

Interval (Single Pulse On Operate)

TDUI 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

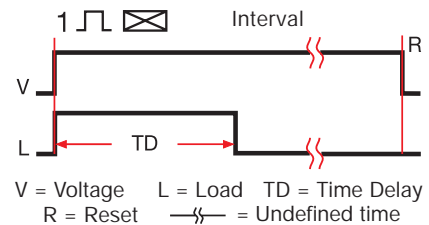
The TDUI Series combines digital timing circuitry with universal voltage operation. Voltages of 24 to 240 V AC and 12 to 24 V DC are available in three ranges. The TDUI Series offers DIP switch selectable time delays ranging from 0.1 seconds to 102.3 minutes in three ranges. Its 1 A rated output, ability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

Operation

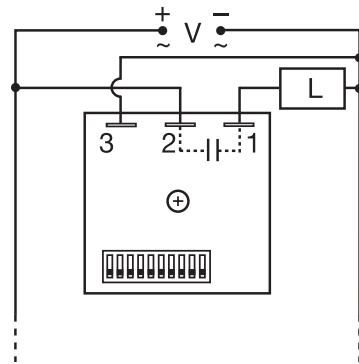
Upon application of input voltage, the time delay begins. The output energizes during the time delay. At the end of the time delay, the output de-energizes and remains de-energized until input voltage is removed.

Reset: Removing input voltage resets the time delay and the output.

Function



Connection



Dashed lines are internal connections.

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/N's:
017322005 (Steel)
C103PM (Al)
DIN rail adaptor
P/N: **P1023-20**

See accessory pages for specifications.

Ordering Table

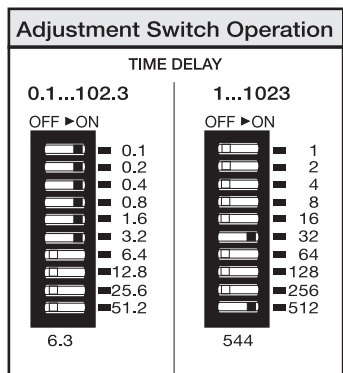
| Input Voltage Range | Time Range | Part Number |
|---------------------|-----------------|-------------|
| 24 ... 120 V AC | 0.1 ... 102.3 s | TDUIL3000A |
| 100 ... 240 V AC | 0.1 ... 102.3 s | TDUIL3001A |
| 12 ... 24 V DC | 0.1 ... 102.3 s | TDUIL3002A |
| 24 ... 120 V AC | 1 ... 1023 s | TDUI3000A |
| 100 ... 240 V AC | 1 ... 1023 s | TDUI3001A |
| 12 ... 24 V DC | 1 ... 1023 s | TDUI3002A |
| 24 ... 120 V AC | 0.1 ... 102.3 m | TDUIH3000A |
| 100 ... 240 V AC | 0.1 ... 102.3 m | TDUIH3001A |
| 12 ... 24 V DC | 0.1 ... 102.3 m | TDUIH3002A |

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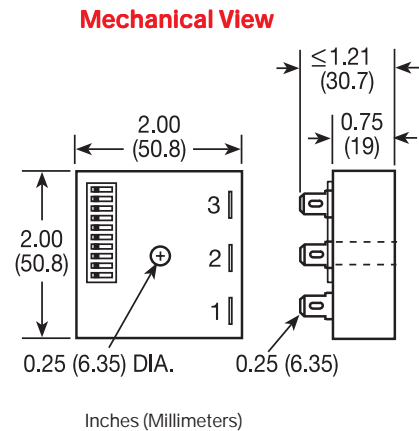
Technical Data

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

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



Inches (Millimeters)