

# TDM / TDMH / TDML SERIES

## Delay-on-Make Timer



\*8-pin models UL listed when used in combination with P1011-6 socket only.



8-PIN

### Description

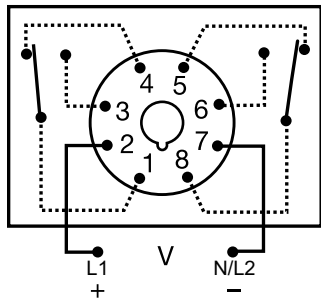
The TDM/TDMH/TDML Series is a delay-on-make timer that combines accurate digital circuitry with isolated, DPDT relay contacts in an industry standard 8-pin plug-in package. DIP switch adjustment allows precise selection of the time delay over the full time delay range. The TDM/TDMH/TDML Series is the product of choice for custom control panel and OEM designers.

#### Operation (Delay-on-Make)

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

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

### Wiring Diagram



Relay contacts are isolated.

### Features & Benefits

| FEATURES                                  | BENEFITS   |
|---|--|
| <b>Wide delay range (0.1s to 2.8h)</b>    | User selectable via DIP switches for fine tuning to individual applications. |
| <b>Microcontroller based</b>              | Repeat Accuracy +/- 0.1%   |
| <b>Dip switch adjustment</b>              | Provides first time setting accuracy of +/-2%                                |
| <b>Setting accuracy +/-2%</b>             | Provides flexibility for use in most applications                            |
| <b>LED indication</b>                     | Provides visual indication of time delay status                              |
| <b>Isolated 10A, DPDT output contacts</b> | Allows control of loads for AC or DC voltages                                |

### 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 surface mount. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail. Uses PSC8 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.



#### P1011-6 Octal Socket for UL listing\*

8-pin surface mount socket with binder head screw terminals. Rated 10A @ 600VAC.



#### C103PM (AL) DIN Rail

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

### Ordering Information

| MODEL     | INPUT VOLTAGE | DELAY RANGE                     |
|-----------|---------------|---------------------------------|
| TDM120AL  | 120VAC        | 1 - 1023s in 1s increments      |
| TDM12DL   | 12VDC         | 1 - 1023s in 1s increments      |
| TDM230AL  | 230VAC        | 1 - 1023s in 1s increments      |
| TDM24AL   | 24VAC         | 1 - 1023s in 1s increments      |
| TDM24DL   | 24VDC/28VDC   | 1 - 1023s in 1s increments      |
| TDMH120AL | 120VAC        | 10 - 10230s in 10s increments   |
| TDMH24AL  | 24VAC         | 10 - 10230s in 10s increments   |
| TDML110DL | 110VDC        | 0.1 - 102.3s in 0.1s increments |
| TDML120AL | 120VAC        | 0.1 - 102.3s in 0.1s increments |
| TDML12DL  | 12VDC         | 0.1 - 102.3s in 0.1s increments |
| TDML24DL  | 24VDC/28VDC   | 0.1 - 102.3s in 0.1s increments |

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

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### Specifications

#### Time Delay

|                         |   |
|-------------------------|---|
| <b>Type</b>             | Digital integrated circuitry  |
| <b>Range*</b>           | 0.1 - 102.3s in 0.1s increments<br>1 - 1023s in 1s increments<br>10 - 10,230s in 10s increments |
| <b>Repeat Accuracy</b>  | ±0.1% or 20ms, whichever is greater   |
| <b>Setting Accuracy</b> | ±2% or 50ms, whichever is greater   |
| <b>Reset Time</b>       | ≤ 50ms  |
| <b>Recycle Time</b>     | During Timing - TDMH: ≤ 500ms<br>TDM, TDML: ≤ 300ms   |

#### Time Delay vs. Temperature & Voltage

|                  |   |
|------------------|---|
| <b>Indicator</b> | ±2%<br>LED glows during timing; relay is de-energized |
|------------------|---|

#### Input

|                |  |
|----------------|--|
| <b>Voltage</b> | 12, 24, or 110 VDC; 24, 120, or 230VAC |
|----------------|--|

#### Tolerance

|                             |            |
|-----------------------------|------------|
| <b>12VDC &amp; 24VDC/AC</b> | -15% - 20% |
|-----------------------------|------------|

|                            |            |
|----------------------------|------------|
| <b>110VAC/DC to 230VAC</b> | -20% - 10% |
|----------------------------|------------|

|                          |          |
|--------------------------|----------|
| <b>AC Line Frequency</b> | 50/60 Hz |
|--------------------------|----------|

|                          |         |
|--------------------------|---------|
| <b>Power Consumption</b> | ≤ 2.25W |
|--------------------------|---------|

#### Output

|             |                         |
|-------------|-------------------------|
| <b>Type</b> | Electromechanical relay |
|-------------|-------------------------|

|             |      |
|-------------|------|
| <b>Form</b> | DPDT |
|-------------|------|

|               |  |
|---------------|--|
| <b>Rating</b> | 10A resistive @ 120/240VAC & 28VDC;<br>1/3 hp @ 120/240VAC |
|---------------|--|

#### Life

|                   |   |
|-------------------|---|
| <b>Protection</b> | Mechanical - 1 x 10 <sup>7</sup> ; Electrical - 1 x 10 <sup>6</sup> |
|-------------------|---|

|                 |   |
|-----------------|---|
| <b>Polarity</b> | DC units are reverse polarity protected |
|-----------------|---|

|                          |                             |
|--------------------------|-----------------------------|
| <b>Isolation Voltage</b> | ≥ 1500V RMS input to output |
|--------------------------|-----------------------------|

#### Mechanical

|                 |                |
|-----------------|----------------|
| <b>Mounting</b> | Plug-in socket |
|-----------------|----------------|

|                   |  |
|-------------------|--|
| <b>Dimensions</b> | <b>H</b> 81.3 mm (3.2"); <b>W</b> 60.7 mm (2.39");<br><b>D</b> 45.2 mm (1.78") |
|-------------------|--|

#### Termination

|                      |                     |
|----------------------|---------------------|
| <b>Environmental</b> | Octal 8-pin plug-in |
|----------------------|---------------------|

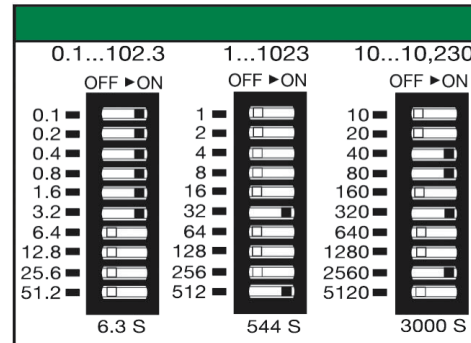
#### Operating/Storage

|                    |                             |
|--------------------|-----------------------------|
| <b>Temperature</b> | -20° to 65°C / -30° to 85°C |
|--------------------|-----------------------------|

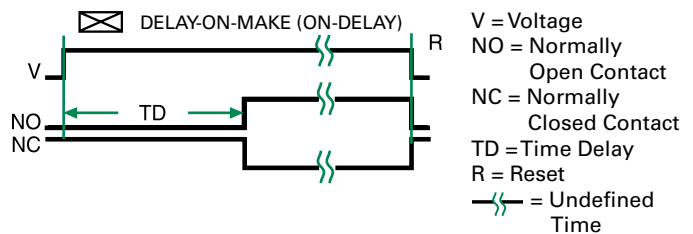
|               |                |
|---------------|----------------|
| <b>Weight</b> | ≈ 6 oz (170 g) |
|---------------|----------------|

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

### Binary Switch Operation



### Function Diagram





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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