

H822-20



Hawkeye® 822-20

Solid-Core Current Transducer,
0-5VDC Output

Installer's Specifications

Sensor Power	Induced from monitored conductor
Insulation Class	600VAC RMS
Amperage Range	0-20A
Frequency	50/60Hz nominal
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10-90% RH, non-condensing
Accuracy	±2% F.S. from 10% to 100%
Response Time	2 sec.
Terminal Block Maximum Wire Size	14 AWG
Terminal Block Torque (nominal)	4 in-lbs (0.45 N-m)

For applications requiring double or reinforced insulation, please contact the factory.

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Follow safe electrical work practices. See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off.
DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION
- Only install this product on insulated conductors.

Failure to follow these instructions will result in death or serious injury.

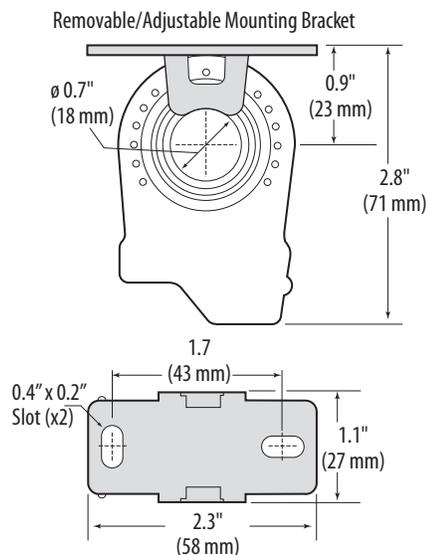
NOTICE

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- The installer is responsible for conformance to all applicable codes.
- Mount this product inside a suitable fire and electrical enclosure.

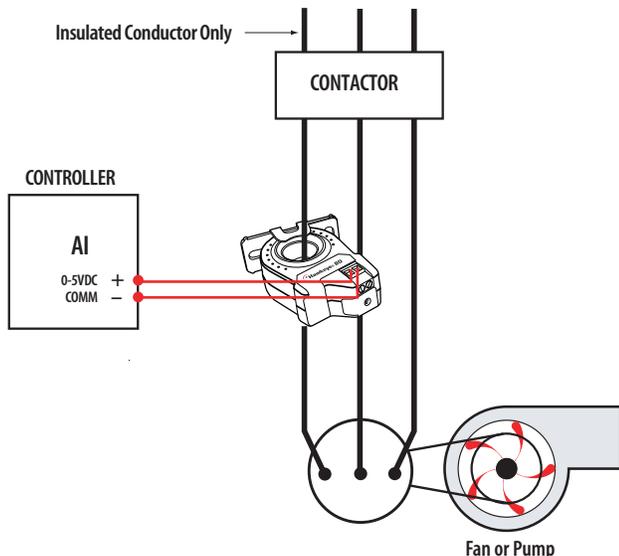
QUICK INSTALL

1. Disconnect and lock out power.
2. Install the mounting bracket to the back of the electrical enclosure, no closer than 1/2" (12mm) to an uninsulated conductor.
3. Slide the conductor to be monitored through the sensing hole of the current switch. Terminate the conductor. See Notes (page 2) for currents under 1 Amp or above 10 Amp.
4. Wire the output connections between the H822-20 and the controller (0-5VDC).
5. Reconnect power.
6. Scale the controller software to match the H822-20's output.

DIMENSIONS



WIRING EXAMPLE



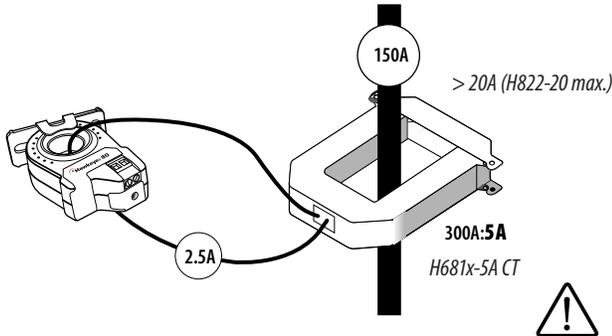
OPERATION

The H822-20 is a current transducer that senses current (amperage) in the 0-20A range. This represents the maximum current that can be applied to the monitored conductor. The H822-20 transforms the monitored current into a 0-5VDC output suitable for connection to building controllers, or other appropriate data acquisition equipment. The H822-20 requires no external power supply to generate its output.

NOTES

For load currents greater than sensor maximum rating:

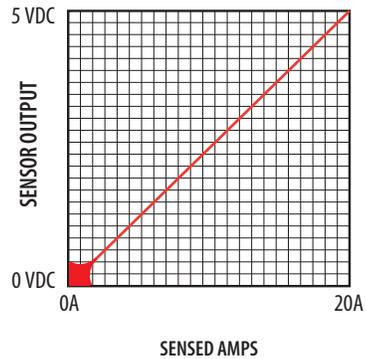
Use a 5 Amp (H681x series) Current Transformer (CT) as shown.



 **DANGER: 5A CTs can present hazardous voltages.**
 Install CTs in accordance with manufacturer's instructions.
 Terminate the CT secondary before applying current.

CALIBRATION

Scale the controller software to match the current transducer's output (0-5VDC).



TROUBLESHOOTING

Problem	Solution
No Reading at Controller	<ul style="list-style-type: none"> • Check for control voltage at sensor (<20V). • Check for amperage in monitored conductor (> 2A). • Assure that sensor core mating surfaces are clean.

CAUTION

RISK OF EQUIPMENT DAMAGE

- Derate the product's maximum current for the number of turns through the sensing window using the following formula.

$$\text{Rated Max. Amps} \div \text{Number of Turns} = \text{Max. monitored Amps}$$
 e.g. : $100A \div 4 \text{ Turns} = 25 \text{ Amps max. in monitored conductor}$
- Failure to follow these instructions can result in overheating and permanent equipment damage.

For load currents less than sensor minimum rating:

Wrap the monitored conductor through the center hole and around the sensor body to produce multiple turns through the "window." This increases the current measured by the transducer.

Controller must be programmed to account for the extra turns. e.g., if four turns pass through the sensor (as shown) the normal controller reading must be divided by 4.

