### AHP-590 Air Conditioner/Heat Exchanger

**TECA** 1-888-TECA-USA (832-2872)  www.teca-usa.com

**AHP-590 Air Conditioner/Heat Exchanger**

- **Air Cooled**
- **Through Mounted**
- **Nema-12, 4, 4X**
- **24 VDC**
- **High Efficiency**
- **460 BTU/HR**

### FEATURES
- Compact (only 10" X 5.84" X 7.75")
- Mounts and operates in any orientation: horizontal, vertical, etc.
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel exterior housing
- Efficient heat exchanger mode (ECO-Mode)
- Easy to use Pivot Clean feature
- Weight: 14 LBS.

### 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-590</td>
<td>0-G0J5-0-001</td>
<td>Cool only, industrial fans</td>
<td>TC-4F</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>AHP-590HC</td>
<td>0-G095-1-001</td>
<td>Heat/Cool, industrial fans</td>
<td>None*</td>
<td>NEMA-12, IP 52</td>
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<td>AHP-590HC</td>
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<td>AHP-590XE</td>
<td>0-G0I5-4-001</td>
<td>Cool only, sealed hot side fan</td>
<td>TC-4F</td>
<td>NEMA-4, IP 56</td>
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<tr>
<td>AHP-590XEHC</td>
<td>0-G095-5-001</td>
<td>Heat/Cool, sealed hot side fan</td>
<td>None*</td>
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<tr>
<td>AHP-590X</td>
<td>0-G0J5-2-001</td>
<td>Cool only, Mil. grade hot side fan</td>
<td>TC-4F</td>
<td>NEMA-4X, IP 56</td>
</tr>
<tr>
<td>AHP-590XHC</td>
<td>0-G095-3-001</td>
<td>Heat/Cool, Mil. grade hot side fan</td>
<td>None*</td>
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<tr>
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<td>Heat/Cool, Mil. grade hot side fan</td>
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<tr>
<td>AHP-590XM</td>
<td>0-G0J5-2-011</td>
<td>Cool only, Mil. grade fans</td>
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* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

### POWER INPUTS
- **Voltage**: 24 VDC
- **Current, Active**: 6.9 AMPS
- **Current, ECO-Mode**: 0.3 AMPS

### PERFORMANCE RATINGS
- **Cooling (Traditional)**: 460 BTU/HR
- **Cooling (Din 3168)**: 137 WATTS
- **Cooling COP (at L35 L35)**: 0.85
- **Heating (Traditional)**: > 562 BTU/HR
- **Heating (Din 3168)**: > 165 WATTS
- **Heating COP**: > 1.0

### CONTROL TEMPERATURES
- **Active Cooling**: 35 °C
- **Heat Exchanger (ECO-Mode)**: 25 °C
- **Active Heating**: 10 °C
- **Typical Hysteresis**: 5 °C
- **Operating Ambient**: -40/+70 °C
- **Operating Enclosure**: -10/+60 °C

### INCLUDES
- Temperature controller
- Mounting gasket
- Mounting hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)

### VOLTAGE AND CURRENT

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<th>Current, Active</th>
<th>Current, ECO-Mode</th>
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### PERFORMANCE RATINGS

#### ECO Mode vs Active Mode

- **Power Used (Watts)**
- **Active Mode**: ECO
- **Cooling (Traditional)**: 460 BTU/HR
- **Cooling (Din 3168)**: 137 WATTS
- **Cooling COP (at L35 L35)**: 0.85
- **Heating (Traditional)**: > 562 BTU/HR
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- **Heating COP**: > 1.0
PERFORMANCE CURVE

Equation of Line: \( y = D(T^\circ C) \times x \) = Capacity (Watts)

<table>
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<tr>
<th>Ambient Temp</th>
<th>20°C</th>
<th>60°C</th>
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<tr>
<td>AHP-590</td>
<td>( y = 0.25x - 32.5 )</td>
<td>( y = 0.25x - 35 )</td>
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DIMENSIONS

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