

Delay On Break (Release) TDUB 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

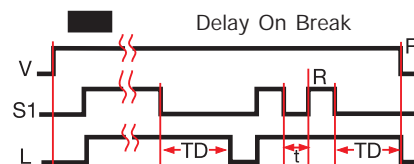
The TDUB Series combines digital timing circuitry with universal voltage operation. Voltages of 24 to 240 V AC and 12 to 24 V DC are available in three ranges. The TDUB Series offers DIP switch selectable time delays ranging from 0.1 seconds to 102.3 minutes in three ranges. Its 1 A rated output, ability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

Operation

Input voltage must be applied before and during timing. Upon closure of the initiate switch, the output energizes. The time delay begins when the initiate switch is opened (trailing edge triggered). The output remains energized during timing. At the end of the time delay, the output de-energizes. The output will energize if the initiate switch is closed when input voltage is applied.

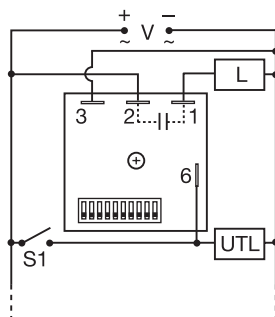
Reset: Reclosing the initiate switch during timing resets the time delay. Loss of input voltage resets the time delay and output.

Function



V = Voltage L = Load S1 = Initiate Switch
TD = Time Delay R = Reset
t = Incomplete Time Delay — = Undefined time

Connection



Dashed lines are internal connections.

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

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 adaptor
P/N: **P1023-20**

DIN rail P/Ns:
017322005 (Steel)
C103PM (Al)

See accessory pages for specifications.

Ordering Table

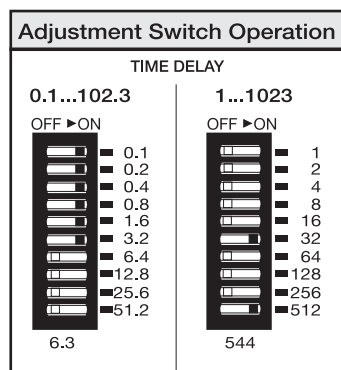
Input Voltage Range	Time Range	Part Number
24 ... 120 V AC	0.1 ... 102.3 s	TDUBL3000A
100 ... 240 V AC	0.1 ... 102.3 s	TDUBL3001A
12 ... 24 V DC	0.1 ... 102.3 s	TDUBL3002A
24 ... 120 V AC	1 ... 1023 s	TDUB3000A
100 ... 240 V AC	1 ... 1023 s	TDUB3001A
12 ... 24 V DC	1 ... 1023 s	TDUB3002A
24 ... 120 V AC	0.1 ... 102.3 m	TDUBH3000A
100 ... 240 V AC	0.1 ... 102.3 m	TDUBH3001A
12 ... 24 V DC	0.1 ... 102.3 m	TDUBH3002A

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Technical Data

Time Delay 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.
Input 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%	
Output Type Form Rating Voltage Drop Off State Leakage Current	Solid state Normally Open, closed before and 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 @ 230 V AC; DC ≅ 1 mA	
Protection Circuitry Dielectric Breakdown Insulation Resistance Polarity	Encapsulated ≥ 2000 V RMS terminals to mounting surface ≥ 100 MΩ DC units are reverse polarity protected	
Mechanical Mounting Package Termination	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	
Environmental Operating Temperature Storage Temperature Humidity Weight	-40°C ... +60°C -40°C ... +85°C 95% relative, non-condensing ≅ 2.4 oz (68 g)	

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

Mechanical View

