







# Section 4



## BIOMASS SYSTEMS






# BIOMASS SYSTEM COMPONENTS


## Constant Temperature Control Accessories

CONSTANT TEMPERATURE CONTROL PRODUCTS		
Order Code	Description of Package and Contents	Pictures
CSB00001	<p><b>Constant Temperature Valve Actuator</b> Electronic actuator adaptor kit for 3-way valves (note: valve bought separately) to provide Biomass Constant Temperature Control. Touch sensitive keypad and digital display for set-up and temperature display. Fits a wide range of mixing and diverting valves.</p> <p>See <i>Technical Appendix I</i> for more details.</p>	
<p><b>3-Way and 4-Way Mixing Valves</b> Mixing valves compatible with the above actuator.</p> <p>CSB00002 3-Way Mixing Valve : 1" KV8 CSB00003 3-Way Mixing Valve : 1¼" KV12 CSB00004 4-Way Mixing Valve : 1" KV8 CSB00005 4-Way Mixing Valve : 1¼" KV12</p>		
<p><b>Temperature Sensors for Biomass Applications</b></p> <p>CSB00006 <b>Exhaust Gas Temp Sensor</b> CF/Pt 90mm (400°C max)</p> <p>CSB00007 <b>Outside Sensor</b> AF/Pt [49 x 26 x 14 mm]</p> <p>CSB00008 <b>Immersion Sensor</b> TF/Pt [Ø6 x 50mm] 3m Silicone (180°C max)</p> <p>CSB00009 <b>Surface Sensor</b> VF/Pt [23 x 14 x 42 mm] 3m Silicone (180°C max)</p>		
<p><b>Loading Pump for Biomass Boiler to Cylinder</b> Integrated and compact loading pump providing constant temperature control and circulation with a thermostatic unit set at either 55°C or 72°C. Includes a recirculation pump that connects solid fuel boilers (pellets, wood, chips....) to one or more hot water storage tanks.</p> <p>See <i>Technical Appendix III</i> for more details.</p> <p>CSB00030-55 1" Fittings : Anti-Condensation Pump Set (55°C Mixing) CSB00030-72 1" Fittings : Anti-Condensation Pump Set (72°C Mixing) CSB00031-55 1¼" Fittings : Anti-Condensation Pump Set (55°C Mixing) CSB00031-72 1¼" Fittings : Anti-Condensation Pump Set (72°C Mixing)</p>		

Order Code	Description of Package and Contents	Pictures
<p><b>CPS3 Biomass Loading Pump set</b> Integrated Pumping set that comes complete with mixing valve for controlled temperature loading from the biomass boiler. Includes a Wilo Yonos para 25/6 A Class pump, Isolation valves, check valve and built in temperature gauges. The units have integrated mixing valves that are preconfigured to open at a set temperature. Options are available for opening temperatures as follows :</p> <p><b>CSB00032-55</b> Opening Temperature : 55°C</p> <p><b>CSB00032-70</b> Opening Temperature : 70°C</p> <p>See <b>Technical Appendix IV</b> for more details.</p>		
<p><b>CSB000033</b> <b>Constant Temperature Controller</b> Controller for constant temperature with graphical user interface to provide constant boiler return-pipe temperature control and storage tank loading. Suitable for all kind of solid fuel and pellet boiler systems with ability to manage layered storage tank loading.</p> <p>See <b>Technical Appendix II</b> for more details.</p>		

HEAT METERING EQUIPMENT		
Order Code	Description of Package and Contents	Pictures
<p><b>F96 Plus Ultrasonic Heat Meter</b> Digital Ultrasonic Heat Meter complying with MID Certificate Class 2 requirements for OFGEM and RHI Compliance requirements (MID Certificate Available including written confirmation from OFGEM that meter complies with RHI requirements). This meter can be ordered and supplied calibrated for WATER, or for premixed GLYCOL Fluids (i.e. Tyfocol LS). Optional MBUS DataLogging (call for more details).</p> <p><b>CSB00010</b> G<math>\frac{3}{4}</math>"B Fittings with Nominal Flow Rate (Q<sub>p</sub>) 0.6 : WATER</p> <p><b>CSB00011</b> G<math>\frac{3}{4}</math>"B Fittings with Nominal Flow Rate (Q<sub>p</sub>) 0.6 : GLYCOL</p> <p><b>CSB00013</b> G1" B Fittings with Nominal Flow Rate (Q<sub>p</sub>) 0.6 : WATER</p> <p><b>CSB00014</b> G1" B Fittings with Nominal Flow Rate (Q<sub>p</sub>) 0.6 : GLYCOL</p> <p><b>F96 Accessories :</b> Additional accessories and non-standard sizes and variants are available - See <b>Technical Appendix V</b> for more details.</p> <p><b>Important Note :</b> Other non-standard sizes are available, however, the lead time can be up to approx. 6 weeks during busy periods.</p>		

THERMACONTROL PUMPING SYSTEMS		
Order Code	Description of Package and Contents	Pictures
CSB00034	<p><b>ThermaControl Primary Heating Pump Set CPS1</b>            Wilo Yonos para 25/6 A Class pump. Isolation valves. Check valve. Temp gauges.</p> <p>See <b>Appendix IV</b> for more details.</p>	
CSB00035	<p><b>ThermaControl UNDERFLOOR HEATING Pump Set CPS2</b>            Wilo Yonos para 25/6 A Class pump. Isolation valves. Check valve. Temp gauges. Mixing range 36C - 60C.</p> <p>See <b>Appendix IV</b> for more details.</p>	
CSB00036-55 CSB00036-70	<p><b>ThermaControl Biomass Loading Pump Set CPS3</b>            w/mixing valve for controlled temperature loading from the biomass boiler.            Wilo Yonos para 25/6 A Class pump.            Isolation valves. Check valve. Temp gauges.</p> <p>Opening Temperature : 55°C            Opening Temperature : 70°C</p> <p>See <b>Appendix IV</b> for more details.</p>	
CSB00037	<p><b>ThermaControl Fresh Water Station Pump Set FWS</b>            The optimum solution for Fresh Water Delivery requirements. With a Primary Loop Max. flow rate of 40 litres / min and a secondary loop set temperature in the range from 35°C to 60°C this integrated unit is ideal for Fresh Water applications in domestic and small commercial applications. Supplied with Single Pump and 20 plate heat exchanger and controller.</p> <p>There is also an option for a unit with two pumps to additionally provide sanitary recirculation. See <b>Appendix VI</b> for more details.</p> <p>ThermaControl FWS Single Pump</p>	
CSB00038 CSB00039	<p><b>Low Loss Headers</b>            ThermaControl HEADER 2 way (insulated)            ThermaControl HEADER 3 way (insulated)</p>	
CSB00040	<p>Header to Pump Connector Set (2 Connections 1½ x 1")            [Set required with each pump set if used with Header]</p>	

RHI COMPLIANT HEAT METERS		
Order Code	Description of Package and Contents	Pictures
	<p><b>Superstatic 749</b>            Lithium Battery Powered (6 year life)            Open Collector Data / Pulse Output            1.5 metre PT500 Sensors and Pockets            0.8 metre Signal Cable (Remote Mounting)            BSP Union Fittings</p> <p>Various Sizes available as standard :</p>	
<b>SS749-01</b>	Qp0.6 (90°C) ½" BSPM Union (G ¾") 110mm	
<b>SS749-02</b>	Qp1.5 (90°C) ½" BSPM Union (G ¾") 110mm	
<b>SS749-03</b>	Qp1.5 (90°C) ¾" BSPM Union (G 1") 130mm	
<b>SS749-04</b>	Qp2.5 (90°C) ¾" BSPM Union (G 1") 130mm	
	<p style="text-align: center;"><b>ADDITIONAL OPTIONS / UPGRADES</b>  <b>ADD COST TO ABOVE PRICES</b></p>	
<b>OPT_01</b>	Power Supply : 12+1 Year Lithium Battery	
<b>OPT_02</b>	Heat Meter with 2 Pulse Inputs	
<b>OPT_03</b>	Cooling Meter Application	
<b>OPT_04</b>	Cooling Meter with 2 Pulse Inputs	
<b>OPT_05</b>	Heating / Cooling Meter	
<b>OPT_06</b>	Heating / Cooling Meter with 2 Pulse Inputs	
<b>OPT_07</b>	M-Bus, power supply over M-Bus Line Only 1 Battery	
<b>OPT_08</b>	Radio Supercom	
<b>OPT_09</b>	Radio wM-Bus (Wireless M-Bus – OMS)	



**Please Note : All our prices are quoted ex-works and ex-VAT.**

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