Timing Mode

Input voltage is applied continuously. Upon application of the control voltage, the load is energized, and remains energized as long as it is applied.

When the control voltage is removed, 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.

Control voltage and input voltage can be different.

TGMVB Timers

TGMVB 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. They are for use in applications where the control voltage is different to the input voltage.

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

The TGMVB has the relay common hooked to the hot or (+).

Current-carrying capacity up to 10 amps

Transient protected

100% Control voltage isolation

100% Load isolation

No leakage in N.O. position

No heat sinking required

Available in any time delay period required

Digital CMOS timing

No minimum load required

Totally encapsulated for protection from harsh environments

100% Operational testing before shipping

RoHS compliant
**Input Voltage:**
- VDC: 12, 24-28, or 48
- VAC: 24, 48, 120 or 230, 50/60Hz
  *Special AC or DC voltages available*

**Control Voltage:**
- VAC: 24-120 inclusive

**Time Delay:**
- **Timing Mode:** Delay on Break
- **Type:** Digital CMOS
- **Time Range:** 0.2 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
- **Control Voltage Isolation:** 2500V 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**

<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>
</table>
| **Voltage-Controlled Delay On Break** | TGMVB | 1 120 VAC 2 230 VAC 3 24 VAC 4 24-28 VDC 5 48 VAC 6 48 VDC 7 12 VDC 8 Any in between AC voltage (specify) 9 Any in between DC voltage (specify) | **VARIABLE TIME PERIODS**

| 0001 | 0.2 to 1 sec. |
| 0010 | 0.1 to 10 sec. |
| 0100 | 1 to 100 sec. |
| 1000 | 10 to 1000 sec. |
| Any range up to 24 hours available | | **FIXED TIME PERIODS**

Specify time in full seconds or hours followed by the letter “S” or “H” and the decimal amount of the main time unit.

**Examples:** 5S5 is 5.5 secs 
SH5 is 5.5 hours |
|  | A Variable, integral, knob on timer. |
|  | B Variable, external knob remote. |
|  | C Fixed, internal, factory set. |
|  | D Fixed, external, resistor remote. |
|  | 2 SPST (N.O.) |
|  | H 10 Amps |

Specifications subject to change without notice.