**RECIRCULATING LOOP CHILLER**

**MODEL** ............................................. PCP or POC-33-3

**DESCRIPTION**
Recirculating chillers recirculate a clean coolant at constant temperature and pressure to increase the stability and consistency of water cooled machines and instruments. Air cooled chillers eliminate the use of tap water and prevent clogging and corrosion of small diameter heat exchangers due to rust and scale build-up.

**PCP - CLOSED LOOP CHILLERS**
Use a storage type cooling tank to provide close temperature control of recirculating coolants. The tank is sealed to prevent coolant evaporation and fouling, and supplied with a liquid level gauge, fill port and clean out. The pump recirculates coolant at constant pressure and flow.

**POC - OPEN LOOP CHILLERS**
Pump liquid from an open tank or sump, through the chiller and back to the sump. An adjustable thermostat senses the make up liquid temperature, cycling the chiller to insure constant temperature in the sump.

**SPECIFICATIONS**

**COOLING CAPACITY:**
- Btu/Hr .................................................................3,500
- Watts .................................................................1,026

**Rating Conditions**
- Coolant Discharge Temperature ...........................................68°F (20°C)
- Ambient Temperature .....................................................90°F (32°C)

**COMPRESSOR HP** .................................................1/3
Lifetime lubricated, welded hermetic type supplied with condenser as specified (see below), charging port, expansion valve and dehydrator.

**STANDARD CONDENSERS** (Designated by suffix)
- A Fan cooled condenser inside chiller housing.
- W Water cooled condenser for hookup to city or tower water

**COOLING TANK & EVAPORATOR CAPACITY** ..........................2 gal. (7.6 liters)
Welded all stainless steel shell and immersion coil evaporator. Tank tested for 125# working pressure. Insulated with closed cell thermo-elastomer with an R factor of 3.7 and enclosed in a rust-proofed steel jacket.

**PUMP MOTOR HP** .................................................1/14
- Capacity .................................................................4 GPM @ 5 PSI (15 LPM @ 0.3 bar)
- Plastic, seal-less magnetic drive, centrifugal pump mounted on rubber pads over a stainless steel condensation tray. All piping and fittings plastic, copper, or brass and insulated with closed cell thermo-elastomer with an R factor of 3.7. Pump supplied with manual on/off switch.

**THERMOSTAT ADJUSTABLE RANGE** ..............................40° to 90°F (5° to 32°C)
Temperature Stability .........................................................±1.5°F (0.8°C)

**CABINET:** Enameled aluminum panels with stainless steel corner legs and top. Panels removable for access to all components.

**SUPPLY POWER** ....................................................115 or 230/60/1
FLA AMPS MAXIMUM .........................................................10 or 5

**PLUMBING CONNECTIONS IN & OUT** .........................1/2” FPT (13 mm)

**SHIPPING WEIGHT** ..................................................145 Lbs (65 Kg)
**PCP-33-3**

**STANDARD MODELS— Suffix A & W**

**LEGEND**
1. Temperature Control
2. Level Gauge
3. Fill Port
4. Coolant Return
5. Coolant Discharge
6. On/Off Switch
7. Electrical Connection

Chiller dimensions and shipping wts. may vary depending on options. All information given on this bulletin is for general use only. Confirm specifications with factory for your specific requirement.

**NOTES**

VENTILATION PANELS: Standard models — air intake at right end and air discharge at rear on A models. Allow 12” (30 cm) clearance at these ends.

REMOVABLE SERVICE PANELS: Front & rear on all models

SERVICE ROOM: Allow 16” (40 cm) at left end and 22” (55 cm) at front for service.

INSTALLATION & SERVICE: Arranging for installation, start-up and service is the responsibility of the purchaser.

WARRANTY: All parts are covered F.O.B. factory for 15 months from date of shipment.

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**CHILLER CAPACITY**

<table>
<thead>
<tr>
<th>Kw</th>
<th>BTU/HR</th>
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<tbody>
<tr>
<td>1.0</td>
<td>3,500</td>
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<tr>
<td>0.9</td>
<td>3,300</td>
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<tr>
<td>0.8</td>
<td>3,200</td>
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<tr>
<td>0.5</td>
<td>2,300</td>
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<tr>
<td>0.3</td>
<td>1,700</td>
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<tr>
<td>0.15</td>
<td>1,100</td>
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**AMBIENT TEMP**

- 80°F 27°C
- 90°F 32°C
- 100°F 38°C
- 110°F 43°C

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**PUMP CAPACITY CHART**

<table>
<thead>
<tr>
<th>PUMP MODEL</th>
<th>GPM at PRESSURE SHOWN</th>
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<tbody>
<tr>
<td></td>
<td>psi</td>
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<tr>
<td>ft</td>
<td>7</td>
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STD: 1/14C

<table>
<thead>
<tr>
<th>OP: 1/8C</th>
</tr>
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<tbody>
<tr>
<td>13</td>
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</table>

Standard pump: 1-1/4 hp centrifugal

Optional pumps are available

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* For outlet temperatures below 34°F - use appropriate antifreeze