

H740



Hawkeye™ 740

**Solid-Core On/Off Current Switch,
With Command Relay**

Installer's Specifications

Sensor Power	Induced from monitored conductor
Amperage Range	0.5 to 200 A continuous
Insulation Class	600 VAC RMS
Frequency Range	50/60 Hz
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10-90% RH non-condensing
Relay Coil	24 VAC/DC; 10 mA
Relay Contact	8(3.5) A@250 VAC/DC, 30 VDC, 1/4 HP
Status Output	N.O. 1.0 A@30 VAC/DC
Off-State Resistance	0 (open switch represents >1 MΩ)
Terminal Block Max. Wire Size	14 AWG
Terminal Block Torque (nom.)	4 in-lbs (0.45 N-m)
Agency Approvals	UL508 E150462

The product design provides for basic insulation only.

⚠ 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

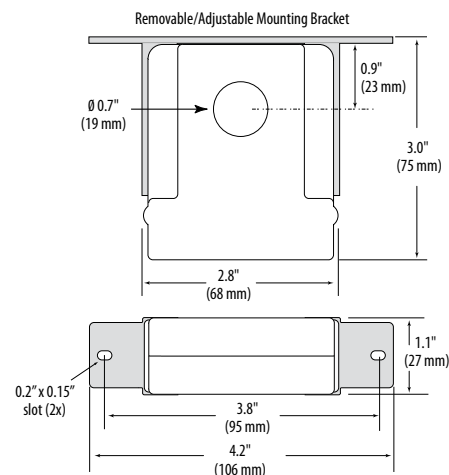
- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- The installer is responsible for conformance to all applicable codes.
- Mount this product inside a suitable fire and electrical enclosure.

INSTALLATION

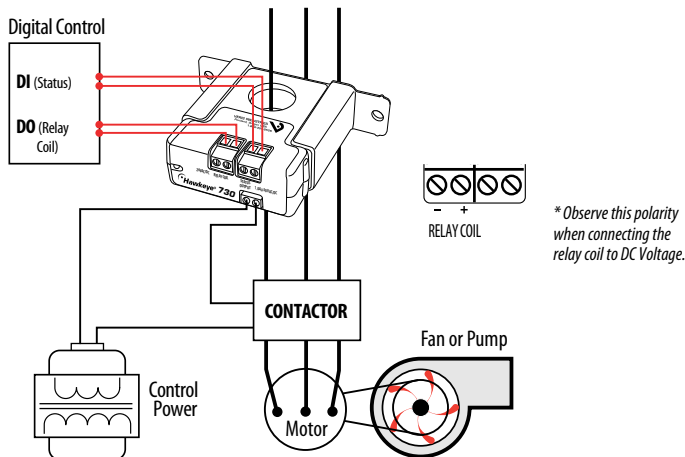
Disconnect and lock out power to the enclosure containing the conductor to be monitored.

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. Wire the output connections and relay between the sensor and the controller (solid-state contact).
4. Wire sensor to control power.
5. Route the conductor through the sensor's center window and slip the assembly into the mounting bracket.
6. Secure enclosure and reconnect power.

DIMENSIONS



WIRING EXAMPLE



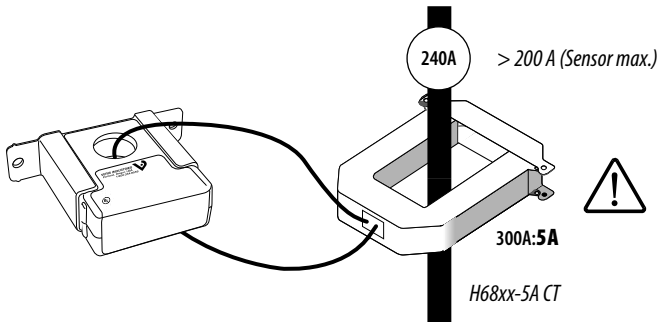
OPERATION

The H740 is a current-sensitive transducer that monitors current (amperage) in the conductor passing through it. The integrated relay provides On/Off control. The status output is suitable for connection to building controllers or other appropriate data acquisition equipment operating at up to 30 volts. The H740 requires no external power supply to generate its output.

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.



TROUBLESHOOTING

Problem	Solution
No Reading at Controller	<ul style="list-style-type: none"> • Check for control power at sensor (<30 V; <1.0 A) • Check for amperage in monitored conductor (>0.5 A)
Relay chatters or will not change state	<ul style="list-style-type: none"> • Ensure that not more than 24 VAC/DC has been applied to the coil. • Parallel applications with AC transformers can damage the relay. Use appropriate snubbing device.

! DANGER: 5A CTs can present hazardous voltages. 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.

$$\text{Rated Max. Amps} \div \text{Number of Turns} = \text{Max. monitored Amps}$$
 e.g. : $100\text{A} \div 4 \text{ Turns} = 25 \text{ Amps max. in monitored conductor}$
- 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 window and around the sensor body to produce multiple turns. This increases the current measured by the transducer.

