ONE-PASS CHILLER

MODEL............................................. PC-500S-62

DESCRIPTION
A completely packaged liquid chiller designed for applications where the liquid to be cooled passes through the chiller only once before either being added as an ingredient to a product or fouled by the product it is cooling. It is most important that a one-pass chiller be able to chill liquids at high and low flow rates without significant pressure drop or danger of freeze up, and yet have close, accurate temperature control.

Filtrine PC chillers are specifically designed for one-pass cooling. A high transfer immersion coil evaporator supplies maximum capacity at any flow rate with no pressure drop. Storage tank design permits close temperature control without short-cycling.

SPECIFICATIONS

COOLING CAPACITY

<table>
<thead>
<tr>
<th>BTU/HR</th>
<th>62,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watts</td>
<td>18,166</td>
</tr>
</tbody>
</table>

Rating Conditions

- Coolant Discharge Temperature: 68°F (20°C)
- Ambient Temperature: 90°F (32°C)
- Flow rate: 10 gpm (38 lpm)

COMPRESSOR HP: 5

Field serviceable semi-hermetic type supplied with high/low pressure stat, freeze control, head and suction gauges, oil pressure switch, pump down solenoid valve, thermostatic expansion valve, refrigerant sight glass and dehydrator.

STANDARD CONDENSERS (Designated by suffix)

- A - Fan cooled condenser for indoor installation
- W - Water cooled condenser for hookup to city or tower water
- AR - Remote air cooled condenser for outdoor installation
- A-WP - Air cooled, weather-resistant condenser for outdoor installation

COOLING TANK & EVAPORATOR

- Capacity: 50 gal (190 ltr)
- Welded stainless steel shell and immersion coil evaporator.
- Tank tested at 250# for 125# working pressure and insulated with closed cell thermo-elastomer with an R factor of 3.7 and enclosed in rust-proof steel jacket.
- THERMOSTAT: Adjustable Range: 40° to 90°F (5° to 32°C)
- Temperature Stability: ± 1.5°F (1°C)

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

SUPPLY POWER: 208-230/60/3 or 460/60/3

FLA Amps Maximum: 16 or 8

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

PLUMBING CONNECTIONS IN & OUT: 1” (25 mm) FPT

LIFETIME WARRANTY Consult factory for details.

ONE YEAR WARRANTY All parts covered FOB jobsite for [12] months from start-up date or [15] months from date of shipment, whichever comes first. Consult factory for details.

START-UP and FIRST YEAR SERVICE Filtrine can arrange start-up and first year service on all parts and labor. Regular maintenance, to help prevent costly down-time, is available on a contractual basis. Consult factory for details.
NOTE: Chiller dimensions and shipping wts. may vary depending on options - confirm with factory.

LEGEND
1. Gauges
2. Control Panel
3. Coolant In
4. Coolant Discharge
5. Electrical Connection
6. To Remote Condenser (AR Models)
7. From Remote Condenser (AR Models)
8. Channel Skids

VENTILATION PANELS
Standard models: air intake at rear, air discharge at right end and front. Recommend 3 ft. clearance at front for service and 18 in. clear space opposite all ventilation panels.

REMOVABLE SERVICE PANELS
Front & rear on all models

CHANNEL SKIDS
Channel skids project 2" (5 cm) front and rear. Center of mounting holes located 6" (15 cm) from chiller end and 1" (2.5 cm) from chiller edge front and rear. Skids add 2" (5 cm) to overall height.

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 or SSD 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.

NOTE: Drawings are composites of various models to demonstrate plumbing locations. Confirm footprint with factory.

GPH - CHILLER COOLING CAPACITY

<table>
<thead>
<tr>
<th>CHILLER MODEL NUMBER</th>
<th>MAKE UP WATER</th>
<th>CHANGE IN TEMPERATURE THROUGH CHILLER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>5°F</td>
</tr>
<tr>
<td>PC-500S-62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90°F</td>
<td>=</td>
<td>360</td>
</tr>
<tr>
<td>80°F</td>
<td>1560</td>
<td>120</td>
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<tr>
<td>70°F</td>
<td>1440</td>
<td>240</td>
</tr>
<tr>
<td>60°F</td>
<td>1260</td>
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<tr>
<td>50°F</td>
<td>1020</td>
<td>300</td>
</tr>
<tr>
<td>40°F</td>
<td>420*</td>
<td>180*</td>
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* Agitation pump required

CHILLER CAPACITY

<table>
<thead>
<tr>
<th>Kw</th>
<th>BTU/hr</th>
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<tbody>
<tr>
<td>29.3</td>
<td>100,000</td>
</tr>
<tr>
<td>26.3</td>
<td>90,000</td>
</tr>
<tr>
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<tr>
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<tr>
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<td>14.6</td>
<td>50,000</td>
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<tr>
<td>11.7</td>
<td>40,000</td>
</tr>
<tr>
<td>9.8</td>
<td>30,000</td>
</tr>
<tr>
<td>8.8</td>
<td>20,000</td>
</tr>
<tr>
<td>7.9</td>
<td>10,000</td>
</tr>
</tbody>
</table>

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