

RTD OR THERMO COUPLE TO CURRENT CONVERTER

The OS -UT-CC is an interface unit, to accept a RTD, T/C, Potentiometer or a mV as input signal and offers a proportional galvanically isolated PC Programmable 0-20mA current signal.

The unit can be Programmed easily as per requirement of linearisation, testing and monitoring on actual RTD or T/C value that can be changed with the help of PC on the field.

FEATURES :

- * 3 point Galvanic Isolation between I/P, O/P and Power Supply Terminal.
- * Input 2/3/4 wire RTD and all type of T/C.
- * Output 0-20mA or 4-20mA
- * Selectable Up and Down scale for T/C.
- * LED Indication for I/P selection (RTD or T/C)
- * Power Supply.
- * Line fault indication
- 22.5mm housing Width

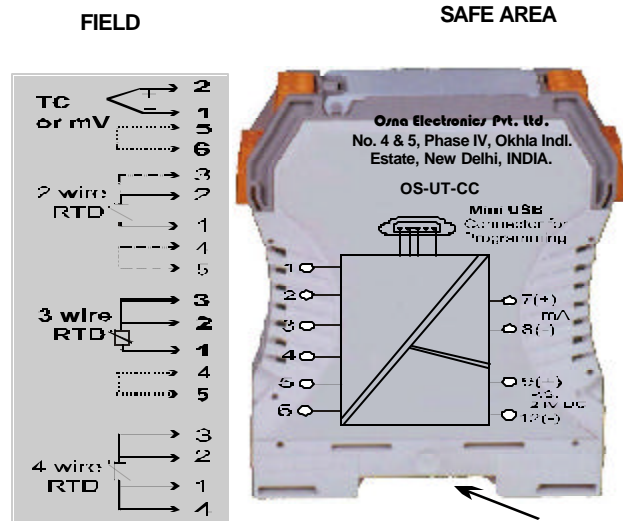
Manufactured according to European standard EN 50014 and EN 50020. Input signal/output signal and the power supply are galvanically isolated from each other at a level of - 1500V, 50Hz.

OPERATION :

The RTD or T/C is connected to the input. The compensation wire of the RTD, if available (in a 3-wire RTD) is connected to the terminal 1 of the unit. The analog signal is available at output terminals 7(+) and 8(-) as current signal.

APPLICATIONS :

To enable a remote temperature measurement of a RTD and T/C through a 0/4-20mA current converter.



Clip onto 35mm rail as per DIN 46277

OS -UT-CC
fig-1

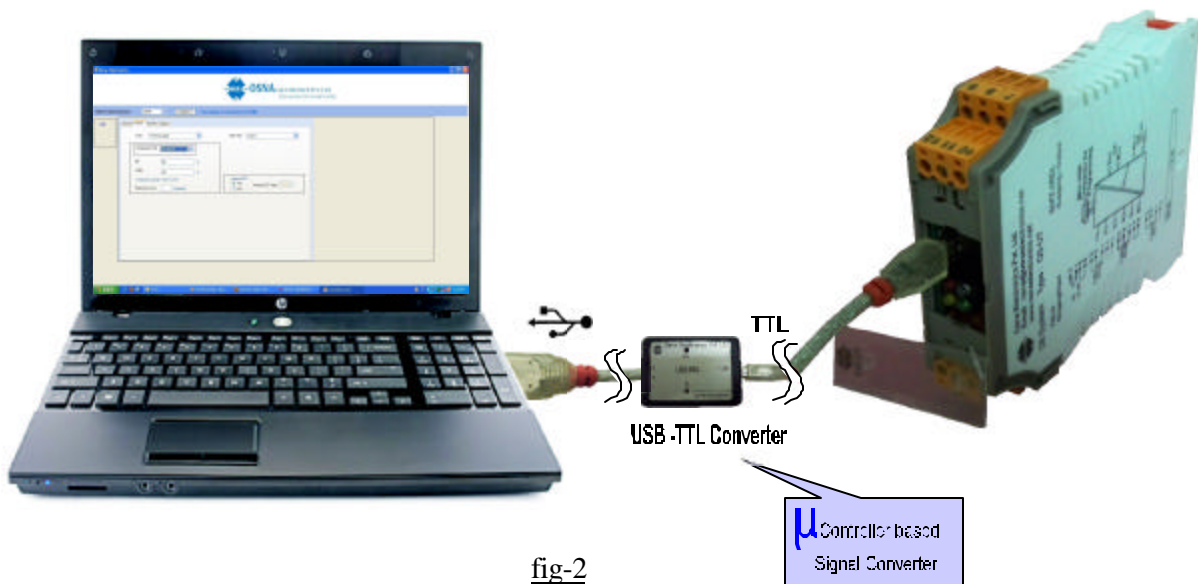


fig-2

TECHNICAL DETAILS

(ART. NO. : (ODA030WO)

Number of channels One
Type selection T/C or RTD Pt 100
Location of signal source field area
Input signal RTD type Pt100,

Type of measuring Terminals
 2wire RTD (1&2)
 3wire RTD(1,2&3)
 4wireRTD(1,4&2,3)

Input signal T/C J,K,T,E,R,S,B,N Terminals 1&2.
Input signal mV 0 - 150 mV
Input signal Resistance 0-750 Ohm
Cold junction compensation Built in

Power Supply Section Terminals 9(+), 12(-)
 Supply Voltage (nominal) 24V DC \pm 15%
 Power Consumption \leq 1.1 W

Programming Section
 P C Interface via TTL Converter

Fail Safe maximum Voltage U_m
 Not Nominal Supply 250V r.m.s.

Control Area
 Output at Terminals 7(+) & 8(-). PC Programmable 0-20 mA.
 Max. Load (R_L) 1000 ohm
 Fault signal RTD downscale 0 or 2 mA, upscale 21.5 mA (acc. NAMUR NE 43)

Transfer Characteristics

After calibration
I/P R-100 \pm 0.05 % of measurement value in $^{\circ}$ K + 0.1 % of span value in $^{\circ}$ C
 T / C \pm 0.05 % of measurement value in $^{\circ}$ C + 0.1 % of span value in $^{\circ}$ C
 mV \pm (50 μ V + 0.1 % of span)
 Resistance \pm (0.05 % of full scale + 0.1% of span)
 excludes errors due to Lead

Output mA accuracy \pm 0.1 % at 20mA
 Temperature drifts at mA measurement value \pm 0.1 % / $^{\circ}$ C
 Max. Ambient Temperature Max. -20.....60 $^{\circ}$ C

Dimensions 105 x 92 x 22.5 mm

Weight ca.150g

Accessories TTL to USB Converter

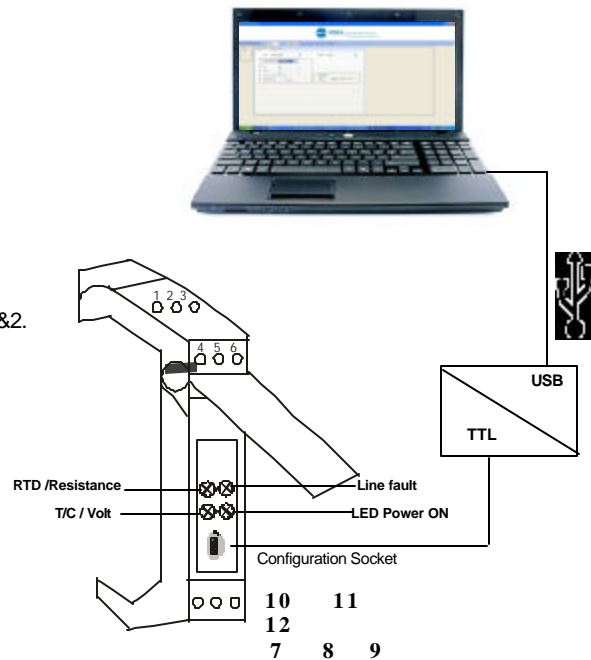


fig-3

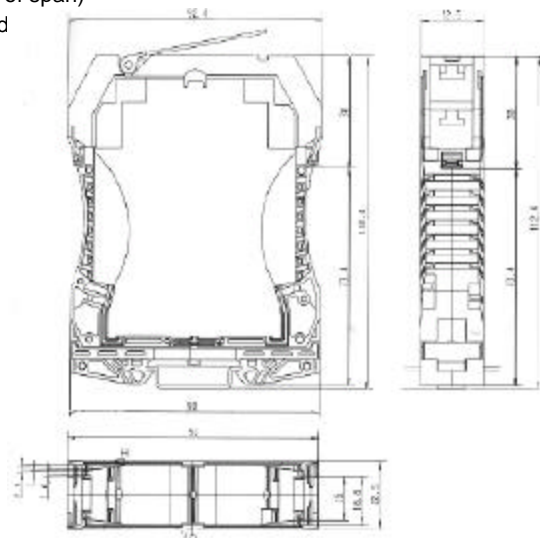


fig-4