

# DPR-22

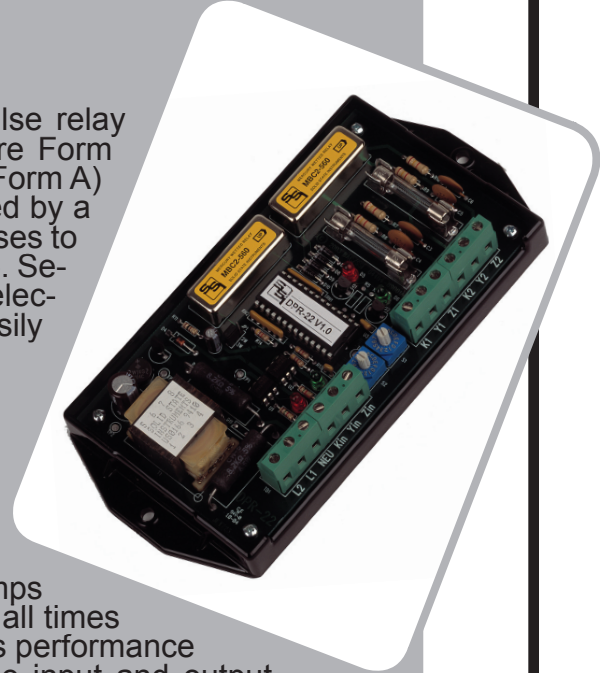
## DIVIDING PULSE RELAY

The DPR-22 is a microcontroller-based dividing pulse relay designed to provide two sets of isolated "dry" 3-wire Form "C" contact (K, Y, & Z) from a field selectable 2-wire (Form A) or 3-wire (Form C) pulse input which has been divided by a user-selected number. The divider's ratio of input pulses to output pulses may be set anywhere between 1 to 255. Selection of the desired division ratio is by two small selector switches mounted on the relay's board and is easily field adjustable with a small screwdriver.

The DPR-22 checks the input pulses for the correct sequence and timing, and counts the input pulses for division only when a correctly valid sequence of pulses occur, thus assuring a high degree of noise rejection. Two sets of bright red and green LED lamps indicate the input and output status of the system at all times thus allowing a rapid visual check-out of the system's performance without requiring any additional test equipment. The input and output circuits' terminal strip are "Euro" type connectors. The "K" leads of each of the DPR-22's isolated outputs are fused to prevent damage to the relays under almost any condition a user might subject it to such as excessive current, voltage, and incorrect wiring.

The DPR-22 provides a "pulled up" sense voltage of approximately +13 VDC on the Y and Z terminals of the input to the external sending contacts. The K terminal is system ground allowing the use of standard electro-mechanical dry-contact switches or solid state open-collector transistor pulse initiators. The DPR-22 has built-in transient protection for the mercury-wetted relays contacts which eliminates the need for external or off-the-board transient suppressors.

All component parts of the DPR-22, which have power applied to them with the exception of the input/output terminal strips and the divider switches, are enclosed in a polycarbonate cover for maximum user protection. The mounting base plate is also made of polycarbonate and offers excellent electrical insulation. This case is not intended for use outside in an unprotected enclosure.



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# DPR-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 time or 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. Factory fused at 1/2 amp. (3AG)

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: 3.50 inches wide, 7.20 inches high, 1.50 inches 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: Contact Factory



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