

H723LC



Hawkeye® 723LC

Solid-Core Current Transducer, 0-10VDC

Installer's Specifications

Amperage Range	0-10/20/40 Amps (slide switch selectable)
Accuracy	±2% F.S. from 10% to 100% of selected range
Output	0-10VDC self-powered
Insulation Class	300VAC RMS
Frequency	50/60 Hz
Temperature Range	-15° to 60°C (-5° to 140°F)
Humidity Range	10-90% RH non-condensing
Safety	IEC 61010-1:2001 CAT III

For CE compliance, conductor shall be insulated according to IEC 61010-1:2001, Installation Category III or equivalent.
The unit 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.

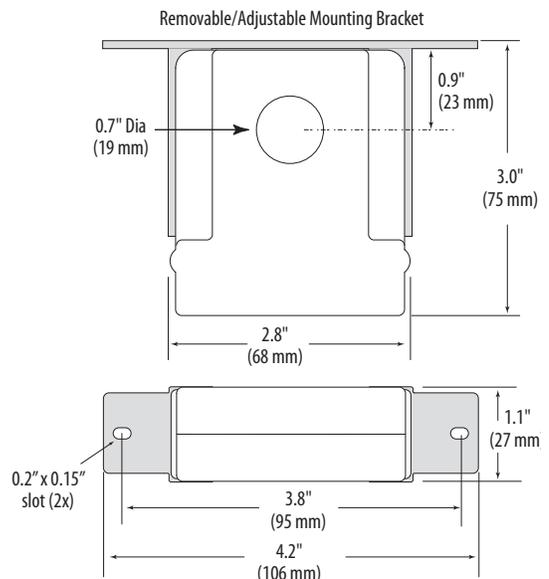
NOTICE

- 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.

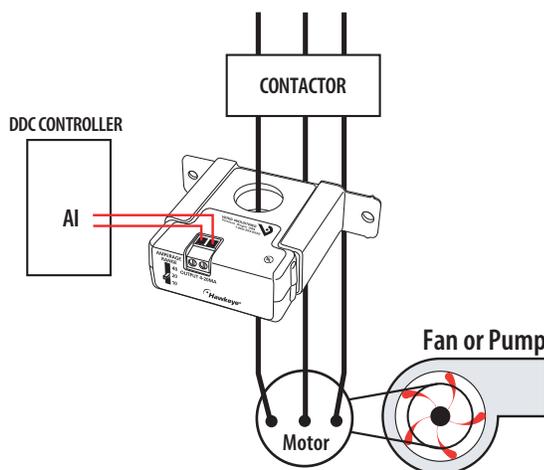
QUICK INSTALL

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 40 Amp.
4. Set the desired amperage range on the H723LC (10, 20, or 40 Amps).
5. Wire the output connections between the H723LC and the controller (0-10VDC).
6. Reconnect power.
7. Scale the controller software to match the H723LC's output.

DIMENSIONS



WIRING EXAMPLE

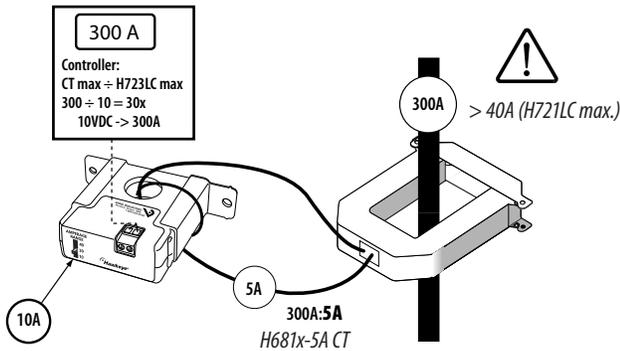


OPERATION

The H723LC is a current transducer that senses current (amperage) in any of three field-selectable ranges: 0-10, 0-20, or 0-40 amperes. These ranges represent the maximum current that can be applied to the monitored conductor. The H723LC transforms the monitored current into a 0-10 VDC output suitable for connection to building controllers or other appropriate data acquisition equipment. The H723LC requires no 12-30VDC external power to generate its output.

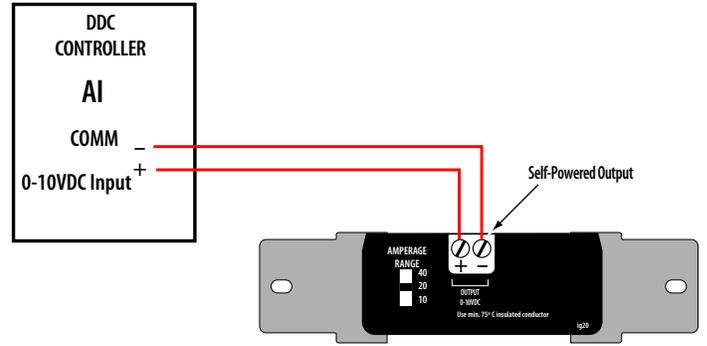
NOTES

For load currents greater than sensor maximum rating:
Use a 5 Amp (H681x series) Current Transformer (CT) as shown.



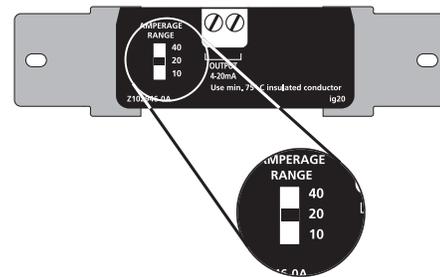
! DANGER: 5A CTs can present hazardous voltages. Install CTs in accordance with manufacturer's instructions. Terminate the CT secondary before applying current.

WIRING



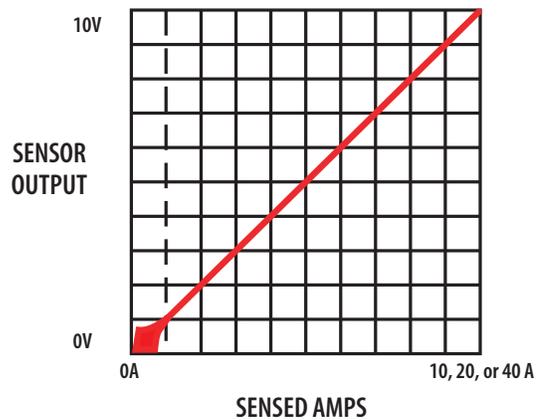
CALIBRATION/SCALING

Set the amperage range selector switch to a level appropriate for your load. The H723LC is available with three choices, 0-10, 0-20, or 0-40 Amps.



Amperage Range Selector Switch

Scale the output as shown below.



CAUTION

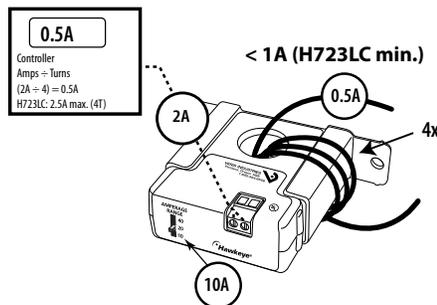
RISK OF EQUIPMENT DAMAGE

- 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. : $30A \div 4 \text{ Turns} = 7.5 \text{ Amps max. in monitored conductor}$
 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.



TROUBLESHOOTING

Problem	Solution
No Reading at Controller	<ul style="list-style-type: none"> • 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