SoliTherm® Thermoelectric Cooling Units

Applications
Thermoelectric elements utilize the Peltier Effect to create a temperature difference between the internal and ambient heat sinks, making internal air cooler while dissipating heat into the external environment. Fans assist the convective heat transfer from the heat sinks, which are optimized for maximum flow.

The Seifert SoliTherm® Peltier thermoelectric cooling units can be mounted in nearly every position (except roof mounting) because they don’t have a compressor or any moving parts aside from the fans. Depending on the application, condensation management may need to be considered. Seifert SoliTherm thermoelectric cooling units are available as recessed with the internal heat sink and fan inside the enclosure and the ambient components on the outside. But, frames are available for external mounting. These thermoelectric cooling units are resistant to extreme ambient conditions and can operate effectively even in environments that are dusty and oily. They comply with European standards IEC/TC 62610-1 and IEC/TC 62610-3, and can be used for both indoor and outdoor applications.

Construction
- Recessed mounting (flush mounting kit sold separately).
- Cooling capacities from 170 to 680 BTU/H [50W to 200W]
- Operating Temperature Range: -4°F to 149°F [20°C to 65°C]
- AISI 304 stainless steel housing
- Condensate tray and drain available separately
- Mounting nut torque: 3.3 lb-ft [4.5 Nm]
- Connection: Terminal block
- 24 VDC units require thermostat for set-point control

Agency Approvals
- CE, RoHS, cURus
- NEMA 4X
- IP 66

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Nominal Power /Max (W)</th>
<th>Cooling Capacity</th>
<th>Operating Voltage</th>
<th>Inrush Current (A)</th>
<th>Max Current (A)</th>
<th>Recommended Fuse Size (A)</th>
<th>Integral Thermostat</th>
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</thead>
<tbody>
<tr>
<td>3050303</td>
<td>58 - 60</td>
<td>170 BTU/H [50W]</td>
<td>24 VDC</td>
<td>3.7</td>
<td>2.5</td>
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<tr>
<td>3102303</td>
<td>115 - 118</td>
<td>340 BTU/H [100W]</td>
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<td>7.4</td>
<td>4.9</td>
<td>8</td>
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<tr>
<td>3152303</td>
<td>170 - 180</td>
<td>510 BTU/H [150W]</td>
<td></td>
<td>11</td>
<td>7.5</td>
<td>10</td>
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<tr>
<td>3200303</td>
<td>260 - 280</td>
<td>680 BTU/H [200W]</td>
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<td>17</td>
<td>11.6</td>
<td>16</td>
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<tr>
<td>6105303</td>
<td>126 - 131</td>
<td>340 BTU/H [100W]</td>
<td>120 VAC</td>
<td>1.6</td>
<td>1.1</td>
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</tbody>
</table>

Note: Power and Cooling Capacity values are for 95°F [35°C] internal and ambient temperatures. Refer to Performance Graphs for values corresponding to other conditions.

Fuses are Class T Time Delay.

Airflow Example

THERMOELECTRIC COOLING PRINCIPLE
### SoliTherm® Thermoelectric Cooling Units

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Price</th>
<th>Dimensions HxWxD</th>
<th>Cutout Dimensions</th>
<th>Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3050303</td>
<td>$649.00</td>
<td>8.11 x 6.06 x 5.31 [206 x 154 x 135]</td>
<td>6.69 x 4.72 [170 x 120]</td>
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<tr>
<td>3102303</td>
<td>$1,141.00</td>
<td>7.87 x 11.97 x 5.43 [200 x 304 x 138]</td>
<td>10.24 x 6.30 [260 x 160]</td>
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<tr>
<td>3152303</td>
<td>$1,488.00</td>
<td>15.75 x 7.09 x 6.73 [400 x 180 x 171]</td>
<td>14.61 x 6.10 [371 x 155]</td>
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<tr>
<td>3200303</td>
<td>$1,416.00</td>
<td>15.75 x 7.09 x 6.73 [400 x 180 x 171]</td>
<td>14.61 x 6.10 [371 x 155]</td>
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<tr>
<td>6105303</td>
<td>$1,550.00</td>
<td>11.02 x 13.78 x 7.22 [280 x 350 x 183]</td>
<td>13.78 x 11.02 [350 x 280]</td>
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</tr>
</tbody>
</table>

**Note:** Dimensions in inches [millimeters].

![Image 3050303 24VDC](image)

![Image 3102303 24VDC](image)

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For the latest prices, please check AutomationDirect.com.
SoliTherm® Thermoelectric Cooling Units

Performance Graphs

For the latest prices, please check AutomationDirect.com.

1-800-633-0405

Enclosures Thermal Management

For the latest prices, please check AutomationDirect.com.
SoliTherm® Thermoelectric Cooling Units

Dimensions

mm [in]

3050303

POWER TERMINAL BLOCK

M6 STUDS (4X)

INSTALLATION CUT-OUT (UNIT WITHOUT DUCT)
PART# 3050303

3102303

M6 STUDS (6X)

INSTALLATION CUT-OUT (UNIT WITHOUT DUCT)
3102303

Please see our website www.AutomationDirect.com for complete engineering drawings.
SoliTherm® Thermoelectric Cooling Units

Dimensions

\[\text{mm}[\text{in}]\]

3200303 and 3152303

Please see our website www.AutomationDirect.com for complete engineering drawings.

6105303

Please see our website www.AutomationDirect.com for complete engineering drawings.
SoliTherm® Thermoelectric Cooling Units

External Mounting Kit

This kit is for external mounting of SoliTherm Thermoelectric Cooling Units. Add these kits when there isn't space in the enclosure for the internal heat sink and fan.

Features

• AISI 304 stainless steel
• Hardware included

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Price</th>
<th>For Use With</th>
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<tbody>
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<td>1013305</td>
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<td>$106.00</td>
<td>3152303 / 3200303</td>
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<tr>
<td>1015305</td>
<td>$95.00</td>
<td>6105303</td>
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Condensate Drain Kit

As with a conventional air conditioner, cooling air with a thermoelectric cooling unit may produce condensation. Consider adding condensation management in humid environments.

This kit contains a condensate tray and drain for use with SoliTherm Thermoelectric Cooling Units.

Mounts to cooling unit using existing mounting bolts for enclosure.

Features

• Stainless steel AISI 304
• Hardware included

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Price</th>
<th>For Use With</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001303</td>
<td>$114.00</td>
<td>3050303</td>
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<tr>
<td>1003303</td>
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<tr>
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</table>

See our website: www.AutomationDirect.com for complete engineering drawings.