Surface Heating & CoolingData Sheet

Comfia Composite Manifold Control Pack







Product information

The Wavin Comfia Composite Manifold Control Pack is designed to reduce the water flow temperature through the underfloor heating system in situations where the mains flow temperature is over 60°C. The mixing valve reduces the flow temperature to 55°C or less, and the manual TRV head can be used to adjust the desired temperature in accordance with the system design.

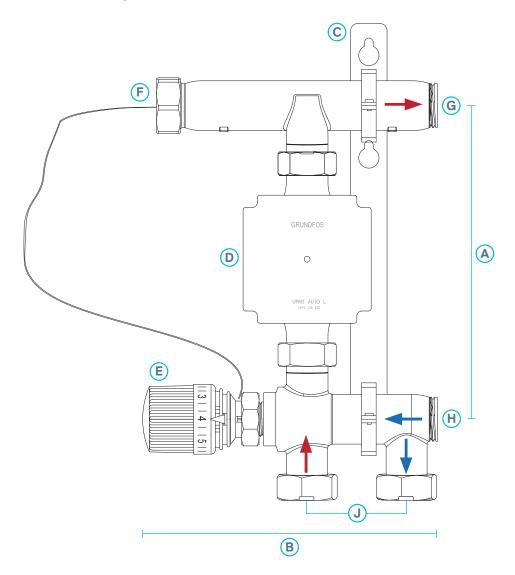
The unit also includes a highly efficient Grundfos UPM3 circulation pump, and is compatible with both composite and stainless steel manifolds.



Technical data

Product code	4041056 3092823 (UK only)
Body material	Brass
Circulation pump	Grundfos UPM3 Auto 15-70
Max. operating temperature	70°C
Temperature control range	10-60°C
Max. operating pressure	4 bar
Max. testing pressure	8 bar
Max. flow rate (primary)	30 litres/min
Max. flow rate (secondary)	8 litres/min
Circulation medium	Water (max. glycol content 30%)
In accordance with	BS EN ISO 15876-1: 2003, BS EN ISO 15876-3: 2003 and BS EN ISO 15876-5: 2003, application class 4, for a lifetime of 25 years and a design pressure of 4 bar

Unit dimensions and components



Key dimensions

Key	Description	Dimension (mm)
A	Manifold connections, centre to centre	212
В	Maximum width	140

Components

Key	Description
С	Wall-mounting bracket
D	Grundfos UPM3 Auto circulation pump
Е	Adjustable thermostatic valve
F	Temperature probe in sensor pocket
G	1" male thread for manifold connection (flow)
Н	1" male thread for manifold connection (return)
J	1" female connections for isolation valves

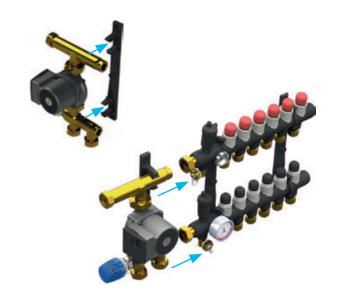
Thermostatic valve **E** settings

Setting	Flow temperature
1	10°C
2	20°C
3	30°C
4	40°C
5	50°C
6	60°C

Connection guide

Connecting the control pack to the manifold

- 1 Ensure bracket adaptors are positively located on the control pack's bracket and that the bottom adaptor is aligned to the bottom arm of the manifold.
- (2) Clip the control pack into the bracket.
- 3 Insert the 1" fibre washers supplied as part of the installation kit and hand tighten the connections between the control pack and the manifold.
- 4 Using 26 and 38mm open-end wrenches, place one on the nut and one on the adjacent brass section of the combined inlets, and tighten until sealed.



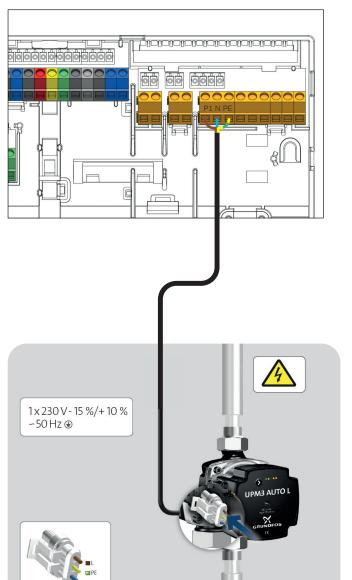
Connecting the primary pipework

- 1 Insert the 1" fibre washers supplied as part of the installation kit and tighten the connections between the assembled manifold and the isolation valves.
- 2 Support connecting pipework parallel to and centred with the isolation valves to prevent leaks.

Note: An automatic bypass, or alternative device capable of sustaining primary flow when the manifold is operating at part load, should be installed as part of the primary system. Please refer to the heat source's installation instructions.

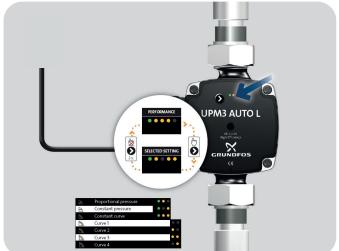


Pump information



Pump connection and setup

- 1 Ensure power sources are isolated and the correct precautions are taken for working with 230V electrical equipment.
- 2 Insert the supplied pump plug and wire the pump to the control/wiring centre. The diagram to the left shows the relevant terminals for connection to the Wavin Sentio Central Control Unit (sold separately). For other control systems, refer to the manufacturer's literature for the appropriate wiring guidance.
- 3 The pump's operation mode and heat curve setting can be cycled using the button on the pump. From the factory, the pump is preset to Constant Pressure, Curve 2, which is ideal for the majority of underfloor heating systems.



Maintenance and troubleshooting

Care and cleaning

- During all construction activities cover the manifold with a polyethylene sheet or an enclosure to prevent damage.
- Oclean the manifold with a soft cloth.
- Periodically inspect the system for leaks and erosion of brass and plastic components.
- Follow the heat source recommendations with regards to flushing and additives.

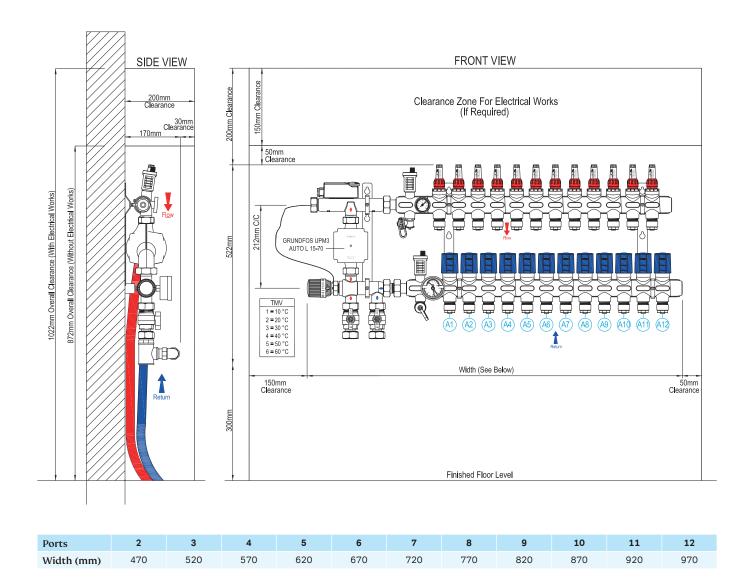
Note: DO NOT use detergents to clean the manifold

Troubleshooting

Issue	Possible cause	Solution
No heat in any zone	UFH system not turning on	Ensure the UFH controls are programmed correctly, and the heat source isavailable to provide hot water for the programmed period
	Heat source/UFH pump not running	Ensure at least one thermostat is calling for heat and that the switched lives to the heat source and the circulators become live according to demand
UFH keeps switching off	Flow Watch Thermostat is activating	Check the flow temperature from the manifold is correct and that limit thermostat is set 10°C higher. If flow temperature is not responding correctly check thermostatic actuator for fault
Some zones do not become warm	Air trapped within pipework	Set the UFH pump to speed setting III, open the balancing valve fully for the problem zone ensuring all other zones are isolated. Air should automatically vent from the system
	Primary flow and return pipes crossed	Check the flow and return pipes from the heat source are correctly connected to the manifold and that they are controlled by the correct thermostat
Zone takes a long time to warm up	Flow temperature set too low	Check the blending valve is set correctly and that the primary flow temperature into the mixing valve is equal to or warmer than the required secondary flow water temperature
	High heat losses	Some rooms will have higher heat losses than others, such as a conservatory. The effects can be compensated for by setting the heating to come on for longer in these zones
	Thermally resistive floor finish	Some floor constructions work more efficiently with underfloor heating. For example stone or tiled floors have a greater heat output than carpeted ones
A "chattering" noise can be heard coming from the Control Pack	Primary pressure difference is too high	Fit an automatic bypass or equivalent device to the primary circuit to prevent excessive pressure difference across manifold as it reaches temperature and reduces its primary intake

Appendix

Dimensions for complete manifold unit with Control Pack included



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