**TYPICAL CHILLER**

**APPLICATIONS**
- Jacket Cooling
- Lasers
- Induction Heaters
- Machine Tools
- Welders
- MRI Equipment
- CAT Scans

**FEATURES**
- Energy Saving Design
- Complete Temperature Control
- Welded Stainless Steel Cooling Tank
- Uses HFC Refrigerant
- Unlimited Options for Any Application

**SPECIFICATIONS**
- **COOLING CAPACITY** @ 68°F [20°C] discharge & 90°F [32°C] ambient

**MODEL** ........................................... **PCP or POC-500G**

**HERMETIC SCROLL MODELS**

**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, with immersion coil evaporator, 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, which is adjustable by turning a manual bypass valve.

- **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.

**NOTE:** FLA may vary depending on options. See MCA and MOP ratings on as-built unit.

**COMPRESSOR:** HP .................................................. 5

Lifetime lubricated, hermetic scroll type supplied with high/low pressure stat, freeze control, head and suction gauges, pump down solenoid valve, thermostatic expansion valve, refrigerant sight glass and dehydrator.

**STANDARD CONDENSERS** [Designated by suffix]
- A ........... Fan cooled condenser for indoor installation.
- AR ......... Remote Air cooled condenser furnished separately for mounting on roof.
- W ............ Water cooled condenser for hookup to city or tower water
- A-WP ....... Self-contained air cooled condenser; complete unit made weather-resistant for outdoor installation

**COOLING TANK & EVAPORATOR:** Capacity ............... 50 gal [190 l]
Welded stainless steel shell and immersion coil evaporator.
Tank tested at 250# for 125# working pressure. Supplied with liquid level gauge and insulated with closed cell thermo-elastomer with an R factor of 3.7.

**PUMP:** HP .................................................. 1
Capacity .................................................. 20 GPM [76 LPM] @ 30 psi
Stainless steel centrifugal pump mounted on rubber pads over a stainless steel condensation tray and supplied with unions and service valves and manually adjustable bypass valve. All piping and fittings brass, copper, or bronze and insulated with closed cell thermo-elastomer with an R factor of 3.7.

**THERMOSTAT:** Adjustable Range ............... 40°C to 90°F [5°C to 32°C]
Temperature Stability .................................. ±1.5°F [1°C]

**CABINET:** Enameled aluminum panels with stainless steel corner legs and top on a welded angle iron frame. Panels removable for access to all components.

**SUPPLY POWER:** ................................ 208-230/60 or 460/60/3
**PLUMBING CONNECTIONS** IN & OUT ............... 1” [13mm] MPT
NOTE: Chiller dimensions and shipping wts. may vary depending on options - confirm with factory.

STANDARD OPERATING CONDITIONS

OUTDOOR AMBIENT

-20°F to 100°F [-29°C to 38°C]

OPTIONAL OPERATING CONDITIONS

OUTDOOR AMBIENT

Up to 110°F [43°C]
Up to 120°F [49°C]
Down to -30°F [-34°C]

NOTE: Higher ambient options may affect unit dimensions.

REMOTE CONDENSER

Use w/Standard Models - Furnished complete w/controls for operating in ambient temperatures to minus 20°F [-29°C], consult factory for specs. Connections for remote condenser are at right end of chiller cabinet.

PUMP CAPACITY

<table>
<thead>
<tr>
<th>MODEL*</th>
<th>GPM @ PRESSURE SHOWN</th>
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<tbody>
<tr>
<td></td>
<td>psi</td>
</tr>
<tr>
<td>STD-1C</td>
<td>ft</td>
</tr>
<tr>
<td>OP-3/4C</td>
<td>ft</td>
</tr>
<tr>
<td>OP-1-1/2C</td>
<td></td>
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<tr>
<td>OP-1/2T</td>
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<tr>
<td>OP-3/4T</td>
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</tbody>
</table>

* Standard pump is 1HP centrifugal. Optional pumps (OP) include centrifugal (C) or turbine (T) models. All turbine pumps include an adjustable pressure relief bypass in lieu of a manual bypass valve.

CHILLER CAPACITY @ 90°F (32°C)

<table>
<thead>
<tr>
<th>KW</th>
<th>BTU</th>
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<tbody>
<tr>
<td>29.3</td>
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<tr>
<td>26.9</td>
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<tr>
<td>23.4</td>
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<tr>
<td>6.4</td>
<td>20,000</td>
</tr>
<tr>
<td>3.6</td>
<td>10,000</td>
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NOTE: Information given in this bulletin for general use only. Confirm exact specs with factory for your specific requirements.