

# Single Shot (Pulse Former)

## PRLS Series

### Time Delay Relay

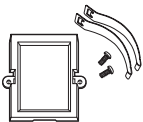
5



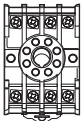
- Knob Adjustable Time Delay Relay
- Electronic Circuit with Electromechanical Relay
- Popular AC & DC Operating Voltages
- Industry Standard Octal Plug-in Connection
- Time Delays to 600 s in 6 Ranges
- +/-2% Repeat Accuracy
- +/-10% Factory Calibration
- LED Indication
- 10 A Rated SPDT Relay Output

Approvals:

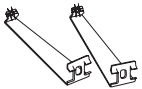
#### Accessories



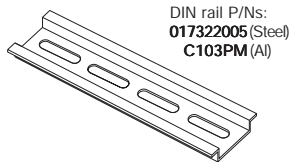
Panel mount kit  
P/N: **BZ1**



Octal  
8 pin socket  
P/N: **NDS-8**



Hold down clips  
P/N: **PSC8**



DIN rail P/Ns:  
**017322005** (Steel)  
**C103PM** (Al)

See accessory pages for specifications.

#### Description

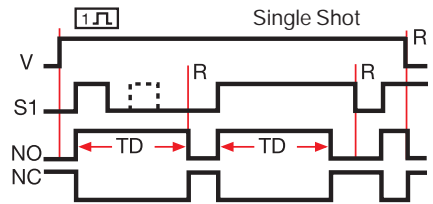
The PRLS Series is designed for use on non-critical timing applications. It offers low cost knob adjustable timing control, full 10 A relay output, and onboard LED indication. The knob adjustment provides a guaranteed time range of up to 10 minutes in 6 ranges. The onboard LED indicates whether or not the unit is timing (flashing LED) as well as the status of the output.

#### Operation

Input voltage must be applied to the input at all times prior to and during timing. Upon closure of the initiate switch (momentary or maintained) the output contacts transfer and the time delay is initiated. The LED flashes during timing. At the end of the delay, the output contacts revert to their original position. If the initiate switch is reclosed during timing, the time delay will not be affected. Applying input voltage with the initiate switch closed will energize the load and begin the time delay.

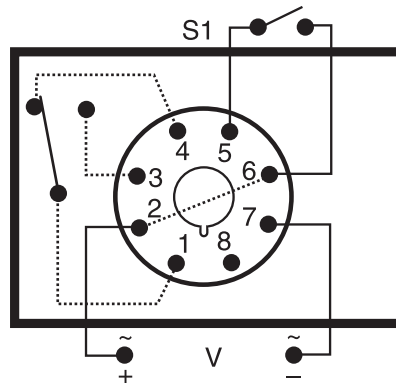
**Reset:** Reset occurs when the time delay is complete and the initiate switch is opened. Loss of input voltage resets the time delay and output.

#### Function



V = Voltage S1 = Initiate Switch TD = Time Delay  
R = Reset NO = Normally Open  
NC = Normally Closed

#### Connection



Relay contacts are isolated. Dashed lines are internal connections.

#### Ordering Table

##### PRLS Series

X	Input
-1	12 V DC
-2	24 V AC
-3	24 V DC
-4	120 V AC
-5	110 V DC
-6	230 V AC

X	Adjustment
-1	Factory Fixed
-2	Adjustable

X	Time Delay *
-1	0.05 ... 3 s
-2	0.1 ... 10 s
-3	1 ... 60 s
-4	2 ... 180 s
-5	7 ... 480 s
-6	7 ... 600 s

Example P/N: **PRLS422** Fixed – **PRLS2160**

\*If Fixed Delay is selected, insert delay [0.05...600] in seconds.

# Single Shot (Pulse Former)

## PRLS Series

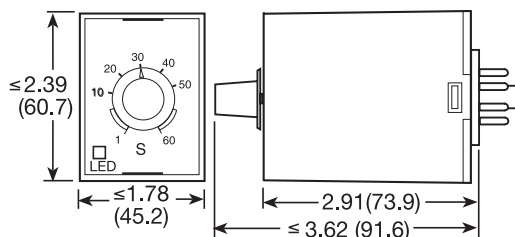
### Time Delay Relay

#### Technical Data

<b>Time Delay</b> Type Range Repeat Accuracy Tolerance  Reset Time Recycle Time Time Delay vs. Temperature & Voltage	Analog circuitry 0.05 ... 600 s in 6 adjustable ranges or fixed +/-2% or 20 ms, whichever is greater Knob Adjust: Guaranteed range Fixed: +/-10% ≤ 75 ms ≤ 250 ms ≤ +/-10%
<b>Input</b> Voltage Tolerance      12 V DC & 24 V DC/AC 110 ... 230 V AC/DC Line Frequency Power Consumption	24, 120, or 230 V AC; 12, 24, or 110 V DC -15% ... +20% -20% ... +10% 50 ... 60 Hz ≤ 2.25 W
<b>Output</b> Type Form Rating Life	Electromechanical relay Isolated SPDT 10 A resistive at 28 V DC; 10 A resistive at 240 V AC; 1/3 hp at 120 & 240 V AC Mechanical--1x10 <sup>7</sup> ; Electrical--1x10 <sup>6</sup>
<b>Protection</b> Surge Isolation Voltage Insulation Resistance Polarity	IEEE C62.41-1991 Level A ≥ 1500 V RMS input to output ≥ 100 MΩ DC units are reverse polarity protected
<b>Indication</b> Type Operation	LED Output Energized & Timing--Flashing
<b>Mechanical</b> Mounting Package Termination	Plug-in socket 3.62 x 2.39 x 1.78 in. (91.6 x 60.7 x 45.2 mm) Octal plug-in (8 pin)
<b>Environmental</b> Operating Temperature Storage Temperature Weight	-20°C ... +65°C -30°C ... +85°C ≅ 6 oz (170 g)

5

#### Mechanical View



Inches (Millimeters)