

2000435-4X Signal Splitter/Isolator



- ✓ Signal Splitter for 4-20 mA Transmitters
- ✓ Converts current input signals into isolated output signals
- ✓ Galvanic isolation between the input output and power supply
- ✓ 0-300Hz Frequency Range
- ✓ Transmitting Accuracy $\pm 0.1\%FS$
- ✓ 18-32V Power Supply Voltage Range, Recommended 24V DC
- ✓ ≥ 2500 V AC Dielectric Strength
- ✓ CE Compliance, IEC 61000-4

Introduction

The DATAQ 2000435-4X provides an isolated splitter for 4–20 mA transmitters. It converts one current input signal into 4 isolated output signals, with galvanic isolation between the input, output, and power supply.

It is compatible with modular instrumentation, DCS, PLCs, and other systems to provide signal isolation, conversion, distribution, and processing for field instruments. This enhances the noise immunity of the automatic control system in industrial production environments, ensuring greater system stability and reliability.

The product features a 1-input / 4-output configuration, with Input/Output magnetic isolation.

Panel Light Indication

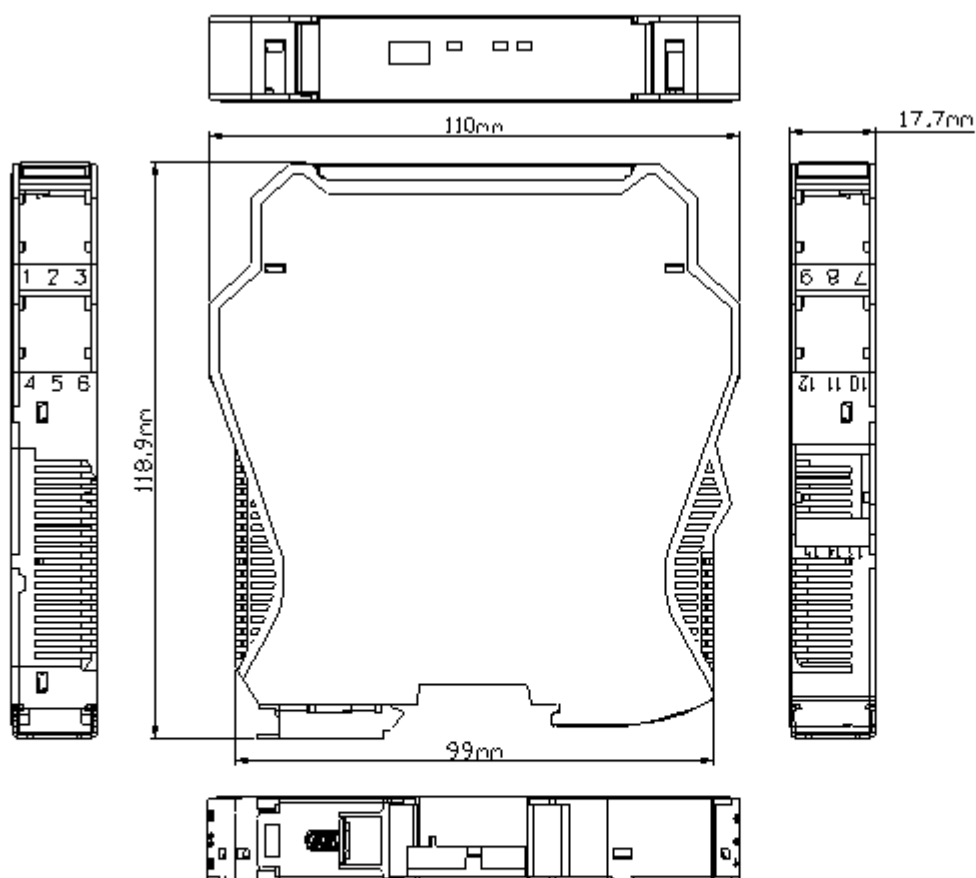
- PWR (green) remains shining during normal operation
- ALM light glitters (red) at occurrences of input signal fault and remains shining at occurrence of input excess

Specifications

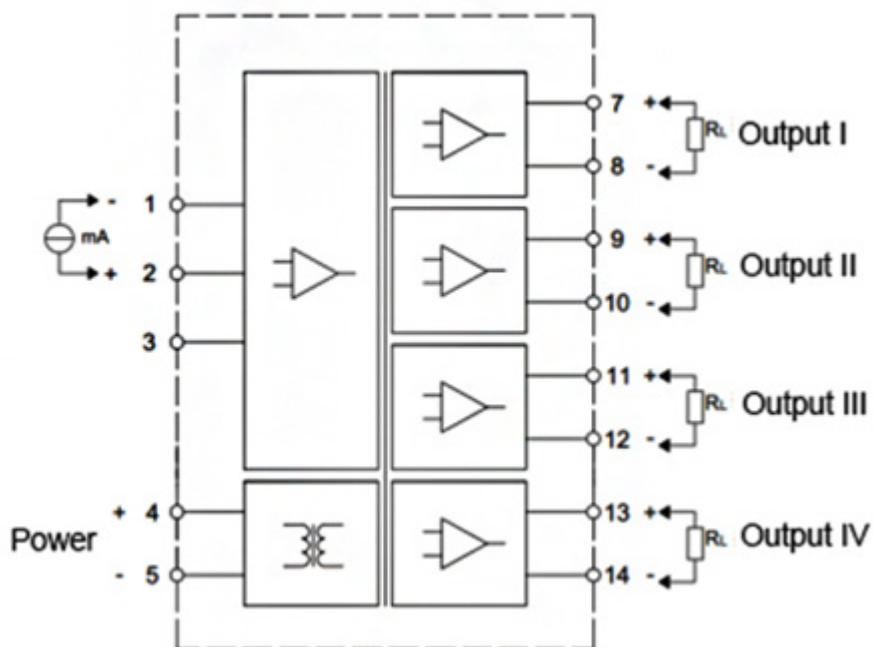
- Transmitting Accuracy: $\pm 0.1\% \text{F.S}$ ($25^{\circ}\text{C} \pm 2^{\circ}\text{C}$)
- Rise Time: $\leq 0.2 \text{ ms}$
- Settling Time: $\leq 2 \text{ ms}$
- Influence of Ambient Temperature: $< 30 \text{ ppm}/^{\circ}\text{C}$
- Ripple: $< 1 \text{ mV}$
- Frequency Range: $0 \sim 300 \text{ Hz}$
- Input Resistance: $\leq 60 \Omega$
- Output Load Capacity: $4 \sim 20 \text{ mA}$: $\leq 600 \Omega$
- Power Supply Voltage Range: $18 \sim 32 \text{ V DC}$ (Recommended voltage: 24 V DC)
- Power Consumption: 24 V DC
- Single Output: 0.4 W
- Insulation Resistance: $\geq 100 \text{ M}\Omega$ (Input /Output /Power)
- Dielectric Strength: $\geq 2500 \text{ V AC}$ (Input /Output /Power, 1 mA leakage current, 1 minute test time)
- EMC: CE Compliance, IEC 61000-4

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Dimensions - W×H×D (12.8×100×115) mm



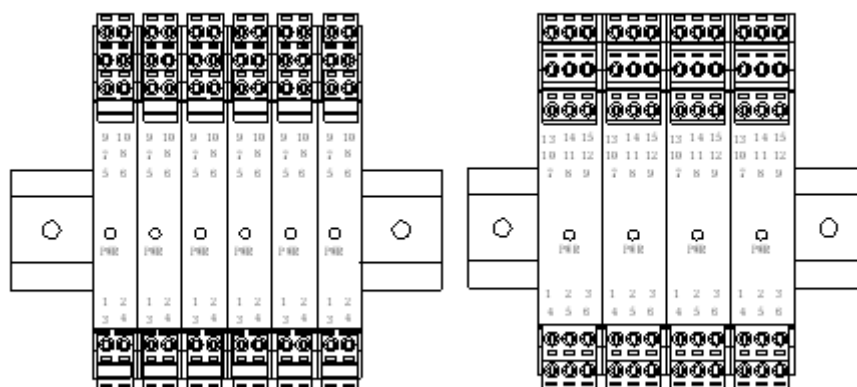
Wiring



Installation Instructions

- Mount the multiplexer onto a 35mm DIN rail, ensuring it is snapped on securely and firmly
- Maintain a vertical position to ensure proper heat dissipation
- Single-channel input, 4-channel output model is 12.8 mm wide

Vertical Installation Diagram



Operation Conditions

Avoid strong mechanical vibrations, impacts, and electromagnetic induction affecting the signal terminal and power supply. The equipment should comply with the electromagnetic interference resistance requirements for Class 3 industrial environments as specified in IEC 61000-4. Additionally, the atmosphere must be free of gases that are corrosive to metal and plastic components.

Compatible with 4-20 mA Current Sensors:

- 2000434-10X Current Transmitter, DC, 0-10A, 4-20mA Output
- 2000434-1X Current Transmitter, DC, 0-1A, 4-20mA Output
- 2000440-500X Current Transmitter, AC, 0-500A, 4-20mA Output
- 2000441-150X Current Transmitter, DC, 0-150A, 4-20mA Output
- 2000441-400X Current Transmitter, DC, 0-400A, 4-20mA Output
- 2000442-1000X Current Transmitter, Open Loop, DC, 0-1000A, 4-20mA Output
- View all Humidity, Flow and Current Sensors: https://dataq.com/products/accessories/humidity_flowsensor.html