

PERFECT CONDENSATION CONTROL FOR CHILLED BEAM, RADIANT PANEL HVAC OR ANY WATER COOLED SYSTEM

GET THE MAXIMUM COOLING EFFECTIVENESS FROM YOUR CHILLED WATER COOLING SYSTEM AND POSITIVELY AVOID CONDENSATE "RAIN" WITH A CONSENSOR BASED CONDENSATION CONTROL SENSOR

THE FIRST EVER TO BE BASED ON A TRUE CONDENSATION SENSOR

Not a humidity sensor being sold as a "condensation sensor"..... Virtually all other condensation sensors on the market are actually humidistats set to stop coolant flow when the adjacent Relative Humidity reaches 80% to 90% RH.

The CONSENSOR is generally accepted as the standard in the HVAC industry.



Model CG2 -CM -P (Pipe Mounted)



Model CG2 -CM -F (Flat Surfaces / Glass)

These integrate a Model CG2 CONSENSOR with a Model ICM Circuit Module. They provide fully isolated (Voltage Free) Normally Closed solid state contacts for systems with -- or without, a Controller. They can also be used in systems where valves, etc. are controlled directly by thermostats / relays, etc. The contacts open when the onset of condensation is sensed and close again when the threat passes.

Note: Normally Open contacts are also available on special order, but these lack an inherent element of "fail safe" operation. To order, add "-N/O" to the model designation.

**ALL CG2 -CM SERIES INCLUDE A BI-COLOR LED TO INDICATE:
NO CONDENSATION, CONDENSATION, SENSOR FAULT**

SENSOR FAULT is a really unique feature of the CG2 -CM Series. The LED signals if the sensor malfunctions. While the problem exists, coolant flow can be made to stop until the CONSENSOR's malfunction is cleared. The unit can often be restored.

SPECIFICATIONS:

Size - 1.5" x 1.2" footprint x nom. 1.7" H from mounting surface

Power - 24 VAC (20 to 28 VAC) @ nom. 40 mA or
12 to 30 VDC @ nom. 10 mA (20mA worse case)

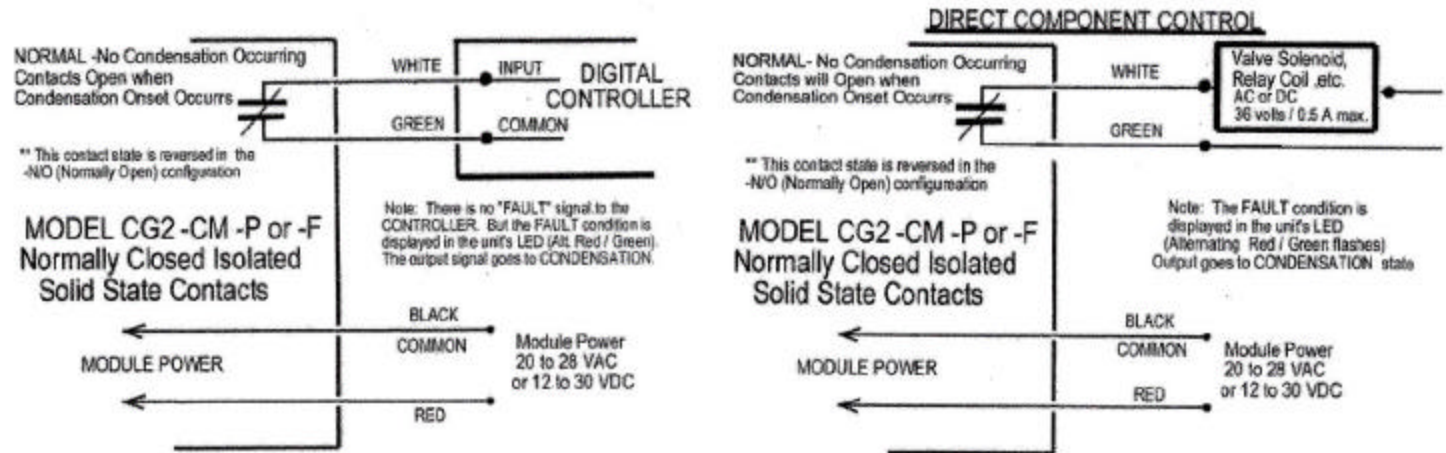
(Note: There may be a momentary 1.5 Amp
Inrush current for approx. 3 - 5 mSec. at power-up)

Contact Rating - 36 volts AC/DC 1/2 A max. @ 25°
At 24VAC: 8W @ 25°C / 7W @ 40°C
/ 6W @ 65°C / 5W @ 70°C / 5W @ 80°C

Electrical Isolation - 500 volts from mounting surface –greater on request

Max. Temperature – 65°C

WIRING DIAGRAM



To send the Condensation Onset Signal
to a Controller / Computer

To Send the condensation onset signal to
a valve solenoid, etc.

All condensation sensors on the market except the patented **CONDENSENSOR**, are actually humidistats set to 80% to 90% RH (Relative Humidity). This means that when the RH in the vicinity of the sensor reaches that preset level, a "condensation" signal is sent to a controlling computer, valve solenoid, etc. Actually, condensation is not occurring at this point, and it may never actually occur at all. The "condensation" signal is very premature. In fluid cooling applications - Chilled beam HVAC systems for example, coolant flow will be needlessly stopped - often when it's needed most.

The more elaborate dew point sensors are similarly dependant on the immediate RH.

The **CONDENSENSOR** functions very differently. It incorporates a very sensitive condensate sensing area that is intimately coupled thermally to your surface of interest - a pipe for example. Both will be at the same temperature. So when the pipe surface "sweats", the sensing area also "sweats" simultaneously. The **CONDENSENSOR**'s integrated microprocessor circuit is programmed to signal a condensation condition when a microscopic deposit of condensate appears on the sensing area ... the same instant it appears on your pipe surface. That will be well before there is any threat of the dreaded condensation "rain" or drip. When the threat of condensation passes, the **CONDENSENSOR** restores the coolant flow. Restoral time will depend on the ambient RH, the frequency and the amount of condensate deposited which should be limited.

To view a DEMO on YOUTUBE, COPY and PASTE this to your browser:

<http://youtube.com/watch?v=gA84e0MOwlc>



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