



PULSE ISOLATION RELAYS - SOLID STATE

RPR-22PS REPEATING PULSE RELAY

FORMERLY THE RPR-22 & IPR-1

DESCRIPTION

The RPR-22PS repeating pulse relay incorporates two independent signal channel isolation relays in one compact package. It provides two isolated solid-state Form C (K, Y, & Z) contacts from two Form A or C inputs. Each input of the RPR-22PS supplies its own sense voltage to the pulse sending unit(s), usually an electric meter's pulse initiator.



Typical applications include interfaces between utility metering devices and customer-owned energy control systems, demand recorder applications, or supervisory control systems (SCADA) interfaces. The RPR-22PS is particularly useful in applications where one channel is Kwh pulses and the second channel is Kvarh pulses.

The RPR-22PS relay is designed to filter noise and transients from its input to prevent any false pulses at its output. Bright red and green LED lamps indicate the system's status at all times thus allowing a rapid visual check of the system's performance without requiring any additional test equipment.

In addition to selecting the Input type, the output timing configuration may be selected between long or short modes. In the long mode, the output directly follows the input creating a "mirror image" of the input pulse. In the short mode, the output will close for a fixed 100mS "short" pulse. The short output mode is generally used with a Form A end-of-interval or timing pulse.

The RPR-22PS' input and output circuit's terminal strip connector is a "EURO" type, providing excellent insulation from live electrical contacts. Each K lead of the RPR-22PS' outputs is fused to prevent damage to the relay under almost any conditions a user might cause such as excessive current, incorrect wiring, etc. The RPR-22PS' robust solid-state switching device is rated at 800V at 750mA giving maximum protection from lightning or transient voltage damage. Its built-in transient protection for the solid-state switch contacts eliminates the need for external or off-board transient suppression devices. 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.

RPR-22PS

FUNCTIONAL SUMMARY

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



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SPECIFICATIONS

ELECTRICAL

Power Input:	120, 208-277 VAC. Burden: 10 mA at 120 VAC
Pulse Input:	Two Form A or C field-selectable
Pulse Output:	Two sets of Form C dry contacts (K, Y & Z) for energy pulses. The solid-state "no bounce" relay contacts are rated at 250 VAC/VDC @ 1/2 Amp. The maximum rating of the contacts is 100 VA. Factory fused at 1/2 amp. (3AG)
Contact On-State Resistance:	2.3 ohms maximum, 1.7 ohms typical
Insulation Resistance:	50 megohms typical
Operate and Release Time:	Turn-on time - 8 mS typical, 20mS MAX Turn-off time - 1 mS typical, 5mS MAX
Input/Output Isolation Voltage:	2500Vrms

MECHANICAL

Mounting:	Any position
Size:	3.5" wide, 7.2" high, 1.5" deep
Weight:	12 ounces

TEMPERATURE

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

OPTIONS

Input Voltages:	24 VAC/24VDC, 125VDC
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