### MicroTech III Base Controller

<table>
<thead>
<tr>
<th>Jumper</th>
<th>Description</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP1</td>
<td>Mode</td>
<td>Open for normal operation mode</td>
</tr>
<tr>
<td>JP2</td>
<td>Fan operation only applies to room sensor control without a fan-mode On/Auto switch</td>
<td>Open for continuous fan operation</td>
</tr>
<tr>
<td>JP3</td>
<td>Freeze Protection</td>
<td>Open for water freeze protection (Standard range units)</td>
</tr>
<tr>
<td>JP4</td>
<td>Freeze Fault Protection</td>
<td>Open for none</td>
</tr>
<tr>
<td>JP5</td>
<td>Set point adjustment range only applies to network controls with a room temperature sensor</td>
<td>Open for adjustment range of 50°F to 95°F</td>
</tr>
<tr>
<td>JP6</td>
<td>Room control type</td>
<td>Open for thermostatic room control</td>
</tr>
<tr>
<td>JP7</td>
<td>Compressor heating source</td>
<td>Open for enable compressor heating</td>
</tr>
<tr>
<td>JP8</td>
<td>I/O expansion module</td>
<td>Open when I/O expansion module is not needed</td>
</tr>
</tbody>
</table>

### I/O Expansion Module

<table>
<thead>
<tr>
<th>Jumper</th>
<th>Description</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP1</td>
<td>Not Used</td>
<td>Open</td>
</tr>
<tr>
<td>JP2</td>
<td>Secondary Heating Options</td>
<td>Shorted</td>
</tr>
<tr>
<td>JP3</td>
<td>Waterside Economizer</td>
<td>Open</td>
</tr>
<tr>
<td>JP4</td>
<td>Not Gas Reheat / Desuperheater</td>
<td>Open, Hot Gas Reheat (HGR)</td>
</tr>
<tr>
<td>JP5</td>
<td>Waterside Economizer</td>
<td>Open</td>
</tr>
<tr>
<td>JP6</td>
<td>Single stage compressor</td>
<td>Open</td>
</tr>
<tr>
<td>JP7</td>
<td>Not Used</td>
<td>Open when I/O expansion module is not needed</td>
</tr>
<tr>
<td>JP8</td>
<td>Two stage compressor</td>
<td>Open</td>
</tr>
</tbody>
</table>

---

**WARNING**

*Check all wiring across all points and ensure proper operation (i.e., make sure all connections are secure).*

*Ensure that all electrical connections are secure and in place.*

*Confirm that any necessary internal condensate trap (WGSH and WGTH models require a field provided external condensate trap).*

*Verify current conditions are within the unit operating range (see tables on page 4 fold-out).*

*Confirm that loop piping has been flushed of debris prior to directing fluid through coil.*

*Complete provided start-up form and verify against catalog data.*

*Please leave this document with the unit.*
Air Limits

<table>
<thead>
<tr>
<th></th>
<th>Standard Range Units</th>
<th>Geothermal Range Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Min. Ambient Air</strong></td>
<td>50°F (10°C)</td>
<td>50°F (10°C)</td>
</tr>
<tr>
<td><strong>Max. Ambient Air</strong></td>
<td>100°F (38°C)</td>
<td>100°F (38°C)</td>
</tr>
<tr>
<td><strong>Min. Entering Air</strong></td>
<td>100°F (38°C)</td>
<td>100°F (38°C)</td>
</tr>
<tr>
<td><strong>Max. Entering Air</strong></td>
<td>100°F/83°F (38°C/28°C)</td>
<td>100°F/83°F (38°C/28°C)</td>
</tr>
</tbody>
</table>

Cooling

- Min. Ambient Air: 50°F (10°C)
- Max. Ambient Air: 100°F (38°C)
- Min. Entering Air: 100°F (38°C)
- Max. Entering Air: 100°F/83°F (38°C/28°C)

Heating

- Min. Ambient Air: 50°F (10°C)
- Max. Ambient Air: 100°F (38°C)
- Min. Entering Air: 100°F (38°C)
- Max. Entering Air: 100°F/83°F (38°C/28°C)

Notes:
1. Maximum and minimum values may not be combined. If one value is at maximum or minimum, the other two conditions may not exceed the normal condition for standard units. Extended range units may combine any two maximum conditions, but not more than two, with all other conditions being normal conditions.
2. This is not a normal or continuous operating condition. It is assumed that such a start-up is for the purpose of bringing the building space up to occupancy temperature.

Water limits

<table>
<thead>
<tr>
<th></th>
<th>Standard Range Units</th>
<th>Geothermal Range Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Min. Entering Water</strong></td>
<td>55°F (13°C)</td>
<td>30°F (-1°C)</td>
</tr>
<tr>
<td><strong>Normal Entering Water</strong></td>
<td>85°F (29°C)</td>
<td>70°F (21°C)</td>
</tr>
<tr>
<td><strong>Max. Entering Water</strong></td>
<td>110°F (43°C)</td>
<td>110°F (43°C)</td>
</tr>
<tr>
<td><strong>Min. GPM/Ton</strong></td>
<td>1.5</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Nominal GPM/Ton</strong></td>
<td>3.0</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Max. GPM/Ton</strong></td>
<td>4.0</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Maximum and minimum values may not be combined. If one value is at maximum or minimum, the other two conditions may not exceed the normal condition for standard units. Extended range units may combine any two maximum conditions, but not more than two, with all other conditions being normal conditions.

2. This is not a normal or continuous operating condition. It is assumed that such a start-up is for the purpose of bringing the building space up to occupancy temperature.

Figure 1: MicroTech III Base Controller with I/O Expansion Module Terminal Details