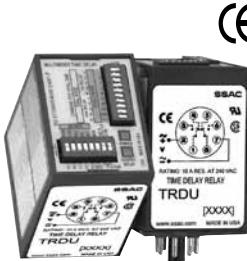


Multifunction

TRDU Series

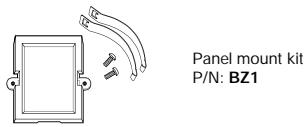
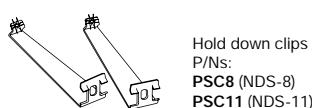
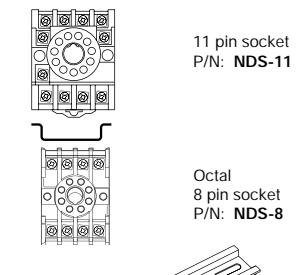
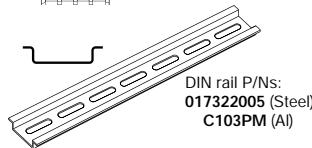
Time Delay Relay

10
YEAR
WARRANTY

- Microcontroller +/-0.1% Repeat Accuracy
- Multifunction – 21 Timing Functions
- Multirange – 0.1 s ... 1,705 h in 8 Ranges
- Switch Selectable Modes, Time Delay, & Ranges
- AC and DC Input Voltages are Available
- 10 A, Isolated SPDT or DPDT Output Contacts

Approvals:

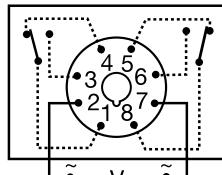
Accessories

Panel mount kit
P/N: BZ1Hold down clips
P/Ns:
PSC8 (NDS-8)
PSC11 (NDS-11)11 pin socket
P/N: NDS-11Octal
8 pin socket
P/N: NDS-8DIN rail P/Ns:
017322005 (Steel)
C103PM (Al)See accessory pages for
specifications.

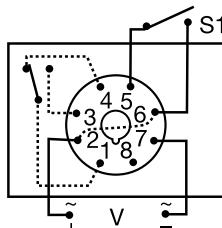
Description

The TRDU Series is a versatile universal time delay relay with 21 selectable single and dual functions. The dual functions replace up to three timers required to accomplish the same function. Both the function and the timing range are selectable with switches located on the face of the unit. Two LED's indicate input voltage and output status. This device offers full 10 A isolated relay output contacts in either SPDT or DPDT. The TRDU replaces hundreds of part numbers, thereby, reducing your stock inventory requirements.

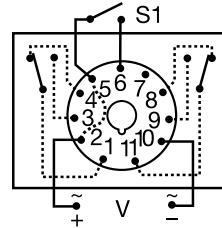
Connection



8 Pin DPDT



8 Pin SPDT



11 Pin DPDT

V = Voltage S1 = Initiate Switch
Relay contacts are isolated. Dashed lines are internal connections.

Available Models-

- TRDU120A1
- TRDU12D1
- TRDU230A2
- TRDU24A3
- TRDU120A2
- TRDU12D2
- TRDU24A1
- TRDU12A3
- TRDU12D3
- TRDU24A2

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

Ordering Table

TRDU
SeriesX
Input

- 12D - 12 V DC
- 24A - 24 V AC/DC
- 120A - 120 V AC
- 230A - 230 V AC

X
Base Connection

- 1 - 8 pin DPDT *
- 2 - 8 pin SPDT
- 3 - 11 pin DPDT

*Limited to Nine Operating Functions

Example P/N: TRDU120A2

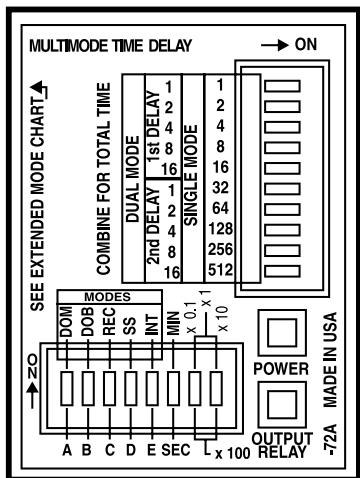
Multifunction TRDU Series Time Delay Relay

Multifunction
timers

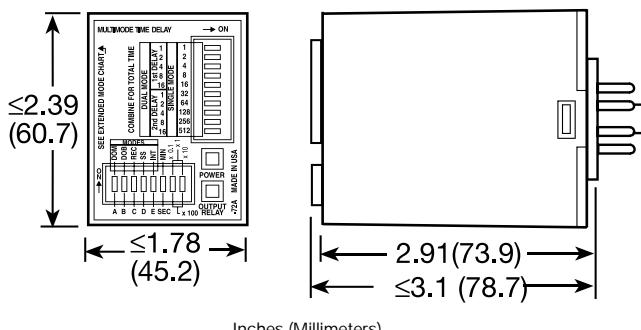
Technical Data

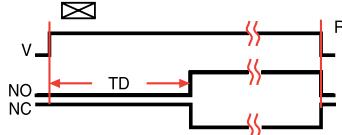
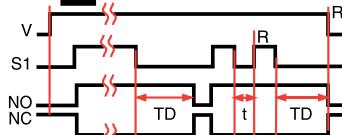
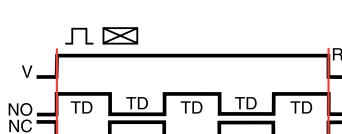
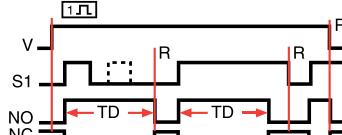
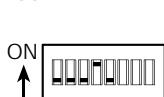
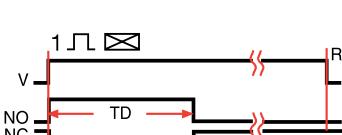
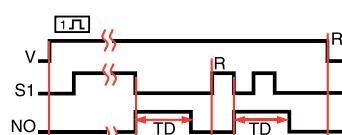
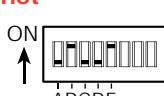
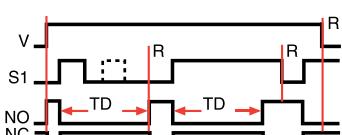
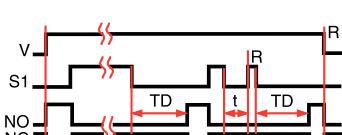
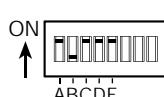
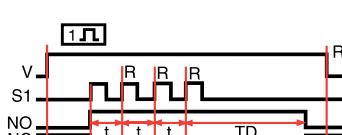
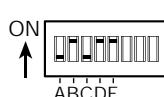
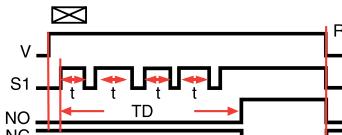
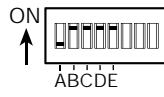
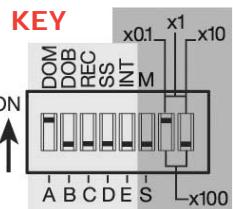
Time Delay	
Type	Microcontroller
Range: Switch Selectable**	Single Functions: 0.1 s ... 1,705 h in 8 ranges Dual Functions: 0.1 s ... 3,100 m each in 8 ranges Three switches are provided to set secs/mins & multipliers of x0.1, x1, x10, or x100 +/-1% or 50 ms, whichever is greater +/-0.1% or 20 ms, whichever is greater Five switches are provided to set one of twenty-one single or dual functions
Adjustments	50 ms
Setting Accuracy	120 V AC: 75 ms
Repeat Accuracy	+/-1%
Timing Functions	
Reset Time	
Initiate Time	
Time Delay vs. Temp. & Voltage	
Indication	
Two LED's indicate	1) Input voltage applied; 2) Output relay status
Input	
Voltage	12 V DC, 24 V AC/DC, 120 V AC, or 230 V AC
Tolerance	-15% ... +20%
	-20% ... +10%
Frequency	50 ... 60 Hz
Power Consumption	24 ... 230 V 3 W; 12 V DC 2 W
Output	
Type	Electromechanical relay
Form	SPDT or DPDT
Rating	10 A resistive at 120/240 V AC & 28 V DC; 1/3 hp at 120/240 V AC
Life	Mechanical - 1×10^7 ; Electrical - 1×10^6
Protection	
Isolation Voltage	1500 V RMS input to output
Insulation Resistance	100 M
Polarity	DC units are reverse polarity protected
Mechanical	
Mounting	Plug-in socket
Package	3.1 x 2.39 x 1.78 in. (78.7 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	-40°C ... +85°C
Weight	\approx 5.8 oz (164 g)

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

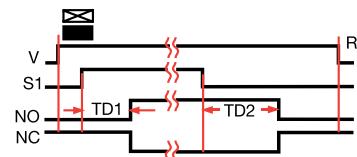
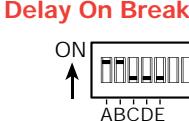
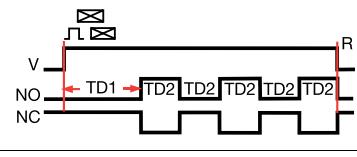
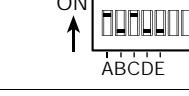
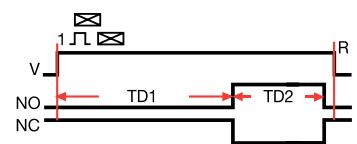
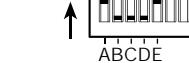
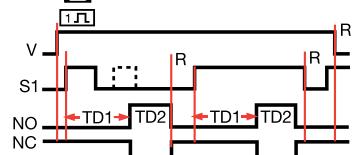
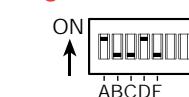
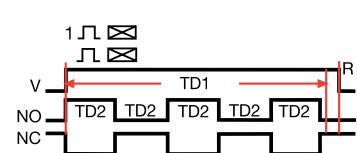
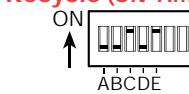
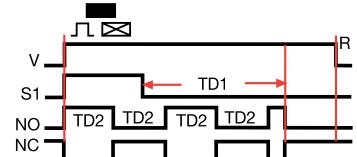
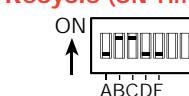
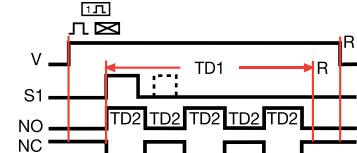
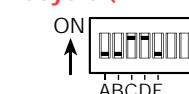
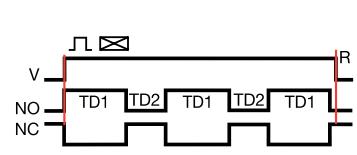
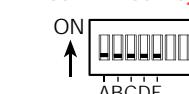
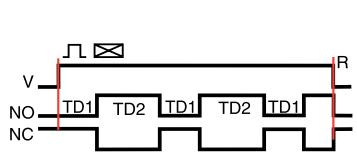
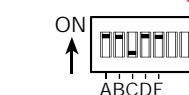
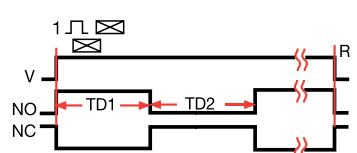
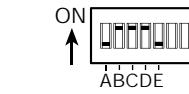
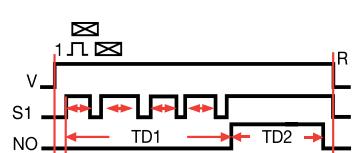
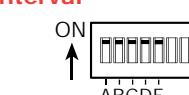


Mechanical View



Single Functions*** Delay On Make****Delay On Break***** Recycle (ON Time First, Equal Delays)****Single Shot***** Interval****Trailing Edge Single Shot****Inverted Single Shot****Inverted Delay On Break****Retriggerable Single Shot****Accumulative Delay On Make****KEY**

V=Voltage, R=Reset, S1=Initiate Switch, NO=Normally Open Contact, NC=Normally Closed Contact, TD, TD1, TD2=Complete Time Delay, t=Partial Time Delay, DOM=Delay On Make, DOB=Delay On Break, REC=Recycle, SS=Single Shot, INT=Interval, M=Minutes, S=Seconds, \rightarrow = Undefined time
 5 Switches for Function Selection
 3 Switches for Time Delay Range
 NOTE: The time delay range is the same for both functions when dual functions are selected.

Dual Functions**Delay On Make***** Delay On Make Recycle (ON Time First)***** Delay On Make Interval****Delay On Make Single Shot***** Interval Recycle (ON Time First)****Delay On Break Recycle (ON Time First)****Single Shot Recycle (ON Time First)***** Recycle (ON Time First) Both Times Adjustable***** Recycle (OFF Time First) Both Times Adjustable***** Interval Delay On Make****Accumulative Delay on Make Interval**

* 9 Functions included in the 8 pin DPDT models