



## SPECIALTY DEVICES

# CLC-1 CURRENT LOOP CONVERTER

## DESCRIPTION

The CLC-1 Current Loop Converter is a device which allows standard KYZ pulses to be converted to a format compatible for use with a 4-20mA current loop. The KYZ output from a meter or isolation relay is fed directly into the CLC-1's KYZ input. The CLC-1's input provides the +13VDC wetting voltage for the meter's dry contact pulse output. The CLC-1's output will toggle between 4mA and 20mA upon each transition of the meter's pulse initiator. There is no

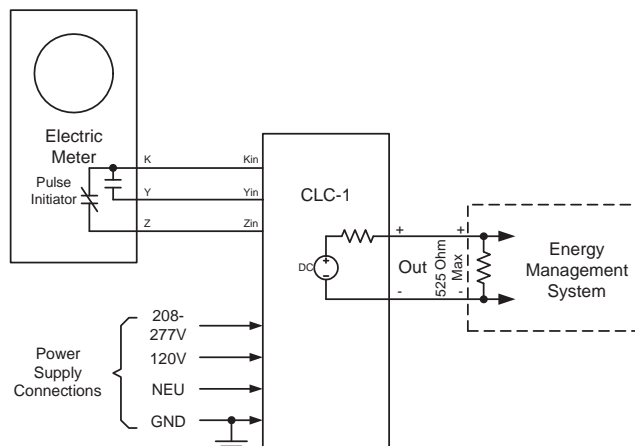


scaling of interpretation of a value of a pulse. The output can be configured so that a K-Y closure will result in either 4mA or 20mA. Once set, the K-Z closure becomes the opposite milliamp output. In this way, a KYZ pulse output can be configured to interface directly to a process control system or other instrumentation with a 4-20mA input.

The 4-20mA output is current limited to insure that short circuits or excessive loading will not damage the unit. Bright red and green LED lamps indicate the input's status at all times, thus allowing a rapid check of the input's performance without requiring any special test equipment. Provisions are made to easily read the output's current level with a digital multi-meter (DMM).

Typical applications include interfaces between utility metering devices and customer-owned energy information or control systems. The CLC-1's input and output circuit's terminal strip is a "EURO" type connector strip. When the stripped wire has been correctly installed in the terminals "slot" no conductive parts are exposed on the surface of the terminal strip, thus allowing the user maximum protection from accidental electrical shock.

The CLC-1 has built-in transient protection on the 4-20mA current loop output that eliminates the need for external protection. All component parts that have power applied to them, with the exception of the input/output terminal strip are enclosed in a polycarbonate cover for maximum protection. The mounting base plate is also made of polycarbonate and offers excellent electrical insulation between the circuit and the mounting surface.



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### SPECIFICATIONS

#### ELECTRICAL

Power Input:	90 to 300 VAC. Burden: 10 mA at 120 VAC
Input:	Standard KYZ pulse input, field configurable as either Form A (2-wire) or Form C (3-wire) +13VDC supplied by the CLC-1's power supply to wet meter contacts.
Output:	One active 4-20mA current loop output. No additional loop power supply is necessary since the CLC-1 provides the DC Voltage for the output.
Output Impedance:	Will drive into 525 ohms maximum, 500 ohms typical
Insulation Resistance:	10 megohms typical
Operate Time:	20 milliseconds typical

#### MECHANICAL

Mounting:	Any position
Size:	3.50 inches wide, 7.20 inches high, 1.50 inches deep
Weight:	17 Ounces

#### TEMPERATURE

Temperature Range:	-38° C to +70° C, -36.4° F to +158° F
Humidity:	0 to 98% non-condensing

#### AVAILABLE OPTIONS

Input Voltages:	Contact Factory
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