

SIGNAL ISOLATING REPEATER

TX-233



SPECIFICATIONS

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|------------------------------|--|
| Model | ASHE TX-233. |
| Type | Analog signal Isolating Multiplier (Repeater). |
| Principle | Optical Isolation, Signal Conditioning and Amplification. |
| Input Signal | 4 to 20 mA DC / 0-10V DC / [as required]. |
| Output Signals | Three isolated and buffered outputs of 4 to 20 mA DC or 0 to 10 V DC |
| Load Driving Capacity | 600 Ohms for each output (for mA) |
| Linearity | ± 0.1%. |
| Isolation | Between Input // Outputs // Power Supply. |
| Isolation type | Optical and Galvanic. |
| Isolation level | 1.5 kV rms for one minute. |
| Output protection | Short / Open Circuit protection. |
| Calibration facility | Zero and Span settings [external]. |
| Accuracy | ± 0.1%. |
| Indication | Red LED for Power On. |
| Power Supply | 90 to 270 V AC, 50/60hz. |
| Initial warm-up time | One minute. |
| Dimensions | 75 x 55 x 110 mm. [H x W x D]. |
| Execution | DIN-Rail / Rear panel mounting. |
| Enclosure | Industrial grade ABS. |
| Enclosure colour | Light Grey [RAL 7035] |
| Weight | Approximately 0.8 Kgs. |
| Operating Temperature | 0 to 50 °C. |

OVERVIEW

The ASHE TX series of Signal Conditioners, Isolators, Transducers, Transmitters and Multipliers comprise a wide range of high quality and reliable instruments for the conversion, amplification, isolation and multiplication of analog and digital signals.

The instruments accept standard industrial process input signals such as DC/AC Voltage, DC/AC Current, 4 to 20 mA DC, RTD Pt-100 sensor, Thermocouple sensor, Frequency [Pulse], Resistance, Strain gauge, etc. and provide buffered and isolated outputs with enhanced load driving capacity. The instruments find wide usage in single loop or distributed process measurement and control applications.

The new Series TX Signal Isolating Multipliers measure an analog signal and convert the signal into two or more isolated analog signals of 4 to 20 mA DC [or as required]. The Output signals are linear with respect to the Input signal and each output is galvanically and optically isolated to a potential level of 1.5 KV rms for one minute.

The instruments operate on universal AC power supply of 92 to 270 VAC, 50/60 Hz. Optional features include higher load driving capability, digital indication facility, control relay outputs, two-wire operation with auxiliary power output, etc.

The instruments are available in compact industrial grade enclosures in DIN Rail / Wall-mounting execution, or optionally in IP65 protected field mount weather-proof enclosures, or in CIMFR certified explosion-proof enclosures. Absence of any moving parts provides these instruments inherent advantages like immunity to mechanical shocks, dust, ambient temperature, humidity and corrosive atmosphere.

FEATURES

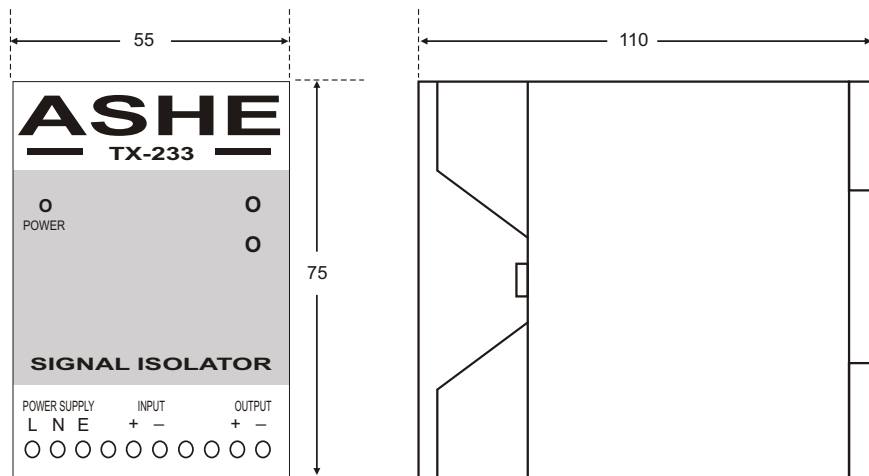
- Optical & Galvanic Isolation between Input, Outputs & Power Supply.
- High accuracy and linearity to input signal
- Very low power consumption and heat dissipation
- Options of multiple [upto four] isolated outputs
- High load driving capacity of retransmitted signal
- Configurable output option of current / voltage
- Short-circuit / Open-circuit protection of outputs
- Front accessible Zero and Span calibration for all channels
- Digital Indication option with/without control relay outputs
- Auxiliary power for two-wire transmitters
- Rugged, industrial grade ABS enclosure
- Panel / Field / Hazardous area installation in IP65 execution
- Current limiting for I/O protection
- Customized outputs offered
- Proven record of several thousand installations
- Lifetime warranty on design and workmanship

SIGNAL ISOLATOR REPEATER

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DIMENSIONAL DIAGRAM

Dimensions : 75 x 55 x 110 mm
Execution : DIN Rail mount.



HOW TO ORDER

SIGNAL ISOLATOR REPEATER

Input : 4 to 20 mA DC / 0 to 10 V DC / other
Output : 4 to 20 mA DC / 0 to 10 V DC / other
Isolation : Optical and Galvanic.
Power Supply : 90 to 270 V AC 50/60Hz.
Dimensions : 75 x 55 x 110 mm.

TX-233

Configuration and Add-on options

1 OPTICAL AND GALVANIC ISOLATION

- ▶ Required
- ▶ Not Required

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2 EXECUTION

- ▶ DIN Rail mounting [75 x 55 x 110 mm]
- ▶ Field mounting in Weather-proof execution (Polycarbonate enclosure, IP65 protection)
- ▶ Field mounting in Flame/Explosion-proof execution (Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB)

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3 RETRANSMISSION

- ▶ Retransmission of 4 to 20 V DC
- ▶ Retransmission of 0 to 10 V DC
- ▶ No Retransmission
- ▶ Other (to be specified)

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OUR OTHER PRODUCTS



PROCESS CONTROLLER

UNIVERSAL CONTROLLER

FLOW TOTALIZER

TEMP. SCANNER

SIGNAL ISOLATORS & TRANSDUCERS

SMPS POWER SUPPLIES