CHILLERS

Ratek offers a range of refrigerated chillers to assist in the cooling of liquids to sub-ambient temperatures, ideal for cooling condenser coils and reactor vessels, or to simply replace a traditional ice-bucket. Both immersion coil and re-circulating models are available to suit different applications. When combined with a Ratek immersion circulator, precision sub-ambient (or sub-zero) temperature control can be achieved.

RC1

Immersion Coil Cooler

Add Cooling to Any Bath

It makes sense to utilise equipment for more than one job where possible, which is why the RC1 immersion coil cooler can be moved from bath to bath as required to deliver on-demand cooling. The coil can be dropped in and secured to any waterbath to provide cooling that can work in conjunction with a temperature controlled bath or thermoregulator for precise water temperatures below ambient. With 580 Watts of cooling power the RC1 can be used in both large and small tanks. All Ratek waterbaths can be made to size to accommodate the dip-coil without losing usable working area in the bath.

580 Watts cooling, -10° to +30°C operating range

RC4

Re-circulating Cooler with Tank

Circulate Externally

For external circulation including industrial applications, the RC4 delivers a pressurised refrigerated water supply through a closed loop system. The RC4 is ideal for cooling condenser systems, water jacketed devices and heat exchangers, including those found in Ratek OM15C and OM25 incubator shakers.

The RC4 includes a 12 litre reservoir with lid that can accommodate a Ratek thermoregulator to provide a precision temperature controlled water supply which can be maintained between -10°C and +30°C (4°C to 30°C factory default).

580 Watts cooling, -10° to +30°C, 7 lpm pump

CHILLER SPECIFICATIONS

	RC1	RC4
Cooling capacity	¼ hp air cooled, R134a refrigerant, average 580 Watts cooling	¼ hp air cooled, R134a refrigerant, average 580 Watts cooling
Thermostat	No	Adjustable low-temp safety cut-off (factory default is +4°C). For temperature control, the TH8000 is required.
Construction	304 stainless steel coil, chemical resistant plastic case	304 stainless steel tank, chemical resistant plastic case
Operating range	-10°C to +30°C (using suitable additives)	-10°C to +30°C (using suitable additives)
Pump flow rate	-	7 litres per minute at zero head
Dimensions	L170 x W72 mm coil, 1 metre arm, L460 x W320 x H340 mm overall	L275 x W200 x D200mm reservoir, L480 x W340 x H510mm overall
Power input	240V AC/410W	240V AC/450W
Nett weight	25 kg	27 kg

REFRIGERATED BATHS

For Working Directly In A Cold Bath

Flexible Cooling/Heating Options

Ratek's modular refrigerated baths allow you to configure a setup to meet your needs perfectly. With a range of immersion circulators to choose from, plus options for external re-circulation, you can configure a system to offer the features you need. Cooling can be added to the ITxxx range of standard insulated baths, or incorporated into custom sized baths to match the working area you require. Simply choose a bath, an immersion circulator and add the RC1 cooler. Adding external re-circulation ports also allows for a dual-purpose chilled bath.

SUGGESTED CONFIGURATIONS

		ORDER CODES				
Application, I want to…	Usable Opening (mm)	Bath	Bridge	Lid	Circulator	Chiller
Cool containers to below ambient temperatures	L352 x W300 x H200	IT2400	IT2400BC	IT2400FLB	TH8000	RC1
Heat/cool vessels whilst changing temperatures automatically over time	L352 x W300 x H200	IT2400	IT2400BC	IT2400FLB	TH8500	RC1
Cool containers directly, and optionally send cold water externally	L352 x W300 x H200	IT2400	IT2400BPC	IT2400FLB	TH8000	RC1

REFRIGERATED CIRCULATION

Send Cold Temperature Controlled Water Around An External Loop

Precision Controlled External Circulation

For applications where a constant water temperature is required to be circulated around an external system, such as a heat exchanger or condenser coil, the RC4 in combination with a Ratek immersion circulator is the ideal solution. With a wide range of immersion circulators available with different control and alarm features, the system can be supplied with basic digital temperature control right through to advancing temperature ramping and profiling for delivering automated temperature changes over time.

SUGGESTED CONFIGURATION

	ORDER CODES		
Application, I want to…	Temperature Range	Circulator	Chiller
Send sub-ambient temperature water around an external loop	-10°C to +30°C	TH8000	RC4
Send sub or above ambient water around an external loop, whilst automatically changing temperature	-10°C to +30°C	TH8500	RC4