

FEATURES

- Input Ranges from 4mV to 250V, 1mA to 5A
- Switch-Selectable HI/LO Trip Function
- 5 Amp, 230Vac Relay Contacts
- Adjustable Deadband Standard
- Red/Green Alarm Status LEDs
- Industry-Standard Pinouts (11-Pin Socket)
- AC or DC Power Options



DESCRIPTION

Models JH1000 and JH1020 DC Input Alarms monitor a DC voltage or current and provide relay contact HI/LO trip outputs. Input capabilities range from millivolt/milliamp sensor signals to power-level voltages and currents.

The alarm trip points are adjustable anywhere within the input range. Deadbands also are fully adjustable, from 0.25% to 100% of span. A slide switch, accessible through the top of the enclosure, selects HI or LO trip operation (HI/HI, HI/LO or LO/LO on dual alarms). Red/green LEDs indicate alarm status.

Alarm contacts are rated at 5 amps, 230Vac or 30Vdc. Model JH1000 provides one set of DPDT relay contacts; Model JH1020, two SPDT relays. Both models now include as standard a low-drift input amplifier for millivolt-level signals (formerly an extra-cost option). AC and DC power options are available.

HOW TO ORDER

Model Numbers:

JH1000: Single Trip Alarm
JH1020: Dual Trip Alarm

Power:

Add suffix -AC for AC power or -DC for DC power. (Example: JH1020-AC.) Specify 115Vac, 230Vac, 12Vdc or 24Vdc

Input Range:

Specify any DC voltage or current range allowed by the "Input Capabilities" spec (see back).

Trip Point:

If you would like the trip points to be factory set, please specify the

following for each trip point. Specify HI or LO trip, specify the setpoint and specify the amount of deadband required (or specify "minimum deadband").

Relay Action:

Failsafe: Standard. Provided unless otherwise specified. The relay is energized under normal conditions and deenergizes upon alarm or upon loss of power. Thus, loss of power is seen as an alarm condition.

Option R (Reverse Acting): Relay is normally not energized and

energizes (pulls in) upon alarm trip.

Urethane Coating:

Specify Option U.

INSTALLATION

These alarms plug into any standard 11-pin circular (“octal”) relay socket. JH Technology offers part #DS011 for DIN-rail or surface mounting (see the Accessories page).

CONNECTIONS

Pin 1: Power (AC or, if DC power option, DC plus).

Pin 2: No connection.

Pin 3: Power (AC or, if DC power option, DC minus).

Pin 4: Input plus.

Pin 5: Input minus.

Pin 6: Setpoint 1 relay NO contact.*

Pin 7: Setpoint 1 relay moving contact.*

Pin 8: Setpoint 1 relay NC contact.*

Pin 9: Setpoint 2 relay NO contact.*

Pin 10: Setpoint 2 relay moving contact.*

Pin 11: Setpoint 2 relay NC contact.*

* Notes: NO (normally open) and NC (normally closed) refer to the relay state when no power is applied. For Failsafe operation the NO contacts are closed under nonalarm conditions. The NC contacts close upon alarm and upon loss of power. The terms Setpoint 1 and Setpoint 2 refer to dual-

trip alarms. For single-trip alarms, both sets of contacts respond to the same trip point.

RELAY CONTACTS

The relay contacts are rated for 5 amps, *resistive* load, up to 230Vac or 30Vdc. Contact protection (arc suppression) must be used when switching inductive loads. Our warranty does not cover relays whose contacts fail due to arcing or overloads.

SPECIFICATIONS

Voltage Input Capabilities:

4mV minimum span, +/-250V maximum input. Offset ranges are allowed. (Input Impedance: 200Kohms or greater.)

Current Input Capabilities:

1mA minimum span, +/-5 Amps maximum input. Offset ranges are allowed. (Input Resistance: Varies with input range. Contact factory for details. 62 ohms for 4/20mA input.)

Relay Contacts:

Single Alarm, one DPDT relay. Dual Alarm, two SPDT relays. Contacts rated 5 Amps resistive, 115/230Vac or 30Vdc. 1/8 HP max inductive load at 115/230Vac. Refer to instructions for contact protection when switching inductive loads.

Setpoint Adjustment:

0% to 100% of range.

Deadband Adjustment:

0.25% to 100% of range. Setpoint remains centered in the middle of the deadband.

Response Time:

Under 100 milliseconds.

Isolation:

Input is isolated from power and from relay contacts. 1,500Vac rms (2,100V peak) breakdown.

Operating Temperature:

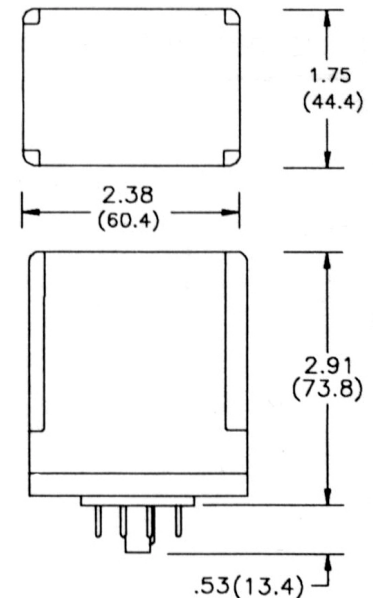
-10 to +60°C (14 to 140°F).

Temperature Stability:

+/- (0.02% of span plus 1.3 microvolts) per °C, or better.

Power Requirements:

AC, 115 or 230Vrms, 50/60 Hz., 2.5V-A. DC, 12 or 24Vdc, 2.5W.



JH TECHNOLOGY, INC.

SARASOTA, FL USA
(800) 808-0300

www.jhtechnology.com
e-mail: jhtek@jhtechnology.com