

TRU SERIES

Knob Adjustable Universal Time Delay Relay



8-PIN



11-PIN

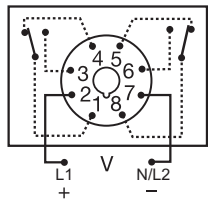
Description

The TRU Series is a multifunction, knob adjustable, Universal Time Delay Relay. It includes six of the most popular timing functions selected by a slide switch. The time delay is knob adjustable and the time delay range is switch selectable. The repeat accuracy is + 0.1%. Both function and time range can be selected on the top face of the unit. In addition to multifunctioning and multiple time ranges, the TRU Series features universal input voltage; 19 to 264VAC and 19 to 30VDC and full 10A output relay. The TRU Series can directly replace up to 1000 competitive time delay relay models.

Operation

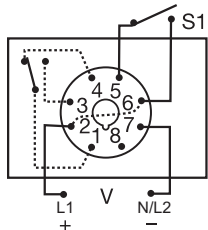
A six position slide switch selects delay-on-make, interval, single shot, recycling (ON time first, equal recycle delays), delay-on-break, and retriggerable single shot. 8-pin DPDT base wiring is limited to delay-on-make, interval, and recycling functions. All six functions are available in the 8-pin SPDT and 11-pin DPDT versions.

Wiring Diagram



8-PIN DPDT

Delay-on-Make
Interval
Recycling

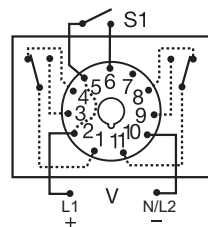


8-PIN SPDT

Delay-on-Make
Interval
Single Shot
Recycling
(ON Time First, Equal
Recycle Delays)
Delay-on-Break
Retriggerable Single Shot

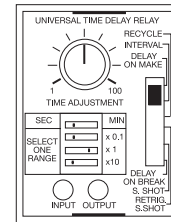
V = Voltage
S1 = Initiate Switch

Relay contacts
are isolated



11-PIN DPDT

Delay-on-Make
Interval
Single Shot
Recycling
(ON Time First, Equal
Recycle Delays)
Delay-on-Break
Retriggerable Single Shot



Features & Benefits

| FEATURES | BENEFITS |
|---------------------------------------|--|
| Microcontroller based | Repeat Accuracy +/- 0.1% or +/- 20ms, whichever is greater |
| 6 time ranges (0.1s to 1,000m) | Broad range will satisfy most requirements |
| Knob adjustable time delay | Allows user to fine tune time delay based on application needs |
| Universal input voltage | Makes it versatile for use in most applications |
| Multifunction | Provides the most common standard timing functions |
| LED Indicators | Provide visual indication of input voltage and relay status |
| 10A isolated output contacts | Allows control of loads for AC or DC voltages |

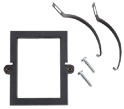
Ordering Information

| MODEL | INPUT VOLTAGE | BASE WIRING | FUNCTIONS |
|-------|---------------------------|-------------|-----------|
| TRU1 | 19 to 264VAC; 19 to 30VDC | 8-pin DPDT | 3 |
| TRU2 | 19 to 264VAC; 19 to 30VDC | 8-pin SPDT | 6 |
| TRU3 | 19 to 264VAC; 19 to 30VDC | 11-pin DPDT | 6 |

If you don't find the part you need, call us for a custom product 800-843-8848

TRU SERIES

Accessories



BZ1 Front Panel Mount Kit
Provides an easy method of through-the-panel mounting of 8- or 11-pin plug-in timers, flashers, and other controls.



NDS-8 Octal 8-pin Socket
8-pin 35mm DIN rail or surface mount. Rated at 10A @ 300VAC. Surface mounted with two #6 (M 3.5 x 0.6) screws or snaps onto a 35 mm DIN rail. Uses PSC8 hold-down clips.

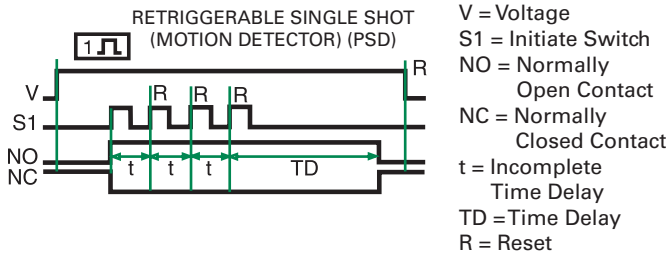


NDS-11 11-pin Socket
11-pin 35mm DIN rail or surface mount. Rated at 10A @ 300VAC. Surface mounted with two #6 (M 3.5 x 0.6) screws or snaps onto a 35 mm DIN rail. Uses PSC11 hold-down clips.



PSC8 or PSC11 Hold-down Clips
Securely mounts plug-in controls in any position. Provides protection against vibration. Use PSC8 with NDS-8 Octal Socket or PSC11 with NDS-11 Socket. Sold in pairs.

Function Diagram



Specifications

Time Delay

Type
Range
Switch Selectable

Digital integrated circuitry

0.1s - 1000m in 6 ranges:

- 1) 0.1 - 10s
- 2) 1 - 100s
- 3) 10 - 1000s
- 4) 0.1 - 10m
- 5) 1 - 100m
- 6) 10 - 1000m

Adjustments Multiplier

4 position DIP switch selects x0.1, x1, x10, and sec. or min. Onboard knob adjustment with 1 - 100 reference dial

Time Setting

Two LEDs indicate

- 1) Input voltage applied
 - 2) Output relay status
- ±0.1% or ±20ms, whichever is greater
≤ 300ms

Repeat Accuracy

Reset Time
Time Delay vs Temp. & Voltage

±2%

Input

Voltage - Universal
Input Range
AC Line Frequency

19 to 264VAC and 19 to 30VDC
50/60Hz

Output

Type
Form
Rating

Electromechanical relay
SPDT or DPDT, isolated
10A resistive @ 120/240VAC & 28VDC;
1/3 hp @ 120/240VAC
Mechanical - 1 x 10⁷; Electrical - 1 x 10⁶

Life

Protection

Transient
Isolation Voltage
Polarity

38 joules
≥ 1500V RMS input to output
DC units are reversed polarity protected

Mechanical

Mounting
Dimensions

Plug-in socket
H 87.3 mm (3.44"); W 60.7 mm (2.39");
D 45.2 mm (1.78")

Termination

Environmental
Operating/Storage

Octal 8-pin plug-in or magnal 11-pin plug-in

Temperature
Weight

-20° to 65°C / -30° to 85°C
≅ 6 oz (170 g)