

3rd Chapter

INSTRUMENTATION RELAYS

- TRI
- TRU

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TRI

TRANSDUCER Current

- Transducer of AC and DC, current signals to DC control signals (0-10V, 4-20mA, 0-20 mA)
- Elimination of noises in transmitted signals
- Elimination of the effect of line loss in transmitting signals
- Transmission of transduced signals up to 2000 m distance
- Optic isolation between input and output
- Induction isolation among supply, input and output up to 2000 VAC
- Maximum 0.5% output deviation respect to input signals
- Having supply voltage display PWR

Principles of Operation

This device is designed to convert different AC or DC current signals to standard DC control signals (0-10V, 4-20mA, 0-20 mA). In order to be able working with variable input signals with different magnitudes, this device needs a 220 or 110 VAC auxiliary supply.

Installation and Start-Up:

After connection of supply voltage to terminals A1 and A2, PWR signal gets ON and device gets ready to work.

The sample of input signals is connected to terminals +IN and -IN.

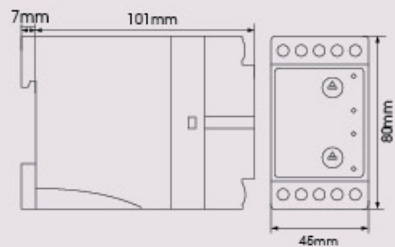
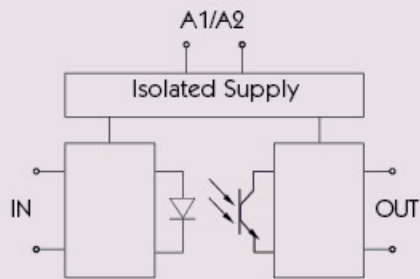
The sample of output signals is connected to terminals +OUT and -OUT.

According to input signal magnitude and device model, output signal reaches to an appropriate value for input right away.

To use the device in special areas (hazardous areas) and safety considerations, input, output and auxiliary supply up to 3KV are isolated from each other by use of transformer and optic isolator.

Technical Specifications

- Supply Voltage: 220 VAC \pm 10%
- Network Frequency: 50 \pm 5 Hz
- Internal Loss: About 3 W
- Insulation Strength: 3KVpp among input, output and supply
- Output Signal: 0-10VDC, 4-20 mA, 0-20 mA
- Input Signal: 0-5A, 0-1A, 4-20mA, (0-20 mA), (AC, DC)
- Output Linearity: Deviation less than 0.5 %
- Transmission Frequency: Less than 3 Hz
- Operating Temperature: 0-50 degree centigrade
- Load Impedance: Less than 500 Ω (at current output)
More than 1K Ω (at voltage output)



TRU

TRANSDUCER Voltage

- Transducer of AC and DC voltage signals to DC control signals (0-10V, 4-20mA, 0-20 mA)
- Elimination of noises in transmitted signals
- Elimination of the effect of line loss in transmitting signals
- Transmission of transduced signals up to 2000 m distance
- Optic isolation between input and output
- Induction isolation among supply, input and output up to 2000 VAC
- Presentable in voltage models TRU and current models TRI
- Maximum 0.5% output deviation respect to input signals
- Having supply voltage display PWR

Principles of Operation

This device is designed to convert different AC or DC voltage signals to standard DC control signals (0-10V, 4-20mA, 0-20 mA). In order to be able working with variable input signals with different magnitudes, this device needs a 220 or 110 VAC auxiliary supply.

Installation and Start-Up:

After connection of supply voltage to terminals A1 and A2, PWR signal gets ON and device gets ready to work.

The sample of input signals is connected to terminals +IN and -IN.

The sample of output signals is connected to terminals +OUT and -OUT.

According to input signal magnitude and device model, output signal reaches to an appropriate value for input right away.

To use the device in special areas (hazardous areas) and safety considerations, input, output and auxiliary supply up to 3KV are isolated from each other by use of transformer and optic isolator.

Technical Specifications

- Supply Voltage: 220 VAC \pm 10%
- Network Frequency: 50 \pm 5 Hz
- Internal Loss: About 3 W
- Insulation Strength: 3KVpp among input, output and supply
- Output Signal: 0-10VDC, 4-20mA, 0-20 mA
- Input Signal: 0-600V, 0-220V, 0-110V, 0-10V, 0-5V
- Output Linearity: Deviation less than 0.5%
- Transmission Frequency: Less than 3 Hz
- Operating Temperature: 0-50 $^{\circ}$ C
- Load Impedance: Less than 500 (at current output)
More than 1K (at voltage output)

