INSTALLATION INSTRUCTIONS

UNDERFLOOR HEATING - SINGLE LOOP MIXER SET. Part No. 47396

Introduction

Stuart underfloor heating pump mixer sets are designed to blend flow and return from the heatsource in underfloor heating systems.

The pump sets have been specifically designed for single loop systems in small areas such as kitchens, bathrooms and conservatories.

The heart of the control system is the mixing valve which blends cooler water returning from the underfloor heating loop with hot water from the heat source to provide mixed water at the correct temperature back to the underfloor loop.

The blending valve is adjustable to enable the user to set the required temperature output.

Featuring a fully ERP compliant energy efficient pump makes the Stuart pump set an ideal choicefor smaller area underfloor heating installations.

The pump set is mounted on a fixing bracket suitable for wall mounting.

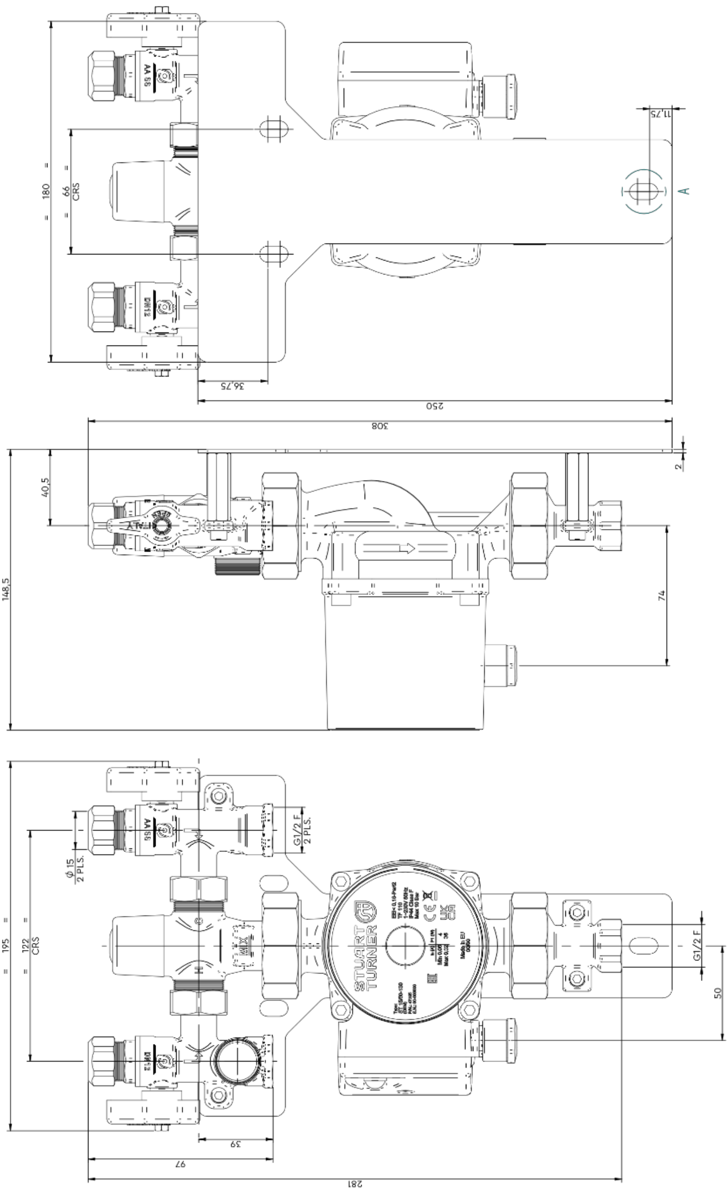
Products

Single Loop UFH Mixer Set	47396

Technical Specification

- ERP compliant, high efficiency pump
- Hot supply temperature range: 60 to 85 °C
- Adjustable temperature range: 35 to 60°C
- Factory set temperature: 45°C±2°C
- Temperature stability: ±2°C
- Maximum pressure: 10 bar
- Inlet connections: 15mm compression
- Other connections: G½

Dimensions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66
CRS
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122
CRS
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G1/2 F
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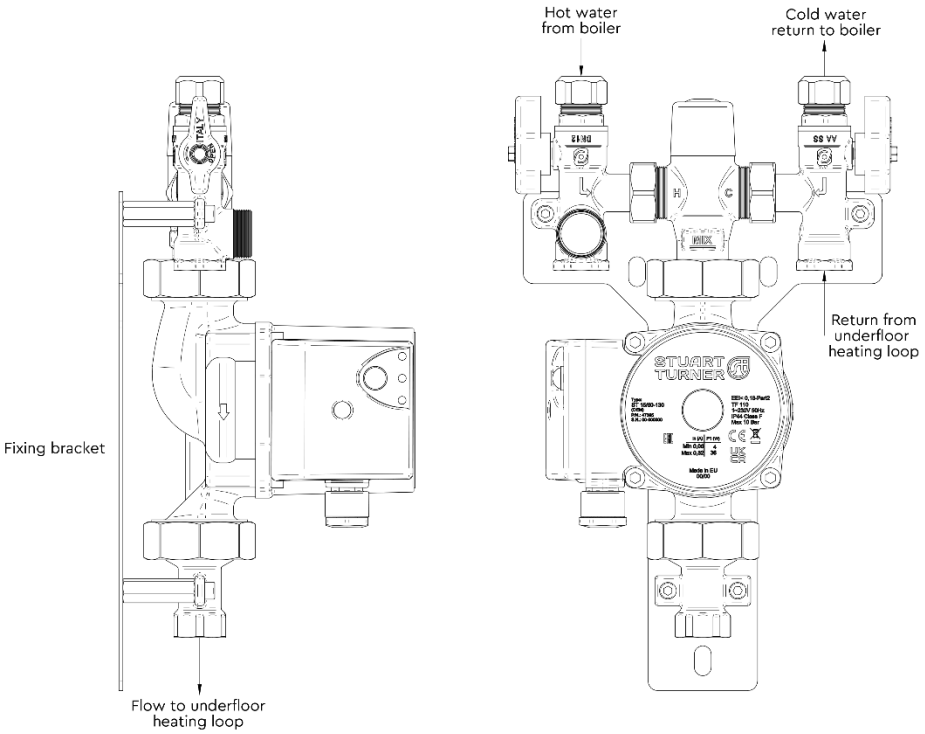
50
39
97
281
STUART
TURNER
MIX

Connections

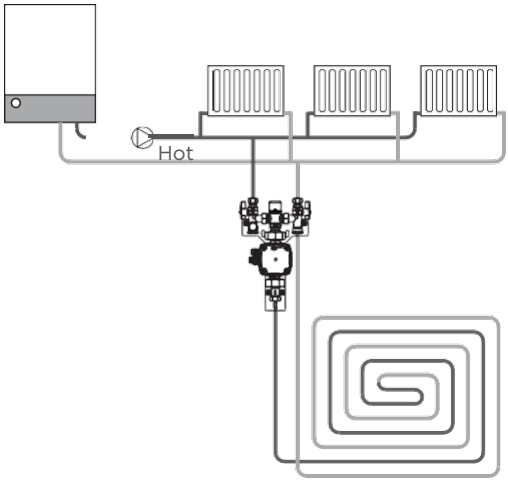


Installation

The underfloor small area pump set is supplied fully assembled for quick and easy connectionto the flow and return under floor heating loop and the flow and return pipes from the heat source.

- Using the fixing plate mount the pump set to a suitable wall or structure.
- The hot and cold connections contain an integral ball valve to allow for future maintenance of the mixing valve and pump.
- Make the compression joints from the heat source (boiler) and the return back to the cold feed.
- Connect the underfloor heating loop to the pump outlet and the return to the cold 'Tee'.

Typical Installation



Commissioning

To help protect and prevent damage to the blending valve and other devices on the heating circuit it is recommended that the connecting pipework is thoroughly flushed to remove any debris before filling and venting the system.

Open both ball valves and fill and pressurise the underfloor loop.

Run the pump for several minutes before venting the circuit at a suitable air

vent. Allow the circuit to settle before running the pump and venting again.

With the primary pipework to the boiler, pump set and underfloor loop filled and at the required system operating pressure check for any signs of leakage on all joints.

Wiring

All electrical wiring should be undertaken by a qualified electrician and must conform to IEE Wiring Regulations.

The pump of the pump set can be wired to operate with a timer and room thermostat, refer to the installation instructions supplied with each piece of equipment.

Notes:

If the primary circuit serving the underfloor heating has not been fitted with an automatic bypass valve it is recommended that one is installed across the flow and return pipes upstream of the pump set to help protect the heat source and improve efficiency.

Mixing Valve Adjustment

The thermostatic blending valve is factory set to provide a mixed water outlet of 45˚C to the underfloor heating loop. The mixed water outlet temperature can be adjusted to suit the design flow temperature within the range of 35 to 60˚C.

To measure the mixed water temperature, use a suitable thermometer preferably digital to measure the surface temperature on the pump outlet, and adjust as required.

With the heat source operating and the system balanced, the mixed water flow temperature can be easily adjusted using the following procedure.

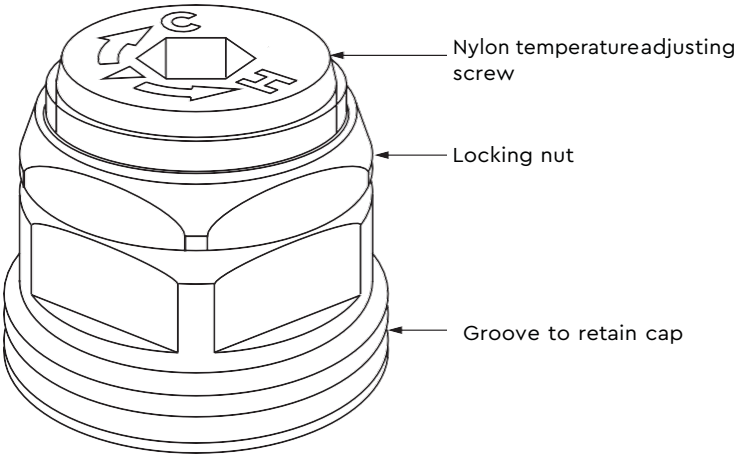
i Remove the cap and release the locking nut from the temperature spindle.

ii Using an 8mm Allen key rotate the temperature adjustment screw anticlockwise to increase the mixed water temperature or clockwise to reduce the mixed water temperature – at all times ensuring the probe of the thermostat is touching the pump outlet.

iii We recommend the use of a digital thermostat when setting the valve, once the desired outlet temperature is reached, re-tighten the locking nut to the temperature

screw and replace the anti-vandal cap to prevent unauthorised adjustment (the cap rotates freely) byclicking into position.

View with cap removed



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