

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 Contacts

Description

The TRU Series is a Universal Time Delay Relay. 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. One unit, multifunction, multirange, universal voltage, and full 10 A output. The TRU Series can directly replace up to 1000 competitive time delay relay models.

Operation

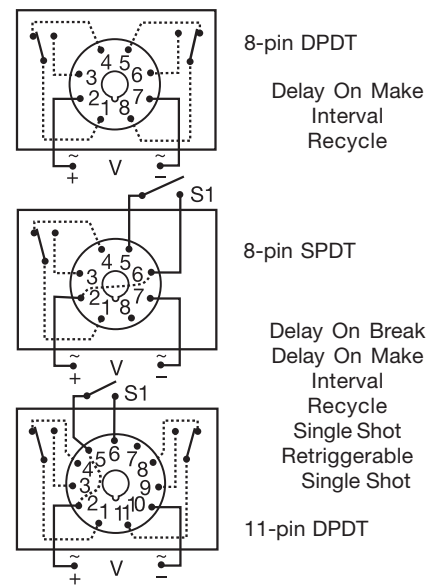
A six position slide switch selects Delay on Make, Interval, Single Shot, Recycle (ON time first), Delay on Break, and Retriggerable Single Shot. 8-Pin DPDT base wiring is limited to Delay on Make, Interval, and Recycle functions.

■ Approvals:

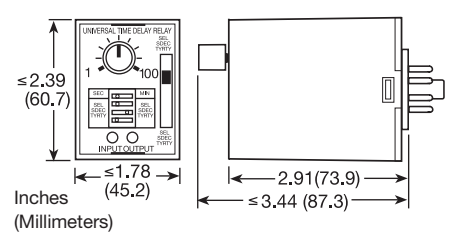
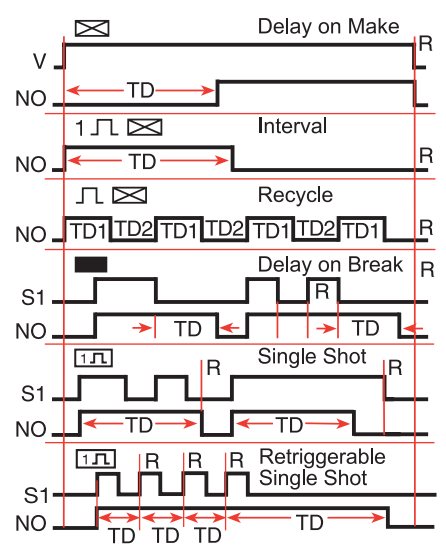
Voltage	Base Wiring	Functions	Part Number
19 ... 264 V AC; 19 ... 30 V DC	8-pin DPDT	3	TRU1
19 ... 264 V AC; 19 ... 30 V DC	8-pin SPDT	6	TRU2
19 ... 264 V AC; 19 ... 30 V DC	11-pin DPDT	6	TRU3

Technical Data

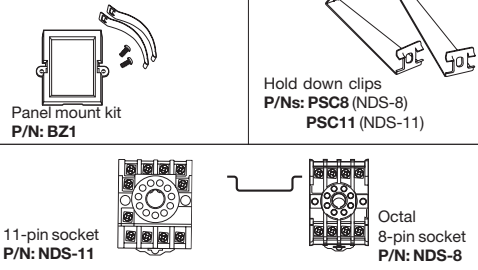
Time Delay	
Type	Digital integrated circuitry
Range (Dipswitch Selectable)	0.1 s ... 1000 m in 6 ranges--0.1 ... 10, 1 ... 100 or 10 ... 1000 s; 0.1 ... 10, 1 ... 100 or 10 ... 1000 m
Adjustments	Multiplier: 4 position dipswitch selects x0.1, x1, x10, and s or m Time Setting: Onboard knob adjustment with 1 ... 100 reference dial
Modes of Operation	A six position slide switch selects Delay on Make, Interval, Single Shot, Recycle (ON time first), Delay on Break, and Retriggerable Single Shot. 8-pin DPDT base wiring is limited to Delay on Make, Interval, and Recycle functions.
LED Indication	Two LED's indicate input power applied & output relay status
Repeat Accuracy	+/-0.1%, or +/-16 ms, whichever is greater
Recycle Time	≤ 300 ms
Time Delay vs. Temperature & Voltage	+/-2%
Input	
Voltage--Universal Input Range	19 ... 264 V AC and 19 ... 30 V DC
Line Frequency	50 ... 60 Hz
Output	
Type	Electromechanical relay
Form	SPDT & DPDT versions available
Rating	10 A resistive at 240 V AC; 7 A inductive at 120 V AC
Life	Mechanical: 1 x 10 ⁷ ; Full Load: 1 x 10 ⁶
Protection	
Transient	38 joules
Isolation Voltage	≥ 1500 V RMS input to output
Polarity	DC units are reverse polarity protected
Mechanical	
Mounting	Plug-in socket
Package	3.44 x 2.39 x 1.78 in. (87.4 x 60.7 x 45.2 mm)
Termination	Octal plug (8-Pin) or magnal plug (11-Pin)
Environmental	
Operating Temperature	-20°C ... +65°C
Storage Temperature	-30°C ... +85°C
Weight	≅ 6 oz (170 g)



Relay contacts are isolated. Dashed lines are internal connections.



Accessories



See accessory pages for specifications.