

# AC Current Isolating Transducer

## **OVERVIEW**

The AC Current Isolating Transducer TX-120 is a compact and reliable high performance instrument used in process control applications to buffer and isolate an analog AC Current signal for indication, feedback, control or data logging. The instrument provides one optically isolated DC Current output signal which follows the input signal.

The instrument accepts an AC Current input signal of either 0 to 1 Ampere or 0 to 5 Ampere from a CT secondary and provides DC Current output signal. The instrument operates on AC power supply of 230 VAC, 50/60 Hz.

The ASHE TX-120 AC Current Transducer provides buffering of the Input analog AC Current signal. The output analog DC Current signal is linear with respect to the input signal and is optically and galvanically isolated to a potential level of 1.5 kV.

The instruments are available in compact industrial grade enclosures in DIN Rail / Wall-mounting execution, or optionally in IP66 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, Output & Power Supply
- High accuracy and linearity to input signal
- Very low power consumption and heat dissipation
- Options of multiple 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
- Rugged, industrial grade ABS enclosure
- Panel / Field / Hazardous area installation in IP66 execution
- Current limiting for I/O protection
- Customized outputs offered
- Proven record of several thousand installations





## **SPECIFICATIONS**

Model	ASHE TX-120.							
Туре	AC Current Isolating Transducer.							
Principle	Optical Isolation and Signal Conditioning.							
Input Signal	0 to 1 Amp/5 Amp AC (from CT secondary).							
Output Signal	4 to 20 mA DC (or as required).							
Load Driving Capacity	600 Ohms.							
Linearity	<u>+</u> 0.1%.							
Isolation	Between Input // Output // Power Supply.							
Isolation Type	olation 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	<u>+</u> 0.1%.							
Indication	Red LED for Power On.							
Power Supply	230 V AC, 50/60 Hz.							
Dimensions	75 x 55 x 110 mm.							
	[H x W x D].							
Execution	DIN-Rail / Rear panel mounting.							
Enclosure	Industrial grade ABS.							
Weight	Approximately 0.4 Kgs.							
Operating Temperature	0 to 55°C.							



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# **DIMENSIONAL DIAGRAM**



# How To Order

AC CURRENT ISOLATING TRANSDUCER	TX-120				
Configuration and add-on options					
INPUT SIGNAL					
0 to 1 Ampere		1			
0 to 5 Ampere		5			
POWER SUPPLY					
230 V AC, 50/60 Hz			А		
24 V DC ( <u>+</u> 10%)			D		
OUTPUT SIGNAL					
4 to 20 mA DC				L	
0 to 10 VDC				V	
Other (to be specified)				Y	
EXECUTION					
DIN Rail mounting					D
Field mounting in Weather-proof execution					W
(Polycarbonate enclosure, Ingress protection)					
Field mounting in Flame/Explosion-proof Ex-d execution					Х
(Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB	L IIC)				

# **OUR OTHER PRODUCTS**





#### Designed and Manufactured by :

## ASHE CONTROLS PRIVATE LIMITED

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