Timing Mode: **INTERVAL ON**Category: **TIMER WITH RELAY**

Series: **TNL**

PLUG-IN RELAY, IC DIGITAL



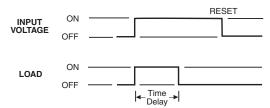


TNL Timers

The TNL Interval On 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

Application of input voltage to the timer energizes the load and starts the time delay. At the end of the time delay, the load is de-energized. Removal and re-application of input voltage resets the timer.



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 (0.187") 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

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 amps DPDT, 10 amps

DPDT Optional

Repeat Accuracy: ±0.1% under fixed operating

conditions

Reset Time: 50 milliseconds

Tolerances: *Fixed*: $\pm 10\%$, *Optional*: $\pm 5\%$, $\pm 1\%$

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.

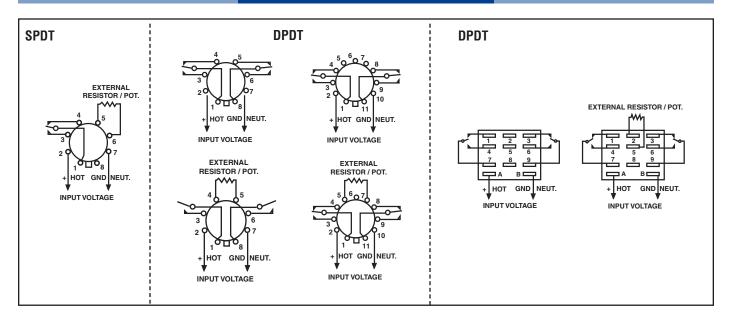
Transient Protection: 25 joules

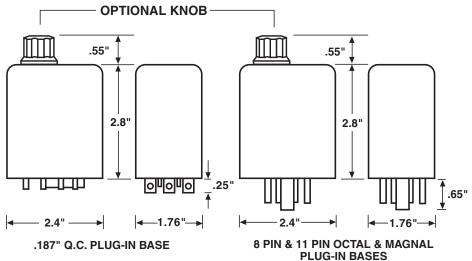
Temperature Ranges:

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
Interval On	TNL	1 120 VAC 2 230 VAC 3 24 VAC 4 24 VDC 7 12 VDC 8 SPECIAL AC 9 SPECIAL DC	VARIABLE TIME PERIODS 0001 0.1 to 1 sec. 0010 0.1 to 10 sec. 0100 1 to 100 sec. 1000 10 to 1000 sec. Any range up to 72 hours available on special order. 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	X Standard (Fixed: ±10% Variable: +20% -0%) E Optional (Fixed, ±5%) F Optional (Fixed, ±1%) G Optional (Adjust.: +10%, -0%)	A Variable knob on timer B Variable with external potentiometer AOT supplied C Factory-fixed time D Fixed time with customer supplied resistor	1-8 Pin Round Octal Base 2-11 Pin Round Magnal Base 3-11 Pin Spade .187 Quick Connect	X Standard 5 amps H 10 amps (8 amps UL Recognized for USA and Canada.)

TNL 3 0010 X A 1 H **EXAMPLE**

This is a "TN" series timer, Interval On, 24 volt AC, 10 second variable time period (standardtolerance), with adjustment knob on timer, 8 pin octal base, 10 amp relay.

Specifications subject to change without notice.

