AHP-1800 Air Conditioner

Air Cooled
Through Mounted
NEMA-12, 4, 4X

48 VDC Input
High Efficiency
1100 BTU/HR

FEATURES
- High capacity thermoelectric design
- Lower profile intrusion into enclosure
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 12%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Operating ambient temperature range -40/+70 °C
- Operating enclosure temperature range -10/+60 °C
- Easy to use Pivot Clean feature
- Weight 55 LBS.
- Agency approvals: UL 1995, CSA 22.2, CE

POWER INPUTS
- Voltage 48 VDC
- Current, Active 9 AMPS
- Current, ECO-Mode 1 AMPS

PERFORMANCE RATINGS
- Cooling (Traditional) 1100 BTU/HR
- Cooling (Din 3168) 322 WATTS
- Cooling COP (at L35 L35) 0.74
- Heating (Traditional) > 1473 BTU/HR
- Heating (Din 3168) > 432 WATTS
- Heating COP > 1.0

INCLUDES
- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads

CONFIGURATIONS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PART NUMBER</th>
<th>NOTES</th>
<th>TEMPERATURE CONTROL</th>
<th>ENVIRONMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHP-1800</td>
<td>0-0196-0-000</td>
<td>Cool only</td>
<td>None</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>AHP-1800</td>
<td>0-0186-0-000</td>
<td>Cool only</td>
<td>TC-6F</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>AHP-1800</td>
<td>0-01F6-0-000</td>
<td>Cool only</td>
<td>TC-1F</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>AHP-1800</td>
<td>0-0156-0-000</td>
<td>Cool only</td>
<td>EXT*</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>AHP-1800HC</td>
<td>0-0136-1-000</td>
<td>Heat/Cool</td>
<td>TC-3F</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>AHP-1800HC</td>
<td>0-01I6-1-000</td>
<td>Heat/Cool</td>
<td>TC-7F</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>AHP-1800HC</td>
<td>0-0156-1-000</td>
<td>Heat/Cool</td>
<td>EXT*</td>
<td>NEMA-12, IP 52</td>
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<tr>
<td>AHP-1800XE</td>
<td>0-0196-4-000</td>
<td>Cool only</td>
<td>None</td>
<td>NEMA-4, IP 56</td>
</tr>
<tr>
<td>AHP-1800XE</td>
<td>0-0186-4-000</td>
<td>Cool only</td>
<td>TC-6F</td>
<td>NEMA-4, IP 56</td>
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<td>AHP-1800XE</td>
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</tr>
</tbody>
</table>

* Unit is set for 5-32 VC external signal, relay(s) included

CONTROL TEMPERATURES

<table>
<thead>
<tr>
<th>TEMP. CONTROL</th>
<th>ACTIVE HEAT °C</th>
<th>ECO-MODE °C</th>
<th>ACTIVE COOL °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC-1F</td>
<td>-</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>TC-6F</td>
<td>-</td>
<td>25 or 35</td>
<td></td>
</tr>
<tr>
<td>TC-3F</td>
<td>10</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td>TC-7F</td>
<td>10</td>
<td>25</td>
<td>35</td>
</tr>
</tbody>
</table>

250 VDC configuration for crane applications available

Consult factory for full shock and vibration models.
Equation of line: \( y = \Delta T (°C) = \frac{y}{x} \)  
\( x = \text{Capacity (Watts)} \)

### Equation of line

<table>
<thead>
<tr>
<th>Ambient Temp</th>
<th>20°C</th>
<th>40°C</th>
<th>60°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure Air</td>
<td>( y = 0.129x - 38.1 )</td>
<td>( y = 0.129x - 40.1 )</td>
<td>( y = 0.129x - 42.0 )</td>
</tr>
<tr>
<td>Cold Sink</td>
<td>( y = 0.09x - 38.1 )</td>
<td>( y = 0.09x - 40.1 )</td>
<td>( y = 0.09x - 42.0 )</td>
</tr>
</tbody>
</table>

### Dimensions

- **Input Power Cable**: 12.35 [314] *
- **External Hot Side Fans**: 18.00 [457]
- **Mounting Surface**: 16.46 [418] *
- **Temperature Adjustment (TC-6F models only)**: 8.63 [219]
- **[8] 10-32 Studs**: 1.34 [34]
- **BX200.218 [Ø6]**: 1.34 [34]
- **Circuit Breakers (VAC models only)**: 5.45 [138]
- **Terminal Strip (1801 models only)**: 4.34 [110]

* Dimension does not include hardware and sealant. Mounting hardware and gasket included but not shown. Dimensions: Inches [Millimeters]