## **Intaeco Flocal B Pump Stations (Circulation Unit)**

Size: 3/4" FI

The Flocal B circulation unit is used on the primary circuit of solar heating systems to control the temperature inside the water calorifiers. The pump inside the unit is activated by a signal from the differential temperature regulator. This unit also contains the functional and safety devices for optimum circuit control.

This Flocal B unit is a combined pump station and a BS3 controller manufactured in Germany. The controller is pre-wired, and the pump station comes with 34" female bsp connections. O ring sealing couplings are required to connect pipework - purchase Intaeco self sealing coupling separately. The controller comes complete with 3 temperature PT1000 temperature sensors. The Solar Controller is a 'Temperature Differential Programmer'. It senses the temperature in key positions in the system, and automatically switches on the pump (or pumps) to transfer solar gain heat into the heat store or hot water cylinder. The controller maintains the safety of the system with preset and adjustable limits, and allows the installer to add additional heat sources for back up when no solar heat gains are available.

The controller is operated by 3 pushbuttons. Button 1 scrolls forward through the options Button 2 scrolls back. Button 3 is the SET command, for when you want to make a change to any of the factory set values. Button 3 is the SET command, for when you want to make a change to any of the factory set values.

Flocal B standard twinline pump station prepared for the direct mounting and integration of the RESOL BS3 controller. Pump is a Wilo Star 15/6, return line is with a isolating valve and non return valve, and safety valve group. Flow line complete with isolating valve and air scoop.

Ciculating Pump: Wilo Star ST20/6 or ST20/7

Nominal size: app. 240x515x200mm (incl. insulation)
Material: Fittings brass, seals teflon/viton, insulation

EPP

Max working pressure: 10 bar

Max working temp: 110 °C. Intermittent 180 °C

Operating pressure: 10 bar

Spring pressure of non return vIv 200mkm  $H^2O = 2$  kPa

Flowmeter: 1 to 13 I/m standard or 0.5 to 5 I/m

Wall mounting, supplied complete with fixings. Standard issue with 6 bar safety valve.

## BS3 Controller

The BS3 solar controller is a temperature differential programmer.

It records the temperature at key points in the system and automatically switches on the pump (or pumps) to transfer solar gain heat into a store. The controller maintains the safety of the system with preset and adjustable limits and allows the installer to provide additional heat sources for back up when no solar heat gains are available.

The screen displays system information at the user level in a code form, For example:

- COL: The temperature at the collector. The probe is positioned at the hottest point on the panel.
- TST: Temperature at the lower probe on the Cylinder Store. (when the system is programmed into Arrangement 2 mode, this code changes to TSTL, (because in this mode, there will be a Lower and an upper temperature reading).
- S3 or TSTU: Temperature at the upper probe on the Cylinder Store.
- S4: Temperature Sensor 4, positioned on the return pipework. This
  sensor is used by the Solar Controller to calculate heat quantity
  measurement. When the HQTL setting is turned ON this becomes TRF
  (read the installation manual to learn more).
- hp: Shows operating time of the pump or equipment connected to the relay.



