# **JOWA USA**

# Metricircuit<sup>™</sup> Series 60,000 Signal Conditioner



# Features:

- Centralized signal conditioning for up to 60 channels
- Economical inputs into DCS or other monitoring system
- Two proportional outputs per channel level or temperature
- Field adjustable calibrations

## **Description:**

The Metricircuit Series 60,000 is a multichannel signal conditioner for use with resistance-tape level and level/temp sensors gauging liquid and slurries. It is intended for central locations where multiple sensor signals can be brought together for signal processing. This central location facilitates calibration and routine system checks providing increased economy and efficiency. For each level or temperature sensor, resistance inputs are converted to two process outputs, 4-20mA and 0-1mA, which are fully adjustable in the field via DIP switches. All connections are by terminal blocks. Standard line voltage of 115 VAC or 220 VAC is acceptable.

The Metricircuit is designed using printed circuit boards which will handle up to 10 channels each. Any combination of level or temperatures is acceptable. Up to six boards can be mounted in an enclosure. See the back of this data sheet for mounting dimensions.

The Metricircuit 60,000 is designed for wall mounting and is housed in a steel NEMA 12 enclosure. It can be placed up to 1000 feet from resistance-tape sensor locations. For applications requiring level or level/temp sensors to be intrinsically safe, an approved intrinsic safety barrier is used.

# Specifications:

#### General:

Sensor inputs (channels): 10 per board. Connection: Terminal block. Enclosure capacity: 1, 2, 4 or 6 boards. Enclosure type: NEMA 12 (indoor mounting).

#### **Input Signals:**

Resistance range:  $630\Omega$  to  $31,000\Omega$ . Maximum resistance adjustment: 14 levels (DIP switches).

Span adjust range: 30% to 200% of max. resistance. Span adjust: 16 levels (DIP switches).

#### **Primary Output:**

Signal type: 4-20mA, common return. Maximum load impedance: 600Ω. Maximum compliance voltage: 12 VDC. Format:

Innage: 4mA at bottom (DIP switch selectable). Ullage: 4mA at top (DIP switch selectable).

Fine adjustments: Zero, Span (potentiometers).

Minimum temperature span adjustment range:

32°F (0° C).

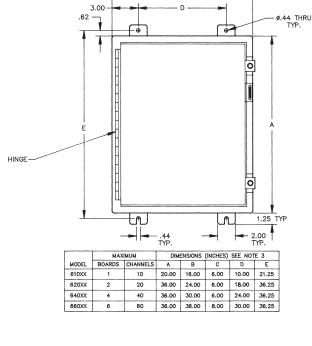
## **Dimensions:**

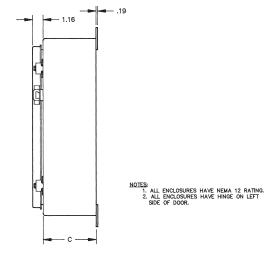
#### Secondary Output:

Signal type: 0 - 1mA, common return. Maximum load impedance:  $10,000\Omega$ . Maximum compliance voltage: 10 VDC. Format: Innage: 0mA at bottom (DIP switches). Ullage: 0mA at top (DIP switches). Fine adjustments: Zero, Span (potentiometers). Minimum temperature span adjustment range: 32°F (0° C).

#### Power:

Input voltage: 115/230 VAC ± 15% (switch selectable). Frequency: 45 - 400 Hz. Input power: 25 watts maximum. Fuse: 1A (slow blow). Indicators: +18 VDC and -12 VDC LEDs.







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