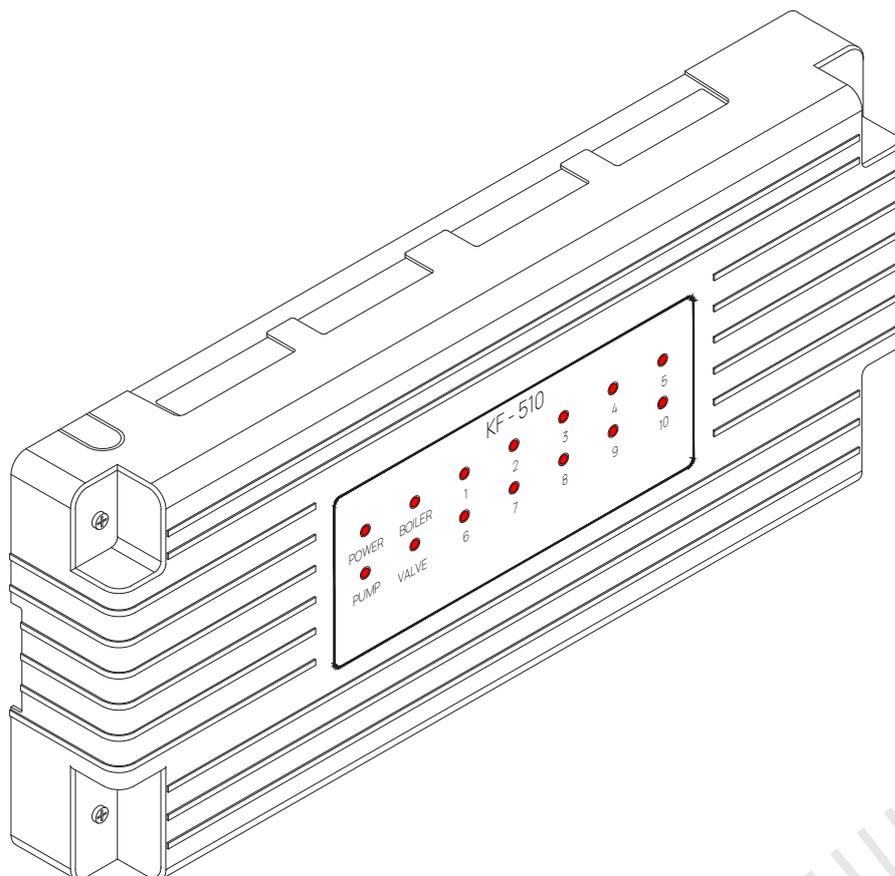


Installation Guide

KF-510 Kinetic 10-way Wiring Centre



KF-510 Kinetic 10-Way Wiring Centre - 230v



The KF-510 is an 10 Zone wiring centre for use with 230v thermostats, the outline dimension is 32cm x 14cm x 5.5cm. The KF-510 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 KF-510 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.

Pump Delay

KF-510 has a feature of pump delay, user could set it 3mins or 1min by adjusting the switch on the pcb, the pump output delay time is 3 minutes if switch is set to "1"; the pump output delay time is 1 minute if switch is set to "ON"; the pump delay switch is close to the fuse on the pcb board.

Zone 10

Zone 10 can be used as an isolated radiator zone, by using the UFH/RAD switch.

If the switch is set to RAD; When zone10 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 10 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.

Connections

Mains supply

Power supply into the KF-510, 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;

NC = Normally Closed

COM = Common

NO = Normally Open

Electrically this is a volt free switch, whatever supply is placed on the COM connection, is fed to the NO connection when there is a call for heat.

Zones 1...10 (Inputs)

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

L = Live supply to thermostat.

E = Earth

N = Neutral supply to thermostat.

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

Zones 1...10 (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.

KF-510 Kinetic 10-way Wiring Centre - 230v

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 KF-510, the live & neutral output will supply 230v to the manifold pump. The delay time is 3 minutes if switch in 1 ; The delay time is 1 minute if switch in ON ; 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; To enable Pump delay Or and Gr must be shorted.

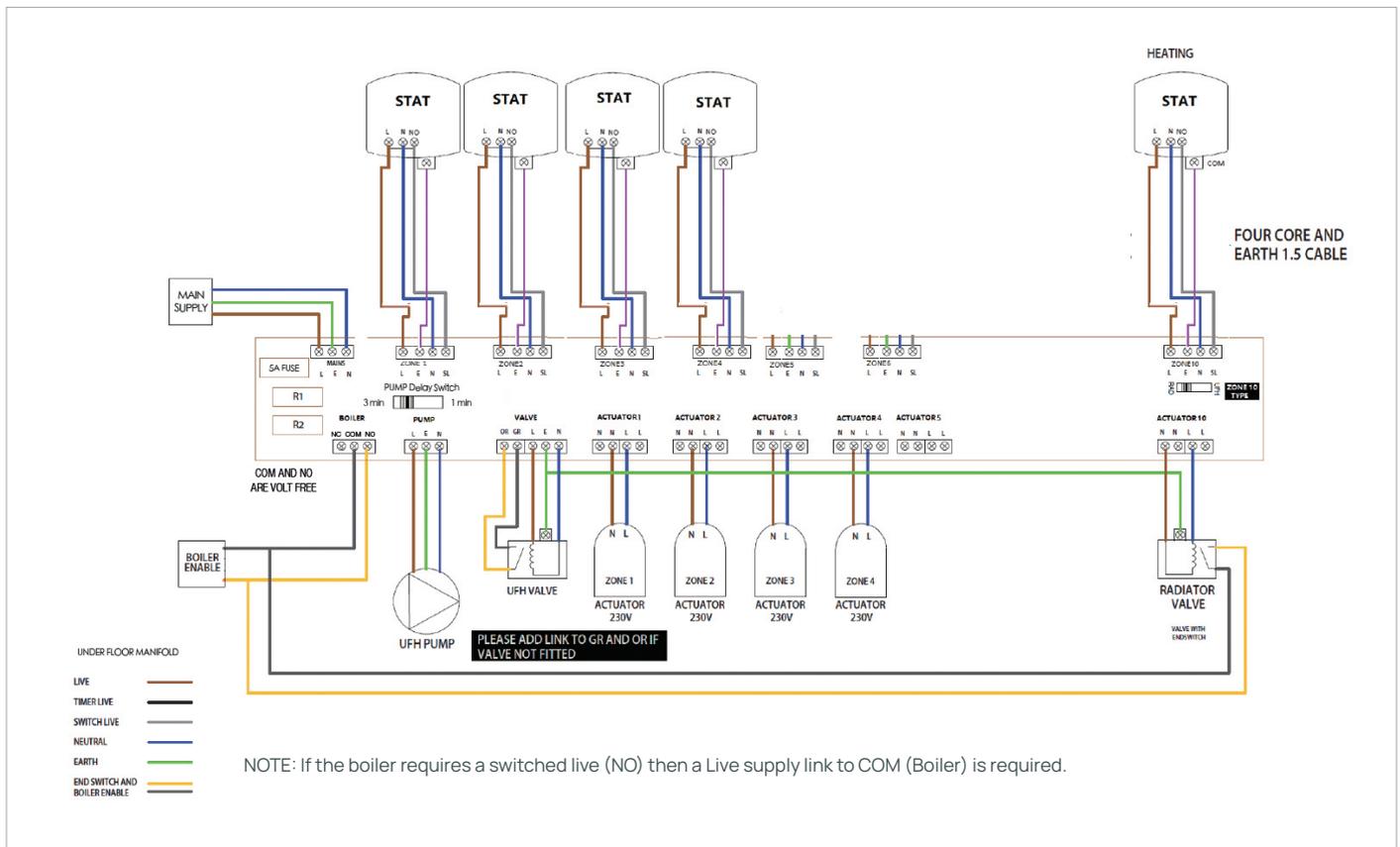
- Or = Orange
- Gr = Grey

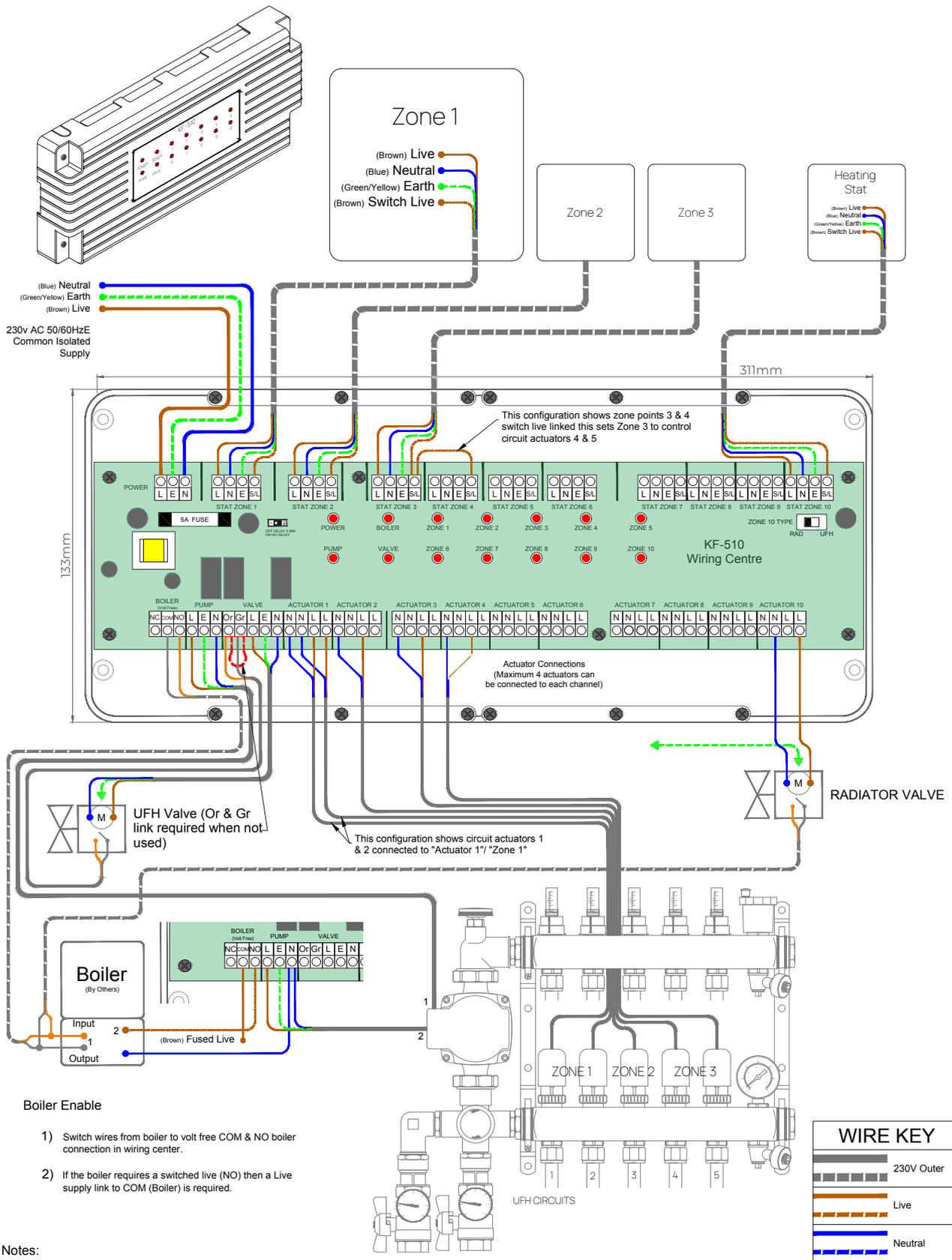
- L = Live
- E = Earth
- N = Neutral

When an under-floor heating zone sends a call for heat to the KF-510, 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 5amp, 30mm anti-surge fuse, this fuse supplies power to all 230v outputs from the board it protects the zone, pump/valve outputs.





Boiler Enable

- 1) Switch wires from boiler to volt free COM & NO boiler connection in wiring center.
- 2) If the boiler requires a switched live (NO) then a Live supply link to COM (Boiler) is required.

Notes:

1. Please refer to boiler manufacturer instructions for switching.
2. Thermostats connected with a 1.0 - 1.5 flexible cable, but must be specified by the installer.

This product must only be installed by a qualified electrician and comply with local installation regulations.

WIRE KEY	
	230V Outer
	Live
	Neutral
	Earth
	Orange
	White
	Grey
	Black



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