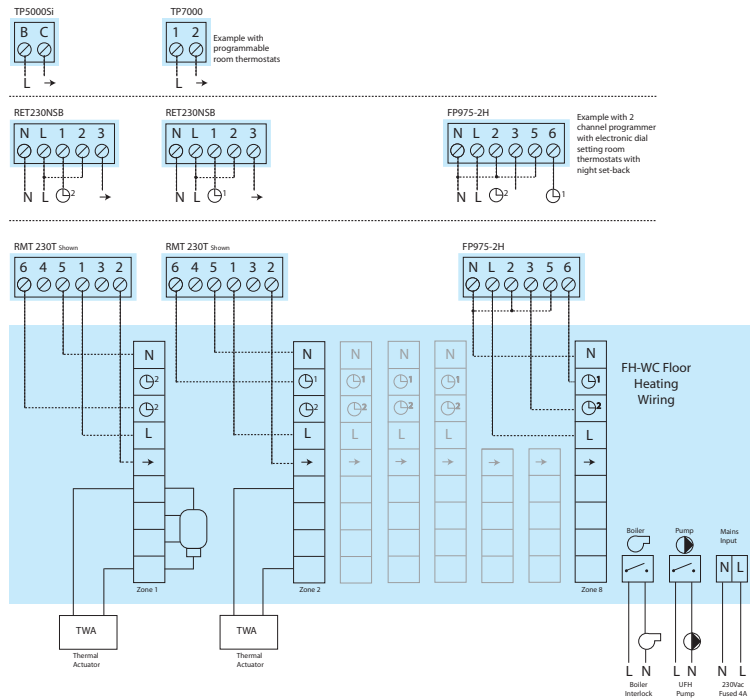


Whole or part-house Underfloor heating



With flow temperature control, multi-zone wiring box and wired room thermostat

Wiring Diagram



Ordering information

Type	Code No	Description	Comments
24 Volts versions			
FH-WC	088H001700	Connection box, 230Vac power supply, 24V output	With socket for 1xSPST relay
FH-WN	088H002100	Timer module	2 zone timer
FH-WT	088H002200	Room thermostat	Standard
FH-WP	088H002300	Room thermostat	Public
FH-WS	088H002400	Room thermostat	Featured
FH-WF	088H002500	Floor sensor, for use with FH-WP & FH-WS	
FH-WR	088H002600	Pump relay kit, for use with FC-WC (24V)	
TWA-A	088H311000	Thermal actuator for use with manifold. 24 Vac	Normally closed. For alternative thermostats refer to page 24 & 25 <i>One thermostat and actuator required per zone.</i>
Manifold	Please refer to page 27 for specification and codes		
230 Volts versions			
FH-WC	088H012801	8-zone wiring box with integrated heat demand relays	
FP-975-2H	087N759900	2-channel programmers with voltage free contacts, 2 Zone	For single channel timeswitch refer to page 25
RMT-230T	087N112500	Room thermostat with night set-back option	
TWA-A	088H311200	Thermal actuator for use with manifold, 230 Vac	For alternative thermostats refer to page 24 & 25 <i>One thermostat and actuator required per zone.</i>
Manifold	Please refer to page 27 for specification and codes		
Mixing loop products			
RAVK	013U806300	Thermostatic controller for use with VMV mixing valve	Range 25 - 65°C
VMV20	065F002000	3/4" 3-port mixing valve for use with RAVK thermostatic controller	Refer to page 22 for alternative sizes



Single room Underfloor heating

Summary

- Maintains programmed room temperatures, including night set-back
- Secure low temperature water to the circuit
- Ensures high flow rate in floor heating circuit
- Does not rely on the pump in the existing heating system

In an extension to an existing heating system - with flow temperature control and wireless room thermostat

A wireless programmable room thermostat for controlling the room temperature in a single room, where the flow temperature is controlled by a separate thermostatically controlled mixing valve arrangement.

- Normally used for larger single room UFH systems, where additional pump capacity is required.
- Can also be used as a zone control (controlling more than one UFH circuit) where individual room control is not required.
- Used where low flow temperatures are required due to the pipe layout, floor construction or flooring surface.

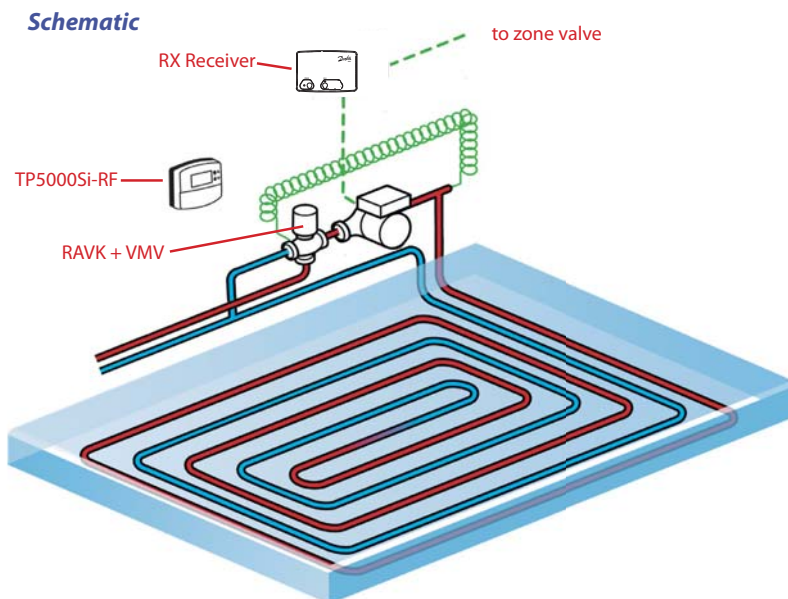
a safety thermostat to turn off the pump if high flow temperatures are measured (not shown on the drawing).

The wireless thermostat uses secure digital RF communication to activate a relay within the RX receiver unit located adjacent to the UFH heating circuit.

No special requirements for floor constructions – can be used in all types of floor constructions, all pipe layouts and flooring surfaces. A safety thermostat, not shown, can be added to increase the safety and to prevent high flow temperatures.

Control

A wireless programmable room thermostat is used to turn the pump on or off according to actual heat demand to maintain programmed room temperatures. The thermostatic controlled mixing arrangement ensures a low flow temperature of the water entering the Underfloor Heating circuit. In addition the system can be fitted with

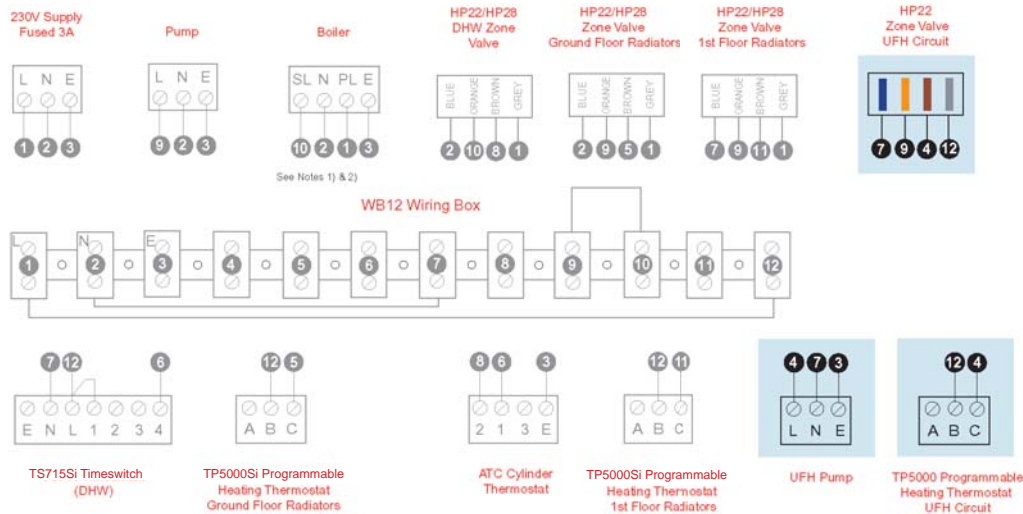


Single room Underfloor heating



In an extension to an existing heating system - with flow temperature control and wireless room thermostat

Wiring Diagram

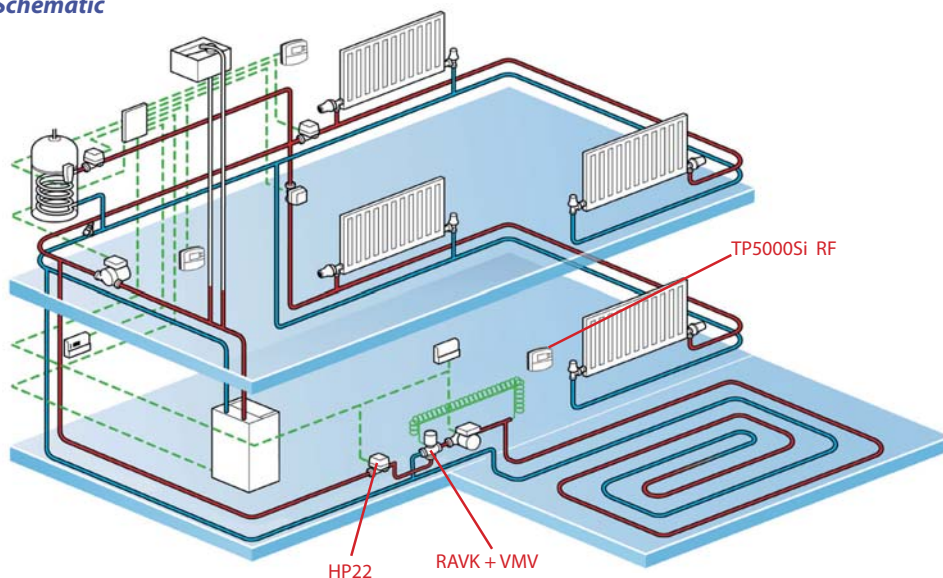


Notes 1) Boiler SL = switched live 2) Boiler PL = permanent live (some boilers only)

Ordering information

Type	Code No	Description	Comments
RAVK	013U806300	Thermostatic controller for use with VMV mixing valve, range 25-65°C	
VMV20	065F002000	¾" 3-port mixing valve for use with RAVK thermostatic controller	Refer to page 22 for alternative sizes
TP5000Si	087N791000	5/2 day programmable room thermostat	Refer to page 24 & 25 for alternative models
RX-1	087N747600	Single channel receiver, works in conjunction with 1 thermostat	Refer to page 24 for 2 & 3 channel versions
HP22	087N660900	22mm 2-port motorised zone valve complete with actuator	Refer to page 25 for alternative sizes

Schematic



Additional Information:
www.danfoss-randall.co.uk

