



PULSE ISOLATION RELAYS - SOLID STATE

RPR-33PS REPEATING PULSE RELAY

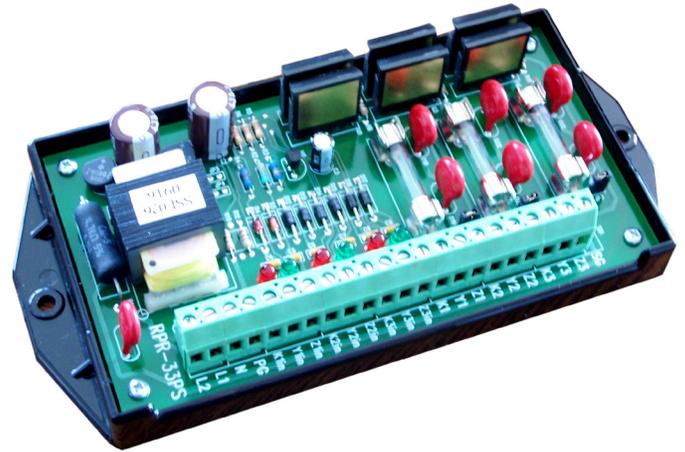
DESCRIPTION

The RPR-33PS repeating pulse relay provides three isolated solid state Form C (K, Y, & Z) contacts from three Form A or C inputs. The RPR-33PS supplies its own sense voltage to the pulse sending units, usually electric meters' pulse initiators.

Typical applications include interfaces between utility metering devices and customer-owned energy control systems, demand recorder applications (particularly useful in applications KWh, kVarh, and EOI), or supervisory control systems (SCADA) interfaces.

The RPR-33PS relay is designed to filter noise and transients from its input to prevent any false pulses at its output. Bright red and green LED indicators display the system's status at all times thus allowing a rapid visual check of the system's performance without requiring any additional test equipment.

The RPR-33PS' input and output circuit's terminal strip connector is a "Euro" type, providing excellent insulation from live electrical contacts. The "K" lead of the RPR-33PS' output 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-33PS' 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.



FUNCTIONAL SUMMARY

| IN | OUT |
|--------|--------|
| 3 | 3 |
| 3 Wire | 3 Wire |
| C | C |

#

TYPE

FORM

RPR-33PS



PULSE ISOLATION RELAYS - SOLID STATE

RPR-33PS REPEATING PULSE RELAY

FORMERLY THE RPR-3P

SPECIFICATIONS

ELECTRICAL

| | |
|---------------------------------|--|
| Power Input: | 120, 208-277 VAC. Burden: 10 mA at 120 VAC |
| Pulse Input: | Three (3) Form A or Form C inputs are provided. Inputs contain +13VDC transformer-isolated power supply for wetting voltage. On each input, "Y" and "Z" terminals are "pulled-up" to +13VDC. "K" terminal is common return. +18VDC auxiliary power supply is optionally available for applications requiring a separate wetting voltage on outputs to receiving devices' inputs. |
| Pulse Output: | Three 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, 20 mS max Turn-off time - 1 mS typical, 5 mS max |
| Input/Output Isolation Voltage: | 2500Vrms |

MECHANICAL

| | |
|-----------|------------------------------------|
| Mounting: | Any position |
| Size: | 3.50" wide, 7.20" high, 1.50" deep |
| Weight: | 12 ounces |

TEMPERATURE

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

OPTIONS

| | |
|-----------------|----------------------|
| Input Voltages: | 24 VAC/24VDC, 125VDC |
|-----------------|----------------------|

RPR-33PS