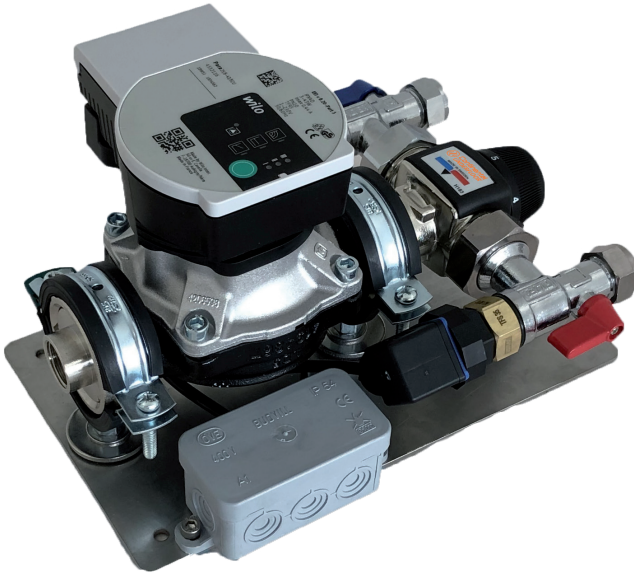


HeatMax™ small area mixer

32008



Pre-assembled for immediate installation, including:

- Thermostatic mixing valve adjustable from 35°C to 60°C
- Temperature switch for pump control on inlet water temperature - 40°C
- Wilo Para 25/6 SCU
- 1/2" BSP female connection to underfloor flow and return
- Nickel plated
- Built-in isolating valve in flow/return elbow
- 15mm compression connection flow and return
- TMV body kvs 1.3
- Mounted pump control terminal box

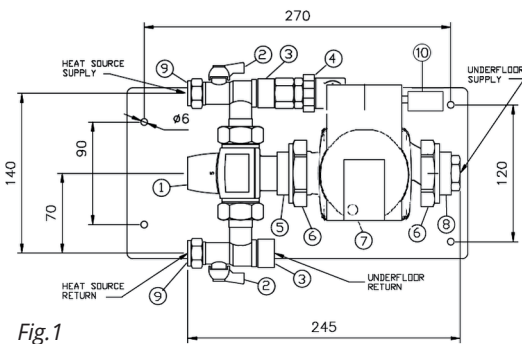
1. General

1.1 The HeatMax™ small area mixer has been designed to control the flow and water temperature in an underfloor heating system. It is pre-assembled and tested to ensure that it can be fitted with the minimum of on-site labour and commissioned immediately once fitted.

1.2 It is designed to connect to both new and existing heating systems that have 15mm compression fittings for the flow and return. The temperature switch to supply power to the pump will remain open until the existing heating system water is above 40°C, then the switch will close, switching on the pump. This allows the TMV to mix the flow and return to the required UFH temperature.

NOTE: Pump connections are made with EPDM seals. During commissioning, pump replacement, or pump repositioning, ensure that the seals are tight enough to be leak-free. This is normally indicated by the pump being unable to swivel. Take care not to over-tighten.

2. Technical Data



Item	Description	Qty
1	Thermostatic mixing valve VTA362	1
2	Isolation ball valve	2
3	1/2" BSP female adapter	1
4	Temperature switch 40°C	1
5	1" BSP x 1 1/2" flange adapter	1
6	1 1/2" pump flange nut	1
7	Wilco Para pump	1
8	1/2" BSP female adapter	1
9	1/2" compression connections	2
10	Terminal box	1

Maximum static pressure 10 bar

Maximum differential pressure 3 bar

Maximum temperature 95°C

Operating temperature range 35°C to 60°C

Inlet connections 15mm compression

Outlet connections 1/2" BSP female

Kvs 1.3

3. Installation

3.1 Remove the HeatMax™ small area mixer carefully from the packaging and check that all the components are in place and there is no damage.

3.2 The HeatMax™ small area mixer is supplied for connection with return to the left-hand side but can be altered very simply for connection to the right-hand side.

3.3 Using an appropriate spanner, loosen the rotating flange nut that secures the mixed outlet of the TMV to the pump inlet.

3.4 The upper assembly can then be rotated through 180°, reversing the connections. Care should be taken to not stretch the cable connection to the temperature switch. Retighten the pump flange nut.

3.5 The HeatMax™ small area mixer can be attached to the heating system. Using the dimensions shown in Fig. 1, ensure that there is sufficient space for installation and maintenance at the intended position.

4. Commissioning

4.1 Filling the UFH system – The TMV (within the HeatMax™ small area mixer) is modified to allow the return flow port to be always partly open. Care should be taken to ensure the system is fully filled, and not bypassing through the TMV.

4.2 The whole system can now be filled and commissioned in accordance with the manifold instructions. Prior to filling, check all the joints to ensure that no connections have loosened during transit.

4.3 Ensure that the pump is filled and vented. Operate the control system to call for heat, then select the desired pump setting.

4.4 Wiring should be carried out by a competent electrician following the wiring diagram (Fig. 2).

5. Wiring

Wiring the HeatMax™ small area mixer is simple: all you need is a 3A mains-fused spur. The HeatMax™ small area mixer automatically detects when your radiator or mains heating circuit is on using a temperature control switch built into the unit.

Use the junction box (included) to wire your thermostat and fused spur as shown below.

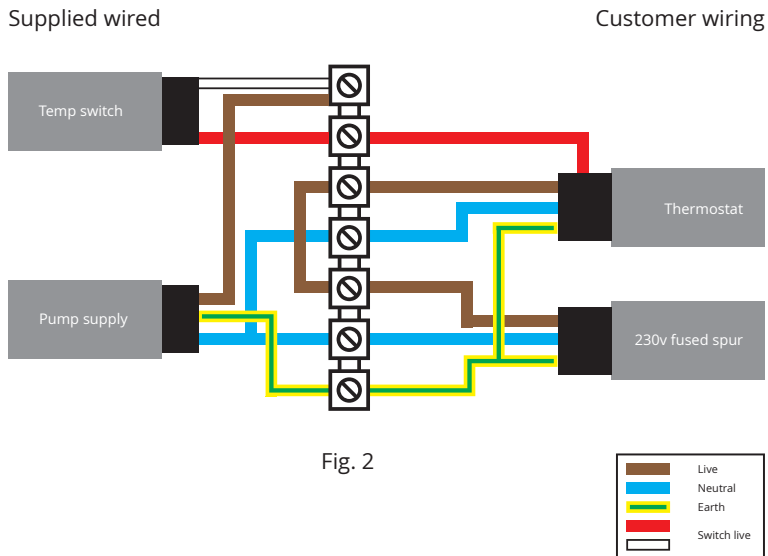
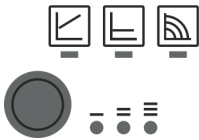


Fig. 2

6. Pump control modes and functions

Operating button



Controls

- Select control mode
- Select pump curve (I, II, III) within the control mode (Press and hold)
- Activate the pump venting function (press for 3 seconds)
- Activate manual restart (press for 5 seconds)
- Lock/unlock button (press for 8 seconds)

Indicator lights (LEDs)



Signal display

- LED is lit up green in normal operation
- LED lights up/flashed in case of a fault



- Display of selected control mode
 Δp -v, Δp -c and constant speed

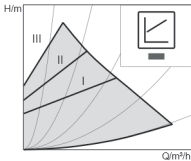


- Display of selected pump curve (I, II, III) within the control mode
- LED indicator combinations during the pump venting function, manual restart and key lock

Setting number	1	2	3	4	5	6
Temperature °C	35	40	45	50	55	60

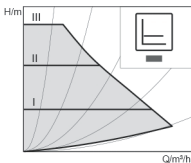
Choose the setting number to give the correct temperature for your system. The setting numbers are a guide only and should be checked against the fitted temperature gauge.

Variable differential pressure $\Delta p-v$ (I, II, III)



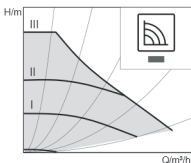
Recommended for two-pipe heating systems with radiators to reduce the flow noise at thermostatic valves. The pump reduces the delivery head to half in the case of decreasing volume flow in the pipe network. Electrical energy saving by adjusting the delivery head to the volume flow requirement and lower flow rates. There are three pre-defined pump curves (I, II, III) to choose from.

Constant differential pressure $\Delta p-c$ (I, II, III)



Recommended for underfloor heating for large-sized pipes or all applications without a variable pipe network curve (e.g. storage charge pumps), as well as single-pipe heating systems with radiators. The control keeps the set delivery head constant irrespective of the pumped volume flow. There are three pre-defined pump curves (I, II, III) to choose from.

Constant speed (I, II, III)



Recommended for underfloor heating for large-sized pipes or all applications without a variable pipe network curve (e.g. storage charge pumps), as well as single-pipe heating systems with radiators. The control keeps the set delivery head constant irrespective of the pumped volume flow.

There are three pre-defined pump curves (I, II, III) to choose from. Recommended for systems with fixed system resistance requiring a constant volume flow. The pump runs in three prescribed fixed speed stages (I, II, III).

NOTE: Factory setting: Constant speed, pump curve III

Want more information?

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