TGML Timers

TGML series Cube Relay Delay on Break timers are a unique combination of digital CMOS timing circuitry with a relay output in a compact 2” x 2” configuration.

These units provide the same functional performance as plug-in relay timers, but at significant cost savings.

Key features:
- Uses a live or hot initiate switch;
- Relay common is totally isolated.

Timing Mode

Input voltage is applied continuously. Upon closure of the normally open live external initiate switch, the load is energized, and remains energized as long as it is closed.

When the external initiate switch opens, the time delay is started. At the end of the time delay, the load is de-energized, and the timer is ready for another cycle.

FEATURES

- High current-carrying capacity up to 30 amps
- Transient protected
- 100% Load isolation
- No leakage in N.O. position
- No heat sinking required
- Available in any time delay period required
- Uses live initiate switch
- Digital CMOS timing
- No minimum load required
- Totally encapsulated for protection from harsh environments
- 100% Operational testing before shipping
- RoHS compliant
**FIXED TIME PERIODS**

- **Input Voltage:**
  - VDC: 12, 24 or 48
  - VAC: 24, 48, 120 or 230, 50/60Hz
  - Special AC or DC voltages available

- **Time Delay:**
  - **Timing Mode:** Delay on Break
  - **Type:** Digital CMOS
  - **Time Range:** 0.1 second to 24 hours
  - **Time Adjustments:** Factory-fixed time period; variable, with adjustments on timer, or terminals for external resistor or potentiometer

- **Repeatability:** ±0.5%

- **Setting Accuracy:**
  - Fixed time period: ±10% of nominal time.
  - Variable time range: +15% -5% max. time, -10% min. time

- **Reset/Recycle Time:** 25 milliseconds

- **Initiate Time:** 6 milliseconds or less

- **Relay Life Expectancy:**
  - **Mechanical:** 20 million operations
  - **Electrical:** 100,000 operations

- **Protection:**
  - **Polarity Protection:** All DC units have reverse polarity protection
  - **Transient Protection:** 18 joules
  - **Dielectric Strength:** 1800V RMS 60Hz

- **Temperature Ranges:**
  - **Storage:** -40°C to +85°C
  - **Operating:** -25°C to +65°C

- **Physical Data:**
  - **Mounting:** Surface with one #8 screw
  - **Connection & Termination:** 0.25” quick connects

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**OPTIONS SELECTION**

<table>
<thead>
<tr>
<th>Mode of Operation</th>
<th>Series</th>
<th>Input Voltage</th>
<th>Examples of Time Ranges</th>
<th>Time Adjustment Method</th>
<th>Relay Output Form</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay On Break</td>
<td>TGML</td>
<td>1 120 VAC</td>
<td>0001 0.1 to 1 sec.</td>
<td>A Variable, integral, knob on timer.</td>
<td>1 SPDT</td>
<td>H 10 Amps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 230 VAC</td>
<td>0010 2 to 10 sec.</td>
<td>B Variable, external knob remote.</td>
<td>2 SPST (N.O.)</td>
<td>JN 15 Amps (1.0 HP)</td>
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<tr>
<td></td>
<td></td>
<td>3 24 VAC</td>
<td>0100 2 to 100 sec.</td>
<td>C Fixed, internal, factory set.</td>
<td>3 SPST (N.C.)</td>
<td>J 20 Amps (1.5 HP)</td>
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<tr>
<td></td>
<td></td>
<td>4 24-28 VDC</td>
<td>1000 20 to 1000 sec.</td>
<td>D Fixed, external, resistor remote.</td>
<td></td>
<td>Z 30 Amps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 48 VAC</td>
<td>Any range up to 24 hours available.</td>
<td></td>
<td></td>
<td>W Wires</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 48 VDC</td>
<td>Fixed TIME PERIODS</td>
<td></td>
<td></td>
<td>S Special</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 12 VDC</td>
<td>Specify time in full seconds or hours followed by the letter “S” or “H” and the decimal amount of the main time unit. Examples: SS is 5.5 secs NS is 5.5 hours</td>
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<td>8 Any in between AC voltage (specify)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>9 Any in between DC voltage (specify)</td>
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</tbody>
</table>

Specifications subject to change without notice.