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TRDU SERIES

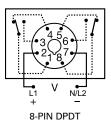


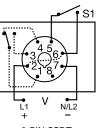




11-PIN

Wiring Diagram





8-PIN SPDT



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 10A isolated relay output contacts in either SPDT or DPDT. The TRDU replaces hundreds of part numbers, thereby, reducing your stock inventory requirements.

21 Functions

Five switches are provided to set one of 10 single or 11 dual modes of operation.

Features & Benefits

FEATURES	BENEFITS
Multifunction: 21 timing functions	Replace hundreds of parts and reduce stocking requirements
Microcontroller based	Repeat Accuracy + / - 0.1%
User selectable time delay	Timing settings are switch selectable 0.1s - 1,705h in eight ranges for added flexibility
Isolated 10A, SPDT or DPDT output contacts	Allows control of loads for AC or DC voltages
LED indicators	Provides visual indication of input voltage and relay status

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 surfac

8-pin 35mm DIN rail or surface mount. Surface mounted with two #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. Surface mounted with two #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 sets of two.

C103PM (AL) DIN Rail

35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.

11-PIN DPDT

Ordering Information

MODEL	INPUT VOLTAGE	BASE CONNECTION
TRDU120A1	120VAC	8-pin, DPDT*
TRDU120A2	120VAC	8-pin, SPDT
TRDU120A3	120VAC	11-pin, DPDT
TRDU12D1	12VDC	8-pin, DPDT*
TRDU12D2	12VDC	8-pin, SPDT
TRDU230A2	230VAC	8-pin, SPDT
TRDU24A1	24VAC/DC	8-pin, DPDT*
TRDU24A2	24VAC/DC	8-pin, SPDT
TRDU24A3	24VAC/DC	11-pin, DPDT

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

*Limited to 9 operating functions in 8-pin DPDT units.

TRDU SERIES

Specifications

Time Delay Type Range: Switch Selectable**

Adjustments

Setting Accuracy Repeat Accuracy Timing Functions

Reset Time Initiate Time Time Delay vs Temp. & Voltage Indication **Two LEDs indicate** Input Voltage Tolerance 12VDC & 24VAC/DC 120 & 230VAC **AC Line Frequency Power Consumption** Output Туре Form Rating

Five switches are provided to set one of twenty-one single or dual functions ≤ 50ms 120VAC: 75ms

Microcontroller

0.1, 1, 10, or 100 in s or m

±1%

1) Input voltage applied 2) Output relay status 12VDC, 24VAC/DC, 120VAC, or 230VAC -15% - 20% -20% - 10% 50/60Hz 24 to 230V \leq 3W; 12VDC \leq 2W Electromechanical relay SPDT or DPDT 10A resistive @ 120/240VAC & 28 VDC;

Single Functions: 0.1s - 1,705h in 8 ranges

Multiplier: 3 position DIP switches select

±1% or 50ms, whichever is greater

±0.1% or 20ms, whichever is greater

Dual Functions: 0.1s - 3,100m each in 8 ranges

1/3 hp @ 120/240VAC Mechanical – 1 x 10⁷; Electrical – 1 x 10⁶

Protection

Isolation Voltage Insulation Resistance Polarity Mechanical Mounting Dimensions

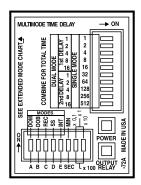
Termination Environmental Operating/Storage Temperature Weight

 \geq 1500V RMS input to output \geq 100 M Ω DC units are reverse polarity protected

Plug-in socket H 76.7 mm (3.1"); W 60.7 mm (2.39"); D 45.2 mm (1.78") Octal 8-pin plug-in or magnal 11-pin plug-in

-20° to 65°C / -40° to 85°C ≅ 5.8 oz (164 g)

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



Life

Function Diagrams

Single Functions Dual Functions DELAY-ON-MAKE/DELAY-ON-BREAK DELAY-ON-MAKE (ON-DELAY) F ON ON v S1 NO TD1 TD2 NO ABCDE ÁBCDE NC NC DELAY-ON-BREAK DELAY-ON-MAKE / RECYCLE \ge π⊠ (ON TIME FIRST) ON ON S1 TD1 TD2 TD2 TD2 TD2 NO ÅBCDE ÁBCDE NO NC ТD ТD NC RECYCLE (ON TIME FIRST, EQUAL DELAYS) Л⊠ ON ON V v יחד TD2 NO NO TD ТD TD TD ÅBCDE ÅBCDE NC \ge SINGLE SHOT DELAY-ON-MAKE / SINGLE SHOT 1Л. <u>___</u> ON ON ν S1 S1 ABCDE ABCDE TD TD NO NC TD1-TD1 TD: NO NC

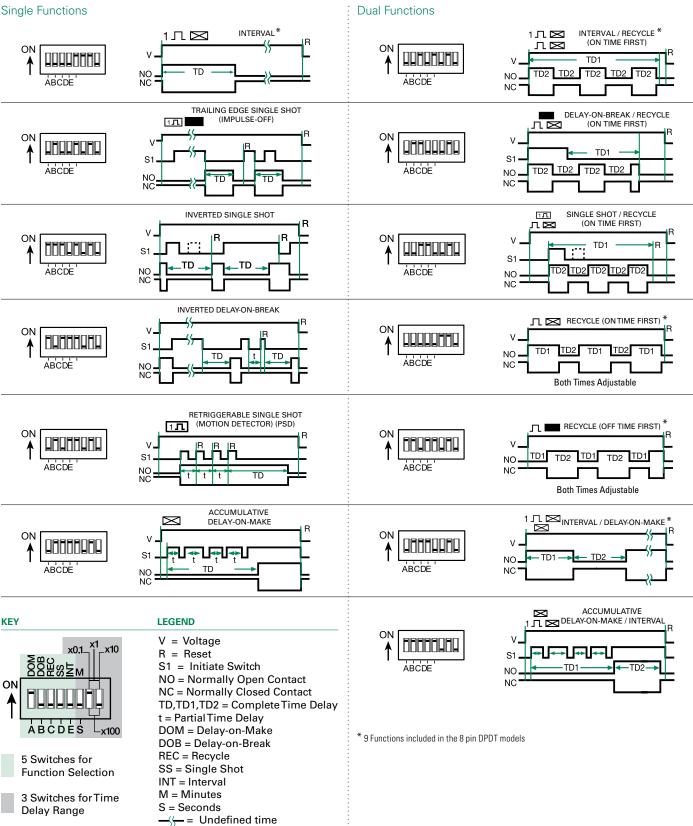
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Time Delay Relays Multifunction

TRDU SERIES

Single Functions



NOTE: The time delay range is the same for both functions when dual functions are selected.

