

Timing Mode: **DELAY ON BREAK**

Category: **TIMER WITH RELAY**

Series: **TNML**

## PLUG-IN RELAY TIMER, IC DIGITAL

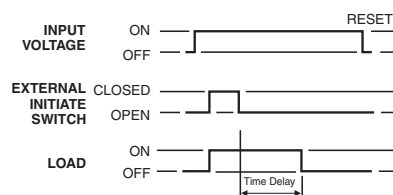


### TNMLTimers


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
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## 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:

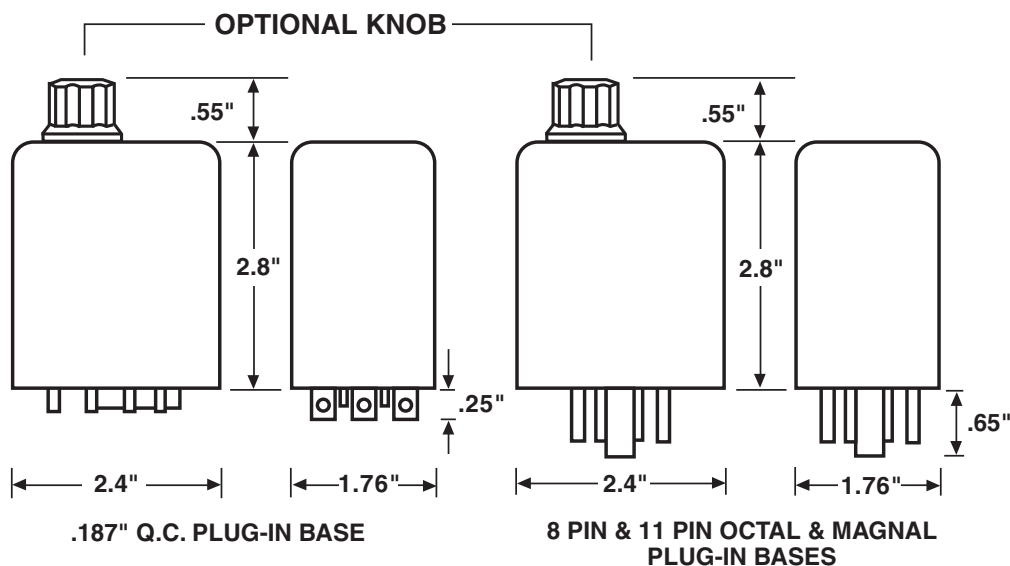
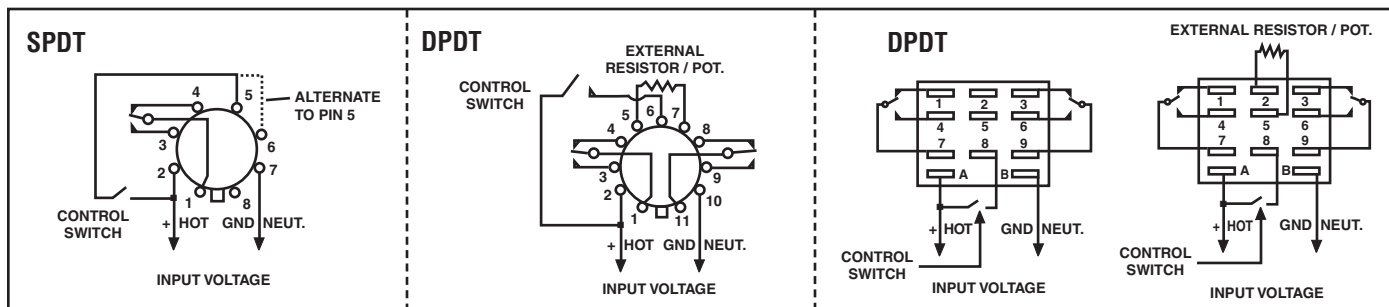
*Polarity Protection:* All DC units have reverse polarity protection.  
*Transient Protection:* 25 joules

### Temperature Ranges:

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

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

## BASIC WIRING AND DIMENSIONS



## OPTIONS SELECTION

Mode of Operation	Series	Input Voltage	Examples of Time Ranges	Tolerance	Time Adjust. Method	Base Style	Options	
<b>Delay On Break with Isolated Cntrl. Sw. or Input Volt. Cntrl. Sw.</b>	<b>TNML</b>	1 120 VAC	<b>VARIABLE TIME PERIODS</b>		<b>X</b> Standard (Fixed: ±10% Variable: +20% -0%) <b>E</b> Optional (Fixed, ±5%) <b>F</b> Optional (Fixed, ±1%) <b>G</b> Optional (Adjust.: +10%, -0%)	<b>A</b> Variable knob on timer <b>B</b> Variable with external potentiometer AOT supplied <b>C</b> Factory-fixed time <b>D</b> Fixed time with customer supplied resistor	<b>1</b> 8 Pin Round Octal Base <b>2</b> 11 Pin Round Magnal Base <b>3</b> 11 Pin Spade .187 Quick Connect	<b>X</b> Standard 5 amps <b>H</b> 10 amps (8 amps UL Recognized for USA and Canada.)
		2 230 VAC	0001 .1 to 1 sec.	0010 .1 to 10 sec.				
		3 24 VAC	0100 1 to 100 sec.	1000 10 to 1000 sec.				
		4 24 VDC	<b>FIXED TIME PERIODS</b>					
		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 SPECIAL AC	Examples: 5S5 is 5.5 secs 5H5 is 5.5 hours					
		9 SPECIAL DC						

**EXAMPLE** TNML 3 0010 X A 1 H This is a "TN" series timer, Delay On Break, 24 volt AC, 10 second variable time period (standard tolerance), with adjustment knob on timer, 8 pin octal base, 10 amp relay.

*Specifications subject to change without notice.*