HSQ-6015

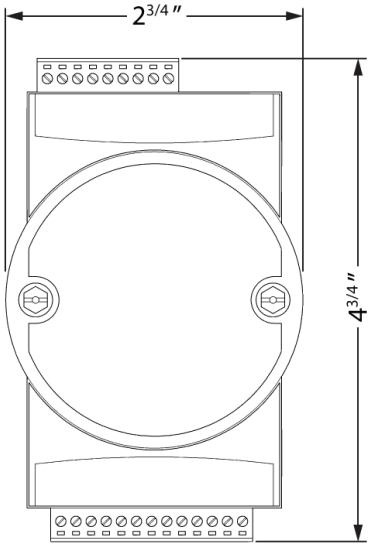
Isolated 7-Channel RTD Input Module

HSQ TECHNOLOGY

Technical Summary

Key Features

- ◇ I/O Type: Seven RTD (Resistance Temperature Detector)
- ◇ Supports Multi-Channel/ Multi-Range
- ◇ 10/100 Mbps Base-T Ethernet Communication
- ◇ Pt 100/1000, Ni, Balco 500
- ◇ Wiring Burn-Out Detect Function



The HSQ-6015 module accepts a wide range of RTD sensor types, including Pt100, Pt1000, Ni50, Ni508, and Balco 500 series. The 6015 allows multi-input ranges in one module, creating a cost-effective solution. This module supports an open wiring diagnostic function which warns operators when the sensor wire breaks. It's frequently used for building and factory temperature monitoring applications.

Specifications

Analog Input

- **Channels:** 7 (differential)
- **Input Impedance:** >10 MΩ
- **Input Connections:** 2 or 3 wire
- **Input Type:** Thermocouple
- **RTD Types and Temperature Ranges:**
  Pt 100 -50° – 150° C (-58° – 302° F)
- 0° – 100° C (32° – 212° F)
- 0° – 200° C (32° – 392° F)
- 0° – 400° C (32° – 752° F)
- -200° – 200° C (-328° – 392° F)
- Pt 1000 -40° – 160° C (-40° – 320° F)
- Supports both IEC 60751 ITS90 (0.03851 Ω/Ω/° C) and JIS C 1604 (0.03916 Ω/Ω/° C)
- Balco 500 -30° – 120° C (-22° – 248° F)
- Ni 518 -80° – 100° C (-112° – 212° F)
- 0° – 100° C (32° – 212° F)
- **Accuracy:** ± 0.1% or better
- **Span Drift:** ± 25 ppm / ° C
- **Zero Drift:** ± 6 µV / ° C
- **Resolution:** 16-bit
- **Wire Burn-out Detection**

General

- **Power Consumption:** 2 W @ 24 V_{DC}
- **Connectors:** Plug-in screw terminal block (I/O and power)
- **Watchdog:** System (1.6 second) and Communication (programmable)
- **Power Input:** 10 – 30 V_{DC}

Protection

- **Over Voltage Protection:** ±35 V_{DC}
- **Isolation Protection:** 2,000 V_{DC}
- **Built-in TVS/ESD Protection**
- **Power Reversal Protection**

Environment

- **Operating Temperature:** -10° – 70° C (14° – 158° F)
- **Storage Temperature:** -20° – 80° C (-4° – 176° F)
- **Humidity (Operating):** 20 – 95% RH (non-condensing)
- **Humidity (Storage):** 0 – 95% RH (non-condensing)

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