

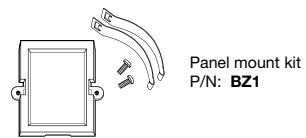
# Multifunction, Multirange TRU Series Universal Time Delay Relay



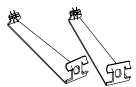
- Microcontroller +/-0.1% Repeat Accuracy
- Six Timing Functions are Switch Selectable
- 0.1 s ... 1000 m in Six Ranges
- Knob Adjustable Time Delay
- Universal Input Voltage  
19...264 V AC & 19...30 V DC
- 10 A, SPDT or DPDT Relay Contacts

Approvals:

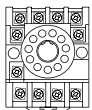
### Accessories



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



Hold down clips  
P/Ns:  
**PSC8** (NDS-8)  
**PSC11** (NDS-11)



11 pin socket  
P/N: **NDS-11**



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

See accessory pages for specifications.

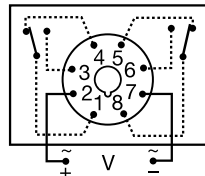
### Description

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  $\pm 0.1\%$ . 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 264 V AC and 19 to 30 V DC and full 10 A output relay. The TRU Series can directly replace up to 1000 competitive time delay relay models.

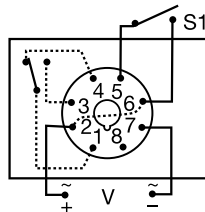
### Operation

A six position slide switch selects Delay on Make, Interval, Single Shot, Recycling (ON time first), 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.

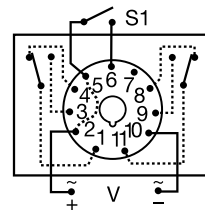
### Connection



8 Pin DPDT  
Delay On Make  
Interval  
Recycling



8 Pin SPDT  
Delay On Make  
Interval  
Single Shot  
Recycling (ON Time First)  
Delay on Break  
Retriggerable Single Shot

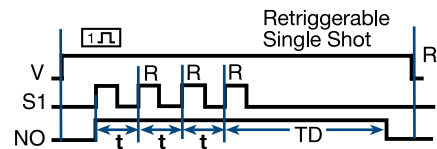
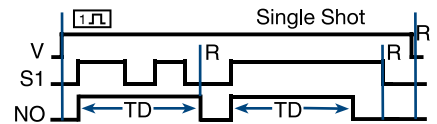
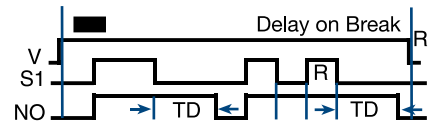
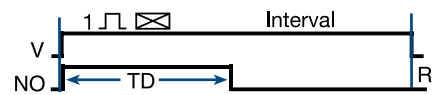
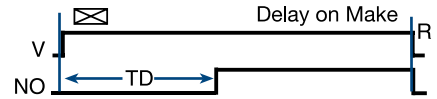


11 Pin DPDT

S1 = Initiate Switch

Dashed lines are internal connections.  
Relay contacts are isolated.

### Function



V = Voltage S1 = Initiate Switch R = Reset TD = Time Delay NO = Normally Open Contact t = Incomplete Time Delay

### Available Models-

•TRU1

•TRU2

•TRU3

**Don't see what you need? Call us for a minimum quantity and price quote!**

### Ordering Table

Voltage	Base Wiring	Functions	Part Number
19 ... 264 V AC; 19 ... 30 V DC	8 pin DPDT	3	TRU1
19 ... 264 V AC; 19 ... 30 V DC	8 pin SPDT	6	TRU2
19 ... 264 V AC; 19 ... 30 V DC	11 pin DPDT	6	TRU3

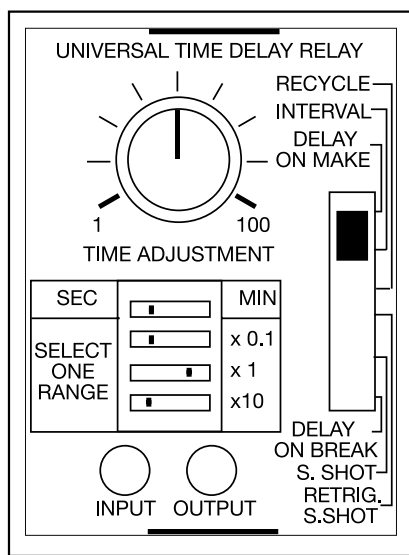
# Multifunction, Multirange TRU Series Universal Time Delay Relay

Multifunction  
timers

## Technical Data

<b>Time Delay</b> Type Range: Switch Selectable**  Adjustments  LED Indication Repeat Accuracy Reset Time Time Delay vs. Temp. & Voltage	Digital integrated circuitry 0.1 s ... 1000 m in 6 ranges--0.1 ... 10, 1 ... 100 or 10 ... 1000 s; 0.1 ... 10, 1 ... 100 or 10 ... 1000 m Multiplier: 4 position DIP switch selects x0.1, x1, x10, and s or m Time Setting: Onboard knob adjustment with 1 ... 100 reference dial Two LED's indicate input voltage applied & output relay status +/-0.1%, or +/-20 ms, whichever is greater ≤ 300 ms +/-2%
<b>Input</b> Voltage--Universal Input Range Line Frequency	19 ... 264 V AC and 19 ... 30 V DC 50 ... 60 Hz
<b>Output</b> Type Form Rating Life	Electromechanical relay Isolated SPDT & DPDT 10 A resistive at 120/240 V AC & 28 V DC; 1/3 hp at 120/240 V AC Mechanical: $1 \times 10^7$ ; Electrical: $1 \times 10^6$
<b>Protection</b> Transient Isolation Voltage Polarity	38 joules ≥ 1500 V RMS input to output DC units are reversed polarity protected
<b>Mechanical</b> Mounting Package Termination	Plug-in socket 3.44 x 2.39 x 1.78 in. (87.3 x 60.7 x 45.2 mm) Octal plug (8 Pin) or magnal plug (11 Pin)
<b>Environmental</b> Operating Temperature Storage Temperature Weight	-20°C ... +65°C -30°C ... +85°C ≅ 6 oz (170 g)

\*\* For CE approved applications, power must be removed when a switch position is changed.



## Mechanical View

