

# Single Shot (Pulse Former) TDUS Digi-Set Timing Module



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- Switch Selectable Time Setting
- 0.1 s ... 102.3 m in 3 Ranges
- +/- 0.5% Repeat Accuracy
- +/- 2% Setting Accuracy
- 1 A Solid State Output
- Encapsulated
- Wide Voltage Ranges

Approvals:

### Description

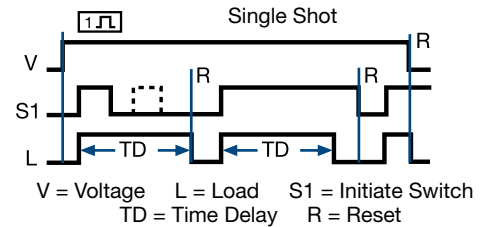
The TDUS Series combines digital timing circuitry with universal voltage operation. Voltages of 24 to 240 V AC and 12 to 24 V DC are available in three ranges. The TDUS Series offers DIP switch selectable time delays ranging from 0.1 seconds to 102.3 minutes in three ranges. Its 1 A rated output, ability to operate on multiple voltages, and wide range of switch selectable time delays make the TDUS Series an excellent choice for process control systems and OEM equipment.

### Operation

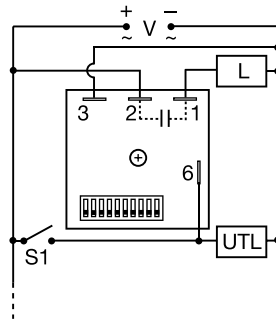
Input voltage must be applied before and during timing. Upon momentary or maintained closure of the initiate switch (leading edge triggered), the output energizes for a measured interval of time. At the end of the delay, the output de-energizes. Opening or reclosing the initiate switch during timing has no effect on the time delay. The output will energize if the initiate switch is closed when input voltage is applied.

**Reset:** Reset occurs when the time delay is complete and the initiate switch is opened. Loss of input voltage resets the time delay and output.

### Function



### Connection



Dashed lines are internal connections.

UTL = Optional Untimed Load S1 = Initiate Switch  
L = Timed Load

### Available Models-

- TDUS3000A
- TDUS3002A
- TDUSH3000A

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### Ordering Table

Input Voltage Range	Time Range	Part Number
24 ... 120 V AC	0.1 ... 102.3 s	TDUSL3000A
100 ... 240 V AC	0.1 ... 102.3 s	TDUSL3001A
12 ... 24 V DC	0.1 ... 102.3 s	TDUSL3002A
24 ... 120 V AC	1 ... 1023 s	TDUS3000A
100 ... 240 V AC	1 ... 1023 s	TDUS3001A
12 ... 24 V DC	1 ... 1023 s	TDUS3002A
24 ... 120 V AC	0.1... 102.3 m	TDUSH3000A
100 ... 240 V AC	0.1... 102.3 m	TDUSH3001A
12 ... 24 V DC	0.1... 102.3 m	TDUSH3002A

### Accessories

Female quick connect  
P/Ns:  
P1015-13 (AWG 10/12)  
P1015-64 (AWG 14/16)  
P1015-14 (AWG 18/22)

Quick connect to  
screw adaptor  
P/N: P1015-18

DIN rail P/Ns:  
C103PM (A)  
DIN rail adaptor  
P/N: P1023-20

See accessory pages for specifications.

# Single Shot (Pulse Former)

## TDUS Digi-Set

### Timing Module

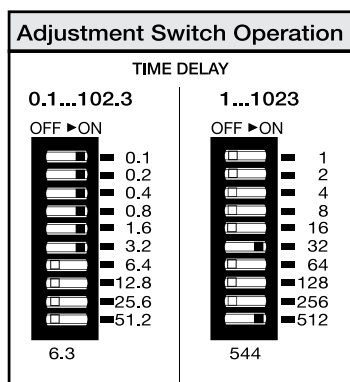
Dedicated  
timers

#### Technical Data

<b>Time Delay</b> Range*  Repeat Accuracy Setting Accuracy Reset Time Initiate Time Time Delay vs. Temperature & Voltage	0.1 ... 102.3 s in 0.1 s increments 1 ... 1023 s in 1 s increments 0.1 ... 102.3 m in 0.1 m increments +/-0.5% or 20 ms, whichever is greater +/-2% or 20 ms, whichever is greater ≤ 150 ms ≤ 20 ms ≤ +/-5%	*For CE approved applications, power must be removed from the unit when a switch position is changed.
<b>Input</b> Voltage/Tolerance Line Frequency Power Consumption DC Ripple	24 ... 240 V AC, 12 ... 24 V DC +/-20% 50 ... 60 Hz AC ≤ 2 VA; DC ≤ 1 W ≤ 10%	
<b>Output</b> Type Form Rating Voltage Drop Off State Leakage Current	Solid state Normally Open, closed during timing 1 A steady state, 10 A inrush at 60°C AC ≅ 2.5 V at 1 A; DC ≅ 1 V at 1 A AC ≅ 5 mA at 230 V AC; DC ≅ 1 mA	
<b>Protection</b> Circuitry Dielectric Breakdown Insulation Resistance Polarity	Encapsulated ≥ 2000 V RMS terminals to mounting surface ≥ 100 MΩ DC units are reverse polarity protected	
<b>Mechanical</b> Mounting Package Termination <b>Environmental</b> Operating Temperature Storage Temperature Humidity Weight	Surface mount with one #10 (M5 x 0.8) screw 2 x 2 x 1.21 in (50.8 x 50.8 x 30.7 mm) 0.25 in. (6.35 mm) male quick connect terminals  -40°C ... +60°C -40°C ... +85°C 95% relative, non-condensing ≅ 2.4 oz (68 g)	

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#### Mechanical View



Add the value of switches in the ON position for the total time delay.

