TNML Timers

The TNML Delay on Break meets the needs of customers who require IC digital timing circuits with octal, magnal round and QC bases for plug-in installation. The units are available in SPDT and DPDT relay forms up to 10 amp with fixed or adjustable time periods.

Timing Mode

Input voltage is applied continuously. Upon closure of the normally open 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

- CMOS IC digital timing
- Multi-board construction
- Relays are sealed
- Proven circuitry
- Standard octal (8 pin), magnal (11 pin) plug-ins or 4.75 mm (.187”) blade terminal mountings
- Fixed or variable time adjustment
- Optional remote time adjustment
- Timing ranges from 0.1 to 1000 seconds standard (special time settings and ranges up to 72 hours also available)
- 0.1% Repeat accuracy
- 100% Operational testing before shipping

### SPECIFICATIONS

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

**Operating Voltage:** ±20% of nameplate voltage

**Relay Contact Ratings:** 5 amp DPDT, 10 amp DPDT Optional

**Repeat Accuracy:** ±0.1% under fixed operating conditions

**Reset Time:** 50 milliseconds

**Tolerances:** Fixed: ±10%, Optional: ±5%, ±1%  
Variable: +20%, -0, Optional: +10%, -0%

**Life Expectancy:**  
*Mechanical:* 1 million operations  
*Electrical:* Up to 100,000 operations at full current load

**Protection:**  
*Polarity Protection:* All DC units have reverse polarity protection.  
*Transient Protection:* 25 joules

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

**Housing Material:** High-impact, UL-approved black Lexan
### Input Voltage

**Examples of Time Ranges**

<table>
<thead>
<tr>
<th>Series</th>
<th>Input Voltage</th>
<th>Examples of Time Ranges</th>
<th>Tolerance</th>
<th>Time Adjust. Method</th>
<th>Base Style</th>
<th>Options</th>
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</thead>
<tbody>
<tr>
<td>TNML</td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>120 VAC</td>
<td>0001 .1 to 1 sec.</td>
<td>X</td>
<td>A</td>
<td>8 Pin Round Octal Base</td>
<td>Standard 5 amps</td>
</tr>
<tr>
<td>2</td>
<td>230 VAC</td>
<td>0010 .1 to 10 sec.</td>
<td></td>
<td>B</td>
<td>11 Pin Round Magnal Base</td>
<td>10 amps (8 amps UL Recognized for USA and Canada.)</td>
</tr>
<tr>
<td>3</td>
<td>24 VAC</td>
<td>0100 1 to 100 sec.</td>
<td></td>
<td>E</td>
<td>11 Pin Spade .187 Quick Connect</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>24 VDC</td>
<td>1000 10 to 1000 sec.</td>
<td></td>
<td>F</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>12 VDC</td>
<td>Any range up to 72 hours available on special order.</td>
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<td>G</td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>SPECIAL AC</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>SPECIAL DC</td>
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**Specifications subject to change without notice.**