



Hawkeye™

H931

*Split-Core Current Transducer with Relay,
4-20mA Output*

Product Overview

The H931 is a current-sensitive device that monitors current (amperage) in any of three field-selectable ranges: 0-30, 0-60, or 0-120 amperes. These ranges represent the maximum current that can be applied to the monitored conductor. The H931 transforms the monitored current into a 4-20mA output suitable for connection to building controllers or other appropriate data acquisition equipment operating at up to 30 volts. It is also equipped with a command relay. The H931 requires a 12-30VDC power supply to generate its output.

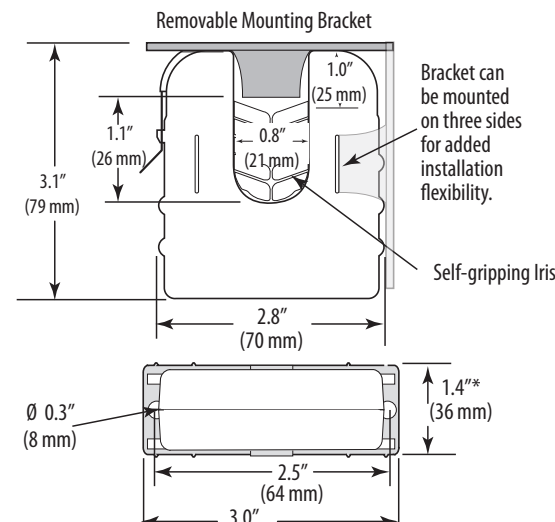
The H931 housing offers unprecedented mounting flexibility. The mounting bracket can be attached in three different places. Additionally, the bracket is compatible with the Veris AH01 DIN Rail clip, allowing DIN mounting.

Specifications

Sensor Power	30mA (max.)@12-30VDC
Insulation Class	600VAC RMS
Relay	SPST, N.O., 24 VAC/DC
Frequency Range	50/60Hz
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10 - 90% RH, non-condensing
Accuracy	±2% full scale from 10% to 100% (selected range)
Response Time	2 sec.
Terminal Block Wire Size	24-14 AWG (0.2 to 2.1 mm ²)
Terminal Block Torque	3.5 to 4.4 in-lbs (0.4 to 0.5 N-m)
Agency Approvals	UL 508 open device listing

Do not use LED status indicators as evidence of applied voltage

Dimensions



Bracket can be mounted on three sides for added installation flexibility.

Self-gripping Iris

Use DIN Rail Mounting clip (Veris part number AH01) to mount on standard DIN rail.



⚠️ ⚠️ 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.

A qualified person is one who has skills and knowledge related to the construction and operation of this electrical equipment and the installation, and has received safety training to recognize and avoid the hazards involved. NEC2011 Article 100
No responsibility is assumed by Veris Industries for any consequences arising out of the use of this material.

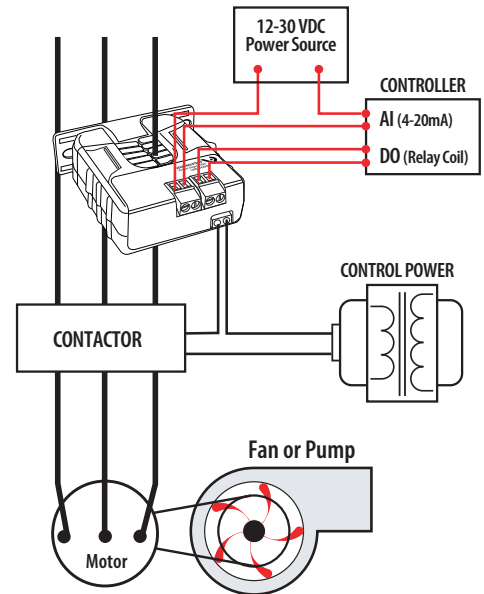
NOTICE

- 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.

Installation

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

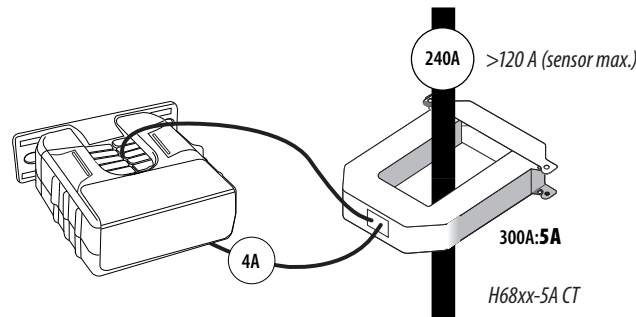
1. Locate a mounting surface for the removable mounting bracket that will allow the monitored conductor to pass through the center window when it is installed and that will keep the product at least ½" (13 mm) from any uninsulated conductors. Determine cable routing for the controller connection, allowing wiring to reach the mounting location. If using with a variable frequency drive, then mount the sensor on the line side.
2. Drill holes to mount the bracket to the chosen surface using the included screws.
3. Set the desired amperage range (30, 60, or 120 Amps).
4. Wire the output connections between the sensor and the controller (4-20mA).
5. Snap the sensor over the wire to be monitored and clip the assembly to the mounting bracket.
6. Scale the controller software to match the sensor's output.
7. Secure the enclosure and reconnect power.



Notes

For load currents greater than sensor maximum rating:

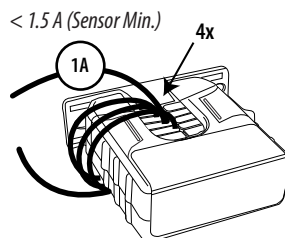
Use a 5 Amp (H68xx series) current transformer (CT) as shown. This technique can be combined with wrapping (see below) to add range for a low current load on a high current source.



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

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), divide the normal reading by 4).



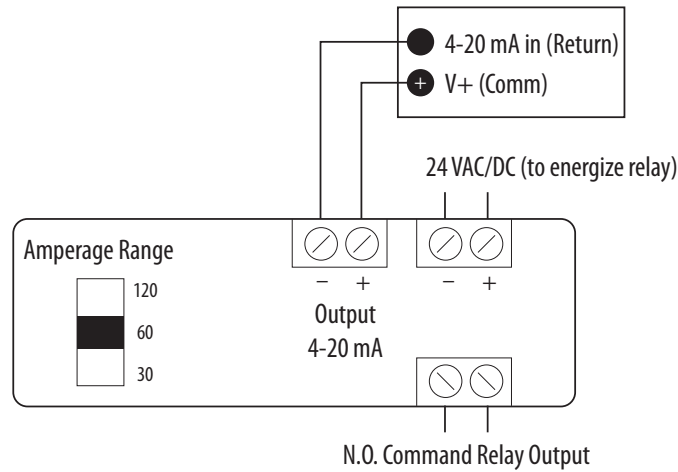
CAUTION

RISK OF EQUIPMENT DAMAGE

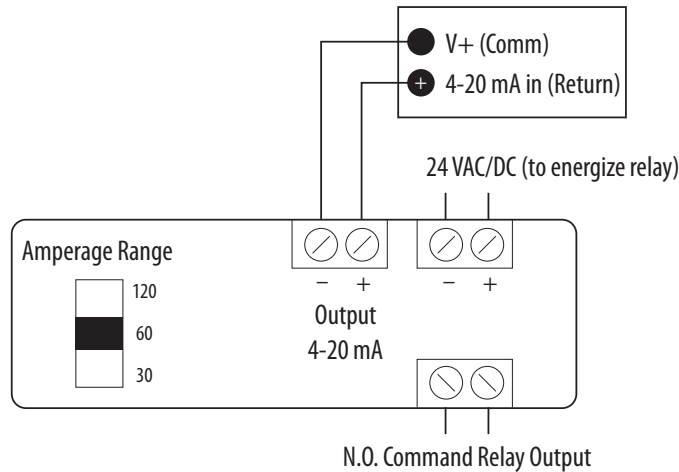
- Derate the product's maximum current for the number of turns through the sensing window using the following formula.
Rated Max. Amps ÷ Number of Turns = Max. monitored Amps
e.g.: 100A ÷ 4 Turns = 25 Amps max. in monitored conductor
- Failure to follow these instructions can result in overheating and permanent equipment damage.

Wiring

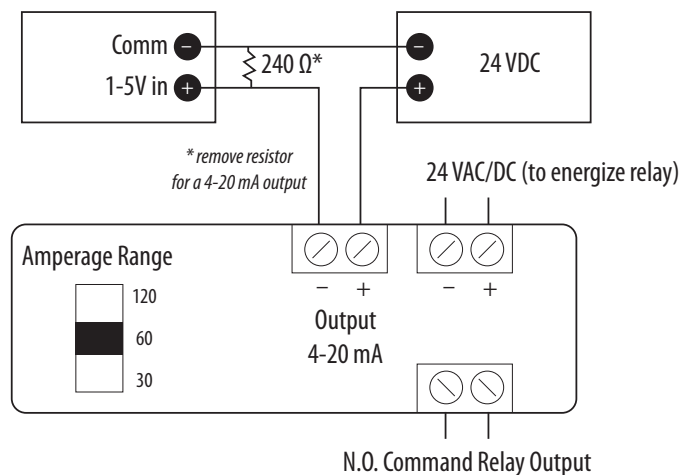
Example 1: Powered by the controller, + Common



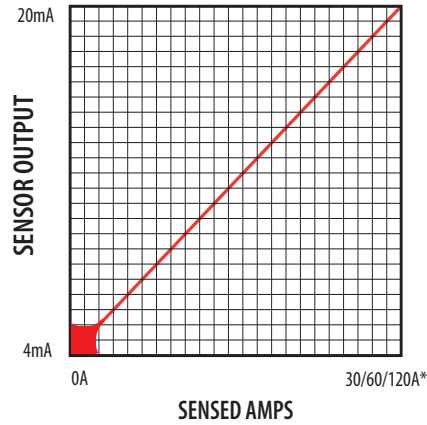
Example 2: Powered by the controller, - Common



Example 3: External Power



Scaling



*Factory calibrated ranges selected
 with the amperage range switch

Relay Information

RELAY CONTACT RATINGS (N.O.)		
Resistive.....	5A@240 VAC	
	5A@30 VDC	
Inductive.....	2A@240 VAC	
	2A@30 VDC	
TYPICAL COIL PERFORMANCE		
Voltage	AC	DC
24	15	15
12		20