RA4007 User Manuel

1U 4 Fans Unit with Thermostat Sensor
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Introduction

Overview
This fan unit includes a power switch and a LED thermostat monitor on the front.

This fan unit includes a power connector and a connector for a thermal sensor.

Specification

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rack Size</td>
<td>1U</td>
</tr>
<tr>
<td>Fans</td>
<td>4 x 120 mm AC Fans</td>
</tr>
<tr>
<td>Dimension (W x D x H)</td>
<td>19” x 17.75” x 1.75”</td>
</tr>
<tr>
<td>Weight</td>
<td>15 LBS</td>
</tr>
</tbody>
</table>
What's In the Box
The package for RA4007 includes the following items:
• 1 x 1U Fan Unit
• 1 x Thermal Sensor
• 1 x Power Cord
• 8 x Pairs of M6 Nuts and Screws

Installation

Installing the Thermal Sensor
To install the thermal sensor, press down on black tab on the back of the fan unit. Put one end of thermal sensor inside the square sized hole above the black tab. Release the tab after the end is inside the hole. Next, press down the red tab on the back of the fan unit. Put the other end of the thermal sensor inside the square sized hole above the red tab. Release the tab once the end is inside the hole. Finally put the thermal sensor in the place on the rack that is most important to keep cool.

Installing on a Rack
To install the fan unit on a rack, move the rear mounting bracket to the desired position that will fit the rack. Put the M6 cage nuts into the desired position on the rack. Put the fan unit in the desired position. Finally screw in the M6 screws with washer into the M6 cage nuts.
System Interface
Thermostat Display

The LED display normally displays the current temperature as detected by the thermal sensor.

**Controlling the Thermostat**
Temperature Control: Press the set button gently to display the controlling temperature. The controlling temperature is the temperature that will determine whether the fans turn on or off. If the current temperature is higher than the controlling temperature, the fans will turn on until the current temperature drops to the controlling temperature. To change the controlling temperature, press the set button to display the controlling temperature. Then, press up or down arrows to increase or decrease the controlling temperature.

Data Settings: Press the set button for 6 seconds to enter the settings. Upon entering settings, HC will be displayed. Use the up and down arrows to set HC-LS-HS-Pt-CA-d.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold the set button, then press up or down. Choose HC, H represents warm mode, C represents cold mode.</td>
<td>Hold the set button, then press up or down. Choose lowest temperature limits: -45°C to 1°C.</td>
</tr>
<tr>
<td>Hold the set button, then press up or down. Set delayed start timer from 0 to 5 minutes.</td>
<td>Hold the set button, then press up or down. Choose temperature correction: -15°C to 15°C.</td>
</tr>
</tbody>
</table>
Hold the set button, then press up or down. Choose highest temperature limits: Temperature control+1ºC to 80ºC.

Hold the set button, then press up or down. Choose return difference: 1ºC to 15ºC.

ERROR Symbol: When the thermal sensor is opened or short circuited, Code “E1” will be displayed.

**Feature Descriptions**

Cooling: When the current temperature is greater or equal to setting temperature + temperature hysteresis and the “delay time has passed, the load relay is ON.

Cooling Stop: When the current temperature is less than or equal to the controlling temperature, the load relay is OFF.

Heating System: When the current temperature is less than or equal to the controlling temperature-the temperature hysteresis and the “delay time” has passed, the load relay is OFF.

Heating System Stop: When the current temperature is greater or equal to the controlling temperature, the load relay is OFF.

Tips: Cooling and heating conversions are set in the parameter HC menu selection; H is heating system, C is cooling.

**Parameters**

<table>
<thead>
<tr>
<th>Code</th>
<th>Function</th>
<th>Setting Range</th>
<th>Factory Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC</td>
<td>Cooling/Warming</td>
<td>H/C</td>
<td>C</td>
<td>------</td>
</tr>
<tr>
<td>LS</td>
<td>Alarm on Low Temperature Limit</td>
<td>-45 to Temperature Control-1</td>
<td>-45</td>
<td>ºC</td>
</tr>
<tr>
<td>HS</td>
<td>Alarm on High Temperature Limit</td>
<td>Temperature Control+1 to 80</td>
<td>30</td>
<td>ºC</td>
</tr>
<tr>
<td>Pt</td>
<td>Delay Time</td>
<td>0-5</td>
<td>1</td>
<td>Minute</td>
</tr>
<tr>
<td>CA</td>
<td>Temperature Correction</td>
<td>-15ºC-15ºC</td>
<td>0</td>
<td>ºC</td>
</tr>
<tr>
<td>d</td>
<td>Temperature Return Difference</td>
<td>1-15</td>
<td>2</td>
<td>ºC</td>
</tr>
</tbody>
</table>