TRANSPAK™ T700-0001

MODEL

Loop-Powered Isolator

Provides an Isolated DC Current Output

Benefits

- Protects Equipment and Personnel with 1800V Input-to-Output Isolation
- 1:1 Input/Output Current Transfer Ratio from 1 to 20mA
- Input Loop-Powered Design Eliminates Output Power Supply
- 500Ω Output Drive, up to 10V Compliance
- Three Year Warranty

DESCRIPTION

The T700-0001 is a loop-powered isolator. Accepting a current input (typically 4-20mA), the TransPak T700 takes its power source voltage and the output current loop drive (500Ω, 10V compliance Max.) from the input current loop. The 1-20mA output current follows the input current signal. Span adjustment is provided to adjust for load variations. There are two (+) output terminals. Terminal #3 is for load less than 100Ω (e.g. current meter inputs) and terminal #4 for loads greater than 100Ω.

The T700 is designed for installation in industrial field environments. Circuitry is enclosed in the TransPak's rugged, die cast aluminum housing which is sealed for protection against corrosion, moisture dust and electrical noise such as radio frequency interference (RFI) and electromagnetic (EMI) interference. Top-mounted barrier terminals strip connections are provided. Optional mounting solutions and enclosures are provided (see Accessories).

APPLICATION

The model T700 is useful in eliminating ground loop problems in existing systems, and as a preventative measure in the design of new systems. The DC current isolation allows a difference in potential of up to 1800V between the input, output signal and case ground. This isolation allows the benefits of grounded inputs to be realized, without creating signal errors or ground loops.

CALIBRATION

1. Connect the input to a calibrated milliamp source. Connect the output to the actual device load or to a load equivalent to the actual device load value (use terminal #3 for loads <100Ω, terminal #4 for load >100Ω). Monitor the output current with a milliamp meter in series with the load or monitor the voltage across the load.

2. Set the calibrator to 20mA and adjust the span potentiometer for 20mA output.

3. Set the calibrator for 4mA and confirm that the output is 4 mA.

ACTION INSTRUMENTS

Protecting the Integrity of Industrial Process Signals

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