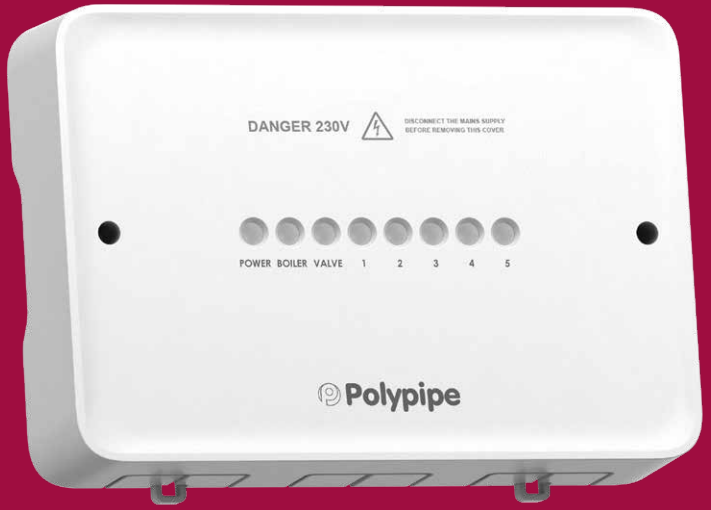
Polypipe

Underfloor Heating



UFH5ZW

5 Zone Wiring Centre

Installation and Operation Guide

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Factory Default Settings

Zone 4 Switch: UFH Zone 5 Switch: UFH

Grey and Orange terminals of the UFH valve are electrically linked. If UFH valve is fitted, remove this link.

Specifications

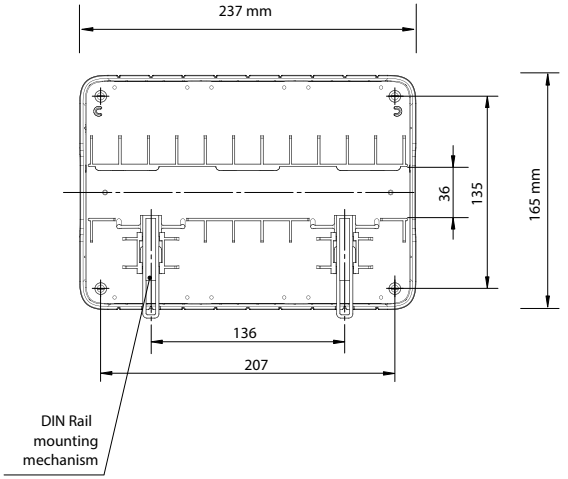
Power supply:	230Vac 50-60Hz	Admissible ambient humidity:	5-95%RH
Number of Zones:	5	Dimensions:	237 x 165 x 50 mm
Power Supply Indication:	Yes	Heat Enable contact rating:	3(1)A
Heat Enable Indication:	Yes	UFH Pump contact rating:	3(1)A
UFH Valve Indication:	Yes	IP rating:	IP20
Zone 1 to Zone 5 Indication:	Yes	Max. No. of actuators per zone	4
Ambient temperature:	0…45°C	Max. Permissible Load	5A Resistive

Mounting and Installation

Caution!

- Installation and connection should only be carried out by a qualified person.
- Only qualified electricians or authorised service staff are permitted to open the wiring centre.
- If the wiring centre is used in a way not specified by the manufacturer, its safety may be impaired.
- Prior to setting the wiring centre, it is necessary to complete all required settings described in this section.
- Before commencing installation, the wiring centre must be first disconnected from the mains.

1. Remove the UFH5ZW from its packaging.
2. The UFH5ZW can be directly mounted on a wall using the fixing holes on the base of the unit or it can be directly mounted on DIN rail.



Wiring Centre Terminals

Power Supply

L 230Vac Live

⏚ Earth

N Neutral

Programmer

L 230Vac to the programmer.

⏚ Earth to the programmer.

N Neutral to the programmer.

1 Zone 1 output from programmer to the wiring centre.

2 Zone 2 output from programmer to the wiring centre.

3 Zone 3 output from programmer to the wiring centre.

Thermostat (Zone 1)

L Live supply to the thermostat.

1 Timed switch live to room stat from programmer zone 1.

⏚ Earth.

N Neutral supply to the thermostat.

S/L Switch live from the thermostat to the wiring centre.

Note: With thermostat 1, you have one time input.

Thermostats (Zone 2 to Zone 4)

L Live supply to the thermostat.

1 Timed switch live to room stat from programmer zone 1

2 Timed switch live to room stat from programmer zone 2

⏚ Earth.

N Neutral supply to the thermostat.

S/L Switch live from the thermostat to the wiring centre.

Note: With thermostats 2, 3 & 4 you have an option of; one of two time inputs.

Thermostat (Zone 5)

L Live supply to the thermostat.

1 Timed switch live to room stat from programmer zone 1

2 Timed switch live to room stat from programmer zone 2

3 Timed switch live to room stat from programmer zone 3

⏚ Earth.

N Neutral supply to the thermostat.

S/L Switch live from the thermostat to the wiring centre.

Note: With thermostat 5, you have an option of; one of three time inputs.

Heat Enable (Boiler / Heat Pump On)

LS Live supply

⏚ Earth

LR Live return

This is a volt free relay which is switched on when there is a call for heat. If 230V is applied to terminal LS and there is a call for heat, 230V will come back on terminal LR.

UFH Pump (Underfloor Heating Pump)

L 230Vac Live

⏚ Earth

N Neutral

When an underfloor heating zone calls for heat, 230V is sent to the underfloor heating manifold pump.

Best practice is to wire the underfloor heating manifold pump through a high limit thermostat which is mounted on the manifold.

UFH Valve (Underfloor Heating Valve)

GR Grey Switch Live

OR Orange Permanent Live

L Live

⏚ Earth

N Neutral

When an underfloor heating zone calls for heat, 230V is sent to the Underfloor heating valve.

The valves auxiliary contacts are wired to the GR and OR terminals.

Note: Please refer to factory default settings on page 2.

Actuators (Zone 1 to Zone 3)

L 230V Live supply to the actuator.

N Neutral supply to the actuator.

There are two terminals marked L & N for each zone.

Actuators (Zone 4 and Zone 5)

L 230V Live supply to the actuator.

N Neutral supply to the actuator.

There are two terminals marked L and two terminals marked N for each zone.

Both zones 4 and 5 have a switch associated with each zone.

This allows the installer to use these zones as underfloor heating zones or radiator / hot water zones.

Operation of Zone 4 & 5 UFH – RAD / HW switches

If set to UFH – When the thermostat calls for heat, the actuator, boiler and pump / valve outputs are enabled.

If set to RAD / HW – When the thermostat calls for heat, the actuator is enabled.

To enable the boiler output, the actuator auxiliary contacts (Grey and Orange wires) must be connected to the LS & LR terminals of the Heat Enable.

SWITCH SELECTED	HEAT ENABLE	UFH PUMP	UFH VALVE	ZONE VALVE ACTUATOR
UFH	On	On	On	On
RAD	Off	Off	Off	On

UFH5ZW - 5 x Underfloor Heating Zones

c/w Programmable Digital Thermostat

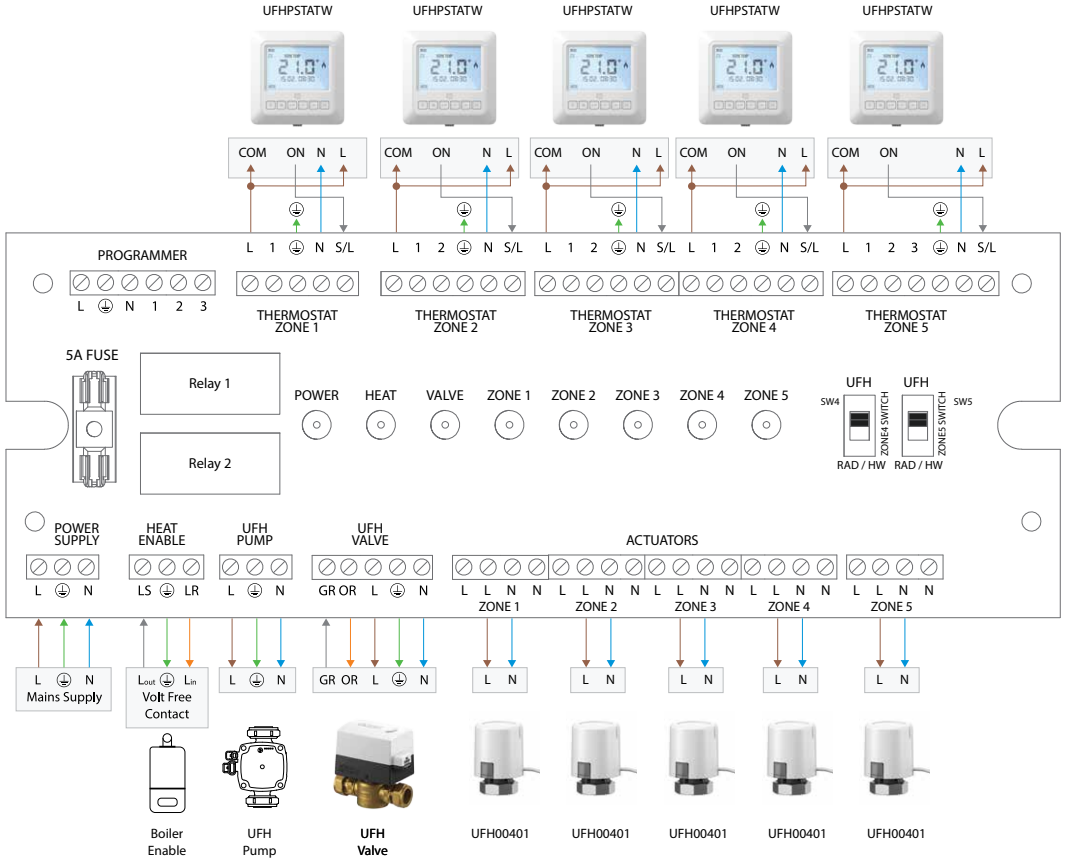
Mains Powered.



UFHPSTATW

Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer	-
RAD Valve	-
HW Valve	-



230V on OR & L when a UFH zone calls for heat.

If no valve is fitted, GR & OR must be linked out.

UFH5ZW - 5 x Underfloor Heating Zones

c/w Non - Dial Programmable Setback Thermostat Mains Powered.



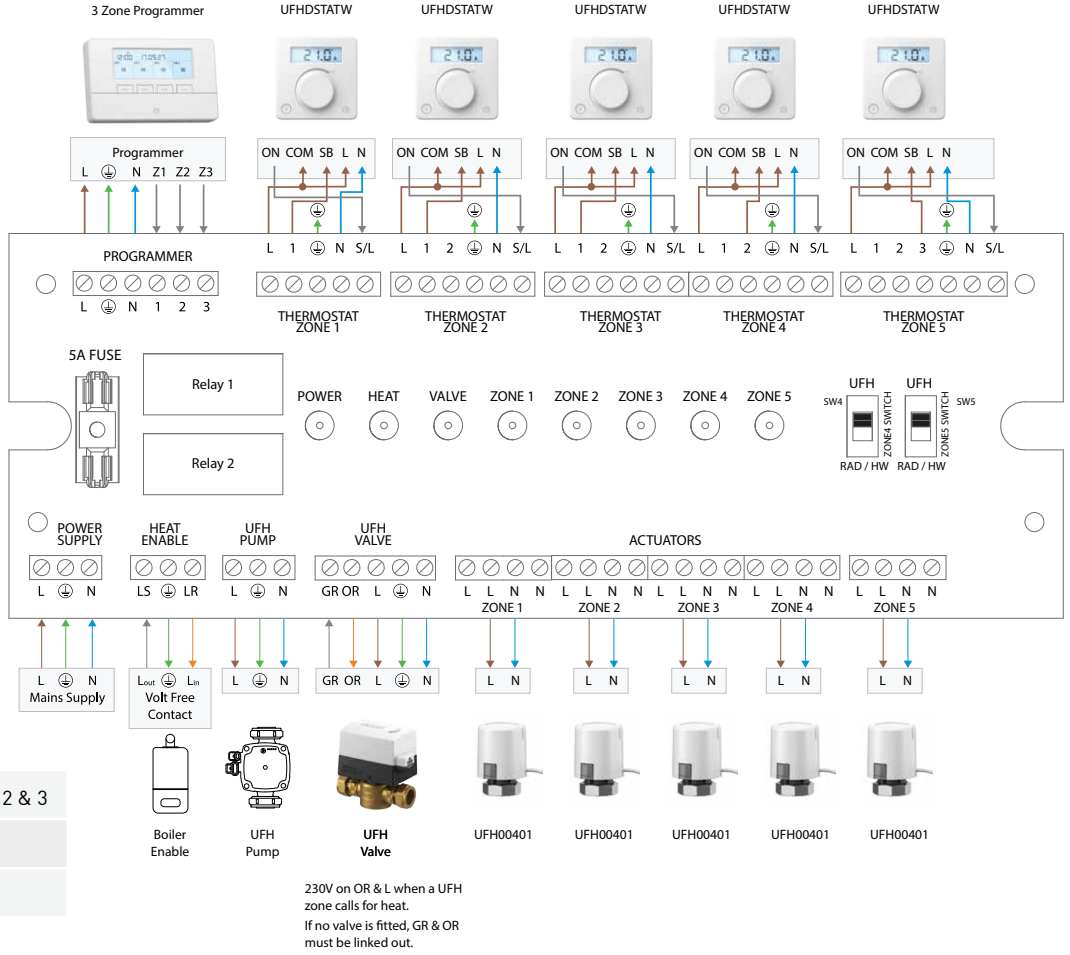
UFHDSTATW

Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer	R37
RAD Valve	-
HW Valve	-

In this example:

Zone 1 on the programmer is controlling thermostats 1, 2 & 3
Zone 2 on the programmer is controlling thermostat 4
Zone 3 on the programmer is controlling thermostat 5



UFH5ZW - 5 x Underfloor Heating Zones

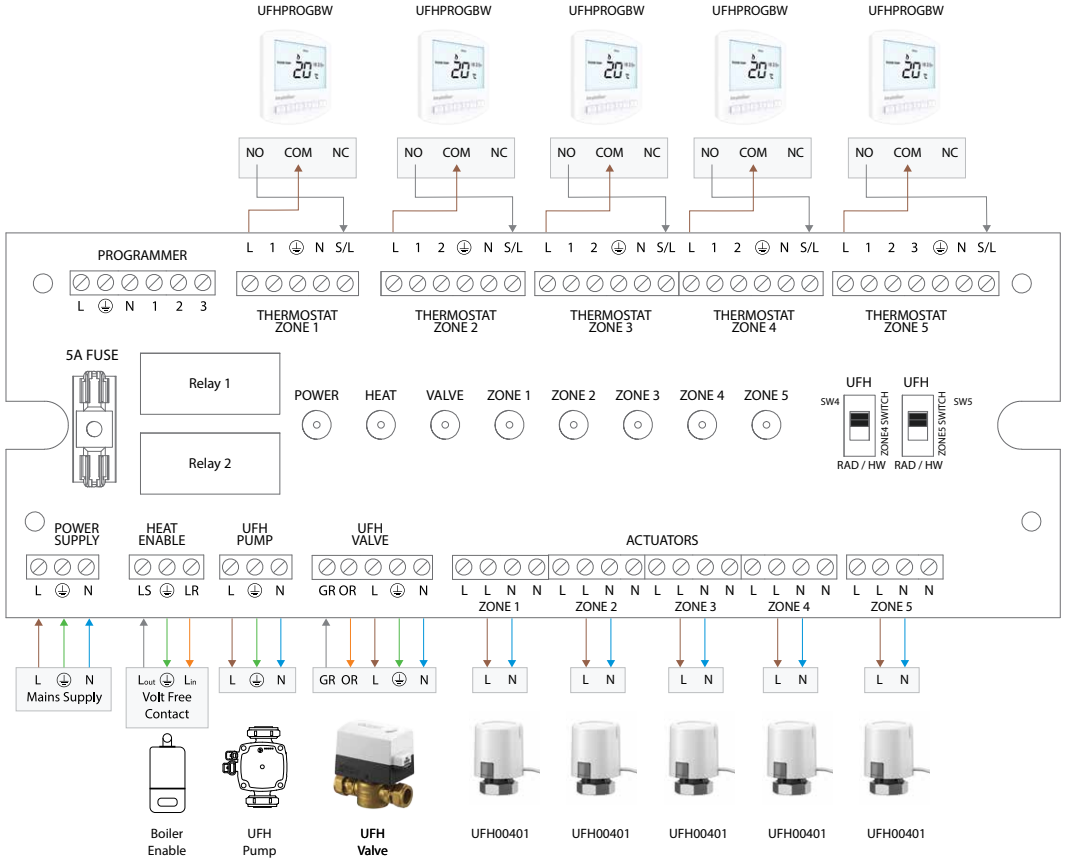
c/w Programmable Digital Thermostat
Battery Powered.



UFHPROGBW

Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer	-
RAD Valve	-
HW Valve	-



230V on OR & L when a UFH zone calls for heat.

If no valve is fitted, GR & OR must be linked out.

UFH5ZW - 5 x Underfloor Heating Zones

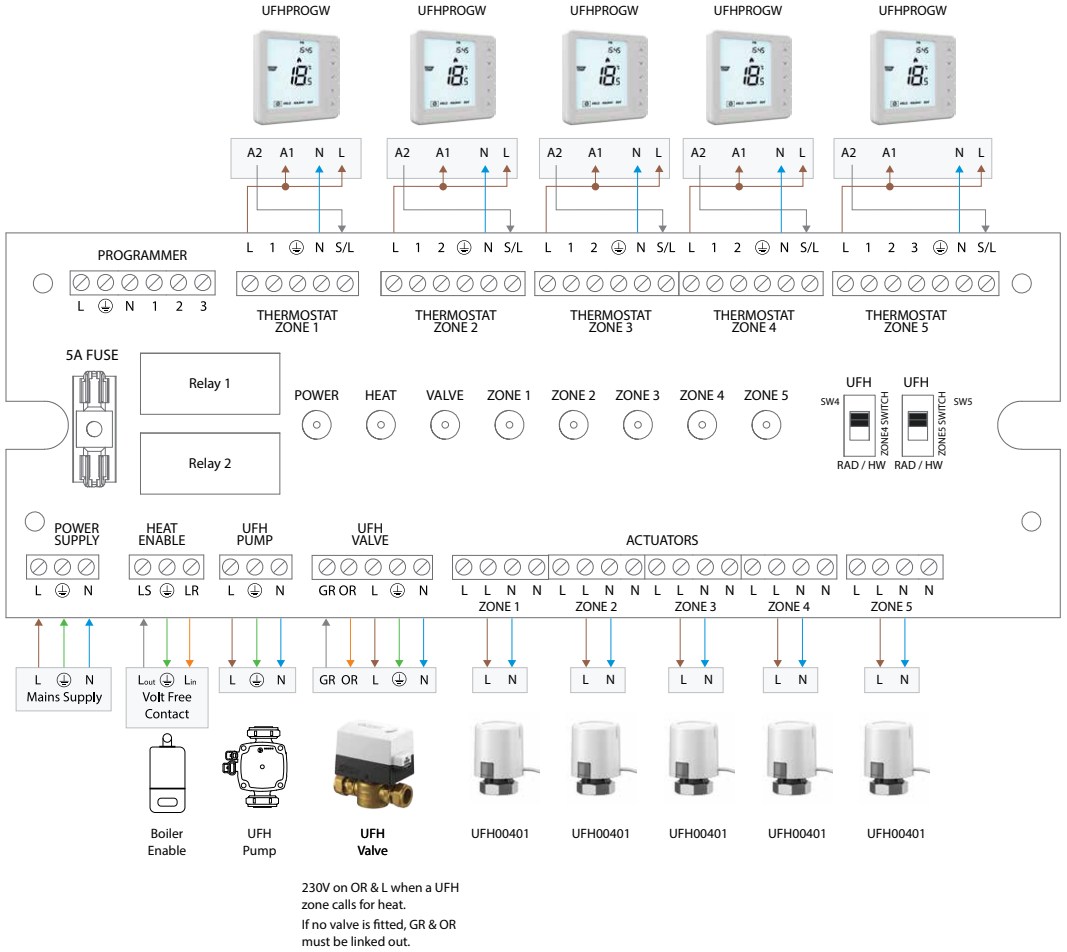
c/w Non - Programmable Digital Thermostat
Mains Powered.



UFHPROGW

Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer	-
RAD Valve	-
HW Valve	-



UFH5ZW - 5 x Underfloor Heating Zones

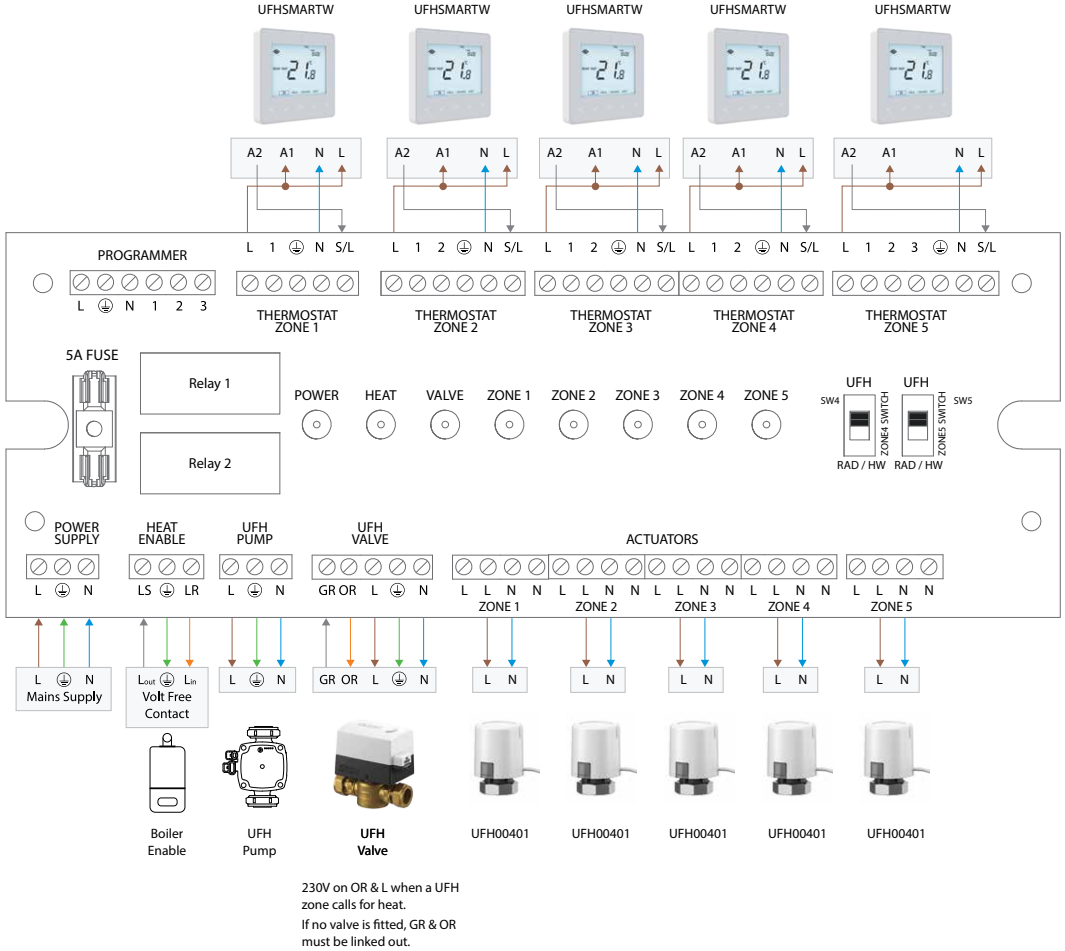
c/w Programmable Digital Thermostat
Mains Powered.



UFHSMARTW

Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer	-
RAD Valve	-
HW Valve	-
App Enabled	Yes (When used with UFHWIFIHUBW)



230V on OR & L when a UFH zone calls for heat.
If no valve is fitted, GR & OR must be linked out.

UFH5ZW - 5 x Underfloor Heating Zones

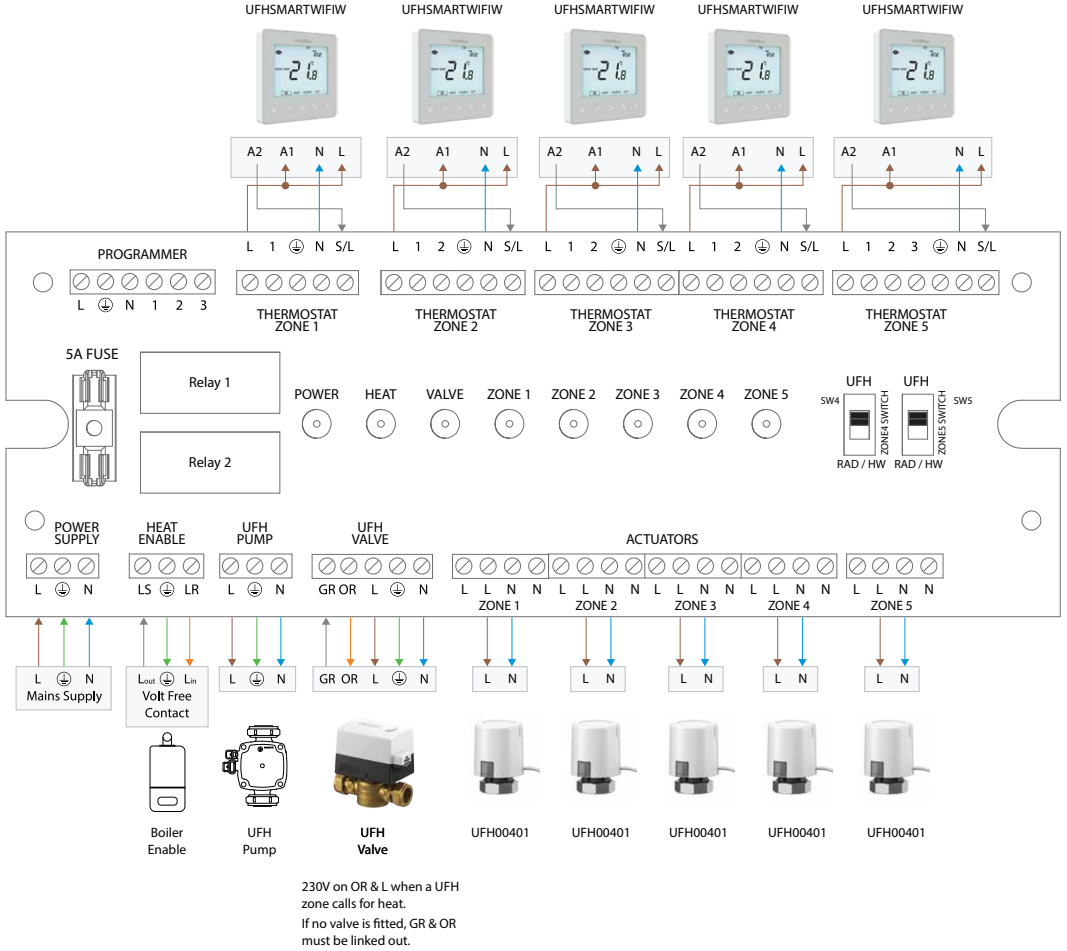
c/w Programmable Digital Room Thermostat
Mains Powered.



UFHSMARTWIFIW

Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer	-
RAD Valve	-
HW Valve	-
App Enabled	Yes



230V on OR & L when a UFH zone calls for heat.
If no valve is fitted, GR & OR must be linked out.

UFH5ZW - 5 x Underfloor Heating Zones

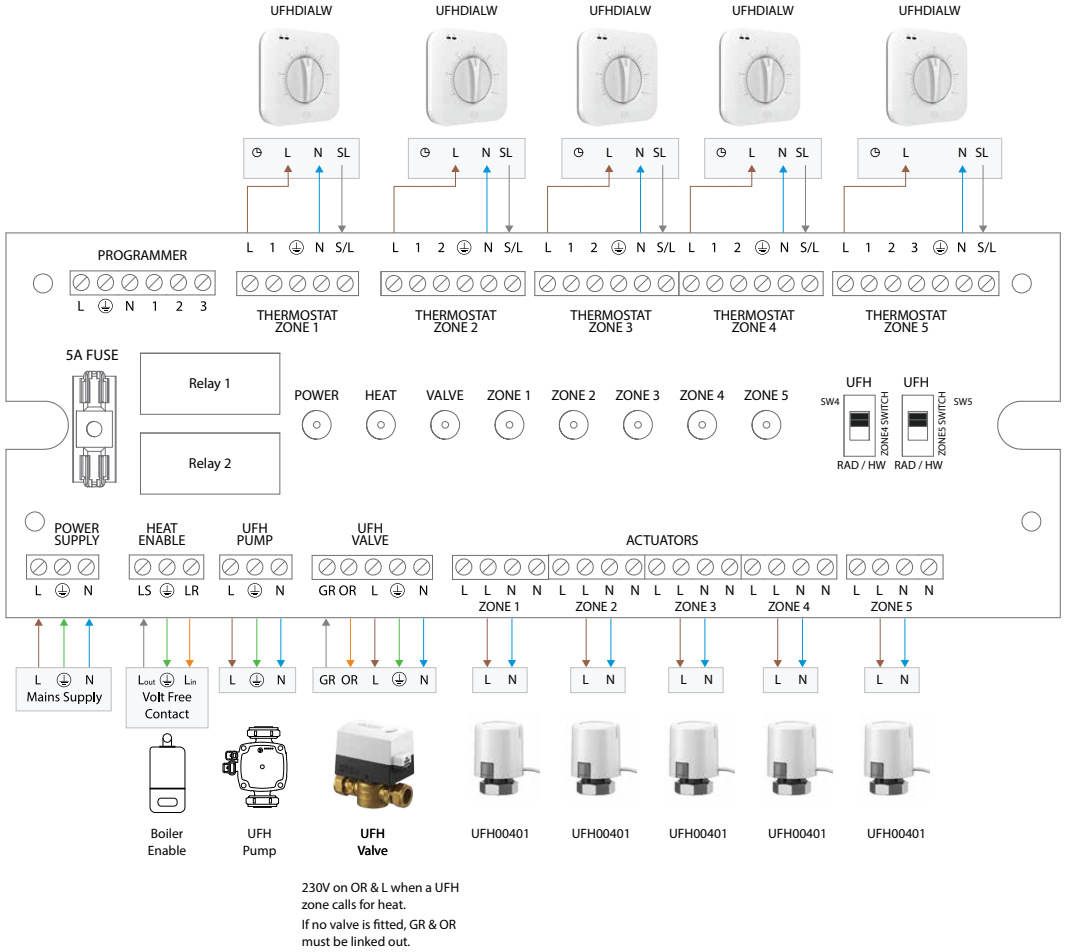
c/w Non Programmable Digital Dial Thermostat
Mains Powered.



UFHDIALW

Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer	-
RAD Valve	-
HW Valve	-



230V on OR & L when a UFH zone calls for heat.

If no valve is fitted, GR & OR must be linked out.

UFH5ZW - 5 x Underfloor Heating Zones

c/w Programmable Digital Time Clock with a Non Programmable Dial Thermostat.
Mains Powered.



UFHTIME4W

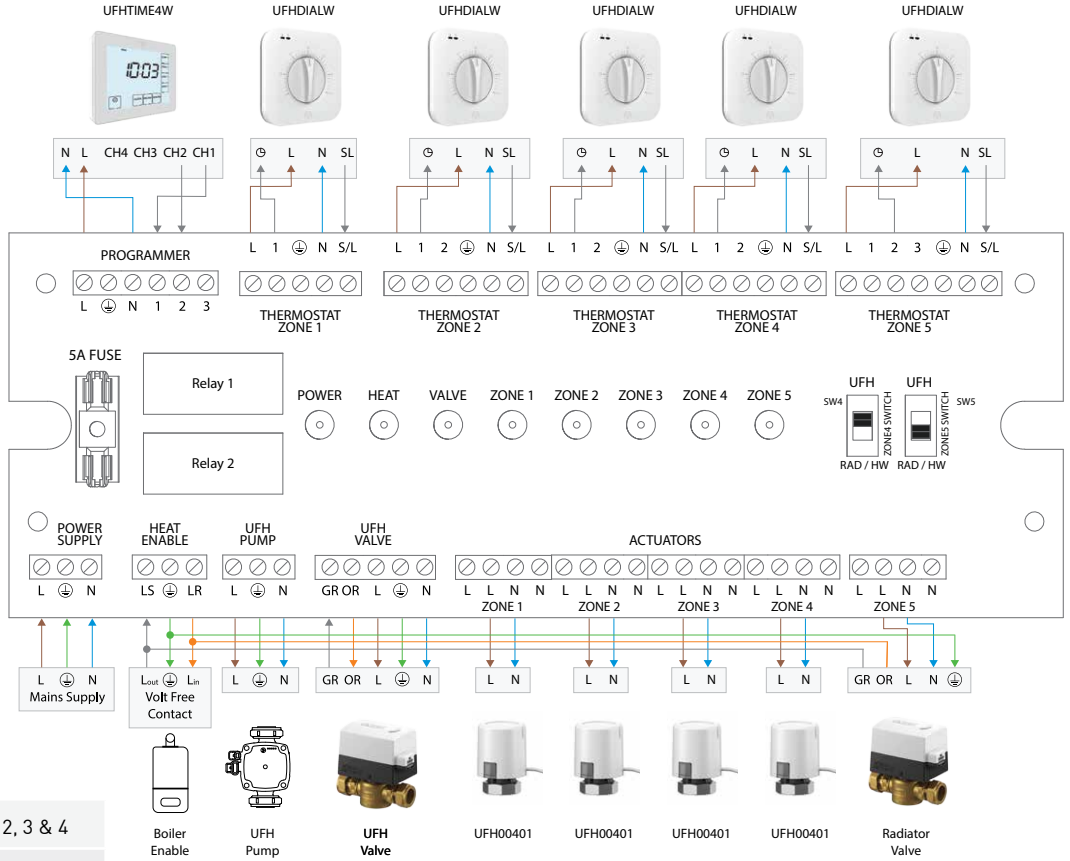
Note: Please refer to individual thermostat wiring diagrams.

CONTROLS	INSTALLED
UFH Pump	Yes
UFH Valve	Yes
UFH Actuators	Yes
Programmer / Time Clock	UFHTIME4W
RAD Valve	-
HW Valve	-

In this example:

Zone 1 on the programmer is controlling thermostats 1, 2, 3 & 4

Zone 2 on the programmer is controlling thermostat 5



Notes

Notes

Polypipe

Underfloor Heating

Want More Information?
Call our telephone support team on: 01709 772200
Or view technical specifications directly on our website:
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