

# prosense® Relay Timers

## Off-Delay Relay Timers TRS-TD Series

### Overview

The TRS-TD series is designed to replace the functionality of pneumatic time delay relays which are very large, expensive and not very accurate. Unlike standard electronic off delay time relays, the TRS-TD does not require a trigger switch or continuous application of input voltage. With an on board power source, these units keep the logic circuit and relay energized during the off delay period.

### Features

- 8 timing ranges built-in covering 0.05 seconds to 30 minutes
- Selecting a range is easy using a rotary switch
- 120 VAC/VDC and 24 VAC/VDC models available
- 8-pin octal socket
- 10A DPDT output contact



**TRS-TD-D-120AD**

### Off-Delay Relay Timers TRS-TD Series

| Part Number                    | Price   | Timer Type | Timing Range                          | Voltage     | Output Type          | Drawing Links       |
|--------------------------------|---------|------------|---------------------------------------|-------------|----------------------|---------------------|
| <a href="#">TRS-TD-D-120AD</a> | \$66.00 | Off-delay  | 0.05 seconds to 30 minutes selectable | 120 VAC/VDC | (1) DPDT timed relay | <a href="#">PDF</a> |
| <a href="#">TRS-TD-D-24AD</a>  | \$66.00 | Off-delay  | 0.05 seconds to 30 minutes selectable | 24 VAC/VDC  | (1) DPDT timed relay | <a href="#">PDF</a> |

### Off-Delay Relay Timer Specifications

| Part Number                 | TRS-TD-D-120AD                                                                           | TRS-TD-D-24AD |
|-----------------------------|------------------------------------------------------------------------------------------|---------------|
| Input Specifications        |                                                                                          |               |
| Nominal Voltage             | 120 VAC/VDC                                                                              | 24 VAC/VDC    |
| Nominal Consumption         | Max 2VA                                                                                  |               |
| Nominal Frequency           | 50/60 Hz                                                                                 |               |
| Contact Specifications      |                                                                                          |               |
| Type                        | (1) DPDT                                                                                 |               |
| Switching Capacity          | 10A @ 240VAC, 30VDC<br>8A @ 28VDC<br>1/2 HP @ 240 VAC<br>1/4 HP @ 120 VAC<br>B300 & R300 |               |
| Electrical Lifetime         | Full Load: 100,000 operations                                                            |               |
| Reset Time                  | 0.1 seconds                                                                              |               |
| Mechanical Lifetime         | 2,000,000 operations                                                                     |               |
| Time Circuit Specifications |                                                                                          |               |
| Setting Accuracy            | Maximum Setting (Adjustable): +5%, -0%<br>Minimum Setting (Adjustable): +0%, -50%        |               |
| Start-up Time               | Time from when power is applied until unit is timing : 0.05 seconds                      |               |
| Maintain Function Time      | Time unit continues to operate after power is removed:<br>0.01 seconds                   |               |
| Repeat Accuracy             | ± 50ms                                                                                   |               |

### Timing Ranges

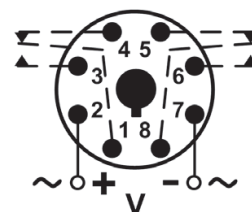
| Dial Setting | Timing Range  |
|--------------|---------------|
| A            | 0.05 - 5 Sec  |
| B            | 0.1 - 10 Sec  |
| C            | 0.3 - 30 Sec  |
| D            | 0.6 - 60 Sec  |
| E            | 1.8 - 180 Sec |
| F            | 3 - 300 Sec   |
| G            | 0.1 - 10 Min  |
| H            | 0.3 - 30 Min  |

### Off-Delay Relay Timer Specifications

|                                         |                                                                                   |
|-----------------------------------------|-----------------------------------------------------------------------------------|
| <b>General Specifications</b>           |                                                                                   |
| <b>Connection (screw terminal)</b>      | Recommend 70169-D socket<br>1 or 2 #12-20 AWG Wire                                |
| <b>Tightening Torque</b>                | 12 in-lb                                                                          |
| <b>Wire/Ferrule Size</b>                | 1 or 2 #12-20 AWG<br>(Ferrule size: Stud size 6 with max overall width 0.30")     |
| <b>Ambient Temperature</b>              | -28 to +65°C<br>[-18 to +150°F]                                                   |
| <b>Storage Temperature</b>              | -40 to +85°C<br>[-40 to +185°F]                                                   |
| <b>Protection Rating</b>                | IP20                                                                              |
| <b>Vibration Resistance</b>             | 10-55 Hz with 3G maximum and<br>0.5mm total displacement (+/- .25mm).             |
| <b>Mounting</b>                         | Socket mount (8-pin required)                                                     |
| <b>Mounting Orientation</b>             | Any                                                                               |
| <b>Weight</b>                           | 0.22 lbs                                                                          |
| <b>Agency Approvals and Standards *</b> | cURus File E191059,<br>cULus with appropriate socket<br>CE EN60947-1, EN60947-5-1 |

\*To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

### Wiring Diagram



# prosense® Octal Sockets

## Features

- Mounts on 35mm DIN rail
- Screw clamp wire termination



**70169-D**



**70170-D**



**750-2C-SKT**

## Octal Sockets for Relays

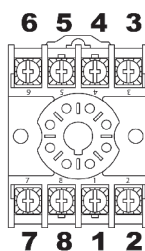
| Part Number              | Price  | Description                                                                                                              | Qty | Wt (lb) | Drawing Links       |
|--------------------------|--------|--------------------------------------------------------------------------------------------------------------------------|-----|---------|---------------------|
| <b><u>70169-D</u></b>    | \$5.25 | Macromatic relay socket, 8-pin, 35mm DIN rail or panel mount. For use with ProSense octal relays.                        | 1   | 0.1     | <a href="#">PDF</a> |
| <b><u>70170-D</u></b>    | \$6.25 | Macromatic relay socket, 11-pin, 35mm DIN rail or panel mount. For use with ProSense octal relays.                       | 1   | 0.1     | <a href="#">PDF</a> |
| <b><u>750-2C-SKT</u></b> | \$4.75 | AutomationDirect relay socket, 8-pin, 35mm DIN rail or panel mount. For use with 750-2C and H750-2C series octal relays. | 1   | 0.1     | <a href="#">PDF</a> |

## Octal Sockets Specifications

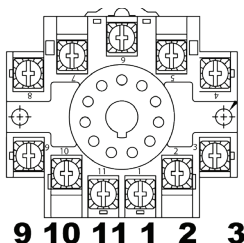
| Part Number              | Number of Pins | Voltage | Current | Screw Size | Wire Size (capacity) | Screw Torque | Screw Chassis Mounting Torque | Agency Approval *              |
|--------------------------|----------------|---------|---------|------------|----------------------|--------------|-------------------------------|--------------------------------|
| <b><u>70169-D</u></b>    | 8              | 600V    | 10A     | 6-32       | 1 or 2, 12-20 AWG    | 12 in-lb     | 7 in-lb                       | UL Recognized E169693, CSA, CE |
| <b><u>70170-D</u></b>    | 11             | 300V    | 10A     | 6-32       | 1 or 2, 12-20 AWG    | 12 in-lb     | 12 in-lb                      |                                |
| <b><u>750-2C-SKT</u></b> | 8              | 600V    | 5A      | M3.5       | 1-12 AWG / 1-14 AWG  | 9 in-lb      | 7 in-lb                       | UL Recognized E225080, CSA, CE |

\* To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

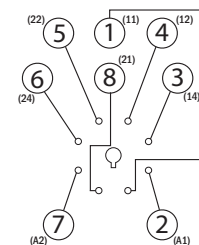
## Socket Pinouts



**70169-D**



**70170-D**



**750-2C-SKT**