AIROTRONICS
## *Timers and Controls* ACT

MISSING PULSE DETECTOR / WATCHDOG
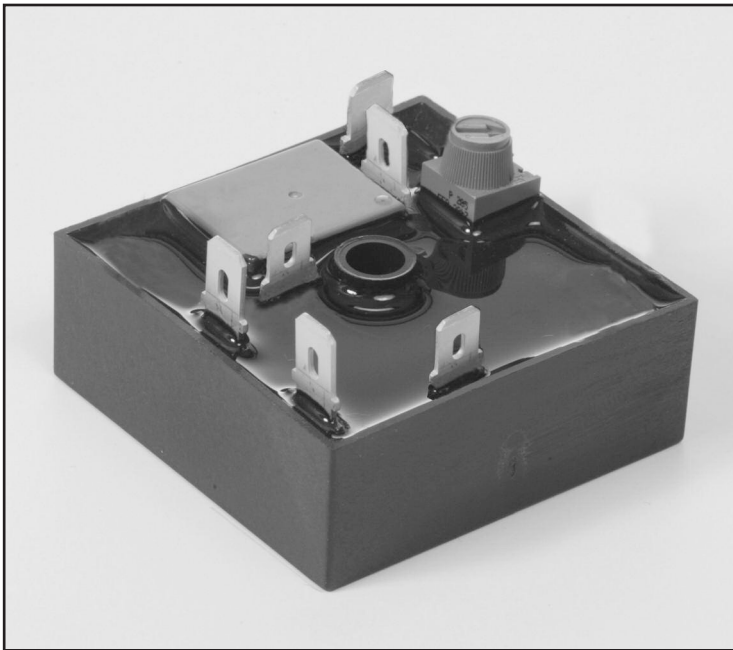
TGMPL Timers

TGMPL series Cube Relay Single Shot 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.
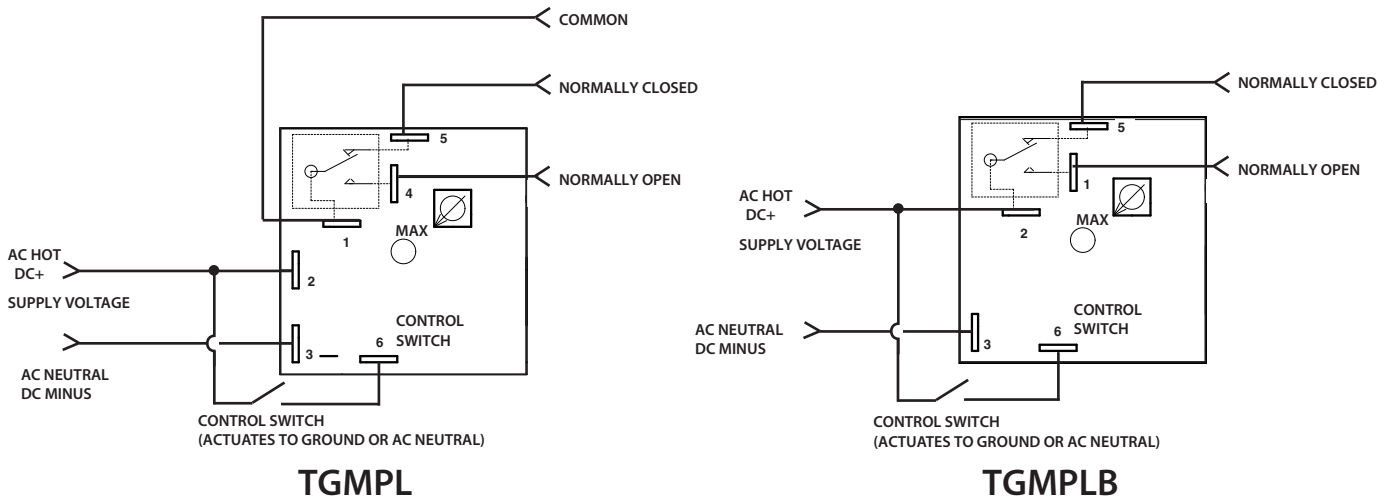
Timing Mode

Input voltage is applied continuously - when control switch closes the relay transfers, if switch closures happen within set time period, relay stays closed. If control switch stays closed or open longer than set time, relay opens.

POWER	ON / OFF	
CONTROL	CLOSED / OPEN	
LOAD	ON / OFF	TIME
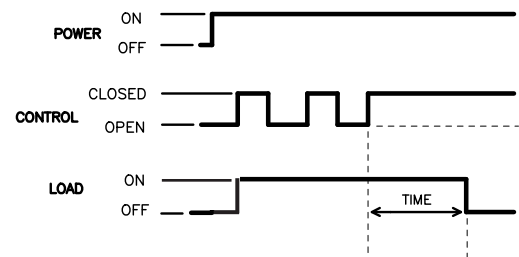
FEATURES

- **High current-carrying capacity up to 10 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**
- ℞ ℞
- **RoHS compliance available**

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COMMON

NORMALLY CLOSED

5

4

NORMALLY OPEN

MAX

AC HOT
DC+

SUPPLY VOLTAGE

2

AC NEUTRAL
DC MINUS

3

6

CONTROL
SWITCH

CONTROL SWITCH
(ACTUATES TO GROUND OR AC NEUTRAL)

TGMPL

NORMALLY CLOSED

5

1

NORMALLY OPEN

AC HOT
DC+

SUPPLY VOLTAGE

2

MAX

AC NEUTRAL
DC MINUS

3

6

CONTROL
SWITCH

CONTROL SWITCH
(ACTUATES TO GROUND OR AC NEUTRAL)

TGMPLB

SPECIFICATIONS

Input Voltage:
> VDC: 12, 24 or 48
> VAC: 24, 48, 120 or 230, 50/60Hz

Time Delay:
> *Timing Mode:* Pulse Detector
> *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

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

Note: *When using a proximity switch for control unit, a snubber may be required to bypass leakage current*

OPTIONS SELECTION

Mode of Operation	Series	Input Voltage		Examples of Time Ranges			Time Adjustment Method		Relay Output Form		Options	
				VARIABLE TIME PERIODS			A	Screwdriver Adj., Variable, integral.	1	SPDT	H	10 Amps
		1	120 VAC	0001	0.5 to	1 sec.						
		2	230 VAC	0010	.1 to	10 sec.	C	Fixed, internal, factory set.	2	SPST (N.O.)		
		3	24 VAC	0100	1 to	100 sec.						
Retriggerable Single Shot (Watchdog)	**TGMPL** **TGMPLB**	4	24-28 VDC	1000	10 to	1000 sec.						
		5	48 VAC	**Any range up to 24 hours available.**								
		6	48 VDC	**FIXED TIME PERIODS**								
		7	12 VDC	Specify time in full seconds or hours followed by the letter "S" or "H" and the decimal amount of the main time unit.								
		8	Any in between AC voltage (specify)	**Examples:** 5S5 is 5.5 secs								
		9	Any in between DC voltage (specify)	5H5 is 5.5 hours								

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Specifications subject to change without notice.