

# H923





# DANGER /

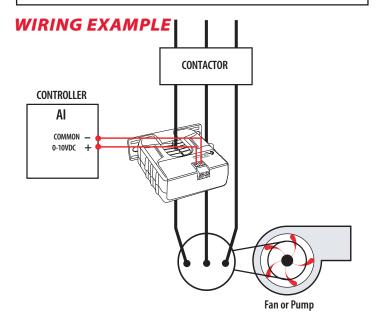
#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- 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.



# <sup>(</sup> \*Hawkeye ™ 923

# Split-Core Current Transducer, 0-10VDC Output

#### Installer's Specifications

Amperage Range	0-20/100/150A (slide-switch selectable)
Sensor Power	Induced from monitored current
Insulation Class	300VAC RMS
Frequency Range	50/60Hz
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10 - 90% RH, non-condensing
Accuracy	$\pm 2\%$ full scale from 10% to 100% (selected range)
Response Time	2 sec.
Terminal Block Maximum Wire Size	e 14 AWG
Terminal Block Torque (nominal)	4 in-lbs (0.45 N-m)
Agency Approvals CE: EN	N61010-1:2001-2, CAT III, pollution degree 2, basic insulation

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

#### INSTALLATION

#### Disconnect and lock out power to the enclosure containing the conductor to be monitored.

- 1. Locate a mounting surface for the removable mounting bracket that will allow the monitored conductor to pass through the center window when it is installed and that will keep the device at least 1/2" from any uninsulated conductors. Determine cable routing for the controller connection, allowing wiring to reach the mounting location.
- 2. Drill holes to mount the bracket to the chosen surface using the included screws.
- 3. Set the desired amperage range (20, 100, or 150 Amps).
- 4. Wire the output connections between the sensor and the controller (0-10VDC).
- 5. Snap the sensor over the conductor to be monitored and clip the assembly to the mounting bracket.
- 6. Scale the controller software to match the sensor output.
- 7. Secure enclosure and reconnect power.

#### DIMENSIONS

Removable Mounting Bracket 1.0" (25 mm Bracket can be mounted on three sides for added 1 1' 0.8" installation flexibility. (26 mm) (21<sub>mm</sub>) 3 1' (79 mm) Self-gripping 2.8" (70 mm) Use DIN Rail 1.4" (36 mm) Mounting clip (Veris part number AH01) to (64 mm) 3.0" mount on stan-(76 mm) dard DIN rail.



#### **OPERATION**

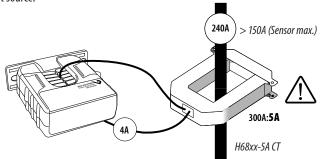
The H923 is a current transducer that senses current (amperage) in any of three field-selectable ranges; 0-to-20, 0-to-100, or 0-to-150 Amps. These ranges represent the maximum current that can be applied to the monitored conductor. The H923 transforms the monitored current into a 0 to 10 VDC output suitable for connection to building controllers or other appropriate data acquisition equipment. The H923 requires no external power supply to generate its output.

The H923 housing offers unprecedented mounting flexibility. The mounting bracket can be attached in three different places. Additionally, the bracket is compatible with the Veris AH01 DIN Rail clip, allowing DIN mounting.

#### NOTES

#### For load currents greater than sensor maximum rating:

Use a 5 Amp (H68xx series) Current Transformer (CT) as shown. This technique can be combined with wrapping (see below) to add range for a low current load on a high current source.





DANGER: 5A CTs can present hazardous voltages. \( \text{Install CTs in accordance with manufacturer's instructions.} \) Terminate the CT secondary before applying current.

## **CAUTION**

#### **RISK OF EQUIPMENT DAMAGE**

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

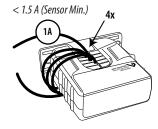
Rated Max. Amps ÷ Number of Turns = Max. monitored Amps e.g.: 100A ÷ 4 Turns = 25 Amps max. in monitored conductor

Failure to follow these instructions can result in overheating and permanent equipment damage.

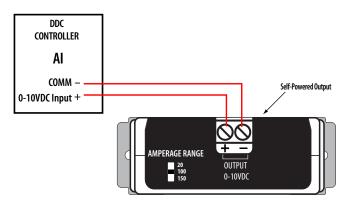
#### For load currents less than sensor minimum rating:

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

Program the controller to account for the extra turns, e.g., if four turns pass through the sensor (as shown) then divide the normal controller reading by 4.

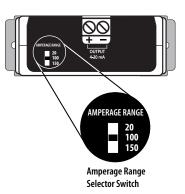


#### WIRING

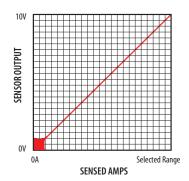


#### **SCALING**

1. Set range switch.



2. Scale controller software to match selected output.



#### TROUBLESHOOTING

Problem	Solution
No Reading at Controller	Check polarity of sensor output connections Check for output voltage at sensor Check for amperage in monitored conductor Assure that sensor core mating surfaces are clean and that the core clamp is completely closed