Description
Packaged condenserless liquid chillers are factory wired, piped, and charged with nitrogen holding charge.

Features
Cooler is mechanically cleanable shell-and-tube type with removable heads. It is tested and stamped in accordance with ASME Code for a refrigerant working side pressure of 235 psig (1620 kPa) and a minimum water side pressure of 300 psig (2068 kPa) (250 psig [1720 kPa] in Canada).
Compressor is semi-hermetic twin screw design with refrigerant gas cooled motor and integral oil filter and discharge gas muffler.
Complete thermal and electrical protection is provided.
Automatic circuit lead/lag.

Each refrigerant circuit includes oil separator, high side pressure relief device, liquid and discharge line shutoff valve, filter drier, moisture indicating sight glass, expansion valve.
Microprocessor control includes keypad, system status (including temperatures, pressures and % loading) and the alarm conditions.
Capacity control based on leaving chilled water temperature with return water temperature sensing.
7-day time scheduling of pump(s) and chiller.

Performance Data

<table>
<thead>
<tr>
<th>Unit</th>
<th>Capacity</th>
<th>Compressor Input Power</th>
<th>Unit Input Power</th>
<th>Minimum Capacity %</th>
<th>Total Heat Rejection</th>
<th>Saturated Condensing Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>kW</td>
<td>kW</td>
<td>%</td>
<td>Tons</td>
<td>F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cooler</th>
<th>Cooler Fluid</th>
<th>Entering Fluid Temperature</th>
<th>Leaving Fluid Temperature</th>
<th>Flow Rate</th>
<th>Pressure Drop</th>
<th>Fouling Factor</th>
</tr>
</thead>
</table>

Electrical Data

<table>
<thead>
<tr>
<th>Power Supply to Unit</th>
<th>Volts</th>
<th>Ph</th>
<th>Hz</th>
<th>Control Circuit Fuse Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply to Control Circuit</td>
<td>Volts</td>
<td>Ph</td>
<td>Hz</td>
<td>Maximum Instantaneous Current Flow</td>
</tr>
<tr>
<td>Minimum Amps Circuit 1</td>
<td>Volts</td>
<td>Ph</td>
<td>Hz</td>
<td>Minimum Amps Circuit 2</td>
</tr>
<tr>
<td>Maximum Fuse Amps Circuit 1</td>
<td>Volts</td>
<td>Ph</td>
<td>Hz</td>
<td>Maximum Fuse Amps Circuit 2</td>
</tr>
</tbody>
</table>

Factory-Installed Options

Field-Installed Accessories
CERTIFIED DIMENSION PRINT

NOTES:
1. OPERATING WEIGHT INCLUDES WEIGHT OF WATER AND REFRIGERANT.
2. D DENOTES CENTER OF GRAVITY.
3. DIMENSIONS IN ( ) ARE IN MILLIMETERS AND WEIGHT IN ( ) ARE IN KILOGRAMS.
4. 36" (914.4) RECOMMENDED SERVICE CLEARANCE AROUND MACHINE.
5. VICTULINE NOZZLES ARE STANDARD ON ALL MODELS.
FLOW SWITCH FACTORY INSTALLED IN COOLER OUTLET VICTULINE NOZZLE.

DETAIL B
FOR NOZZLE MEASUREMENTS

3/4" NPT BELLEFF CONN. FEMALE
26" PRESSURE RELIEF VENT CONN. TIGHTEN
2 1/2" DISCONNECT COUPLING NOS.
1/4" NPT BELLEFF CONN. TIGHTEN
1/2" NOZZLE MOUNT. VICTULINE NOS.
2 1/2" DISCONNECT COUPLING NOS.

DETAIL "C" NOzzle Entry

DOOR SWING CLEARANCE

DATE: 09/19/02
SWEEPERs: 06/13/00
HERMETIC SCREW LIQUID CHILLING PACKAGE WITH COMFORT LINK™ CONTROLS-3044A.116, 129, 136, 146
304X302307 REV: 2.0
NOTES:
1. DIMENSIONS IN ( ) ARE IN MILLIMETERS.
2. 36" (914 mm) RECOMMENDED SERVICE CLEARANCE AROUND MACHINE.
3. UNDED PORTION OF PIPING OPENINGS TO BE CLOSED AND INSULATED FOR ACOUSTIC PURPOSES. USE FILLER PANEL IN ACCESSORY PACKAGE.
4. FIELD FABRICATED HOLES MUST BE CLOSED AND INSULATED FOR ACOUSTIC PURPOSES.
5. RECOMMENDED ELECTRICAL POWER SUPPLY AREA. NOTCH TO SUIT AND COVER INSULATE REMAINING OPEN AREA FOR ACOUSTIC PURPOSES.
6. RECOMMENDED CONTROL WIRING ENTRY AREA. NOTCH TO SUIT AND COVER INSULATE REMAINING OPEN AREA FOR ACOUSTIC PURPOSES.
7. RECOMMENDED ACCESS RELIEF VALVE VENT LINE AND SOME COMPRESSOR RELIEF VENT LINE ENTRY AREA. COVER INSULATE AND COVER LINE ENTRY SIDE. NOTCH ENCLOSURE TO SUIT PARTICULAR INSTALLATION.
8. HOLES IN DRAWING ARE TYPICAL AND REPRESENTS JOHNSON CRN SITE IN THE D. (2") 00 ACCESSORY.
9. SOUND ENCLOSURE ACCESSORY SHOULD BE ALIGNED TO THE CENTER LINES OF THE CONTROL PANEL ACCESS AND PIPING OPENINGS.

SEE NOTE #3 RECOMMENDED ELECTRICAL POWER LIV AY AREA

SEE NOTE #4 RECOMMENDED CONTROL WIRING ENTRY AREA

SEE NOTE #5

SEE NOTE #6

SEE NOTE #7

SEE NOTE #8

SEE NOTE #9

SEE NOTE #10

DATE
06/31/00

SOUND ENCLOSURE HERMETIC SCREW LIQUID CHILLING PACKAGE WITH COMFORT LINK™ CONTROLS

30KX02354

01/27/00

46.75 (1186)

6.75 (171)

20X." Typ

6.25 (160)

54.40 (1380)

54.40 (1380)

54.40 (1380)
FIELD WIRING DIAGRAM

1. Factory wiring is in accordance with national electrical code inc. field modifications or additions must be in compliance with all applicable codes.

2. Wiring for main field supply must be rated 75°C minimum, use copper for all units.

3. Power for control circuit should be supplied from a separate source (except 380/415V units) through a field supplied disconnect #1 with 15 amp maximum protection for 1/5 volt control circuit and 15 amp maximum protection for 230 volt control circuit. Connect control circuit power to terminals 1 and 2 of the control circuit conductors for all units must be copper only. Control circuit power is factory wired for 380/415V units.

4. Terminals 14 thru 16 of T15 are for field external connection for remote on/off the contact must be rated for dry circuit application capable of handling a 240AC load up to 50 ma.

5. Terminals 1 & 2 of T15 are for chilled water pump interlock (CWP) functions. If added, chilled water pump interlock contacts must be wired in series with flow switch contacts. The contacts must be rated for dry circuit application capable of handling a 24VAC load up to 50 ma. Chilled water flow switch (CWS) is factory installed.

6. Terminals 14 thru 16 of T15 are for control of chilled water pump starter. The maximum load allowed for the chilled water pump relay is 10 VA sealed, 360 VA unsheathed at 115 or 230 volt. Field power supply is not required.

7. Terminals 1 & 2 of T15 are for alarm relay. The maximum load allowed for the alarm relay is 75 VA sealed, 360 VA unsheathed at 115 or 230 volt. Field power supply is not required.

8. Terminals 7, 8, 9, 10 of T15 are for condenser water pump (CWP) ONLY or circuit 1 condenser fan contactor (CFA only). Terminals 11, 12 of T15 are for circuit 1 condenser fan contactor (CFA only). The maximum load allowed is 15 VA sealed, 360 VA unsheathed at 115 or 230 volt. Separate field power supply is not required. Condenser fan control must be connected in parallel with condenser fan contactor as shown.

9. Terminals 5, 6, 7 of T15 are for condenser water pump (CWP) and/or condenser water pump interlock (CPPI). The contacts must be rated for dry circuit application capable of handling a 24VAC load up to 55 ma.

10. Make appropriate connections to TBA as shown for energy management board options. The contacts for demand limit and ice dumps options must be rated for dry circuit application capable of handling a 24VAC load up to 55 ma.

11. This supplied on 30HX52308 280/230 Y-Delta, 30HX52306-271 Y-Delta and by special order.