

INSTALLATION

!CAUTION !

- **This product is not intended for life or safety applications**
- **Installing sensors in an energized motor control center or on any energized conductor can be hazardous.**

Severe injury or death can result from electrical shock during contact with high voltage conductors or related equipment. Disconnect and lock-out all power sources during installation. Applications shown are suggested means of installing sensors, but it is the responsibility of the installer to ensure that the installation is in compliance with all national and local codes. Installation should be attempted only by individuals familiar with codes, standards, and proper safety procedures for high-voltage installations.

SENSOR INSTALLATION (5800/5900)

The 5004 Remote Status panel accepts any combination of 5800 mini-sensors or 5900 split-core sensors. Sensors may be located up to 1000 feet away from remote status panel.

Ensure power conductor to be monitored is disconnected and locked out from the power source!

For model 5800, slide conductor to be monitored through the sensor hole, and re-connect the conductor.

For model 5900 split-core, simply clamp sensor over the monitored conductor.

NOTE: 5800/5900 sensors are polarity sensitive. Wire according to diagram. Unlike ordinary CTs, these sensors may be left unshorted, however, they will generate up to 24VDC. Be sure to label wiring to observe polarity for easy connection to processor.

Note: Monitoring amperages above or below sensor ratings require special installation:

- Low amperage (<1 amp FLA for 5800 mini-sensor & <2A FLA for 5900 split-core sensor) - to provide adequate current, wrap conductor through the center hole and around the sensor body to produce multiple turns and increase flow. Measured current = Actual Current x Number of turns.
- High amperage (>100A FLA for 5800 mini-sensor & >200A FLA for 5900 split-core sensor) - current flows in excess of sensor rating require the use of an appropriately sized external current transformer. Install the external CT on the conductor and run the CT secondary wire through the sensor. CAUTION: CTs can contain hazardous voltages. Install CTs in accordance to manufacturers' specifications and instructions.

Installation Instructions

HAWKEYE 5002

Remote Status Current Sensing 2-point Remote Status Panel

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SENSOR SPECIFICATIONS

5800 Mini-sensor

Amperage Ratings..... 1to 100A continous
Dimensions.....2.29"L x 1.85"W x 0.875"H
Sensor Hole Size..... 0.70" Dia.
Sensor wiring.....Up to 1000' from remote, two wire
22 AWG twisted pair

5900 Split-core Sensor

Amperage Ratings.....2 to 200A continuous
Dimensions.....3.63"L x 2.75"W x 0.88"H
Sensor Hole Size..... 1.00" Dia.
Sensor wiring.....Up to 1000' from remote, two wire
22 AWG twisted pair

REMOTE PANEL SPECIFICATIONS

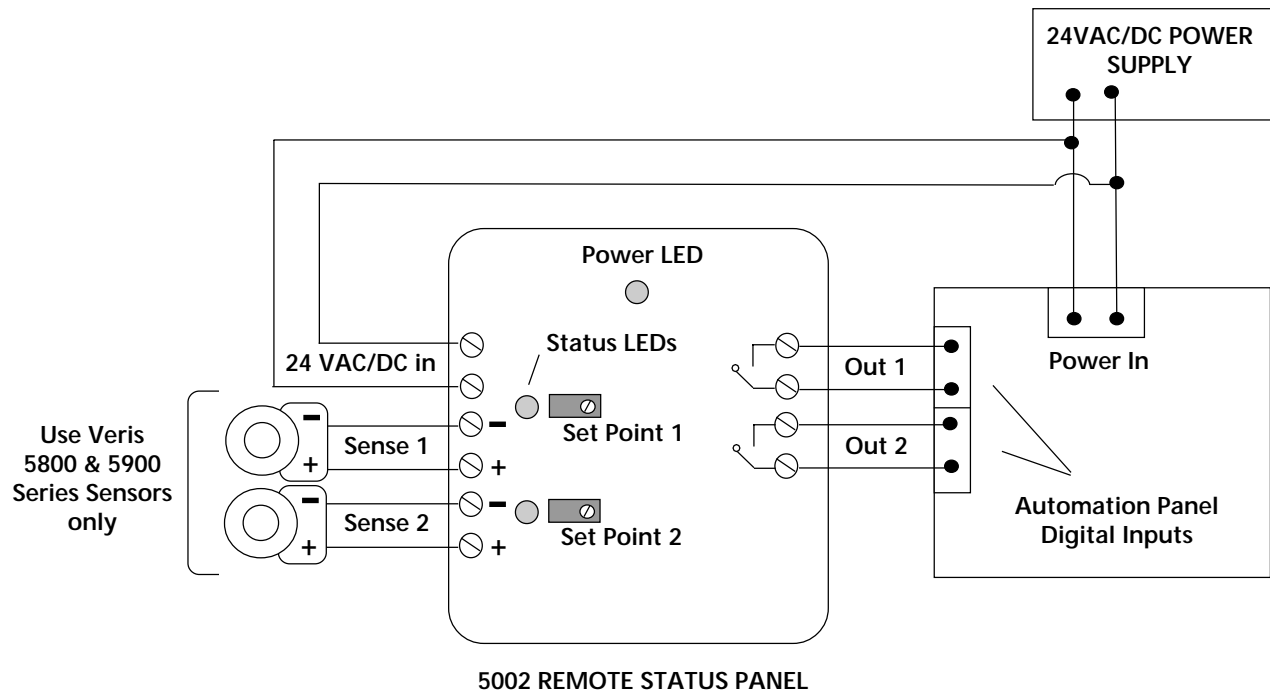
Model 5002

Number of points accepted.....1 to 2 sensors
Supply voltage.....24 VAC/DC
Supply current.....25 mA max.
Trip set-points.....Adjustable to +/- 1% of range
Dimensions 3.250"L x 2.375"W x 1.080"H
Sealing.....N.E.M.A. 1
Temperature range.....-15 to 85 C
Humidity range.....0-95% non-condensing
Output typeDry Contact, reed relay, N.O.
Output rating.....200 mA @ 30 VAC/DC
50 mA @ 120 VAC
All Outputs and Adjustments are per point

P/N Z101170

For larger jobs, use model 5004 four point remote status panel

SEE REVERSE SIDE FOR REMOTE PANEL
INSTALLATION INFORMATION



INSTALLATION QUICK-FACTS

- Sensors may be located up to 1000' away from Remote Status Panel
- You can use ordinary 22 gauge, unshielded wire (twisted is preferred).
- The 5800/5900 series sensors are safe...if unshorted on a powered conductor they'll only develop 24V (still, it's a good idea to short them if not connected to panel for extended periods of time)
- You must observe polarity of the sensors...if reversed, you won't get an output from the panel at any set-point adjustment...simply flip the wires. Nothing is damaged.
- Power LED is on when unit is powered
- Set-point adjustment determines at what current level monitored the Remote Panel output will trip. Turn clockwise to increase.
- Status LEDs are lit when the output is energized (closed) and the monitored current is above threshold.

REMOTE STATUS PANEL INSTALLATION

1. Mount the 5002 at your control panel (or other convenient location).
2. Wire the 5800/5900 sensors as shown below to the Remote Status Panel. Observe Polarity.
3. Connect dry-contact reed outputs per point to your automation control panel.
4. Power the 5002 with 24 VAC/DC from your control panel power supply or other source.

CALIBRATION

NOTE: A Status LED is lit when output is ON (Closed) Sensor output is closed when sensed current is above set-point. Turn clockwise to increase set-point.

For undercurrent application (i.e., to detect belt loss on fan):

1. Turn on the load source and allow the motor or other load to reach normal operating condition.
2. For each point: If the status LED is lit, turn the setpoint screw clockwise until the LED goes out, then stop. If the status LED is not lit, turn the setpoint screw counterclockwise until the LED lights, then clockwise until the LED goes out, then stop. Sensor threshold is now balanced at the current level being monitored.
3. For undercurrent indication (for most status applications), turn the setpoint counterclockwise 1/4 turn from the position determined in step 2. The status LED should be ON. For variable frequency drives operating above 25 Hz, operate drive to lowest speed operated above 25 Hz, and adjust as above. For drives operating below 25Hz or used with motors under 5A, consult factory for set-up. The sensor is now calibrated to provide indication of current flows below normal FLA.

An "open "condition of the sensor output after this adjustment indicates that the equipment has been turned off or has failed (belt loss, electrical failure, etc..)

NOTE: To calibrate the sensor for over-current indication, turn the setpoint screw 1/4 turn clockwise rather than counterclockwise. If the current exceeds the setpoint, the contact will close.