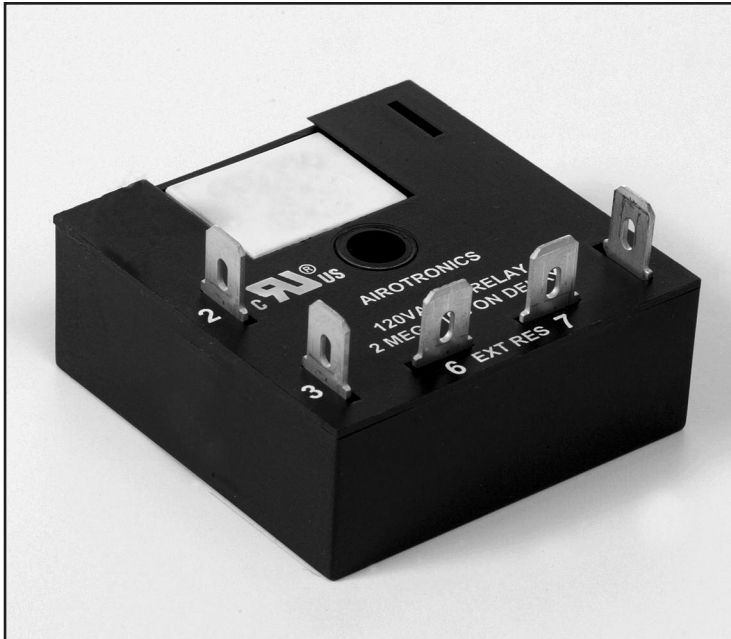


Timing Mode: **REPEAT CYCLE, ON/OFF**

Category: **TIMER WITH RELAY**

Series: **TGKAB**

## CUBE RELAY, 10-20 AMPS



### TGKAB Timers

TGKAB series Cube Relay Repeat Cycle On/Off timers are a unique combination of solid state timing circuitry with a relay output in a compact 2" x 2" configuration.

These solid state timers offer the many advantages of a relay output and provide the same functional performance as plug-in relay timers, but at significant cost savings.

Terminal #3 is common for both the input voltage and the load, thereby saving on installation cost.

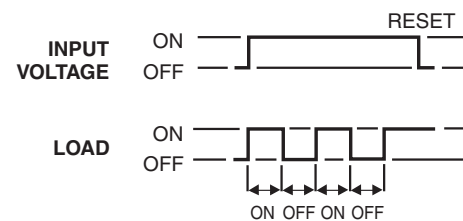
### Timing Mode

Application of input voltage to the timer starts the "On" time delay, and energizes the load.


At the end of the "On" time delay, the load is de-energized, and the "Off" time delay starts.

At the end of the "Off" time delay, the load is again energized, the timer returns to the "On" time delay, and the cycling continues as long as input voltage is applied.

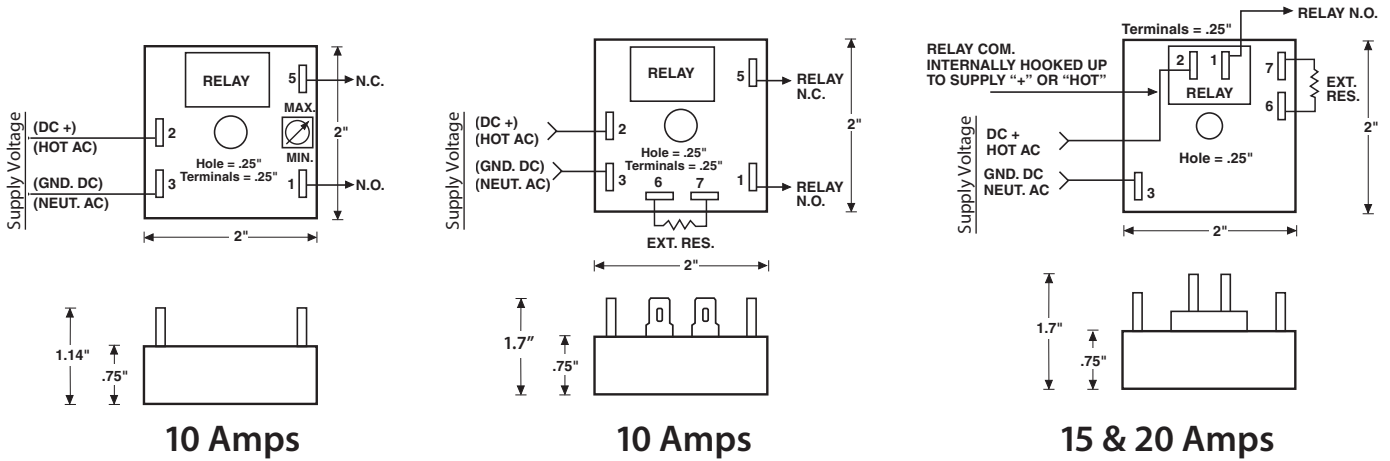
Removal of the input voltage resets the timer.



## FEATURES

- High current-carrying capacity up to 20 amps
- 100% Load isolation
- No leakage in N.O. position
- No heat sinking required
- Available in any time delay period required
- Digital CMOS timing
- Transient protected
- No minimum load required
- Totally encapsulated for protection from harsh environments
- 100% Operational testing before shipping
- 
- RoHS compliance available

## BASIC WIRING AND DIMENSIONS



## SPECIFICATIONS

**Input Voltage:** VDC: 12, 24-28, or 48  
 VAC: 24, 48, 120, or 230, 50/60Hz  
 Optional: Any in-between AC or DC voltage

**Time Delay:**  
*Timing Mode:* Repeat Cycle On/Off  
*Type:* Digital CMOS  
*Time Range:* 0.1 second to 24 hours  
*Time Adjustment:* Factory fixed time period;  
 variable, with knob on timer,  
 or terminals for external resistor  
 or potentiometer

**Repeatability:** ±0.5%

**Setting Accuracy:** *Fixed time period:* ±10% of nominal time;  
 ±1% optional  
*Variable time range:*  
 +15% -5% max. time, -10% min. time

**Reset/Recycle Time:** 25 milliseconds

**Initiate Time:** 6 milliseconds or less

**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

## SELECTION PROCEDURE

Mode of Operation	Series	Input Voltage	Examples of Time Ranges	Time Adjustment Method	Relay Output Form	Options	
Repeat-Cycle On/Off	TGKAB	1	120 VAC	<b>VARIABLE TIME PERIODS</b> 0001 .1 to 1 sec. 0010 .1 to 10 sec. 0100 1 to 100 sec. 1000 10 to 1000 sec. Any range up to 24 hours available <b>FIXED TIME PERIODS</b> 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 seconds 5H5 is 5.5 hours	A	1	H
		2	230 VAC		B	2	JN
		3	24 VAC		C	3	J
		4	24-28 VDC		D		S
		5	48 VAC				W
		6	48 VDC				
		7	12 VDC				
		8	Any in between AC voltage (specify)				
		9	Any in between DC voltage (specify)				

*Specifications subject to change without notice.*