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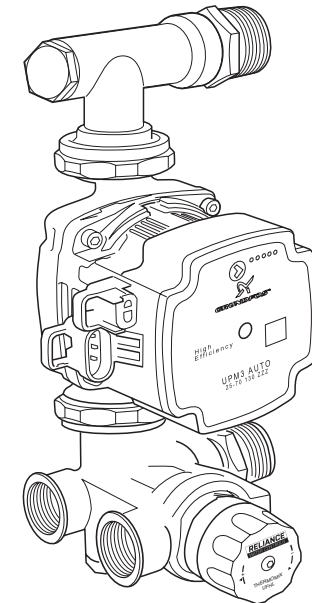
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Installation and Maintenance Instructions

RELIANCE

Thermomix[®] Underfloor Heating Control Pack



The Manifold Control Pack provides temperature controlled mixed water to an underfloor heating system with a heat output up to 14kW.

Reliance Worldwide Corporation (UK) Ltd

Reliance Worldwide Corporation (UK) Ltd are part of the Australian based group of companies collectively known as Reliance Worldwide Corporation, with the UK brand known as Reliance Water Controls.

Reliance Worldwide Corporation (UK) Ltd is a specialist in the design, distribution and technical support for temperature and flow controls.

With group offices and manufacturing plants throughout the world RWC offers a wealth of knowledge and expertise which is reflected throughout our products. Being part of many specialised trade associations and having our own UKAS accredited laboratory, makes us at the forefront of any new regulations or changes which impact the industry, and allows for continuous product development and innovation, within our specialised product area.

Our core product range is related to thermostatic control, with the manufacturing undertaken at our head office in Brisbane Australia, we have an extensive range of thermostatic mixing valves, shower control valves, and taps all which use the same high quality technology to control the temperature of water, within this range we have different valves to suit various applications and working parameters, including both TMV2 and TMV3 approved controls.

RWC, are market leaders of OEM controls with a complete range of safety valves for use in G3 unvented systems and a wide range of Underfloor heating controls (UFH) to allow for safe distribution of hot water, throughout a property. This range includes; thermostatic control valves for safe hot water temperatures, manifolds to enable even distribution, complete UFH kits to allow ease of installation & commissioning, and a range of modern and stylish programmers to complement these controls.

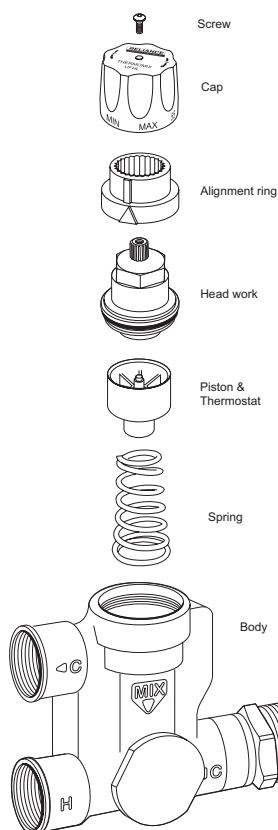
Spares & Accessories

Code	Size	Description
HEAT970256	3/4" FBSP x 1" MBSP	UFH Valve and Elbow
SKIT970250	N/A	Internal Service Kit
ZKIT970215	1" MBSP	UFH Nickel Elbow with 1/2" Plug
PUMP950200	1.1/2" MBSP	Grundfos UPM3 'A' Rated Pump
ZEAD970250	N/A	Headwork for UFH valve
BVAL900001	3/4"	Isolating Ball Valve
GAGE600001	1/2"	63mm Dial Pressure/ Temperature Gauge, 4 bar/ 120°C
GAGE600005	1/2"	Pocket 50mm Dial Temperature Gauge, 0-120°C
STAT970300	1/4" MBSP	Overheat Thermostat
ZCAP970256	N/A	Replacement Cap

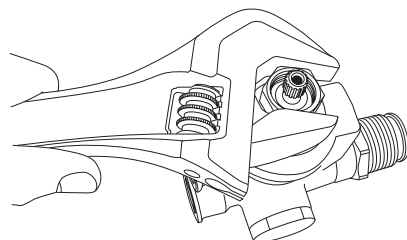
Maintenance

Isolate the flow and return to the UFH blending valve and partially drain down the UFH manifold using the drain/filling valves provided.

To clean or replace the internals of the UFH blending valve, first remove the temperature control knob from the top of the valve. The temperature cam also needs to be removed by sliding it off the brass headwork.



Remove the brass headwork with a large adjustable spanner or a 22mm ratchet spanner.



Slide the piston/thermostat assembly and spring out of the valve body.

Clean all internal surfaces of the valve with a weak solution of scale remover.

Using a silicon based waterproof grease, lightly lubricate the external surface of the piston and thermostat assembly.

After cleaning, re-assemble the UFH blending valve, ensuring the components are returned in the correct order. Re-set the valve as laid out in the commissioning section.

Technical Specifications & Dimensions

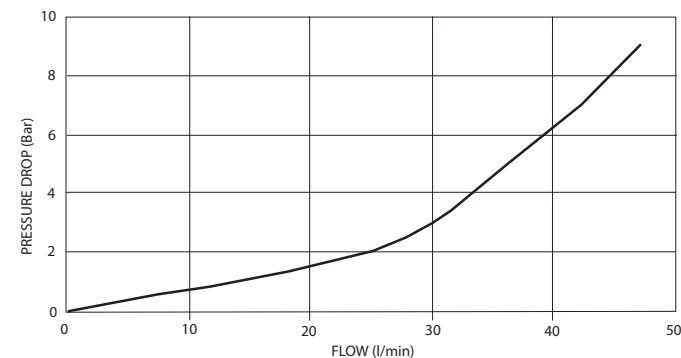
Specification

Maximum static pressure:	10 bar
Maximum temperature:	85°C
Adjustable control range:	25°C to 60°C
Factory pre-set :	45°C (Control knob is in the adjustable position)

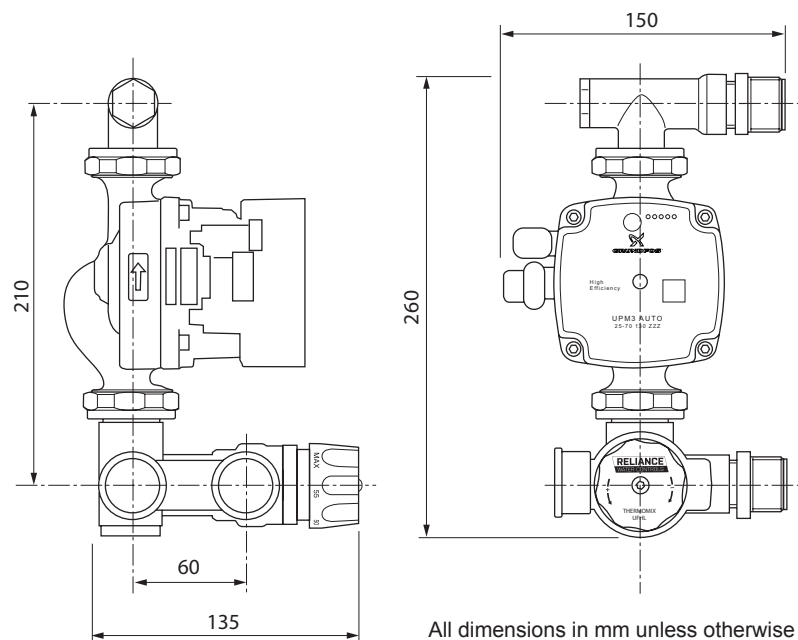
Materials

Body	Gunmetal
Seals	Fibre
O-rings	Viton
Spring	Stainless Steel

Pressure Drop Graph



Dimensions



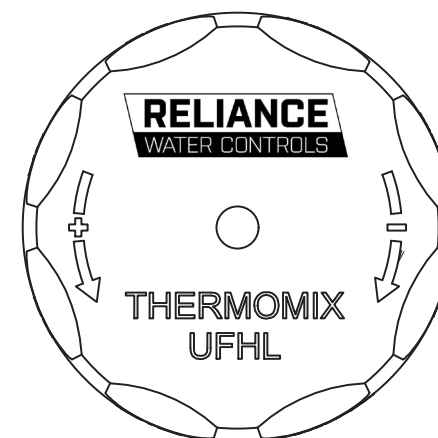
All dimensions in mm unless otherwise stated

These initial settings can then be adjusted to provide the correct comfort level. A maximum floor surface temperature of 29°C should not be exceeded (with the exception of wet areas such as bathrooms, 35°C) as this may lead to feelings of discomfort.

With timber floor finishes including strip laminate products the maximum floor temperature of 27°C should not be exceeded as this may result in excessive shrinkage of the material.

Maximum temperatures can vary so check the floor manufacturers recommendations first.

To adjust the temperature simply rotate the temperature control handle clockwise or anti-clockwise as indicated on the cap, until you reach the required setting.



Wiring

A fused spur should be provided adjacent to the manifold to provide power to the pump and two port zone valve if fitted.

To comply with IEE regulations, the pump on the Manifold Control Pack must be provided with an earth. All wiring should be undertaken by a qualified installer and must conform to IEE regulations.

Commissioning

The UFH valve supplied as part of the control pack has a temperature setting range of 25-60°C as indicated on the temperature adjustment cap:

Min (25°C)
30°C
35°C
40°C
45°C
50°C
55°C
Max (60°C)

The temperature control is factory set to 45°C with the cap in the adjustable position.

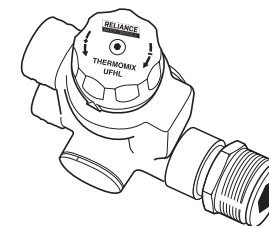
Initial setting of the thermostatic blending valve (after the heat up/ screed drying period) should provide the following temperatures:

Screeded floors: 40-45°C
Timber floors: 55-60°C

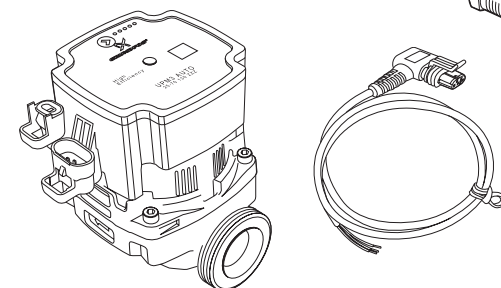
Pack Contents

PLEASE CHECK CONTENTS OF PACK BEFORE BEGINNING INSTALLATION.

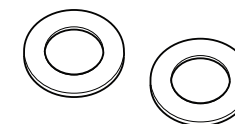
ThermoMix UFH Valve



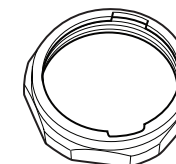
Pump including rubber washers and cable



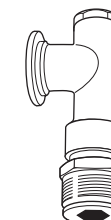
1" washers
(Qty 2)



Pump nut



Connection elbow



Introduction

Designed to work with manifolds of all types, on 210mm centres. The Thermomix Underfloor Heating Control Pack is a bolt on unit providing a quick and simple system to install.

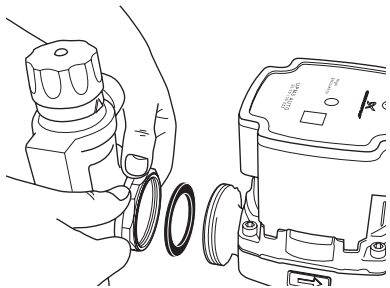
Installation

Firstly firmly fix the distribution manifolds to the wall leaving enough room beside the manifold to fit the control pack (see dimensions on Page 2).

Before beginning the installation of the Thermomix Underfloor Heating Control Pack, identify all of the components in the pack.

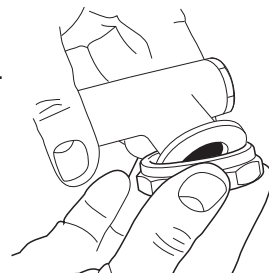
2.1

The Thermomix UFH valve comes complete with a blanking plug, this means if the standard orientation of the kit is not suitable for your application you can unscrew the blanking plug and pump union (left handed thread), and change them around, to reverse the kit.



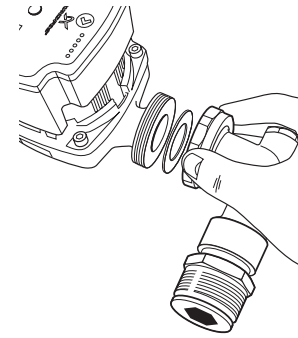
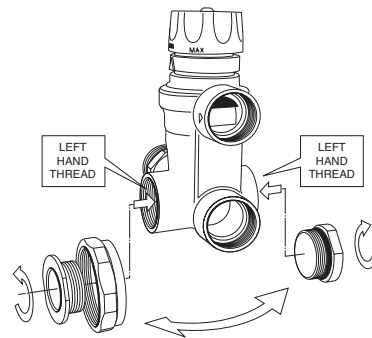
2.2

Connect the Thermomix UFH valve to the pump using the pump nut which is pre-assembled to the thermomix, ensuring the pump washer is inserted. (taking note of the directional arrows on the pump body).



2.3

Slip the 1 1/2" pump nut over the flange on the flow connection elbow.



2.4

Use the 1 1/2" pump nut to connect the elbow to the pump, again ensuring the pump washer is inserted.

2.5

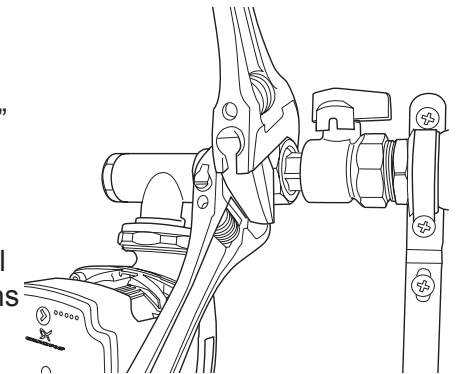
Tighten the pump union connections.

2.6

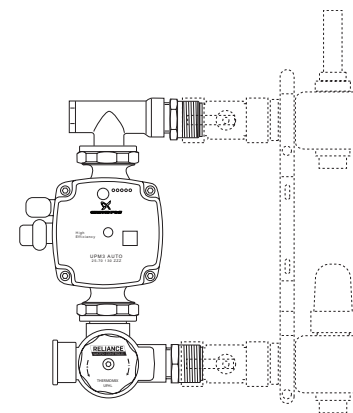
Connect the elbow to the flow manifold by means of the 1" MBSP connection onto the flat faced union connection, remembering to fit the 1" fibre washer.

2.7

Connect the Thermomix UFH control valve to the return manifold by means of the 1" MBSP connection onto the flat faced union connection again remembering to fit the 1" fibre washer.

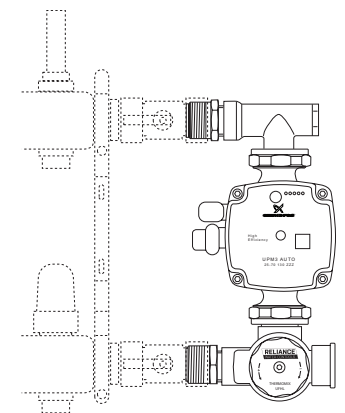


Thermomix UFH Valve complete with UFH manifold.



Standard Installation

or



Alternative Installation