

# H721LC



## DANGER

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

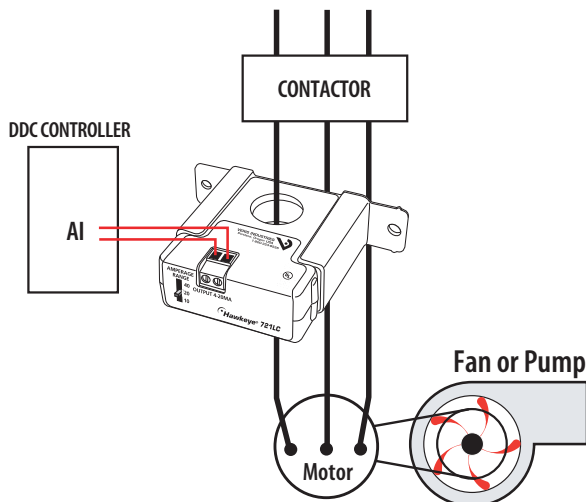
- Follow safe electrical work practices. See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment 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.

## WIRING EXAMPLE



# Hawkeye® 721LC

## Solid-Core Current Transducer, 4-20mA Output

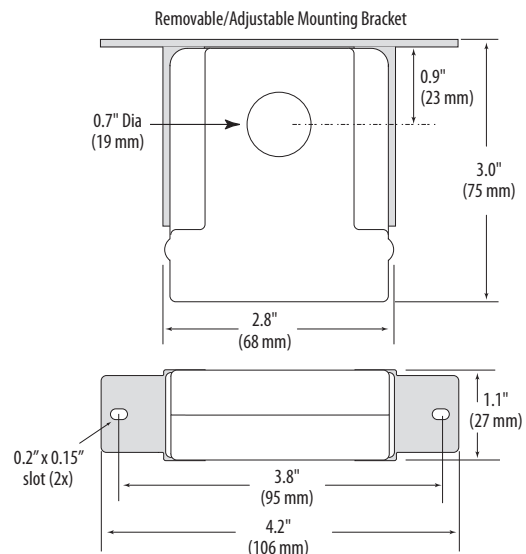
### Installer's Specifications

Amperage Range	0-10/20/40 Amps (slide switch selectable)
Sensor Power	30mA (max)@12-30VDC
Insulation Class	600VAC RMS (UL), 300VAC RMS (CE)
Frequency	50/60Hz
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10-90% RH, non-condensing
Accuracy	±2%FS from 10% - 100% of selected range, but not less than ±0.4A
Response Time	2 sec.
Terminal Block Maximum Wire Size	14 AWG
Terminal Block Torque (nominal)	4 in-lbs (0.45 N-m)
Agency Approvals	UL 508 open device listing
CE: EN61010-1:2001-2, CAT III, deg. 2, basic insulation	

## QUICK INSTALL

- Disconnect and lock out power.
- Install the mounting bracket to the back of the electrical enclosure, no closer than 1/2" (12mm) to an uninsulated conductor.
- 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.
- Set the desired amperage range on the H721LC (10, 20, or 40 Amps).
- Wire the output connections between the H721LC and the controller (4-20mA).
- Reconnect power.
- Scale the controller software to match the H721LC's output.

## DIMENSIONS

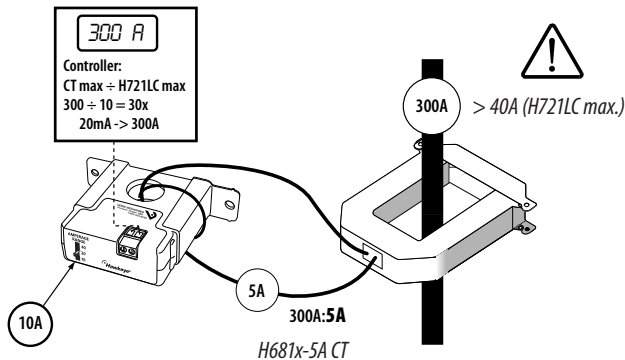


## OPERATION

The H721LC 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 H721LC transforms the monitored current into a 4-20mA output suitable for connection to building controllers or other appropriate data acquisition equipment. The H721LC requires 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.

## CAUTION

### RISK OF EQUIPMENT DAMAGE

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

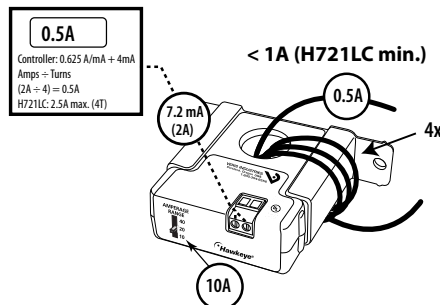
Rated Max. Amps ÷ Number of Turns = Max. monitored Amps  
e.g. : 30A ÷ 4 Turns = 7.5 Amps max. in monitored conductor

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

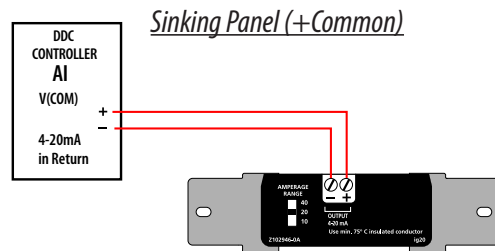
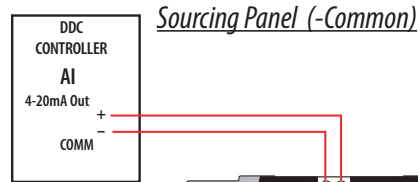
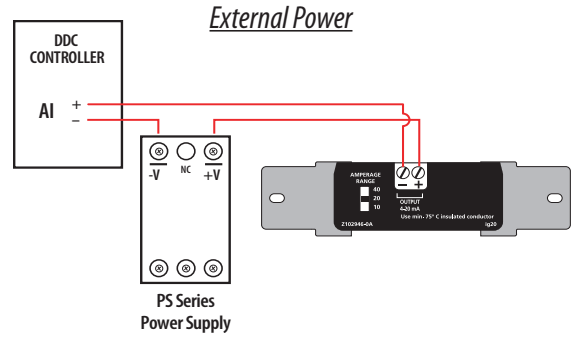
**For load currents less than sensor minimum rating:**

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.



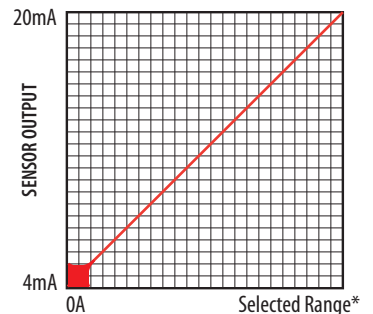
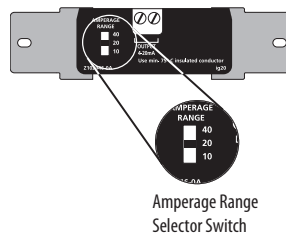
## WIRING EXAMPLES



\*A resistor can be added in parallel to convert the 4-20mA signal to a VDC signal (250 ohm = 1-5VDC; (500 ohm = 2-10VDC)

## CALIBRATION/SCALING

Set the amperage range selector switch to a level appropriate for your load. The H721LC is available with three choices, 0-10, 0-20, or 0-40 Amps.



\*Factory calibrated ranges selected with the amperage range switch

## TROUBLESHOOTING

Problem	Solution
No Reading at Controller	<ul style="list-style-type: none"> <li>Confirm that you have 12-30VDC in series with the sensor output terminals and the control panel analog input.</li> <li>Confirm measured current is within the selected range on the product.</li> <li>Check polarity of sensor output connections.</li> </ul>