Accurate temperature control
Multi-function microprocessor controller includes dual, 4-digit LED displays that readout alpha-numeric alarm codes and temperatures. The control panel also has additional indicator lights that show the status of the pump, compressor, hot-gas bypass valve, alarms and temperature unit selection.

Environmentally-friendly refrigerant
All EarthSmart ECW Series Chillers use R-410A refrigerant. This refrigerant significantly reduces the potential amount of harmful chemicals released into the environment.

Non-ferrous construction
All chilled water contact surfaces are non-ferrous for protection against corrosion. Pumps and reservoirs are stainless steel. All other wetted surfaces are brass, copper or other non-ferrous materials.

Reliable, long-life design
Proven component suppliers like Copeland, Scot Pump, Sporlan, Johnson Controls and Cutler-Hammer have been chosen for ultimate reliability and availability of parts. Each chiller is factory tested underload prior to shipment and is provided with a functionality test report when it is shipped.
FEATURES/OPTIONS

EarthSmart Chiller SX

Control Features
- Large, dual 4-digit LED displays for process data, alarms and operation.
- Scroll and Function buttons allow you to navigate the chiller's control parameters.
- Selectable temperature control point; choose between To Process, From Process or Average.
- Five status lights that show pump, hot-gas bypass, compressor, alarm and temperature unit selection status.
- Auto-tune capabilities allow you to optimize your chiller to achieve maximum efficiency.

OPTIONS

- Evaporator Strainer – Protects the evaporator from solid contaminants in the process water stream (example: pellets in an open extrusion cooling tank). Bronze construction. Pre-piped.
- Hot-Gas Bypass Valve – Capacity control down to 25%.
- Process Pump Pressure Gauge – Provides a mechanical read-out of the process pump discharge pressure for roughly estimating flow and detecting pump problems.

- Evaporator Strainer – Protects the evaporator from solid contaminants in the process water stream (example: pellets in an open extrusion cooling tank). Bronze construction. Pre-piped.
- Hot-Gas Bypass Valve – Capacity control down to 25%.
- Process Pump Pressure Gauge – Provides a mechanical read-out of the process pump discharge pressure for roughly estimating flow and detecting pump problems.

- Brazed Plate Evaporators – High surface area, rapid response.
- Condenser Water Strainer – Helps to protect the condenser from solid contaminants in the condenser water (example: dirty cooling tower water). Cast iron construction.
- Standard Warranty – One year parts and labor warranty from the casters up.

Process Water Bypass with Valves – Includes process water valves and a pre-piped, external bypass line with bypass valve for low flow/high delta T processes which would limit flow through the chiller.

Alarm Kit – Highly visible strobe light and beacon indicate any chiller fault that may occur.

Autofill – Reservoir level sensor and solenoid to allow connection to city water for automatic water make-up. (Not recommended when chiller is charged with Glycol.)

Condenser Water Regulating Valve (WRV) – Modulating condenser water regulating valve matches cooling tower water flow with chiller operating conditions. Recommended when cooling tower water temperatures will fall below 79°F (26°C).

Dual Water Pumps – Includes a second pump dedicated to recirculating coolant through the evaporator for increased heat transfer.

Tankless/Pumpless Kits – EarthSmart chillers are available without a pump or without a tank and pump to meet the requirements of your system.

UL/CE Labeling – Includes UL or CE labeled electrical enclosure only.

Extended Compressor Warranty – Warranty extension covers the compressor(s) only for an additional (2) two years. Labor, refrigerant or any other chiller parts are not included during the extended warranty period.
SINGLE PUMP CURVES

SPECIFICATION NOTES

Pump availability: 0.75 Hp standard for 1.5 ton; 1 Hp standard for 3 ton; 1.5 Hp standard for 5, 7.5 and 10 ton and optional for 1.5 ton; 2 Hp standard for 15 ton and optional for 3 ton; 3 Hp (A) optional for 3, 5, 7.5 and 10 ton; 3 Hp (B) standard for 20 and 25 ton; 5 Hp standard for 30 ton and optional for 5 and 15 ton; 7.5 Hp optional for 7.5, 10, 20, 25 and 30 ton; 10 Hp optional for 15 ton; 15 Hp optional for 20, 25 and 30 ton.

* Pump curves do not reflect pressure drops due to internal piping.

These pump curves are non-overloading using the service factor of the motors.

Specifications may change without notice. Check with your Conair representative for the most current information.
## Specifications

### Portables Chillers

**Earthsartm Ecw Water-Cooled Series**

#### Tpx038-1011

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**Model ECW-T.5 ECW-3 ECW-5 ECW-7.5 ECW-10 ECW-15 ECW-20 ECW-25 ECW-30**

### Performance Characteristics

<table>
<thead>
<tr>
<th>Nominal Capacity* tons (kW)</th>
<th>1.6 (5.6)</th>
<th>2.9 (10.2)</th>
<th>5.4 (19.0)</th>
<th>7.3 (25.7)</th>
<th>10.3 (36.2)</th>
<th>15.2 (53.5)</th>
<th>19.4 (68.2)</th>
<th>24.4 (85.8)</th>
<th>31.9 (112.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressor qty/Hp (kW)</td>
<td>1 (1.5)</td>
<td>1 (1.2)</td>
<td>1 (3.2)</td>
<td>1 (5.7)</td>
<td>1 (7.4)</td>
<td>1 (11.1)</td>
<td>1 (14.9)</td>
<td>1 (18.6)</td>
<td>1 (22.3)</td>
</tr>
<tr>
<td>Standard process pump† Hp (kW)</td>
<td>0.75 (0.56)</td>
<td>1.0 (0.75)</td>
<td>1.5 (1.12)</td>
<td>1.5 (1.12)</td>
<td>1.5 (1.12)</td>
<td>2.0 (1.50)</td>
<td>3.0 (2.25)</td>
<td>3.0 (2.25)</td>
<td>5.0 (3.73)</td>
</tr>
<tr>
<td>Standard process flow gpm (l/min)</td>
<td>4.0 (15.1)</td>
<td>7.0 (26.5)</td>
<td>14.0 (53.0)</td>
<td>18.0 (68.1)</td>
<td>26.0 (98.4)</td>
<td>37.0 (140.0)</td>
<td>48.0 (181.7)</td>
<td>60.0 (227.1)</td>
<td>79.0 (299.0)</td>
</tr>
<tr>
<td>Standard process pressure PSI (bar)‡</td>
<td>33.0 (2.28)</td>
<td>38.0 (2.62)</td>
<td>42.0 (2.9)</td>
<td>41.0 (2.83)</td>
<td>39.0 (2.69)</td>
<td>37.0 (2.55)</td>
<td>33.0 (2.28)</td>
<td>27.0 (1.86)</td>
<td>43.0 (2.96)</td>
</tr>
<tr>
<td>Reservoir capacity gal (l)</td>
<td>10 (37.9)</td>
<td>10 (37.9)</td>
<td>25 (94.6)</td>
<td>25 (94.6)</td>
<td>25 (94.6)</td>
<td>50 (189.3)</td>
<td>75 (283.9)</td>
<td>75 (283.9)</td>
<td>75 (283.9)</td>
</tr>
<tr>
<td>Condenser water flow gpm (l/min)</td>
<td>5.3 (20.1)</td>
<td>9.3 (35.2)</td>
<td>17.1 (64.7)</td>
<td>22.9 (86.7)</td>
<td>30.8 (116.6)</td>
<td>46.1 (174.5)</td>
<td>59.4 (224.9)</td>
<td>69.5 (263.1)</td>
<td>97.4 (368.7)</td>
</tr>
</tbody>
</table>

### Dimensions inches (mm)

| A - Height | 40.00 (1016) | 40.00 (1016) | 56.41 (1433) | 56.41 (1433) | 57.78 (1468) | 66.78 (1696) | 76.19 (1935) | 76.19 (1935) | 76.19 (1935) |
| B - Width  | 27.0 (686) | 27.0 (686) | 33.0 (838) | 33.0 (838) | 33.0 (838) | 33.0 (838) | 41.0 (1046) | 41.0 (1046) | 41.0 (1046) |
| C - Depth  | 45.0 (1143) | 45.0 (1143) | 51.88 (1318) | 51.88 (1318) | 55.88 (1419) | 63.5 (1613) | 72.94 (1853) | 72.94 (1853) | 73.03 (1855) |

### Approximate Weight lb [kg]

| Installed  | 450 (204) | 475 (216) | 685 (311) | 1130 (513) | 1240 (563) | 1480 (671) | 1515 (687) | 1580 (714) | 1985 (900) |
| Shipping   | 500 (227) | 525 (238) | 735 (333) | 1180 (535) | 1290 (586) | 1530 (694) | 1685 (764) | 1950 (885) | 2215 (1005) |

### Connections inches (mm)

| Process connections NPT | 1.0 (26) | 1.0 (26) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 2.5 (64) | 2.5 (64) | 2.5 (64) |
| Condenser connections NPT | 1.0 (26) | 1.0 (26) | 1.0 (26) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 2.0 (51) | 2.0 (51) | 2.0 (51) |

### Voltages full load amps

| 460/3 phase/60 Hz | 6.6 | 9.8 | 15.4 | 20.0 | 23.6 | 34.0 | 36.9 | 52.0 | 68.3 |

### Specification Notes:

* Based on supplying 50°F (10°C) water (no antifreeze) to process, standard single pump selections, maximum of 95°F (35°C) ambient air and 60 Hz operation. Adjust capacities up 2% per degree for operation above 50°F (10°C) to a maximum of 65°F (18°C). Adjust capacities down 2% per degree for operation below 50°F (10°C) to a minimum of 20°F (-7°C). Capacities are +/- 5% based on the compressor manufacturer's ratings and are subject to change without notice. Consult with a Conair representative for other conditions. Capacities change depending on selected options.

† Standard design based on 50°F (10°C) to process with 60°F (16°C) return from process. Condenser water based on 85°F (29°C) supply and 95°F (35°C) return.

‡ Standard pump pressure rating does not include internal chiller losses.

Specifications may change without notice. Check with your Conair representative for the most current information.