

TRIPLE LOOP ISOLATOR

Type: AITA

FEATURES

- 3 Loop isolators 4 - 20 mA in one unit
- Prevent lightning from spreading over the system
- Working voltage max.: 1000 V_{RMS}
- Transient overvoltage max.: 8000 V_{peak}
- Excellent linearity
- Small outlines, 35 mm. wide

Description:

The loop isolator is designed to separate a 4 - 20 mA loop into two galvanically separated 4-20 mA loops in order to prevent signal distortion and instrumentation damages due to electrical noise or voltage spikes and ground loop currents.

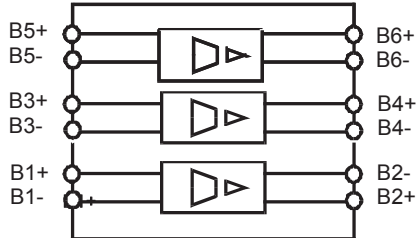
The insulation is based on a high performance linear optocoupler with an excellent linearity and a low coupling capacitance.

Application:

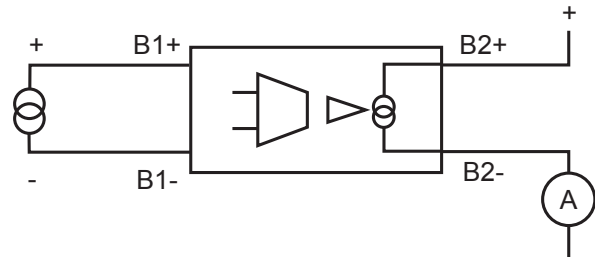
For use in instrumentation with current loop I/O as used by PLCs, sensors, recorders, indicators, alarm units etc.

CONNECTION DIAGRAM

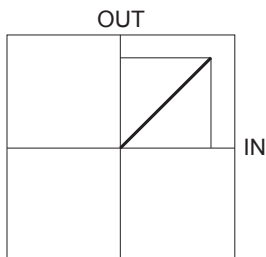
Rail mounting



FUNCTION DIAGRAM



INPUT/OUTPUT CHARACTERISTICS



Input: 4 - 20 mA

Output: 4 - 20 mA

SPECIFICATIONS

INPUT

4 - 20 mA
 Loop supplied
 Max. input 100 mA
 Voltage drop, Max. 7 V

PERFORMANCE PARAMETERS

TIMING
 Response time < 10 msec.

ELECTRICAL
 Precision Class 0,5 according to DIN / EN60688
 Linearity < 0.02 %
 Temp. dependence $\pm 0.02\% / ^\circ\text{C}$
 Supply dependence $\pm 0.01\% / \% \Delta U$

OUTPUT

Loop supplied Loop voltage, 8 - 32 V
 4 - 20 mA Max. voltage, 36 V

Max. load 600 Ω . @ 20 V Loop voltage

ISOLATION CHARACTERISTICS

Capacitance < 1 pF, input/output

Safety approval According to:
 UL1577 (5 kVRMS/1 min. rating)
 VDE 0884/06.92 ($V_{IORM} = 1\text{ kVRMS}$)
 BSI: BS415; 1990
 BS7002; 1992
 BS EN60950; 1992
 EN41003; 1991

GENERAL

Temperature range - 25 $^\circ\text{C}$ to + 55 $^\circ\text{C}$
 Humidity Up to 90 % RH non-condensing
 Weight 0.12 kg



EMC directive 89/336: International Standards
 EN50081 - Emission
 EN50082 - Immunity

Low voltage directive 73/23: EN60255 - Electrical Relays
 EN60688 - Measuring transducers

ORDERING INFORMATION

TYPE
 Triple loop isolator

HOUSING
 Rail mounting

SIZE
 35 mm.

CODE END

