



# SELF-CONTAINED RELAYS (OUTDOOR) - SOLID STATE

## CIR-24NG CUSTOMER INTERFACE RELAY

### FUNCTIONAL SUMMARY

	IN	OUT
#	2	4
TYPE	2 or 3 Wire	2 or 3 Wire
FORM	A or C	A or C

# CIR-24NG

The CIR-24NG Customer Interface Relay provides four isolated solid-state Form A or C dry-contact outputs 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 input channel might be for watt-hour pulses and the second input channel for var-hour pulses. The CIR-24NG provides two independent isolation relay channels in one ready-to-use weather-resistant package.

The CIR-24NG is internally divided into two compartments. Once installed, the upper compartment is normally locked and only accessible to utility metering personnel. It contains the Power Supply input terminals, all of the system electronics and programming accessibility. The lower compartment (customer compartment) contains an Output terminal strip, fusing, and output status LEDs. Using SSI's Universal Programmer software, the inputs and outputs can be configured as 2-Wire(Form A) or 3-Wire(Form C) and each output mapped to an input. Pulse output timing for Form A pulse widths can also be set. With the outputs having like form Settings to the inputs, the channel is in Normal mode and the outputs follow the inputs with equal time. If the outputs are Form A, a fixed pulse width may be programmed into the that particular relay output, making it compatible with certain instruments' minimum pulse width requirements. If the outputs have the opposite setting to the input they are following, the that channel is in the conversion mode, either A to C or C to A while keeping the pulse value constant.

Red and green LEDs, one for each input and output, are located next to the terminal blocks for good visibility and easy interpretation of the state of each input and output.

The CIR-24NG' robust solid-state switching device is rated at 1000V and 180mA giving maximum protection from lightning or transient voltage damage. The CIR-24NG 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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FORMERLY THE CIR-24S

## SPECIFICATIONS

### ELECTRICAL

Power Input:	120, 208-277 VAC. Burden: 10 mA at 120 VAC
Pulse Inputs:	Two Form A (2-Wire) or C (3-Wire) input with +13VDC wetting voltage on the "Y" and "Z" terminals.
Pulse Outputs:	Four sets of dry contact solid state outputs – located in the customer compartment. The contacts are solid state "no bounce" relays rated at 125VACVDC at 1/4 Amp. The maximum rating of the contacts is 1500 mW. Factory fused at 1/4 amp. (3AG)
Contact On-State Resistance:	12.3 ohms maximum, 18 ohms typical
Insulation Resistance:	50 megohms typical
Operate and Release Time:	Turn on-time - 10 mS MAX Turn off-time - 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
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