**FHP-2259 Air Conditioner/Heat Exchanger**

- Air Cooled
- Flush Mounted
- Nema-12, 4/4X

**100 - 240 VAC Input**

**High Efficiency**

**1300 BTU/HR**

### FEATURES

- High efficiency thermoelectric design
- Power saving air to air heat exchanger mode (ECO-Mode)
- Heavy duty full perimeter mounting
- No intrusion into enclosure
- Central input cord for easy mounting
- Closed loop design
- Condensate control and evaporation system
- Compact
- Increased efficiency at higher ambients by as much as 10%
- Virtually maintenance free
- No compressor
- Environmentally friendly and safe
- Stainless Steel exterior housing
- Mounts and operates in any orientation
- Integral temperature controller
- Weight 60 LBS.

### CONTROL TEMPERATURES

<table>
<thead>
<tr>
<th>Control Type</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Cooling</td>
<td>35 °C</td>
</tr>
<tr>
<td>Heat Exchanger (ECO-Mode)</td>
<td>25 °C</td>
</tr>
<tr>
<td>Active Heating</td>
<td>10 °C</td>
</tr>
<tr>
<td>Typical Hysteresis</td>
<td>5 °C</td>
</tr>
<tr>
<td>Operating Ambient</td>
<td>-40/+65 °C</td>
</tr>
<tr>
<td>Operating Enclosure</td>
<td>-10/+60 °C</td>
</tr>
</tbody>
</table>

### POWER INPUTS

- **Input Voltage**: 100 - 240 VAC
- **Current, Active**: 4.5 - 1.8 AMPS
- **Alternate Input Voltage**: 127 - 374 VDC
- **Current, ECO-Mode**: 1 AMP
- **Frequency**: 47 - 63 / 440 Hz
- **Power Consumption**: 320 Watts

### PERFORMANCE RATINGS

- **Cooling (Traditional)**: 1300 BTU/HR
- **Cooling (Din 3168)**: 381 WATTS
- **Cooling COP (at L35 L35)**: 0.85
- **Heating (Traditional)**: > 980 BTU/HR
- **Heating COP**: > 1.0
- **Heat Exchanger (ECO-Mode)**: 12.5 W/°C

### 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>FHP-2259</td>
<td>7-H4JB-0-000</td>
<td>Cool only, industrial fans</td>
<td>TC-4F</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>FHP-2259</td>
<td>7-H45B-0-000</td>
<td>Cool only, industrial fans</td>
<td>EXT*</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>FHP-2259HC</td>
<td>7-H4IB-1-000</td>
<td>Heat/Cool, industrial fans</td>
<td>TC-7F</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>FHP-2259HC</td>
<td>7-H45B-1-000</td>
<td>Heat/Cool, industrial fans</td>
<td>EXT*</td>
<td>NEMA-12, IP 52</td>
</tr>
<tr>
<td>FHP-2259XE</td>
<td>7-H4JB-4-000</td>
<td>Cool only, sealed hot side fans</td>
<td>TC-4F</td>
<td>NEMA-4/4X, IP 56</td>
</tr>
<tr>
<td>FHP-2259XE</td>
<td>7-H45B-4-000</td>
<td>Cool only, sealed hot side fans</td>
<td>EXT*</td>
<td>NEMA-4/4X, IP 56</td>
</tr>
<tr>
<td>FHP-2259XEH</td>
<td>7-H4IB-5-000</td>
<td>Heat/Cool, sealed hot side fans</td>
<td>TC-7F</td>
<td>NEMA-4/4X, IP 56</td>
</tr>
<tr>
<td>FHP-2259XEH</td>
<td>7-H45B-5-000</td>
<td>Heat/Cool, sealed hot side fans</td>
<td>EXT*</td>
<td>NEMA-4/4X, IP 56</td>
</tr>
<tr>
<td>FHP-2259XEH†</td>
<td>7-H4LB-5-000</td>
<td>Heat/Cool, sealed hot side fans</td>
<td>TC-5300D</td>
<td>NEMA-4/4X, IP 56</td>
</tr>
<tr>
<td>FHP-2259HC†</td>
<td>7-H4LB-1-000</td>
<td>Heat/Cool, industrial fans</td>
<td>TC-5300D</td>
<td>NEMA-12, IP 52</td>
</tr>
</tbody>
</table>

† Precise temperature control model

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

**INCLUDES**

- Power supply
- Temperature controller
- Power saving heat exchanger mode (ECO-Mode)
- Mounting gasket
- Mounting hardware
- Power input cord

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**TECA**

1-888-TECA-USA (832-2872) www.thermoelectric.com

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**200 - 277 VAC (254 - 420 VDC) Versions available**
**PERFORMANCE CURVE**

Equation of line: \( y = \Delta T \)°C, \( x \) = Capacity (Watts)

<table>
<thead>
<tr>
<th>Ambient Temp</th>
<th>35°C</th>
<th>50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure Air</td>
<td>( y = \frac{0.063}{9004}x - 23.9 )</td>
<td>( y = \frac{0.063}{9004}x - 25.2 )</td>
</tr>
<tr>
<td>Cold Sink</td>
<td>( y = \frac{0.047}{9004}x - 23.9 )</td>
<td>( y = \frac{0.047}{9004}x - 25.2 )</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

[Diagram of dimensions and airflow patterns]

**MOUNTING STYLE**
Flush Mounted

**ENVIRONMENTS SERVED**
- NEMA-12  IP 52
- NEMA-4/4X  IP 56

**RATING (TRADITIONAL)**
- 1300 BTU/hr @ 0 °F ΔT

**RATING (DIN 3168)**
- 381 Watts L35 L35
- 162 Watts L35 L50

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[Graphic representation of the Air Conditioner - Air Cooled model FHP-2259]