

Refrigerated/heated circulating baths » LT ecocool range

# LT ecocool energy efficient Refrigerated/heated circulating baths

A new range of innovative, eco-friendly, refrigerated heated circulating baths offering significant running cost savings whilst delivering powerful cooling. Consisting of two models, the LT ecocool range is supplied assembled as ready to use kits, complete with accessory hosing\*, clips and connectors as standard.

- Choice of two models, temperature range  $-25^{\circ}\text{C}$  to  $150^{\circ}\text{C}^+$  (model dependent)
- Industry leading 4 year warranty with Grant renowned service and support, no registration required
- Active cooling through the whole temperature range
- True energy saving of up to 80% against standard compressor units





\* Temperature range of hosing supplied:  $-40^{\circ}\text{C}$  to  $100^{\circ}\text{C}$  (can be cut to length as required). Supplied tubing 2 x 1.5m ID 9mm  $\varnothing$



## Applications:







- Pharmaceutical - mini pilot plant reactors
- Education - rotary evaporator cooling, replacement of running tap water cooling, immersing small samples, photometry, chromatography systems
- Industrial - QC testing, sample preparation, general cooling, reaction chemistry, temperature control, semi-conductor manufacturing, rheometry
- Food - refractometry
- Life-science - electrophoresis cooling
- High temperature cooling - active up to  $150^{\circ}\text{C}$

## Refrigerated/heated circulating baths » Models, options and accessories




LT ecocool refrigeration range – Models and specifications			LT ecocool 100	LT ecocool 150
			 <p>h: 640mm d: 430mm w: 245mm weight: 29kg</p>	 <p>h: 640mm d: 430mm w: 245mm weight: 29kg</p>
Temperature range	°C		-20 to 100	-25 to 150
Temperature stability	±°C		0.05	0.02
Flow rate (max)	L/min		17	14 - 22 (adjustable)
Pump pressure (max)	mbar		250	530
Tank volume	L		5	6
Working Area (d x w)	mm		118 x 154	
Min/Max liquid level	mm		85/145	130/145
Calibration points			2	5
Cooling power (typical)	@ 20°C	W	240	385
	@ 0°C	W	200	205
	@ -10°C	W	100	105
	@ -20°C	W	30	60
Programs			-	1 x 30 segments Labwise™ required
Communication interface			-	USB
Temperature probe socket			-	6 pin mini DIN
Display			4 digit LED	Full colour QVGA TFT
Languages			-	EN, FR, DE, IT, ES
Timer			1 min to 99 hrs 59 mins	
Temperature presets			3	
Alarms			High	High and low
Electrical power (max) W			2160/2070 (60/50 Hz)	2280/2760 (50-60 Hz)
Safety	120V/230V		Adjustable over temperature cut-out	
Ready to use kits			Assembled and supplied with standard tubing, insulation, clips and connectors	

## Refrigerated/heated circulating baths » Models, options and accessories

### Options and accessories

<b>Labwise™ PC software</b> (optional)			
Allows two-way communication for status display, programming and data capture (see page 3.1. for more information). USB cable provided	-		
<b>External probes</b>			
<b>PEP</b> plastic probe	-	•	•
<b>SEP</b> stainless steel probe	-	•	•
<b>Vertical turbine pumps</b> (optional) - when pump is fitted, available working area is reduced.			
Low noise, compact design. Supplied with pipe connections and special lid for fitting to tank, pipe bore 12.7 mm.			Required only where application demands a higher pressure than that delivered by the internal pump to maintain flow.
<b>VTP1-LT</b> maximum pressure 1000 mbar maximum flow 9 L/min			Note: The optional VTP pumps will transfer additional heat to the baths and reduce the net cooling power of the refrigeration unit. The above figures must be taken into consideration when choosing the refrigeration unit. when ordering a VTP pump, please specify which refrigeration base unit it is to be used with.
<b>VTP2-LT</b> maximum pressure 1650 mbar maximum flow 12 L/min			Note: Other sizes of heat exchange coil can be made to your specification, contact Grant for further information.
<b>Heat exchange coil</b>			
<b>CW5</b> Other sizes of heat exchange coil can be made to your specification, contact us for further information			Temperature range: 2°C above the temperature of the coolant Coil Øxl: 77x55mm Pipe bore inlet/outlet: 7mm
<b>Hose Kits</b>			
<b>HOSE100</b> General purpose hose kit: -40°C to 100°C <b>HOSE200</b> High temperature hose kit: -50°C to 200°C			Hose kit 2 x 2m, assembled with Optima™ pump outlet plate and simple hose clips, no tools required.

### High pressure pumps (optional)

			VTP pumps		Heat exchange coil
			VTP1-LT	VTP2-LT	CW5
					
Maximum pressure	water	mbar	1000	1650	-
Maximum flow	water	L/min	9	12	-
Pipe bore	inlet/outlet	mm	12.7	12.7	7
Electrical connection			10 amp IEC	10 amp IEC	-
Power consumption		W	30	40	-
Power output to liquid @ 20°C		W	15	22	-
Safety			thermal fuse	thermal fuse	-
Temperature range		°C	-	-	2°C above coolant temperature
Coil Øxl		mm	-	-	77 x 55