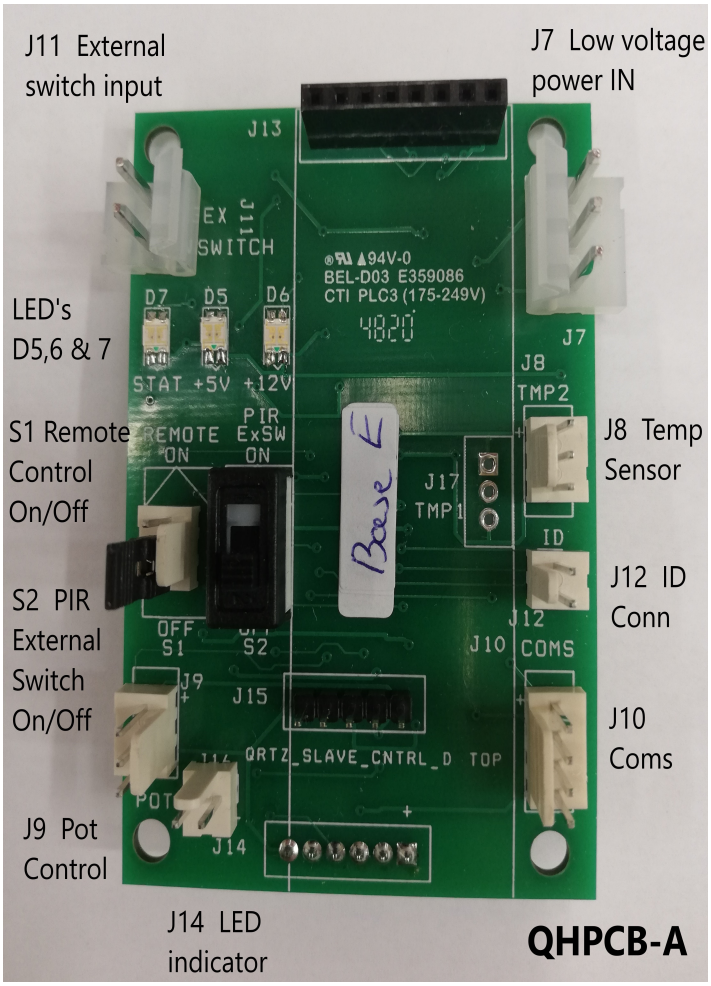
QHVC-S3 illustration showing coloured zones

Fig 4



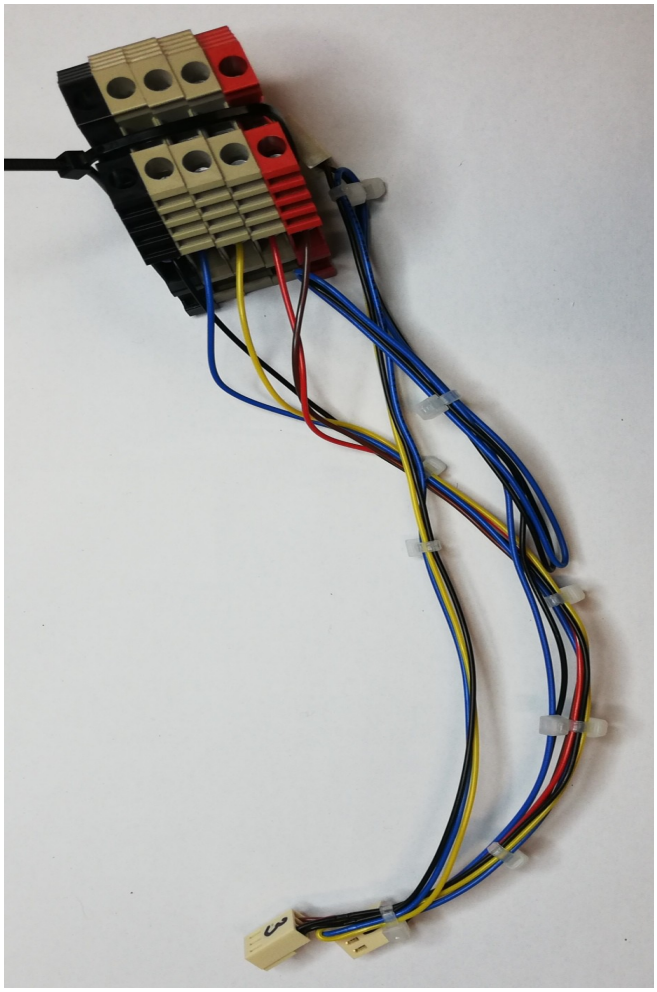
Terminals #21-25 shown fitted for QHVC-S

Fig 5



Remove existing cable harness from header **J9 Pot control**

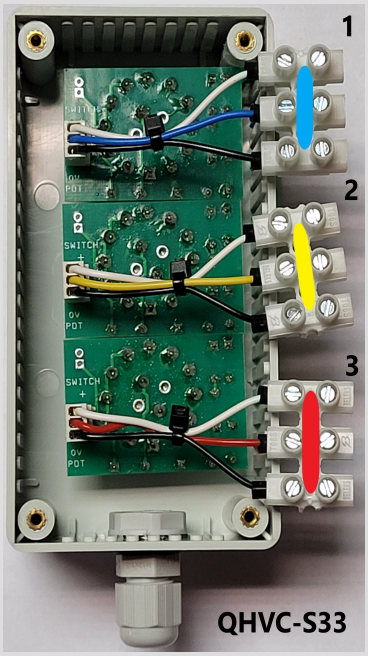
Fig 6



QHVC-S Kit use this to replace existing harness

Wiring a QHVC-S33

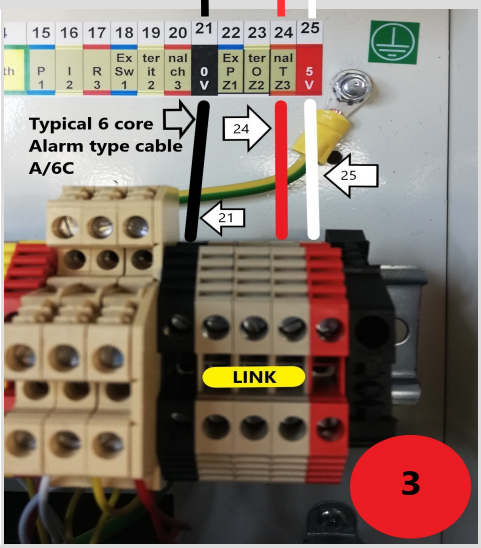
Used when controlling 3 individual QHC controllers

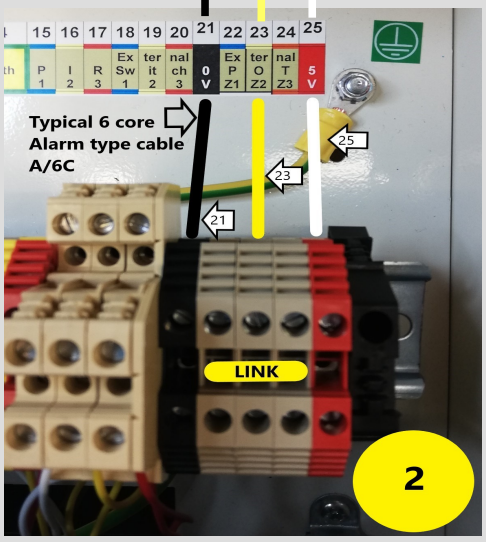


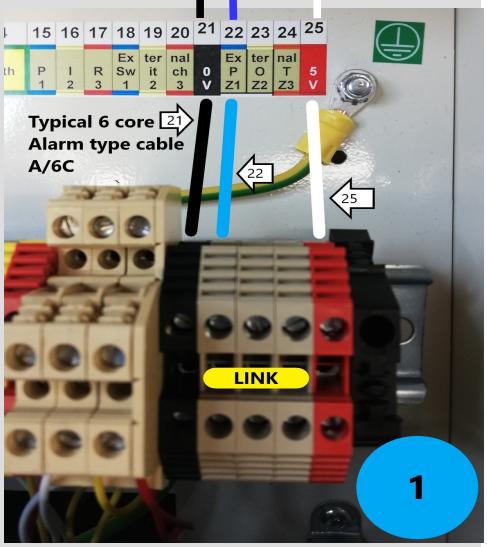
White - terminal #25
Blue - terminal #22
Black - terminal #21

White - terminal #25
Yellow - terminal #23
Black - terminal #21

White - terminal #25
Red - terminal #24
Black - terminal #21







QHC main Controller 3 **QHC main Controller 2** **QHC main Controller 1**

When wiring the QHVC-S33 external 3 zone three controller module, we recommend you use standard 6 core Alarm type cable A/6C. This cable is readily available and will have all the correct colour wires to match the above wiring diagram. Each illustration above represents the appropriate section of the DIN RAIL & the terminal connections in each of the main controllers (QHC18M or 24M).

Important ! Please ensure the yellow Jumper Link connecting terminals 22,23 & 24 is fitted in each of the main controllers otherwise the QHVC-S33 will not operate correctly. This is fitted if requested when ordering. **(Use each controller's own 5v supply, black & white wires. Do not connect the 5v supplies in parallel)**

Products within this range

18kW 3 phase Manual Heater Controller QHC18M

The QHC18M, QHC24M & QHC27M are manual 3 phase heater control panels with load capacities of 18kW, 24kW & 27kW across 3 channels.

Save up to 60% of your energy costs by using the 4 energy saving levels 1-4.

The controllers are fitted with an Isolation switch for the incoming 3 phase supply and for circuit protection MCB's are fitted on the three channels.

There are additional facilities for a timer function via auxiliary inputs for external switches NO(normally open) to close contacts.
There are also inputs for a mains switched (trigger) voltage for use with PIR motion detectors or an external 7-Day programmable timer.

18kW 3 phase RF Heater Controller (receiver) QHC18MR

The QHC18MR, QHC24MR & QHC27MR are remotely controlled 3 phase RF heater control panels with load capacities of 18kW,24kW & 27kW across 3 channels. These controllers can be operated manually or remotely via the selector dial on the front panel. When set in remote mode this device is controlled by the transmitter QHVCR 3 Zone Master controller.

Save up to 60% of your energy costs by using the 4 energy saving levels 1-4.

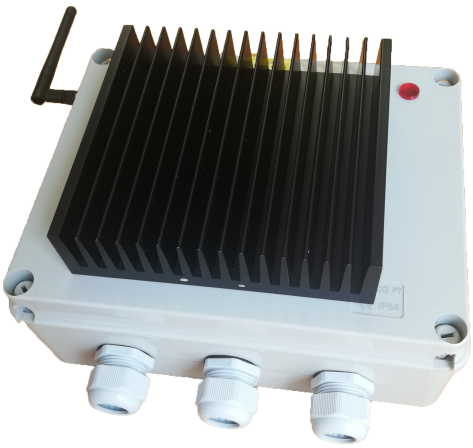
The controllers are fitted with an Isolation switch for the incoming 3 phase supply and for circuit protection, MCB's are fitted to the three channels. There are additional facilities for a timer function via inputs for external switches NO(normally open) to close contacts. See fig 9 & 10
There are also inputs for a mains switched (trigger) voltage for use with PIR motion detectors or an external 7-Day programmable timer.

Note: The transmitter QHVCR is sold separately & is not included in the price of the QHC18MR.

12kW 3 phase RF Heater Controller (receiver) QHC12MRE

The QHC12MRE is a wireless RF receiver which controls the power to Infrared heaters up to a load capacity of 12kWatts. This device is paired with the QHVCR 3 Zone remote Master Controller.
Any number of these devices can be in a zone as long as they are within the 100 meter transmit range.

3 Phase controller



9kW Single phase RF Heater Controller (receiver) QHC09MRE

The QHC09MR is a wireless RF receiver which controls the power to Infrared heaters up to a load capacity of 9kWatts. This device is paired with the 3 Zone remote Master Controller QHVCR. Any number of these devices can be in a zone as long as they are within the 100 meter transmit range.

Single phase controller

6kW Single phase RF Heater Controller (receiver) QHC06MRE

The QHC06MR is a wireless RF receiver which controls the power to Infrared heaters up to a load capacity of 6kWatts. This device is paired with the 3 Zone remote Master Controller QHVCR. Any number of these devices can be in a zone as long as they are within the 100 meter transmit range.

Single phase controller

CE RoHS Technical Data

Supply voltage : 5 volt external

Location : Up to 20 meters away from the main controller.

Zones : Single & Three

Mounting : Flanged bracket

IP Rating: IP54

Material: ABS plastic

Colour: Grey

Dimensions : 145mm x 65mm x 55mm

Weights : 0.2 Kg

HS code: 85365080

Manufactured in Rep. Of Ireland
Country of Origin Rep. Of Ireland

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