

# Circulators

## Refrigeration Units, LT ecocool

**Grant**  
IN THE LABORATORY

Benchtop refrigeration units with built-in thermostatic controllers, stainless steel tanks and pumps providing a source of temperature controlled, refrigerated liquid for cooling applications, or as low temperature baths.

- ◆ Choice of model ranges:-
  - -20 to +100°C or -25 to +150°C
  - Tank volumes: 5 or 6 litres
- ◆ Active cooling throughout the whole temperature range
- ◆ High power (up to 500W) cooling available if required
- ◆ Controller includes digital display of set/actual temperature, three temperature pre-sets, 1 minute to 99 hour 59 minute timer and high (and low – CL120-70 only) temperature alarm settings
- ◆ “Eco” mode operation provides up to 80% energy saving compared to standard chillers with compressor on/off modes
- ◆ High pressure pumping up to 2 bar
- ◆ Adjustable overtemperature cut-out
- ◆ Model LT ecocool 150 additionally has a USB interfaces for remote control via the user’s computer using accessory Labwise software and DIN sockets for connection to external temperature probes

Catalogue No		CL120-45	CL120-70
Model		LT ecocool 100	LT ecocool 150
Temperature range	°C	-20 to +100	-25 to +150
Typical cooling power at 20°C	W	250	350
Stability at 20°C (using water)	±°C	0.05	0.02
Liquid flowrate	litres/minute	17	14 to 22 (adjustable)
Pump head pressure at 1 litre/minute	mbar	250	530
Calibration points		2	5
Customisable programmes (segments)		–	1 (30)
Temperature pre-sets		3	3
Alarms		High	High and low
Interface port		–	USB
Ext. temperature probe socket		–	6-pin mini DIN
Display		LED	Colour QVGA TFT
Dimensions			
D	mm	430	430
W	mm	240	245
H	mm	640	640
Weight	kg	28	28
Inlet/outlet connections	mm	Super seal, 9.5 diameter tubing ferrule, M16 or BSP— both models	
Reservoir capacity	litres	5	6
Supply requirements		230V 50Hz single phase supplies — both models	



CL120-45

### Refrigeration units, LT ecocool

As described. Supplied with built-in controller and pump, stainless steel tank, lid and connectors and adapters for super seal, tubing ferrule, M16 or BSP connections. For 230V 50Hz single phase supplies.

**CL120-45** LT ecocool 100

**CL120-70** LT ecocool 150

### Accessories

#### Labwise software

Allows remote set-up and programming of the thermostat controllers from the users’ PC, real-time temperature/time profiles, graphical representation of process to be displayed, logging of profiles and programme storage to disk. Requires Windows™ software. Supplied with connection cable.

**BJ189-75** Labwise software

#### Remote Temperature Probes

Pt1000 external temperature probes for use with thermostat controllers in remote heating/cooling applications. With 3 metres of cable.

**BJ242-20** TXPEP, fast response, nylon, 100mm x 4.5mm length x diameter

**BJ242-25** TXSEP, robust, stainless steel, 125mm x 5mm length x diameter

#### Racks

If used as conventional low temperature baths the refrigeration unit tanks will accept 1 x QR series rack - see BJ188-10 to BJ188-23.