



MCS-8 Air Handler Unit (AHU)



◆ **MCS-AHU General Information**

- Provide Total Control of the AHU System
- Provide Maximum Flexibility of the AHU System
- PC-Connect & PC-Config Support
- Standard MCS-8 Hardware
- Standard MCS-8 Software Approach

◆ MCS-AHU Controls

- Cooling Mode
- Heating Mode
- Dehumidification Mode
- Fan or Pump Only Mode
- Static Pressure in the System

◆ **MCS-AHU Control Based On:**

- Return Temperature / Humidity
- Supply Temperature / Humidity
- Zone Temperature / Humidity
- Ambient Temperature / Humidity

◆ MCS-AHU Control Strategy Flexibility

- Individual Modes can be controlled on different temperatures
- Requires only temperature sensors that are needed
- One Economy (non-mechanical) Stage, plus
- Up to four mechanical stages

◆ MCS-AHU Ease of Selection (PC-Config)

Return Air selected for:

Supply Air selected for:

Control Mode on:	Return	Supply	Zone	Ambient	
Fan/Pump Only Mode	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Cooling Mode	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Heating Mode	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dehumid Mode	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Supply Temp	SUPPLY T	Return Temp	RETURN T	Zone Temp	Not Used
Supply Humid.	Not Used	Return Humid.	RETURN H	Zone Humid	Not Used
Ambient Temp	Not Used	Ambient Humid.	Not Used		

Temperature Sensors are selected from a drop down menu by clicking on arrow:

◆ MCS-AHU Components

- Up to 4 Compressors
- Fan or Pump
 - With or without Variable Speed Control
- Modulating Valve
 - Ball Valve for Economizer
 - Damper Control
 - Water Valve Control

◆ MCS-AHU Components (continued)

- Types of Heat
 - None
 - Reversing Valve (Heat Pump Control)
 - Hot Water Valve
 - Electric Heat
- Adjust the Cooling Target of the Supply Air Based upon the Return air Temperature

◆ MCS-AHU Components (continued)

- Pro-Active Features
 - Safeties with Retries
 - All of the Chiller Control Safeties
 - Anti-Cycle Timers
- Set Points Contain the Targets, Timers, etc.
- Standard Machine Interface