DATA SHEET – Process Automation – Loop Isolation

Subject to change without notice



Loop Repeater 1Ch 4-20mA.



GENERAL DESCRIPTION

The LRS is a fully floating 4-20mA signal isolator that provides up to 2500Vrms isolation between the input loop and the output loop. The LRS can be used as a noise filter or reducer of common mode noise in some 4-20mA current loops. The LRS is manually adjustable to suit the individual loop loading, the adjustments being done from the top of the module via multi-turn potentiometers.

The LRS is factory calibrated for a 250 ohm output load unless otherwise specified.

FEATURES

- Full galvanic isolation input and output
- Both DIN and G rail mounting
- External Monitor points (40-200mV)
- External adjustment points
- Very small footprint of 25mm width

TECHNICAL DATA

Loop Voltage Between 12 and 45Vdc

 Input
 4 to 20mA

 Output
 4 to 20mA

Loop Resistance 250 ohms maximum per loop

ESD Protection Nominally 15kV (all ports) (IEC 61000-4-2)

Four Port Isolation 1500V (galvanic, all ports)

Power Indicator Blue LED

GENERAL SPECIFICATION

 Loop Voltage
 12 to 45Vdc

 Loop Resistance
 Load plus 250 ohms maximum.

 Long term drift
 <0.1% of span per 10,000hrs</td>

 Isolation Level
 1500V (galvanic, all ports)

 Creepage distance
 ≥2.0mm. (Port to Port)

 Output Noise Level
 3.2μA rms (typical).

 Accuracy
 0.1% of span

 Linearity
 0.1% of span

 Repeatability
 0.1% over 10,000hrs

 CMR (50/60Hz)
 Typically 110dB

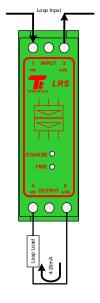
 Response time
 Nominally 100mS (10 to 90%)

 Operating Temp
 -25 to 75 Deg. C

 Storage Temp
 -55 to 85 Deg. C

Storage Temp -55 to 85 Deg. C
Terminals Self Opening 2.5mm²
Housing Material KRILEN

Dimensions 79mm x 85mm x 25mm (see profile)
Weight 90 grams



SCHEMATIC DIAGRAM

