



XZ2-A

AC CURRENT OR VOLTAGE TRANSMITTER

Converts AC current or voltage input signals to a standard DC current output

- 2 wire DC loop powered
- Input-output isolation
- Wide range of AC current and voltage inputs
- 4-20mA or 10-50mA output
- High accuracy
- High loop load drive capability (2400ohms/20mA/60V)
- Field adjustable span & zero

The XZ2-A AC Current or AC voltage transmitter is designed using highly stable state of the art electronics to accept both AC current (0-5A) and AC voltage (0-300V) inputs and power a fully isolated current output proportional to the input signal.

Standard input ranges are listed, but any input range between 0-300V AC or 0-5A AC can be specified for your application. Output ranges are either 4-20mA or 10-50mA.

The 12-60Vdc power needed to operate any XZ2-A 2-wire transmitter is obtained from the output current loop and is supplied from the load source or a separate DC power supply source. The recommended output wiring is standard twisted or shielded copper wires.

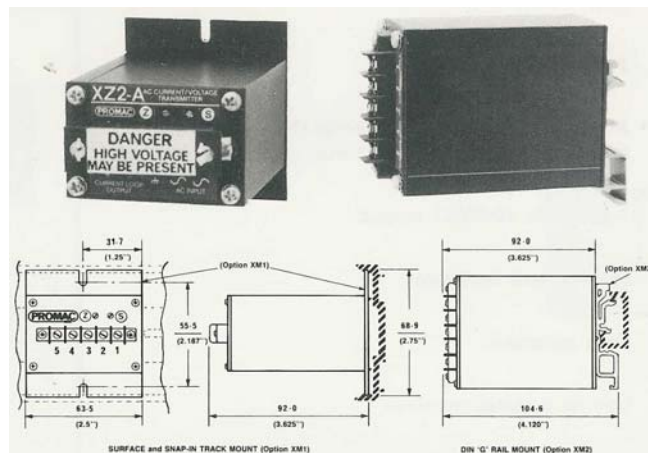
All XZ2-A transmitters undergo stringent factory tests to ensure their correct specifications. Circuit boards are conformally coated and enclosed in a rugged compact aluminum housing, which can be surface, track or DIN 'G' rail mounted for location in controlled environments. Industrial or explosion proof enclosures are also available for harsh or restricted environments.

Warning: When using the XZ2-A AC current transmitter with an input from a (CT) current transformer, very high voltages may be present when opening the secondary wiring from the CT to the XZ2-A, which can be fatal.

The use of an auxiliary Input Current Transformer (option ZM) as shown in fig. 2 provides a safe interface for servicing, by not having to open the secondary wiring from the 5A CT.

We strongly recommend the use of appropriate procedures and suitably skilled personnel when working on this type of installation.

Represented By:



INPUT

Standard ranges:

ACV: 0-150, 0-300 (0.1 to 300V AC ranges available) Sine wave only.

ACI: 0-1, 0-5 (0.02 to 5A AC ranges available)

Span: 22 turn potentiometer adjustable $\pm 10\%$

Zero: 22 turn potentiometer adjustable $\pm 10\%$

Burden Voltage (current input):

200mV max

Input impedance (voltage input):

50K ohms/volt min. (10M ohms max.)

Overload Capability:

AC current: 6 times max input current for 5 sec.

AC voltage: Input range x 2

OUTPUT

Range: 4-20mA standard

(10-50mA optional)

Load Resistance (R_L)

$$\frac{\text{Supply Voltage} - 12V}{R_L} = 20\text{mA (50mA)}$$

Current Limit:

34mA for input overrange

(85mA for 10-50mA)

PERFORMANCE

Accuracy: (Linearity & Repeatability)

$\pm 0.25\%$ of span

Ripple: Less than 0.25% rms of output

Temperature Effect: (-20°C to 70°C)

0.02% of span/°C

Operating Temperature: -40°C to 85°C

Response Time: 2 seconds for 98% change

Common Mode Rejection:

Better than 120dB at 60Hz

Frequency Range: 50-400Hz

POWER

Range: 12 – 60Vdc (max. dissipation 1.2W)

Supply Voltage Effect:

0.002% of span/volt

ISOLATION

Input/Output: Transformer isolated to

500Vrms (tested to 1kVrms)

CLASSIFICATION

(General purpose)

Designed for non-incendive use in Class 1,

Div. 2 Groups A, B, C, D and suitable for use

in Class II, Div. 2 Group G and Class III, Divs.

1 & 2 Hazardous Areas

ELECTRICAL OPTIONS (applicable)

ZJ Reversed Output

ZO 10-50mA Output

ZM Input Current Transformer 1000:1 Current

ratio (externally mounted)

MOUNTING BRACKET OPTIONS

XM1 Standard surface/Snap-in track

XM2 DIN 'G' rail

XM4 Explosion proof

Typical Application Wiring Diagrams

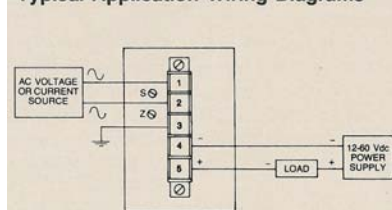


Fig. 1

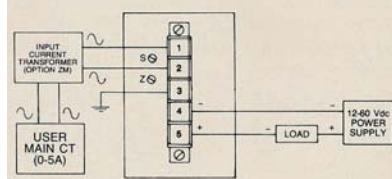


Fig. 2

ORDER INFORMATION

Please specify the following:

1. Model Number XZ2-A
2. Input range
3. Output range
4. Z options
5. X options

Model No. Examples:

XZ2-A/0-50V/4-20/XM1

XZ2-A/1-5V/10-50/XM2

XZ2-A/0-5A/20-4/ZJ/XM1



MEASUREMENT TECHNOLOGIES, LTD.

1900 Industrial Blvd., Suite 200

Colleyville, TX 76034 USA

Ph: +817-442-9930

Fax: +817-442-9990

Email: sales@mtech.biz

Web Site: www.mtech.biz

Specifications are subject to change without notice.

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