

# Tech Tip Tuesday

(say that really fast 5 times!)

Return of  
Counter  
Days



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Technical Support Manager



## Tip: Adding an economizer to RTU

When adding an economizer to an RTU, be aware that the thermostat needs to be a two-stage cooling thermostat. This may require a thermostat upgrade. Below, is an excerpt from the Jade Economizer manual which talks about the sequence of operation of a call for cooling. As below, the first stage cooling, if the outside/mixed air is below setpoint, will always be the economizer. To run mechanical cooling the economizer will bring on Y2. If a single-stage thermostat is installed then either the economizer will not work properly or the mechanical cooling will never come on. Follow the diagram as you go through the sequence of operation.

2. Call for First Stage of Cooling (Y1) a. Economizer Unavailable (warm outdoor air): Closes the Y1-O relay (Y1-O) which energizes 1st stage compressor. b. Economizer Available (free cooling): The controller tries to maintain a mixed air temperature of  $53^{\circ}\text{F} \pm 5$  (MAT SET Setpoint) by modulating the outside air damper position. 3. Call for Second Stage of Cooling (Y2) a. Economizer Unavailable (warm outdoor air): Closes the Y2-O relay (Y2-O) which energizes 2nd stage compressor. b. Economizer Available (free cooling): Closes the Y1-O relay (Y1-O) which energizes 1st stage compressor. The controller tries to maintain a mixed air temperature of  $53^{\circ}\text{F} \pm 5$  (MAT SET Setpoint) by modulating the outside air damper position. After a time period of 2 hours of simultaneous economizer operation and first stage compressor operation, the economizer closes the Y2-O relay (Y2-O) which energizes 2nd stage compressor.

Call our tech line at:

**719-573-2590**

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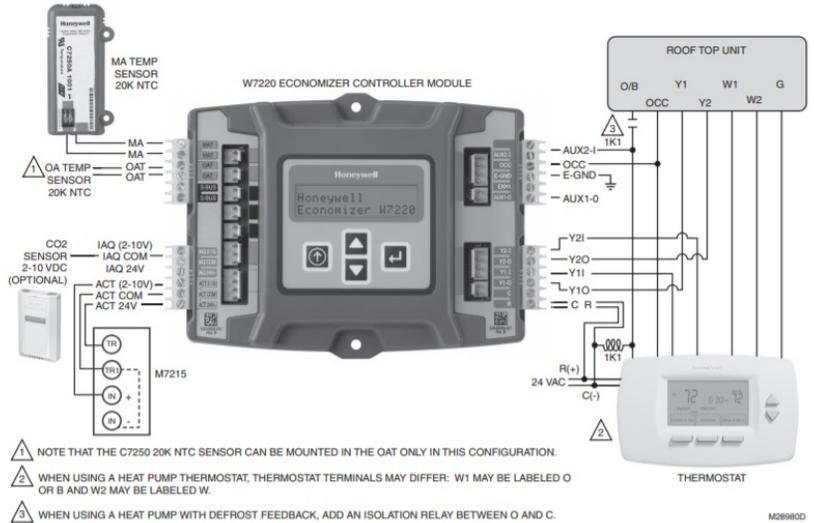


Fig. 10. Stand-alone dry bulb Economizer configuration with black motor M7215.

# COUNTER DAYS

Presented by Shaun and Dennis Pinnacle Sales.

## Vacuum Pump Counter Day

### Denver June 2, 8-11 am

Bring in your vacuum pumps - any make - for a FREE inspection and performance test.

All makes of pumps tested and oil changed if necessary.

