

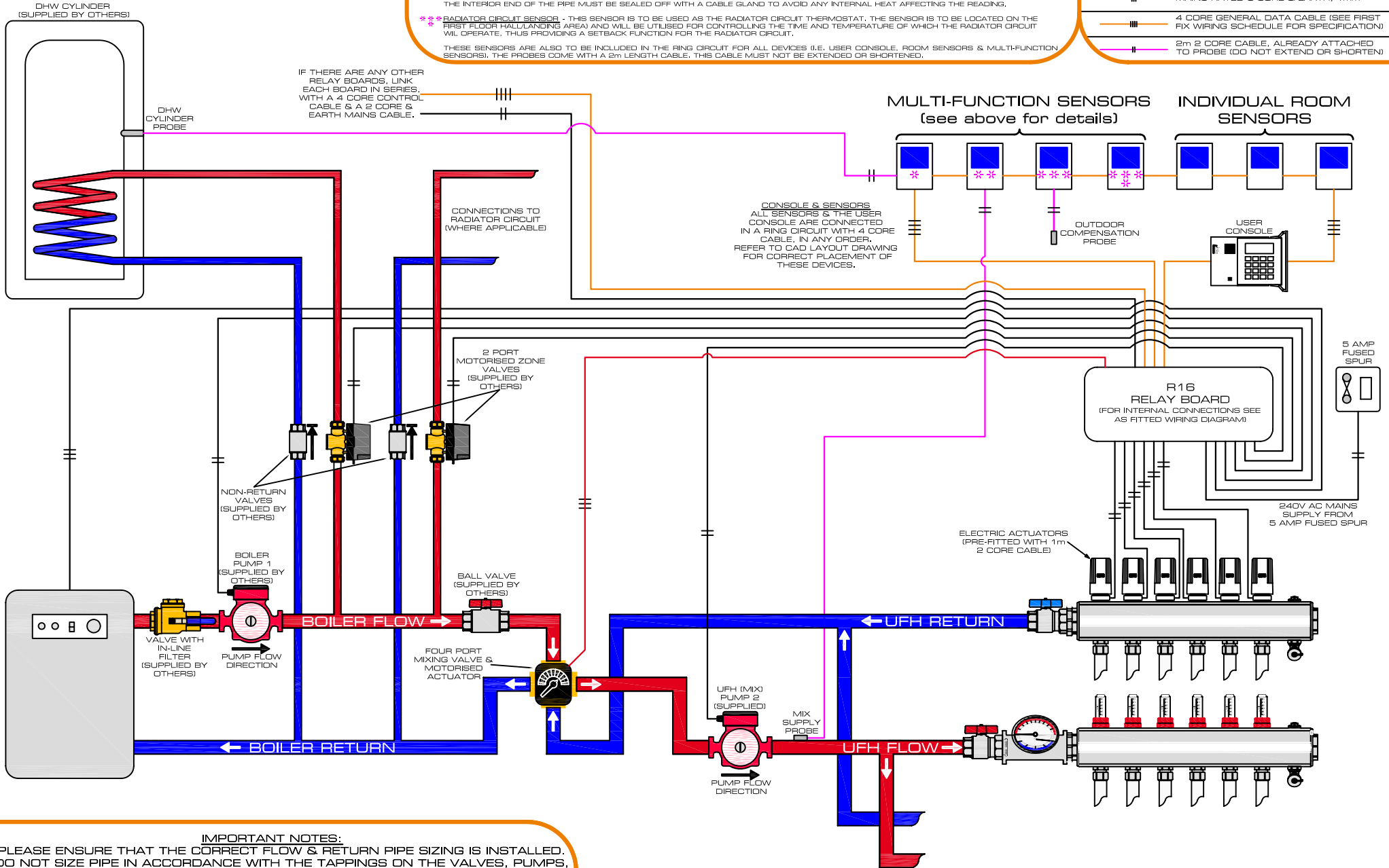
# INTELLIGENT CONTROL - iCON & BOILER - UFH, DHW & RADIATOR CONTROL OVERALL PLANT & WIRING LAYOUT

## MULTI-FUNCTION SENSORS

- \* **DHW CYLINDER SENSOR** - THIS SENSOR IS TO BE USED AS THE CYLINDER THERMOSTAT. THE SENSOR IS TO BE LOCATED IN THE DHW CYLINDER CURBBOARD WITHIN A METRE OF THE PROBE. THE PROBE IS TO BE INSERTED INTO THE POCKET OF THE DHW CYLINDER.
  - \* **MIX SUPPLY SENSOR** - THIS SENSOR IS TO BE USED AS THE MIX SUPPLY THERMOSTAT. THE SENSOR IS TO BE LOCATED DOWNSTREAM OF THE UFH PUMP (P2) WITHIN A METRE OF THE PROBE. THE PROBE IS STRAPPED TO THE FLOW PIPEWORK AT LEAST 1m AFTER THE UFH MIXING PUMP (P2).
  - \* **OUTDOOR COMPENSATION SENSOR** - THIS SENSOR IS TO BE USED AS THE OUTDOOR COMPENSATION THERMOSTAT. THE SENSOR IS TO BE LOCATED WITHIN A METRE OF THE PROBE. THE PROBE IS TO BE INSTALLED IN A LENGTH OF PIPE THROUGH A NORTH FACING EXTERIOR WALL. THE INTERIOR END OF THE PIPE MUST BE SEALED OFF WITH A CABLE GLAND TO AVOID ANY INTERNAL HEAT AFFECTING THE READING.
  - \* **RADIATOR CIRCUIT SENSOR** - THIS SENSOR IS TO BE USED AS THE RADIATOR CIRCUIT THERMOSTAT. THE SENSOR IS TO BE LOCATED ON THE FIRST FLOOR HALL/LANDING AREA AND WILL BE UTILISED FOR CONTROLLING THE TIME AND TEMPERATURE OF WHICH THE RADIATOR CIRCUIT WILL OPERATE. THIS PROVIDING A SETBACK FUNCTION FOR THE RADIATOR CIRCUIT.
- THESE SENSORS ARE ALSO TO BE INCLUDED IN THE RING CIRCUIT FOR ALL DEVICES (I.E. USER CONSOLE, ROOM SENSORS & MULTI-FUNCTION SENSORS). THE PROBES COME WITH A 2m LENGTH CABLE. THIS CABLE MUST NOT BE EXTENDED OR SHORTENED.

## KEY FOR CABLES TO BE USED

- MAINS RATED 2 CORE & EARTH, 1.5mm<sup>2</sup>
- MAINS RATED 3 CORE & EARTH, 1.5mm<sup>2</sup>
- MAINS RATED 3 CORE & EARTH, 1mm<sup>2</sup>
- 4 CORE GENERAL DATA CABLE (SEE FIRST FIX WIRING SCHEDULE FOR SPECIFICATION)
- 2m 2 CORE CABLE, ALREADY ATTACHED TO PROBE (DO NOT EXTEND OR SHORTEN)



IF THERE ARE ANY OTHER RELAY BOARDS, LINK EACH BOARD IN SERIES, WITH A 4 CORE CONTROL CABLE & A 2 CORE & EARTH MAINS CABLE.

CONNECTIONS TO RADIATOR CIRCUIT (WHERE APPLICABLE)

CONSOLE & SENSORS. ALL SENSORS & THE USER CONSOLE ARE CONNECTED IN A RING CIRCUIT WITH 4 CORE CABLE, IN ANY ORDER. REFER TO CAD LAYOUT DRAWING FOR CORRECT PLACEMENT OF THESE DEVICES.

R16 RELAY BOARD (FOR INTERNAL CONNECTIONS SEE AS FITTED WIRING DIAGRAM)

240V AC MAINS SUPPLY FROM 5 AMP FUSED SPUR

ELECTRIC ACTUATORS (PRE-FITTED WITH 1m 2 CORE CABLE)

CONNECTIONS FOR SYSTEMS WITH MORE THAN ONE UFH MANIFOLD (WHERE APPLICABLE)

### IMPORTANT NOTES:

- PLEASE ENSURE THAT THE CORRECT FLOW & RETURN PIPE SIZING IS INSTALLED. DO NOT SIZE PIPE IN ACCORDANCE WITH THE TAPPINGS ON THE VALVES, PUMPS, ETC. ALL PIPES SHOULD BE SIZED IN ORDER TO COPE WITH THE LOADING OF THE SYSTEM. PLEASE CONTACT OUR OFFICE IF IN ANY DOUBT.
- ALL NON-RETURN VALVES, 2-PORT MOTORISED VALVES ETC. CAN BE SUPPLIED, PLEASE CONTACT OUR OFFICE FOR FURTHER INFORMATION.