envirosep PAC

PACKAGED AIR-COOLED CHILLER SYSTEMS

Envirosep has led the way in packaged systems by offering designs and manufacturing integrated solutions for fluid handling, heat transfer and energy recovery for over 20 years. We strive to provide the most cost effective and energy efficient engineered packaged air-cooled chiller systems to our customers.

Our engineered, packaged air-cooled chiller systems, envirosep PAC, are UL-listed, factory engineered and manufactured systems utilized in conventional building cooling systems using chilled water as the cooling medium. Custom engineering by Envirosep enables the owner to specify key components from a range of manufacturers that meet performance needs. Our knowledgeable engineering staff is available to assist facility owners or engineers in conceptual development and planning.

FEATURES & BENEFITS

- The envirosep PAC is factory manufactured, tested and UL-listed ensuring quality and NEC code compliance
- Sole source manufacturing responsibility with just one manufacturer to coordinate
- All components required to integrate a stand-alone air cooled package are included, eliminating site coordination and negating start-up irregularities.
- The envirosep PAC provides a lower cost alternative to site-built air cooled systems while avoiding costly project delays
- The envirosep PAC is controlled by a non-proprietary packaged system optimization controller, providing the best system operating efficiency
- Speeds up installation and start-up which provides significant savings to contractors, engineers and facility owners
- Factory hydrostatic and operational testing performed prior to shipment
- Envirosep provides a dedicated project manager to coordinate all aspects of production, delivery, and site installation assistance

SYSTEM DESIGNS INCLUDE:

- Energy-efficient scroll or screw chillers fully mounted on common base
- Fully designed pumping systems – either for secondary distribution or variable primary
- Hydronic accessories-air separators, expansion tanks, & buffer tanks
- Variable frequency drives (VFD) & multi-chiller controller with touchscreen interface
- Differential pressure, temperature & flow transmitters provided as needed
- Communication interface to Building Management System (BMS)
- Outdoor rated electrical and pumping equipment

PACKAGED SYSTEM OPTIONS INCLUDE:

- Stand-alone hydronic packages when the pump is integrated with the chiller
- Internet connectivity for remote system monitoring
- glycol feed systems
- Chemical treatment
- Environmentally-controlled building enclosure with single-point power connection for outdoor use
- Insulation available
HYDRONIC ACCESSORIES PACKAGE OPTION

The envirosep PAC includes the option for a stand-alone hydronics package when the chiller contains an integrated pump(s). Our accessories package may include: VFDs, air separators, expansion tanks (range from 6 to 211 gallons) and buffer tanks (range from 120-1040 gallons). All accessories are mounted to a common base, are outdoor rated or may be enclosed in environmentally-controlled building with single point power for outdoor use.

PUMPING SYSTEM PACKAGE OPTION

The envirosep PAC includes the option for a stand-alone pumping system package which can be installed next the the air-cooled chiller. Our pumping system packages include energy efficient pumps that best meets the application or is specified. It may include hydronic accessories such as air separators, chemical shot feeders, expansion tanks and buffer tanks. All pumps and accessories are mounted to a common base, are outdoor rated or may be enclosed in environmentally-controlled building with single point power for outdoor use.

AIR-COOLED CHILLER PACKAGE

The envirosep PAC may be provided as a single, UL listed, complete package system shipped in one-section. Components include: air-cooled chiller, pumps, hydronic accessories, piping, valves and fittings, controls, power panel, and VFDs with components rated for outdoor use. All components are mounted on a common base. The envirosep PAC may include the option of an enclosed pump accessory house with chiller all on one common base. One-section air-cooled chiller plants provide for the most simple installations as minimal field piping and power connections are required.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>SYSTEM CONDITIONS</th>
<th>RANGE</th>
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</thead>
<tbody>
<tr>
<td>cooling load per chiller (tons)</td>
<td>40 ≤ 400</td>
</tr>
<tr>
<td>chilled water temperature (°F)</td>
<td>28 to 60</td>
</tr>
<tr>
<td>standard power (V)</td>
<td>460 (other available)</td>
</tr>
<tr>
<td>working pressure (psig)</td>
<td>100 to 300</td>
</tr>
<tr>
<td>working temperature (°F)</td>
<td>&lt; 140</td>
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</tbody>
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<table>
<thead>
<tr>
<th>TYPICAL SYSTEM PERFORMANCE</th>
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<tbody>
<tr>
<td>CHILLER TYPE</td>
</tr>
<tr>
<td>air-cooled screw</td>
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<tr>
<td>air-cooled scroll</td>
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</tbody>
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1. Chilled water supply temperature = 42°F
2. Outdoor air temperature = 95°F