TGM Timers

TGM 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: Normally Open (N.O.) isolated initiate switch; relay common is totally isolated.

Timing Mode

Input voltage is applied continuously. Upon closure of the normally open isolated 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
- Digital CMOS timing
- Transient protected
- No minimum load required
- 100% Load isolation
- Totally encapsulated for protection from harsh environments
- No leakage in N.O. position
- 100% Operational testing before shipping
- No heat sinking required
- Available in any time delay period required
- RoHS compliance available
### SPECIFICATIONS

**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 seconds 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

### OPTIONS SELECTION

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<tr>
<td>1</td>
<td>120 VAC</td>
<td></td>
<td></td>
<td>A</td>
<td>1 SPDT</td>
<td>H 10 Amps</td>
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<tr>
<td>2</td>
<td>230 VAC</td>
<td></td>
<td></td>
<td>B</td>
<td>2 SPST (N.O.)</td>
<td>JN 15 Amps (1.0 HP)</td>
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<tr>
<td>3</td>
<td>24 VAC</td>
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<td>C</td>
<td>3 SPST (N.C.)</td>
<td>J 20 Amps (1.5 HP)</td>
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<tr>
<td>4</td>
<td>24-28 VDC</td>
<td></td>
<td></td>
<td>D</td>
<td>*4 DPDT</td>
<td>Z 30 Amps</td>
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<tr>
<td>5</td>
<td>48 VAC</td>
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<td>6</td>
<td>48 VDC</td>
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<td>S Special</td>
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<td>7</td>
<td>12 VDC</td>
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<td>8</td>
<td>Any in between AC voltage (specify)</td>
<td>FIXED TIME PERIODS</td>
<td>Specify in full seconds or hours followed by the letter “S” or “H” and the decimal amount of the main time unit. Examples: SSS is 5.5 secs SHS is 5.5 hours</td>
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<td>Any in between DC voltage (specify)</td>
<td>FIXED TIME RANGES</td>
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### OPTIONS SELECTION

- Specifications subject to change without notice.

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