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TPS SERIES DIGITAL ENCAPSULATED PERCENTAGE TIME DELAY MODULES

FEATURES

- C/MOS Digital Circuitry
- Low Cost Percentage Timing Control
- Cycle Times From 1 Second to 100 Minutes
- Fully Solid State and Encapsulated
- 0.5% Repeat Accuracy
- On Time Settable From 5% to 95% of Cycle Time
- 1, 2.5, 6, 15, 25 Amp Output Ratings (AC Models)
- UL/cUL Recognized

SPECIFICATIONS

1. Time Delay.

- 1.1 Type: C/MOS digital circuitry
- 1.2 Range: Cycle times from 1 second to 100 minutes available (see ordering information)
- 1.3 Repeat accuracy: $\pm 0.5\%$ under fixed conditions
- 1.4 Setting accuracy: $\pm 10\%$
- 1.5 Reset time: 50 milliseconds maximum
- 1.6 Recycle time: 100 milliseconds during timing, 50 milliseconds after timing
- 1.7 Time delay vs. voltage and temperature: $\pm 3\%$
- 1.8 External resistance: Ranges 1, 1A, 1B - 100K ohms = maximum cycle time
 Other ranges - 1 Megohms = maximum cycle time

2. Input.

- 2.1 Operating voltage: 12 & 24/28 VDC, 24, 120 & 230 VAC
- 2.2 Tolerance: $\pm 20\%$ of nominal
- 2.3 Frequency: 50 - 60 Hertz

3. Output.

- 3.1 Type: Solid state
- 3.2 Form: SPST
- 3.3 Rating:
 - AC- A - 1 amp steady state, (10 amp inrush, 50 mA min.)
 - B - 6 amp steady state, (60 amp inrush, 200 mA min.) *
 - C - 15 amp steady state, (150 amp inrush, 250 mA min.) *
 - D - 2.5 amp steady state, (50 amp inrush, 150 mA min.)
 - H - 25 amp steady state, (250 amp inrush, 500 mA min.) ■
 - DC- A - 1 amp steady state, (10 amp inrush, 20 mA min.)
- * Maximum plate temperature: 85°C
- Maximum plate temperature: 60°C

3.4 Life: 100,000,000 operations minimum under full load

4. Protection.

- 4.1 Transient: Movistor protected
- 4.2 Dielectric breakdown: 1500 volts RMS minimum

5. Mechanical.

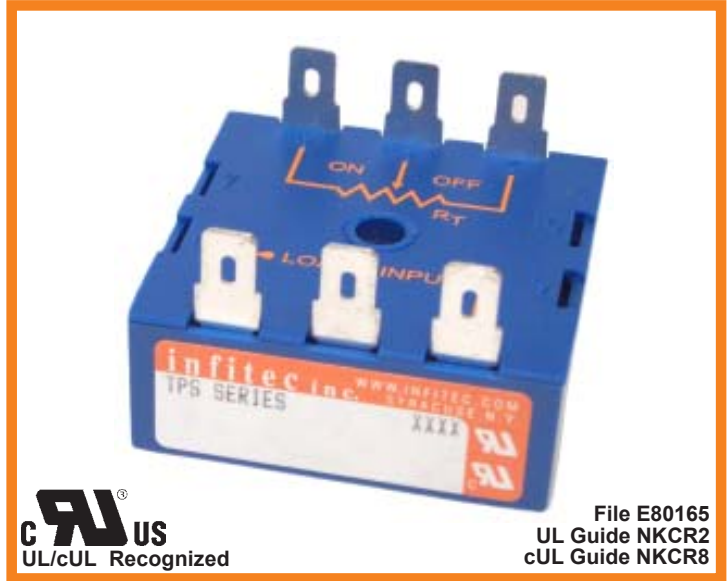
- 5.1 Mounting: One #8 or #10 screw
- 5.2 Termination: 1/4" quick connect terminals
- 5.3 Style: Surface mount / encapsulated with heat sink surface *(see dimensional drawing)

6. Environmental.

- 6.1 Operating temperature: -20°C to +80°C (1 amp models)
 -20°C to +65°C (models > 1 amp)
- 6.2 Storage temperature: -30°C to +85°C
- 6.3 Humidity: 95% relative, non-condensing

NOTE:

For maximum current rating the unit's metal backing must be installed against an aluminum surface of at least 1/16" thickness. A suitable thermal compound should be applied to the unit's metal surface prior to mounting. Refer to Application Note #AN1001 HEATSINKING HIGH CURRENT SOLID STATE CONTROLS



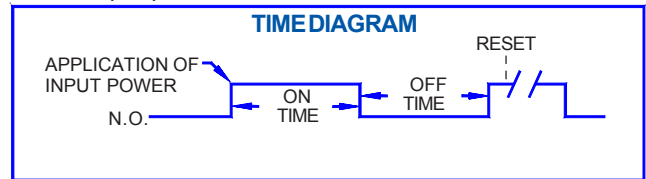
UL/cUL Recognized

File E80165
 UL Guide NKCR2
 cUL Guide NKCR8

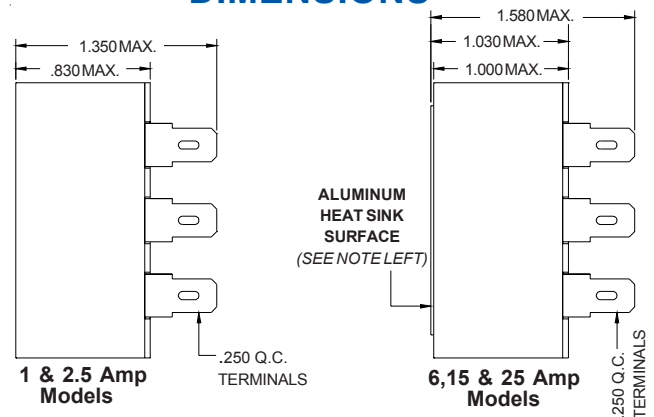
MODE OF OPERATION

Percentage Timer

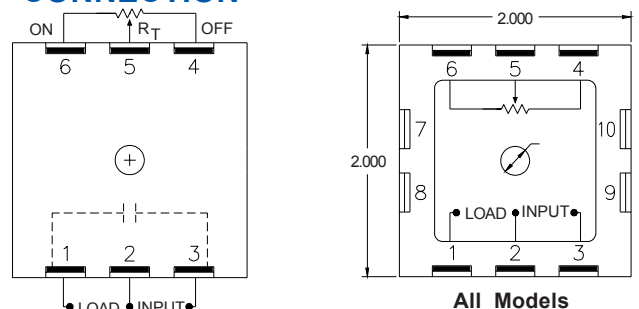
Upon application of input power, the load will energize and de-energize for a percentage of the cycle time. The cycle time is controlled by the value of resistance applied to terminals 4, 5 and 6. **Note:** The **ON** or **OFF** period can be set with a fixed resistance and the remaining delay adjusted with a potentiometer. Reset is accomplished by removal of input power.



DIMENSIONS



CONNECTION



ORDERING INFORMATION

SERIES	INPUT VOLTAGE	OUTPUT RATING	ADJUST.	CYCLE TIME RANGE
TPS	1 - 12 VDC	A - 1 Amp	2 - Remote Adjustment	See Time Delay Range Chart
	2 - 24/28 VDC	* B - 6 Amp		
	4 - 24 VAC	* C - 15 Amp		
	5 - 120 VAC	D - 2.5 Amp		
	6 - 230 VAC	* H - 25 Amp		
	7 - 120/230 VAC	AC only.		
		* Heatsink compound is required for output ratings B, C & H only.		

Note: Only ranges 1- 6A available. Ranges 1, 1A & 1B require 100K ohm external resistance. Other ranges require 1 Megohm external resistance.