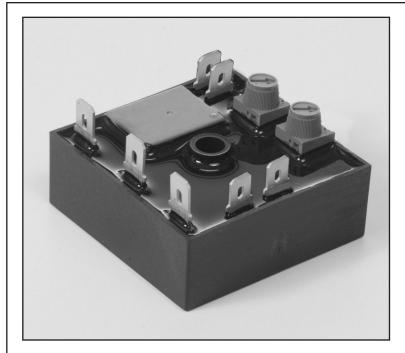
## Timing Mode: **DELAY ON MAKE / DELAY ON BREAK** Category: **TIMER WITH RELAY** Series: **TGCM / TGCML**



# **CUBE RELAY, DUAL FUNCTION, ON DELAY / OFF DELAY**



# **TGCM / TGCML Timers**

TGCM / TGCML series Cube Relay timers offer a timing mode combination of Delay on Make followed by Delay on Break. This function is also known as the "On Delay / Off Delay" timer.

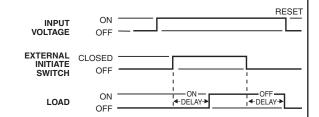
Both time periods are offered with either fixed or adjustable times and both time periods can be offered with a separate time range.

# **Timing Mode**

Apply supply voltage. Turn on initiate switch after the on delay expires, and the load will energize.

Upon release of the initiate switch, the off delay begins.

If the switch remains open for the total time, the load will de-energize.

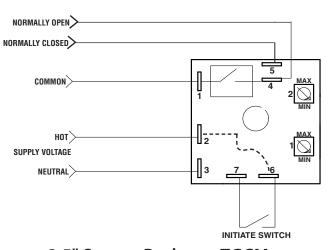


## FEATURES

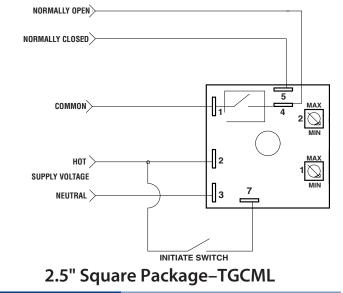
- High current-carrying capacity up to 20 amps
- Transient protected
- 100% Load isolation
- No leakage in N.O. position
- No heat sinking required
- Available in any time delay period required

- Digital CMOS timing
- No minimum load required
- Totally encapsulated for protection from harsh environments
- 100% Operational testing before shipping
- **71 🚯 71**
- RoHS compliance available

## **BASIC WIRING AND DIMENSIONS**







## **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:* On Delay / Off Delay *Type:* Cube Relay *Time Range:* 0.1 second to 24 hours *Time Adjustments:* Fixed; pots; ext adjustments

### **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 Output Form: Standard: SPST N.O. Optional: SPST N.C., SPDT

### **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

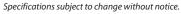
#### **Physical Data:**

*Mounting:* Surface with one #8 screw *Connection & Termination:* 0.25" quick connects

### **OPTIONS SELECTION**

Mode of Operation	Series	Input Voltage	Examples of Time Ranges	Time Adjustment Method	Relay Output Form	Options
On Delay / Off Delay	TGCM TGCML	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       0.1       to       1 sec.         0010       .2       to       10 sec.         0100       2       to       100 sec.         1000       20       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 5H5 is 5.5 hours	<ul> <li>A Variable, integral, knob on timer.</li> <li>B Variable, external knob remote.</li> <li>C Fixed, internal, factory set.</li> <li>D Fixed, external, resistor remote.</li> </ul>	*1 SPDT 2 SPST (N.O.) *3 SPST (N.C.) *10 Amps only	<ul> <li>H 10 Amps</li> <li>JN 15 Amps (1.0 HP)</li> <li>J 20 Amps (1.5 HP)</li> </ul>

EXAMPLE TGCM 1 0010/0010 AA 2 H TGCM, 120 VAC, 10 second On Delay, 10 second Off Delay, both adjustable, SPST, 10 Amps





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