**Filtrine Mfg. Co. • 15 Kit St. Keene, NH 03431 USA**  
800-930-3367 • 603-352-5500 • FAX 603-352-0330  
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**RECYCLING LOOP CHILLERS**

**MODEL.................PCP or POC-1500S-180**

**FIELD SERVICEABLE HERMETIC MODELS**

**DESCRIPTION**  
Filtrine’s PCP and POC chillers recirculate a clean coolant at constant temperature and pressure to increase the stability and consistency of water cooled machines and instruments. Choose from different condenser configurations to match your specific site requirements.

- **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.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>COOLING CAPACITY: BTU/HR</th>
<th>180,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watts</td>
<td>52,755</td>
</tr>
<tr>
<td>Rating Conditions</td>
<td></td>
</tr>
<tr>
<td>Coolant Discharge Temperature</td>
<td>68°F [20°C]</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>90°F [32°C]</td>
</tr>
</tbody>
</table>

**COMPRESSOR: HP** 15

Field serviceable semi-hermetic type supplied condenser as specified below, high/low pressure stat, freeze control, head and suction gauges, oil pressure switch, pump down solenoid valve, thermostat 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 100 gal [380 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** 2

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°F to 90°F [5°C to 32°C]  
Temperature Stability ±1.5°F [1°C]  

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

**SUPPLY POWER:** 208 - 230/60/3 or 460/60/3  
FLA Amps Maximum: 58 or 29

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

**PLUMBING CONNECTIONS**

**IN & OUT** 1-1/2" [38mm] MPT

**SHIPPING WEIGHT** Chart on reverse
TABLE 1

<table>
<thead>
<tr>
<th>Filtrine Chiller Model Number</th>
<th>W (in)</th>
<th>D (in)</th>
<th>H (in)</th>
<th>Shipping Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STD-2C</td>
<td>104</td>
<td>264</td>
<td>52</td>
<td>132</td>
</tr>
<tr>
<td>OP-3C</td>
<td>104</td>
<td>264</td>
<td>30</td>
<td>76</td>
</tr>
<tr>
<td>PCP or POC 15005-180-AR</td>
<td>104</td>
<td>264</td>
<td>30</td>
<td>76</td>
</tr>
<tr>
<td>PCP or POC 15005-180-A-WP</td>
<td>104</td>
<td>264</td>
<td>52</td>
<td>132</td>
</tr>
</tbody>
</table>

NOTE: Chiller dimensions and shipping weights may vary depending on options, confirm with factory.

STANDARD OPERATING CONDITIONS:

OUTDOOR AMBIENT
-20° to 100°F [-29° 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 with Standard Models – Furnished complete with 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>psi</td>
</tr>
<tr>
<td></td>
<td>ft</td>
</tr>
<tr>
<td>STD-2C</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>30</td>
</tr>
<tr>
<td>OP-3C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>58</td>
</tr>
</tbody>
</table>

* Standard pump is 2HP, centrifugal (C). Optional pumps (OP) are available.

NOTE: Information given in this bulletin for general use only. Confirm exact specs with factory for your specific requirements.

REMOVABLE SERVICE PANELS
Front and rear on all models. Manufacturer recommends 36" clearance at front for service.

CHANNEL SKIDS
Channel skids project 2" [5cm] front and rear. Allow additional 2" [5cm] to height for channel skids. Center of 5/8" [16mm] mounting holes located 6" [15cm] from chiller end and 1" [2.5cm] from chiller edge front and rear.

NOTE: Manufacturer recommends 12" minimum clear space opposite all ventilation panels.

CHILLER CAPACITY

L - LOW OUTLET temperature range
NORMAL OUTLET temperature range

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

NOTE: Information given in this bulletin is for general use only. Confirm exact specifications with factory for your specific requirements.

NOTE: Chiller dimensions and shipping weights may vary depending on options, confirm with factory.

STANDARD MODELS: Suffix A, AR, W & A-WP

LEGEND
1. Air Vent
7. To Remote Condenser [AR Models]
2. Fill Port
8. From Remote Condenser [AR Models]
3. Coolant Return
9. Electrical Connection
4. Coolant Discharge
10. Channel Skids
5. Control Panel
6. Gauges

VENTILATION PANELS
Standard A and A-WP models: air intake at rear, air discharge out front and right end.
LP models: air intake rear, air discharge out both ends and top.

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Filtrine is ISO 9001:2015 CERTIFIED
PRODUCT LINE            APPROVED              MARK AVAILABLE
MADE IN USA

REV. 05.03.19