

# THB230 - THB240

The THB230 and THB240 Auto Balancing Actuators is the latest Underfloor Heating Control innovation from SALUS. The THB230 and THB240 automatically balances the UFH circuit to eradicate system hot and cold spots and improve comfort whilst radically reducing the time required on site to setup the system.



Unlike conventional actuators, the new Auto Balancing Actuator performs the function of both thermal actuator and flow regulator, resulting in two functions in one unit. Complete with two remote sensors that are placed on the flow and return pipes from the manifold, the actuator constantly monitors the temperatures and will adjust the flow rate to maintain a delta of 7°C for the UFH circuit. This is the ideal temperature differential between the emitter flow and return pipes; thereby balancing and optimising system performance.

Features	Benefits
Fast actuator opening and closing times typically 30 seconds	Much quicker to respond than conventional actuators
Performs the function of both the thermal actuator & the flow regulator, resulting in two functions in one unit	Less system parts, Quicker to install, Potential lower overall system Cost
Very Low Power, less than 0.5W	Lower running costs than conventional actuators

## Customer Benefits

Who	Benefits
Installer	Quick to install the system, Able to correctly balance retrofit systems where the pipe lengths are unknown
Property Occupant	Improved comfort, correctly working balanced system
UFH Supplier	Less user complaints and callouts due to product installed and balanced correctly

## High Accuracy Operation

The SALUS Auto Balancing Actuator uses a high precision motor to accurately adjust the valve pin and dynamically balance the flow through each loop.

The precision accuracy of the ABA allows for very slight movements of the valve actuator pin (down to just a few microns) to ensure the perfect water flow rate, whilst the clip on temperature sensors permit the ABA to detect the smallest temperature variations. If, as is common in some installations, the heat source varies, then the ABA will take an average reading. For example, if the heat source cycles are between 40°C and 42°C, the ABA will average the cycle to 41°C.

## Base Specification

Power Supply	<b>TBH230:</b> 230VAC 50/60 Hz. <b>TBH24:</b> 24VAC / DC
Power consumption:	0.5W
Valve Open Time:	Typically, 30 seconds
Valve Close Time:	Typically, 30 seconds
Temperature Sensor Resolution:	0.1°C
Dimensions	H 93mm x W 38mm x D 54mm

## Fit & Forget Installation

The ABA is installed in just 3 easy steps:

1. Connect the ABA to the return manifold and clip on the temperature sensors to the flow and return pipe.
2. Connect the ABA power cable to the Wiring Centre.
3. If there is a flow regulator fitted on the flow manifold ensure this is fully opened and then simply switch on the room thermostat.

**That's all. Fit and forget!**

