

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
	@ 10°C	W	230	330
	@ 0°C	W	185	230
	@ -10°C	W	115	109
	@ -20°C	W	45	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.			Required only where application demands a higher pressure than that delivered by the internal to maintain flow.
VTP1-LT 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.
VTP2-LT maximum pressure 1650 mbar maximum flow 12 L/min			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			30	40	-
Power output to liquid @ 20°C			15	22	-
Safety			thermal fuse	thermal fuse	-
Temperature range			-	-	2°C above coolant temperature
Coil ØxL			-	-	77 x 55

Optional accessories

Pump connectors (optional)		Part number
	Replacement plastic pump inlet/outlet connector. Fits tubing 9mm inner dia. Temp range -50°C to 200°C	P-M6
	Replacement plastic pump inlet/outlet connector. Fits tubing 15mm inner dia. Temp range -50°C to 200°C	P-M11
	Metal pump inlet/outlet connector, dual seal super rapid 4mm. Fits semi rigid tubing 4mm outer dia. Temp range -20°C to 100°C	M-SR4
	Metal pump inlet/outlet connector, dual seal super rapid 6mm. Fits semi rigid tubing 6mm outer dia. Temp range -20°C to 100°C	M-SR6
	Metal pump inlet/outlet connector, dual seal super rapid 8mm. Fits semi rigid tubing 8mm outer dia. Temp range -20°C to 100°C	M-SR8
	Metal pump inlet/outlet connector, hose barb 7mm. Fits flexible tubing 7mm inner dia. Temp range -40°C to 120°C	M-HB7
	Metal pump inlet/outlet connector, hose barb 9mm. Fits flexible tubing 9mm inner dia. Temp range -40°C to 120°C	M-HB9
	Metal pump inlet/outlet connector, hose barb 12mm. Fits flexible tubing 12mm inner dia. Temp range -40°C to 120°C	M-HB12
	Metal pump inlet/outlet plate, 1/4 " BSP/G1/4 female. Temp range -50°C to 200°C	M-UC
	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	HOSE100
	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)	HOSE200