## Loop Powered Isolator MIN310

Function: A 4 to 20mA signal isolator that requires no external power supply. The power for the isolator is derived from the input loop. Typically the MIN310 could be used to provide a second isolated 4 to 20mA from an existing isolated loop. This would then allow two non-isolated inputs (e.g. an RTU input and a local indicator input) to monitor the same 4 to 20mA loop. If the input loop was not isolated you would need to use either a BM320 (24 Volt DC powered) or a BD320 (230/115 Volt AC powered) dual output isolator. The MIN310 can also be used as an isolator in a 4 to 20mA output loop from a non-isolated transmitter.



# SPECIFICATIONS INPUTS:

## DC Current

4 to 20mA

## **Overload Capacity**

 $\pm$  50mA

#### NB

The MIN310 is fitted with span and zero potentimeters and the instrument can therfore be site calibrated

## **OUTPUTS:**

**DC Current** 

4 to 20mA into 100 to 1K ohms

## **Input/Output Isolation**

600 Volt > 20M ohms

## **Voltage Drop**

Maximum voltage drop at 20mA output into 1K ohm load = 2.5 Volts across MIN310 plus 20 Volts from 20mA into 1K ohm load

Therefore 22.5 Volts Maximum If load was 500 ohm then voltage drop is 2.5V plus 10v from 20mA into 500 ohm i.e 12.5V maximum

## Accuracy

0.5% of span

### **GENERAL:**

Temperature Coefficient  $\pm 0.1\%$  of span  $/\triangle 10^{\circ}$ C

Operating Temperature Range 0 to  $+50^{\circ}\text{C}$ 

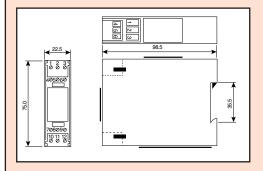
Storage Temperature Range  $-20 \text{ to } +60^{\circ}\text{C}$ 

**Operating Humidity Range** 0 to 95% RH non-condensing

**Storage Humidity Range** 0 to 95% RH non-condensing

Weight 108 gms

## **MECHANICAL DETAILS**



## **TERMINATION DETAILS**

### Terminal

- 1 Unused
- 2 Unused
- 3 Unused
- 4 Input –ve
- 5 Input +ve
- 6 Earth

## Terminal

- 7 Output -ve
- 8 Output +ve
- 9 Earth
- 10 Unused
- 11 Unused
- 12 Unused

## **ORDERING DETAILS**

a) Give identification code, i.e. MIN310