

FEATURES

- Potentiometers from 100 ohms to 100Kohms
- Offset and Expanded Ranges Available
- Input/ Output Isolation is Standard
- Quick-Check Red/Green Output LEDs
- Industry Standard Pinouts (8-Pin Socket)
- AC or DC Power Options
- Full Replacement Warranty

DESCRIPTION

Model JH4003I provides a DC output proportional to the position of a potentiometer or slidewire wiper. A fixed-range device, it is precisely calibrated to your specified range at the factory.

Expanded input ranges are available. Standard calibration is 0/100% potentiometer travel, but you may specify any range covering a 10% or wider portion of the travel. Calibration is unaffected by the potentiometer's end-to-end resistance.

Available options include AC or DC power choices and reverse-action Option RT (decreasing output with increasing input).

HOW TO ORDER

Model Number: JH4003I

Power:

Add suffix -AC for AC power or -DC for DC power. (Example: JH4003I-AC.) Specify 115Vac, 230Vac, 12Vdc or 24Vdc.

Input Potentiometer:

It is *not* necessary to specify the potentiometer's resistance. Just make sure it is not less than 100 ohms nor more than 100Kohms.

Input Range:

Specify 0/100%, or any 10% or wider portion of the travel (for example, 60/70%).

Output Range:

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

Reverse-Acting Transmitter:

Decreasing output with increasing input. Specify Option RT.



Loop-Powered Output:

4/20mA "current sink" output stage for connection to devices whose inputs provide 24Vdc loop excitation. Specify Option LPO.

Urethane Coating:

Specify Option U.

INSTALLATION

Model JH4003I plugs into any standard 8-pin circular (“octal”) relay socket. JH Technology offers part #DS008, suitable 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: Potentiometer ccw (0% travel).

Pin 5: Potentiometer wiper.

Pin 6: Potentiometer cw (100% travel).

Pin 7: Output plus.

Pin 8: Output minus.

QUICK-CHECK LEDs

Red-green Quick-Check LEDs give a quick indication of the relative output. Red is brighter at the low end, green at high, while at mid-scale both are approximately equal. Red-only indicates offscale low while green-only indicates offscale high.

SPECIFICATIONS

Input Potentiometer:

May be any resistance between 100 ohms and 100Kohms. It is not necessary to specify the potentiometer resistance on your order: end-to-end resistance does not affect the calibration.

Input Capabilities:

0 to 100% travel, or any 10% or wider portion of the travel (for example, 35/45%).

Voltage Output Capabilities:

1 volt minimum output span, -10 to +15V absolute limit. Offset ranges are allowed. Maximum output load, 10mA (1Kohm at 10V output).

Current Output Capabilities:

1mA minimum output span, 0 to +25mA absolute limit. Positive offsets are allowed, negative outputs are not. Output drive capability, 24V (1,200 ohms max. at 20mA output).

Accuracy:

+/-0.1% of span, or better.

Adjustability:

Zero and span each are adjustable approx. +/-15% of span. When ordered for 0-100% travel, the adjustments are set up so as to allow calibration to any 75% or wider portion of the travel (for example, 0-75% or 25-100%).

Linearity:

+/-0.05% of span or better.

Response Time:

Under 100 milliseconds.

Isolation:

Power, 1,500Vac rms (2,100V peak). Input/Output, 1,000Vac rms (1,400V peak).

Operating Temperature:

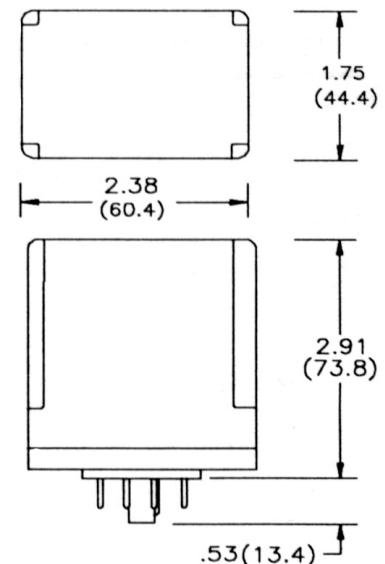
-10 to +60° C (14 to 140° F).

Temperature Stability:

+/-0.02% of span per °C, or better.

Power Requirements:

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



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