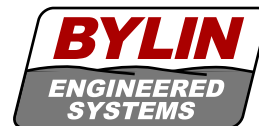


Bylin Engineered Systems

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AS-Digital Controller

Overview

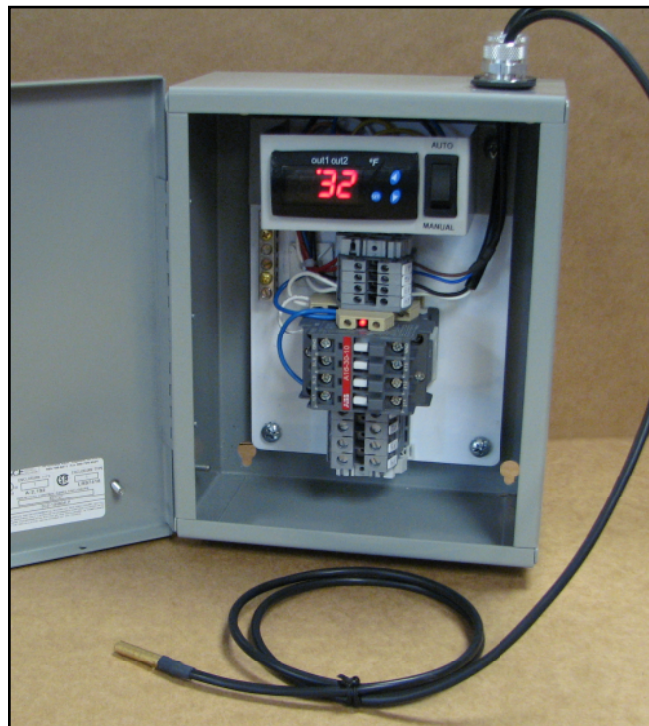
The AS-Digital Controller allows on/off operation of SRH & WFP heater cables (120 Vac to 277 Vac) by energizing up to four (4) branch circuits according to the temperature control values set on the digital temperature switch.

The AS-Digital Controller provides a set point for heater on/off operation as well as a set point for low-temperature cutout of the circuits. The low-temp cutout mode serves to save energy by keeping the heaters off when temperatures are so low that no snow and ice melting occurs. Both temperature set points are easily field adjustable to suit local conditions.

Operation

The AS-Digital Controller uses an ambient sensor (thermistor) to measure the ambient temperature. When the sensed ambient temperature falls below the heater-on set point, the temperature switch causes the branch circuits to be energized. Conversely, when the sensed temperature raises above the heater-on set point the branch circuits are de-energized.

If the sensed temperature falls below the low-temp cutout set point, the branch circuits will be de-energized and remain so until the ambient temperature rises back above the low-temp cutout set point.



The AS-Digital Controller

A 3-position rocker switch allows the controller to operate in automatic or manual mode, or to be turned off completely (switch set to center position).

Installation

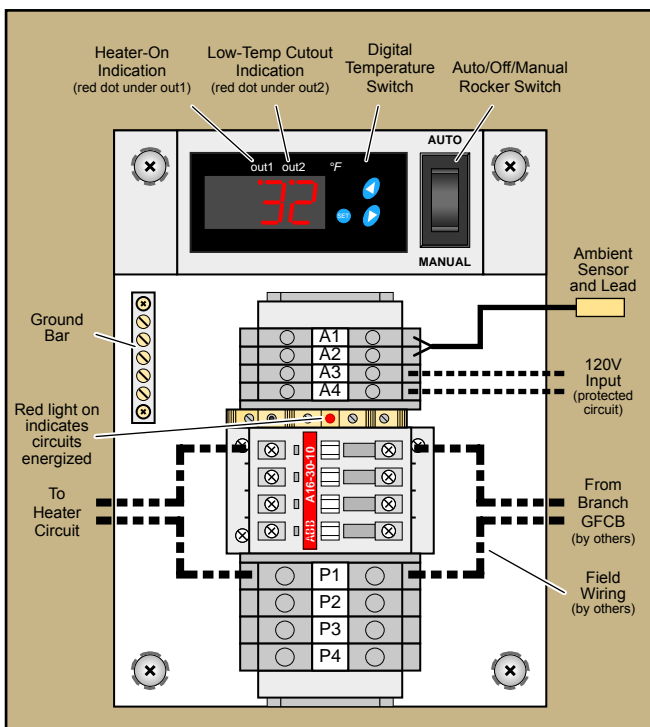
The AS-Digital Controller uses a 10" h x 8" w x 4" d NEMA 1 enclosure that mounts indoors, typically near the circuit breaker panel. Enclosure options include:

- AS-4X-Digital: NEMA 4X for outdoor applications.
- AS-4XW-Digital: NEMA 4X with clear viewing window for outdoor applications.

The ambient sensor is mounted outdoors in a shaded location representative of minimum ambient conditions, and away from any heat source, such as a utility room exhaust vent, so that the sensor gives an accurate reading of the actual ambient conditions. The ambient sensor comes with a standard 10 ft lead, but its range can be extended up to hundreds of feet using ordinary stranded copper wire.

Preseason Testing

The heater circuits may be energized and tested for proper functionality prior to the cold weather season by setting the 3-position rocker switch to Manual. Amperage readings may then be taken on each branch circuit.



AS-Digital Controller Interior Layout
(switches up to four branch circuits)