

Refrigerated / heating circulating baths » LT ecocool range

# LT ecocool™ energy efficient refrigerated / heating circulating baths

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

- n Choice of three models, temperature range -30°C to 200°C+ (model dependent)
- n Industry leading 4 year warranty with Grant renowned service and support, no registration required
- n Active cooling through the whole temperature range
- n True energy saving of up to 80% against standard compressor units



\* Temperature range of hosing supplied: -40 to 100°C (can be cut to length as required).  
 + LT ecocool™ 200 230V available 2016



**eco mode** optimises the cooling control needed, enabling rapid cool down when required

**True energy saving** against competitor units that only switch the compressor off

**Intuitive user interface**

**No-spill** valved front drain

**Built in Britain** to the highest specifications, 5 day dispatch, 4 year industry leading warranty

**Full colour** 5 language QVGA TFT display on both the ecocool 150 and ecocool 200 units

**Modern, sleek, attractive design**

**Thermostat and chiller work in harmony**, neither will operate alone, eliminating any danger of overheating or freezing




**Single front switch** for user convenience

**No side vents**, locate to suit the user, not the unit

- Applications:**
- n Pharmaceutical - Mini pilot plant reactors
  - n Education - Rotary evaporator cooling, replacement of running tap water cooling, immersing small samples, photometry, chromatography systems
  - n Industrial - QC testing, sample preparation, general cooling, reaction chemistry, temperature control, semi-conductor manufacturing, rheometry
  - n Food - Refractometry
  - n Life-science - Electrophoresis cooling
  - n High temperature cooling - Active up to 200°C

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

## LT ecocool™ refrigeration range – technical specification

		LT ecocool™ 100	LT ecocool™ 150	LT ecocool™ 200*	
		 29 kg h: 640 mm d: 430 mm w: 245 mm	 29 kg h: 640 mm d: 430 mm w: 245 mm	 29 kg h: 640 mm d: 430 mm w: 245 mm	
Temperature range	°C	-20 to 100	-25 to 150	-30 to 200	
Temperature stability	±°C	0.05	0.02	0.01	
Flow rate (max)	L/min	17	14 - 22 (adjustable)		
Pump pressure (max)	mbar	250	530	530	
Tank volume	L	5	6		
Calibration points		2	5		
Cooling power (typical)	@ 20°C	W	250	350	500
	@ 10°C	W	230	330	430
	@ 0°C	W	185	230	300
	@ -10°C	W	115	109	140
	@ -20°C	W	45	50	50
Programs		-	1 x 30 segments via Labwise™	10 x 100 segments	
Communication interface		-	USB		
Temperature probe socket		-	6 pin mini DIN		
Display		4 digit LED	Full colour QVGA TFT		
Languages		-	5 (EN, FR, DE, IT, ES)		
Weight	kg	29			
Timer		1 min to 99 hrs 59 mins			
Temperature presets		3			
Alarms		High	High and low		
Electrical power (max) kW	120V/230V	2.16/2.07 (60/50 Hz)	2.28/2.76 (50-60 Hz)	-/2.76 (50-60 Hz)	
Safety		Adjustable over temperature cut-out			
Ready to use kits		Assembled and supplied with standard tubing, insulation, clips and connectors			

\* available 2016

## Options and accessories

**Labwise™ PC software** (optional)

Allows two-way communication for status display, programming and data capture (see p. 3.1. for more information). USB cable provided


**External probes**
**PEP** plastic probe  
**SEP** stainless steel probe

**Vertical turbine pumps** (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.

**VTP1-LT**  
 maximum pressure 1000 mbar  
 maximum flow 9 L/min

**VTP2-LT**  
 maximum pressure 1650 mbar  
 maximum flow 12 L/min


Required only where application demands a higher pressure than that delivered by the internal to maintain flow.

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.

Note: Other sizes of heat exchange coil can be made to your specification, contact us for further information

**Heat exchange coil**
**CW5** 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 (mm): 77x55  
 Pipe bore inlet/outlet (mm): 7

**Hose Kits**
**HOSE100** General purpose hose kit: -40 to 100°C  
**HOSE200** High temperature hose kit: -50 to 200°C


Hose kit 2 x 2m, assembled with Optima™ pump outlet plate and simple hose clips, no tools required

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

## 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

# Optional accessories

Pump connectors (optional)	Part number
 <p>Replacement plastic pump inlet/outlet connector. Fits tubing 9mm inner dia. Temp range -50°C to 200°C</p>	<b>P-M6</b>
 <p>Replacement plastic pump inlet/outlet connector. Fits tubing 15mm inner dia. Temp range -50°C to 200°C</p>	<b>P-M11</b>
 <p>Metal pump inlet/outlet connector, dual seal super rapid 4mm. Fits semi rigid tubing 4mm outer dia. Temp range -20°C to 100°C</p>	<b>M-SR4</b>
 <p>Metal pump inlet/outlet connector, dual seal super rapid 6mm. Fits semi rigid tubing 6mm outer dia. Temp range -20°C to 100°C</p>	<b>M-SR6</b>
 <p>Metal pump inlet/outlet connector, dual seal super rapid 8mm. Fits semi rigid tubing 8mm outer dia. Temp range -20°C to 100°C</p>	<b>M-SR8</b>
 <p>Metal pump inlet/outlet connector, hose barb 7mm. Fits flexible tubing 7mm inner dia. Temp range -40°C to 120°C</p>	<b>M-HB7</b>
 <p>Metal pump inlet/outlet connector, hose barb 9mm. Fits flexible tubing 9mm inner dia. Temp range -40°C to 120°C</p>	<b>M-HB9</b>
 <p>Metal pump inlet/outlet connector, hose barb 12mm. Fits flexible tubing 12mm inner dia. Temp range -40°C to 120°C</p>	<b>M-HB12</b>
 <p>Metal pump inlet/outlet plate, 1/4 " BSP/G1/4 female. Temp range -50°C to 200°C</p>	<b>M-UC</b>
 <p>General purpose hose kit, includes 2 x 2m general purpose insulated hosing -40 to 100°C, assembled with LT ecocool™/Optima™ pump outlet plate and simple hose clips, no tools required</p>	<b>HOSE100</b>
 <p>High temperature hose kit, includes 2 x 2m high temperature insulated hosing -50 to 200°C, assembled with LT ecocool™/Optima™ pump outlet plate and simple hose clips, no tools required (illustrative image)</p>	<b>HOSE200</b>



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.