

	FUNCTIONAL SUMMARY			
	IN	OUT		
#	2	2		
ΤΥΡΕ	2 or 3	3 Wire		
	Wire			
FORM	A or C	С		

SELF-CONTAINED RELAYS (OUTDOOR) - SOLID STATE CIR-22PS CUSTOMER INTERFACE RELAY

FORMERLY THE CIR-22S & CIR-22A/B

DESCRIPTION

The CIR-22PS Customer Interface Relay provides two isolated solid state dry Form C contacts from two Form A or C inputs. Each set of output contacts may be used as either a Form A (K & Y) or a Form C (K, Y, & Z) contact. The typical application is the utility's interface between the KWH meter and a customer-owned energy control system where two types of pulses are used. For example, one channel might be for watt-hour pulses and the second channel for var-hour pulses. The CIR-22 provides two independent isolation relay channels in one ready-to-use weatherresistant package.

The CIR-22PS is internally divided into two compartments. Once installed, the upper compartment is normally locked and only accessible to utility metering personnel. It contains all of the electronics along with



fusing that is coordinated with the fuse contained within the customer compartment. The lower compartment (customer compartment) contains a terminal strip, fusing, and output status LEDs. Using jumper selector, the inputs can be configured as 2-Wire or 3-Wire inputs and the outputs can be configured in the "Long" or "Short" pulse output mode. With the output selector in the long mode, the relays' contact closure is the same duration as the input's closure duration. In the short mode, the output is closed for a approximately 100 milliseconds regardless of the input's closure duration. Red and green LEDs, one for each channel, are located in the customer's compartment and light alternately depending upon input's status. The use of LEDs 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 utility's and customer's compartments, the meter shop service coordinator can usually determine the location of the service problem as to either utility or customer responsibility by the simple question "are the LEDs flashing". The double "K" lead coordinated fusing of the CIR-22PS's output will prevent damage to the relay under almost any condition a user might cause such as that caused by excessive current, incorrect wiring, etc. The CIR-22PS' robust solid state switching device is rated at 800V and 750mA giving maximum protection from lightning or transient voltage damage. The CIR-22PS has built-in transient protection for the solid state switching devices that eliminates the need for external or off-the-board transient suppressors.



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SPECIFICATIONS

ELECTRICAL

Power Input:	120, 208-277 VAC. Burden: 10 mA at 120 VAC	
Pulse Input:	Two Form A (2-Wire) or C (3-Wire) input with +13VDC wetting voltage on the "Y" and "Z" terminals.	
Pulse Output:	Two sets of dry contact solid state outputs located in the customer's compartment. The contacts are solid state "no bounce" relays rated at 250VACVDC at 1/2 Amp. The maximum rating of the contacts is 100 VA. Factory fused at 1/4 amp. (3AG)	
Contact Resistance:	2.3 ohms maximum, 1.7 ohms typical	
Insulation Resistance:	50 megohms typical	
Operate and Release Time:	Turn on-time - 8 mS typical; 20 mS MAX Turn off-time - 1 mS typical; 5 mS MAX	
Input/Output Isolation Voltage:	2500Vrms	

MECHANICAL

Mounting:	Any position
Size:	9.0" wide, 11.0" high, 4.50" deep
Weight:	9 pounds
Type/Material:	NEMA 4X Fiberglass Case

TEMPERATURE

Temperature Range:	-38° C to +85° C, -36.4° F to +158° F
Humidity:	0 to 98% non-condensing

AVAILABLE OPTIONS

Input Voltages:	24 VAC/24VDC, 125VDC	
input voltagoo.	21 0 00 21 0 0 0, 120 0 0 0	

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