## **H11D** LCD Display







## *•Hawkeye*™

The Hawkeye TruStat H11D is a microprocessor based, self-learning, self-calibrating current switch. It is designed for user ease, providing calibration-free status for both under and overcurrent, an LCD display, and slide-switch selectable trip point limits. At initial power-up, the H11D automatically learns the average current on the line with no action required by the installer. Once a current is learned, the switch monitors for changes in current greater than the selected range.

## **Backlit LCD**

View the monitored current (up to 200 A)...no need for expensive handheld meters and offers easy visibility in dark enclosures

# Versatility

Slide-switch selectable trip point limits

# Simplified troubleshooting

Records and displays the amperage level that trips the alarm

# **Automatic** calibration

Reduced errors and installation costs

## Microcontrollerbased learning technology

Automatically learns load upon initial power-up...minimizes calibration labor

## **Reset function**

Reset function can be used when unpowered...reduces the possibility of an arc flash incident

#### **APPLICATIONS**

Insulation Class

- HVAC fans, pumps, and blowers
- Monitoring status of industrial process equipment

600 Vac RMS (UL); 300 Vac RMS (CE3)

### **SPECIFICATIONS**

| Sensor Power  | Induced from monitored conductor  |  |  |  |
|---|---|--|--|--|
| Response Time   | 1 sec.  |  |  |  |
| Accuracy  | ±2% of full scale   |  |  |  |
| Frequency Range   | 50/60 Hz  |  |  |  |
| Temperature Range                                       | -15 to 60 °C (5 to 140 °F)  |  |  |  |
| Humidity Range  | 10 to 90% RH non-condensing   |  |  |  |
| LCD Backlight   | Off at low currents; illuminates when<br>monitored current exceeds 4.5 A;<br>flashes during an alarm state while<br>current remains above 4.5 A |  |  |  |
| On-State Resistance                                     | ≤1.0 Ω  |  |  |  |
| Off-State Resistance                                    | ≥1.0 MΩ   |  |  |  |
| Setpoint Target Range, Switch<br>Setting A <sup>1</sup> | ±40% of learned nominal current; max.<br>learned current of 142 A to enable an<br>upper trip limit at or below 200 A                            |  |  |  |
| Setpoint Target Range, Switch<br>Setting B <sup>1</sup> | ±60% of learned nominal current;max.<br>learned current of 125 A to enable an<br>upper trip limit at or below 200 A                             |  |  |  |
| Switch Setting C <sup>1</sup>                           | On/Off Status; contacts are closed while amperage is above 2.5 A  |  |  |  |
| Alarm Reset Range <sup>2</sup>                          | ±5% of learned nominal current  |  |  |  |
| Setpoint Calibration Learn Period                       | 30 sec.; self-learning, pushbutton reset  |  |  |  |
| Normal-to-Alarm Output Delay                            | 1 sec. maximum  |  |  |  |
| Alarm-to-Normal Output Delay                            | 30 sec. nominal   |  |  |  |

| Hysteresis               | 10% (typical)   |  |  |  |
|--------------------------|---|--|--|--|
| Terminal Block Wire Size | 24 to 14 AWG (0.2 to 2.1 mm <sup>2</sup> )  |  |  |  |
| Terminal Block Torque    | 3.5 to 4.4 in-lbs (0.4 to 0.5 N-m)  |  |  |  |
| WARRANTY                 |   |  |  |  |
| Limited Warranty         | 5 years   |  |  |  |
| AGENCY APPROVALS         |   |  |  |  |
| Agency Approvals         | UL 508 open device listing; CE:<br>EN61010-1, CAT III, Pollution Degree 2<br>basic insulation |  |  |  |

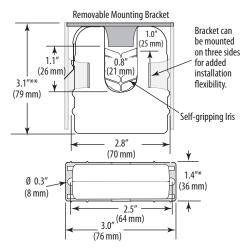


- 1. Trip point switch positions A and B are not for use in applications where the current will fluctuate by more than 40% (A) or 60% (B) of the nominal current. If the current will fluctuate by more than 60%, use the H11D for on/off status (position C) only.
- The upper trip limit alarm resets when the current drops by 5% of the learned nominal current limit. The lower trip limit alarm resets when the current rises by 5% of learned nominal current limit.
- 3 . The CE mark indicates RoHS2 compliance. Please refer to the CE Declaration of Conformity for additional details.

Specification Note: For CE compliance, conductor shall be insulated according to IEC 61010-1

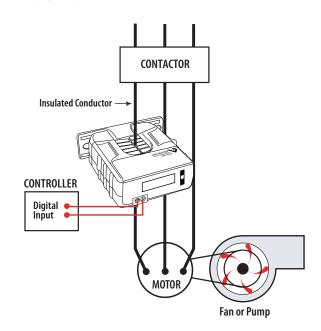
Do not use the LCD as evidence of applied voltage.

### **DIMENSIONAL DRAWING**

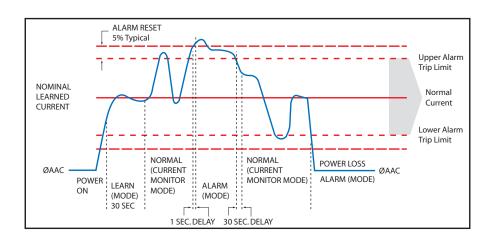


\* Terminal block may extend up to 1/8" over the height dimensions shown.

### **WIRING DIAGRAM**



### **FUNCTIONAL DRAWING**



## **ORDERING INFORMATION**

| MODEL | AMPERAGE RANGE <sup>1</sup>                  | STATUS OUTPUT          | NOMINAL TRIP POINT<br>TARGET RANGE         | HOUSING    | STATUS<br>LED | UL  | CE |
|-------|--|------------------------|--|------------|---------------|-----|----|
| H11D  | 2.5 to 200 A @ 60 Hz<br>3.0 to 200 A @ 50 Hz | N.O. 1.0 A @ 30 Vac/dc | ±40%, ±60%, or on/off<br>(user selectable) | Split-core | •             | • 2 | •  |

1. To enable the upper trip limit alarm, the max. learned current for switch setting "A" is 142 A, and the max. learned current for switch setting "B" is 125 A. Switch setting "C" is for on/off status only, so the upper trip limit alarm does not apply. 2. Listed for use on 75 °C insulated conductors.