



CB100



CF302LA  
CF312LA



CF802



CA301



CA801

## Water Circulator (Chiller)

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#### Purpose

Supplies a source of temperature controlled fluid, typically water, which removes heat from a process

#### Benefits

Keeps water in the condenser at a stable low temperature thereby creating ideal conditions for collecting the maximum amount of solvent

### Cold Trap

#### Purpose

Efficiently collects moisture and harmful vapors by trapping them in the container and keeping them from reaching the vacuum pump

#### Benefits

##### Protects vacuum pumps

For oil-sealed pumps, collection of vapors is critical to prevent them from getting into the vacuum pump where they would condense and contaminate the pump's oil which will eventually cause loss of efficiency or irreparably damage pump

##### Protects the environment

For dry pumps, collection of vapors makes the evaporation system a closed system, preventing vapors from passing through the vacuum pump and into the environment

##### Increases evaporation rate

Vapors are collected as a frozen solid and are therefore not condensed inside the vacuum tubing, which would slow evaporation

### Combination Example

#### In combination with a rotary evaporator



CF302LA + RE Rotary Evaporator + RT200 + Vacuum Pump

#### In combination with a vacuum oven



DP63C Vacuum Oven + CA801 + Vacuum Pump

### Specifications

Type	Series	Temperature range	Dehumidifying capacity	Capacity (L)	Features	Application	Recommended in combination with
Water Circulator (Chiller)	CB100	-10°C to 80°C	N/A	3.4L	<ul style="list-style-type: none"> <li>● Closed circulation system</li> <li>● Environment friendly coolant used for refrigeration</li> <li>● Less energy use and less cooling capacity loss by fixing the heat resistant lead</li> <li>● Can connect four (4) Rotary Evaporators when using CF802</li> </ul>	<ul style="list-style-type: none"> <li>● Used for many cooling applications</li> </ul>	Viscometer Spectrofluorometer
	CF302LA CF312LA	-20°C to 30°C <i>no heating function</i>	N/A	3.9L			
	CF802		N/A	15.5L			Rotary evaporator
Cold Trap	CA301	<i>Max lowest temperature</i> -45°C	Max 0.9 kg (water type liquid)	4L	<ul style="list-style-type: none"> <li>● A worry-free system which can be operated without adding dry ice or liquid nitrogen</li> <li>● Uses environment friendly and CFC-free refrigerant</li> <li>● Standard equipped with stainless steel condenser / option for glass trap for corrosives</li> <li>● CA801 designed with defrosting mechanism (hot gas bypass)</li> <li>● Space saving and highly mobile on wheels, equipped with stoppers in the front caster wheels</li> </ul>	<ul style="list-style-type: none"> <li>● Large amount of outgassing or contaminants that may be present</li> <li>● Large amount of liquid that must be removed from the vacuum environment (e.g. freeze drying)</li> </ul>	Vacuum oven Freeze dryer
	CA801	<i>Max lowest temperature</i> -85°C	Max 1.0 kg (water type liquid)	4L			