

## Revision 1.3



## Description

The UH8 is an 8 Zone wiring centre for use with 230v thermostats.

The UH8 can be used to control any actuator or valve which requires a 230v AC signal to open. For mid position valves and those requiring a closing signal, a changeover relay is required. At the same time the UH8 offers the ability to operate a boiler or other heat source through a volt free output.

Additional outputs designed for use with under-floor heating systems are also included as standard. These are the pump and valve outputs which would normally operate a manifold pump or a manifold valve.

Zone 8 can be used as an isolated radiator zone, by using the UFH/RAD switch.

If the switch is set to **RAD**;

When zone 8 calls for heat this will provide an output to a radiator zone valve and the boiler, but **WILL NOT** enable the under-floor heating pump/valve output.

If the switch is set to **UFH**;

When Zone 8 calls for heat, this will act as an under-floor heating zone, by enabling the actuator, boiler and pump/valve outputs.

Any output which is not needed can be ignored.

## Installation

The UH8 can be mounted directly to a wall using four screws or alternatively, the unit can be DIN rail mounted.

When DIN Rail mounting, you first need to insert the two clips provided on the back of the UH8, as shown in the image;

- On the back of the UH8, position the clip in the middle and slide down.
- Points A and B locate in the corresponding holes and lock into place.
- Locate the UH8 onto the DIN rail from the top.
- Pull the clip down and push the bottom of the UH8 onto the DIN rail.
- Releasing the clip will lock the UH8 in place on the DIN rail.

To remove the UH8, pull both clips down and remove from the DIN rail.



# Connections

## Mains Supply

Power supply into the UH8, which should be fused at 5 amps, these connections are;

- L = Live or phase 230v AC 50/60Hz
- E = Earth
- N = Neutral

## Heat Enable

This is the main call for heat for the system, there are 3 connections;

- LS = Live Supply
- E = Earth
- LR = Live Return

Electrically this is a volt free switch, whatever supply is placed on the LS connection, is fed to the LR connection when there is a call for heat.

## Time Clock

- L = Live supply
- E = Earth
- N = Neutral supply

1 = Switch live input from time clock, this triggers the time clock 1 terminal on the thermostat connections.

2 = Switch live input from time clock, this triggers the time clock 2 terminal on the thermostat connections.

## Zones 1... 8 (Inputs)

Zone inputs are clearly marked at the top of the circuit board;

L = Live supply to thermostat.

1 = Timed switch live to thermostat, triggered by time clock 1 input.

2 = Timed switch live to thermostat, triggered by time clock 2 input.

E = Earth

N = Neutral supply to thermostat.

S/L = 230v switch live from thermostat, this activates the corresponding zone output.

## Zones 1... 8 (Outputs)

Zones outputs are clearly marked

L = live out to actuator or valve

N = neutral to actuator or valve

There are two connections live (L) and neutral (N), both terminals marked L are the same and both terminals marked N are the same.

Each zone output corresponds to the thermostat wired in at the top of the pcb.

## UFH Pump

Used for an underfloor heating manifold pump, connections are;

- L = Live
- E = Earth
- N = Neutral

When an under-floor heating zone sends a call for heat to the UH8, the live & neutral output will supply 230v to the manifold pump.

It is recommended that this is fed through a high limit switch placed on the heating manifold, to protect against mechanical failure of the manifolds temperature control.

## UFH Valve

Used for an underfloor heating manifold valve.

Connections are clearly marked;

Or = Orange Gr

= Grey

L = Live

E = Earth

N = Neutral

When an under-floor heating zone sends a call for heat to the UH8, the live & neutral output will supply 230v to the manifold valve.

The auxiliary wires of the valve, usually grey & orange, are wired to the Gr & Or terminals.

## Fuses

**Fuse 1.** 5amp, 20mm anti-surge fuse, this fuse supplies power to all 230v outputs from the board it protects the zone, pump/valve outputs.

## Ratings

Number of Heating Zones	8
Neon Indication	Y
DIN Rail Mounting	Y
Supply	230v AC 50Hz 1 Phase
Relay Load Max	3 Amp Resistive
Total Load Max	5 Amp Resistive
IP Protection	IP20
Installed Dimensions (L,H,D)	384 x 148 x 60mm
Weight	800g

## System Configuration

PLEASE COMPLETE DURING INSTALLATION

UH8 Title:.....

	Zone Type		Zone Title
	Under-Floor	Radiator	
Zone 1	<input type="checkbox"/>	<input type="checkbox"/>	
Zone 2	<input type="checkbox"/>	<input type="checkbox"/>	
Zone 3	<input type="checkbox"/>	<input type="checkbox"/>	
Zone 4	<input type="checkbox"/>	<input type="checkbox"/>	
Zone 5	<input type="checkbox"/>	<input type="checkbox"/>	
Zone 6	<input type="checkbox"/>	<input type="checkbox"/>	
Zone 7	<input type="checkbox"/>	<input type="checkbox"/>	
Zone 8	<input type="checkbox"/>	<input type="checkbox"/>	

# Wiring schematics

## HeatMax Plus™ UH8 UFH wiring centre

### 230v Wiring schematic



Test the operation of the electrical circuits, ensuring that the programmer is supplying the wiring centre, and that when all the thermostats are off, the pump control circuit switches the HeatMax™ mixer system pump and any connected zone valves off. Then replace the covers to the control modules.

