

# CIR-22 CUSTOMER INTERFACE RELAY

The CIR-22 customer interface relay is designed to provide two isolated "dry", mercury-wetted sets of contacts, each from its own Form "C" input. Both sets of contacts are available for customer use, typically for customer-owned energy management systems. The CIR-22 provides in one compact ready-to-mount case everything necessary to provide a customer with energy control pulses in one box.

The CIR-22 is internally divided into two compartments. The upper compartment is normally locked with a utility company's lock and is only accessible to utility metering personnel. It contains all of the electronics along with fusing which is coordinated with the fuse contained with in the customer's compartment. The customer's compartment, contains a terminal strip, fuses, and status indication LEDs for each output. The terminal strip contains KY&Z terminals for each output. The red and green LEDs are lit alternately depending upon input status.

The use of the LED in the customer's compartment allows a rapid visual check of the system's performance by inexperienced personnel without requiring any additional test equipment. Because of the redundant coordinated fusing in both the utilities and customer's compartments, the meter shop service coordinator can usually determine the location of the service problem as to either utility responsibility or customer responsibility by the simple question "are the LEDs flashing"? The double "K" lead coordinated fusing of the CIR-22's outputs will prevent damage to the relay under almost any conditions a user might cause such as excessive current, incorrect wiring, etc. The CIR-22 has built-in transient protection for the mercury-wetted relay's contacts which eliminates the need for external or off-the-board transient suppressors.

# **CIR-22 SPECIFICATIONS**

#### **ELECTRICAL**

Power Input: 90 to 325 VAC. Burden: 10 MA. at 120 VAC

Output: Two sets of "dry" Form "C" contacts (K, Y, & Z) for energy pulses. The contacts are mercury-wetted "no bounce" relays rated at 500 VDC or 350 VAC 2 Amps. break, 5 amps carry. The maximum rating of the contacts is 100 VA. Customer outputs are factory fused at 1/2 amp @250VAC. (3AG)

Sense Voltage: +13VDC

Contact Resistance: 50 milliohms maximum, 12 to 14 typical

Insulation Resistance: 50 megohms typical

Operate and Release Time: 2.5 milliseconds typical operate; 3.0 milliseconds typical release

# **MECHANICAL**

Mounting: Within 30 degrees of vertical

Size: 9.00 inches wide, 11.00 inches high, 4.50 inches deep

Type/Material: : NEMA 4X Fiberglass Enclosure

Weight: 9.5 pounds

## **TEMPERATURE**

Temperature Range: -38° C to +70° C, -36.4° F to +158° F

Humidity: 0 to 98% non-condensing

## **OPTIONS**

Input Voltages: Contact Factory



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