

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

Category: **TIMER WITH RELAY**

Series: **TGKAD-E**

## CUBE RELAY, DUAL DIPSWITCH ADJUSTMENT



### TGKAD-E Timers

TGKAD-E series Cube Relay Repeat Cycle (Dual Adjustable) On/Off timers are a unique combination of solid state timing circuitry with a relay output in a compact cube configuration.

The time delay for both the "On" cycle and the "Off" cycle can be individually adjusted.

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

### Timing Mode

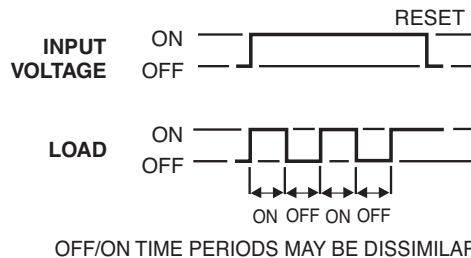
Application of input voltage to the timer starts the "On" time delay, and energizes the relay.

At the end of the "On" time delay, the relay 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 cycling continues as long as input voltage is applied.

Removal of the input voltage resets the timer.

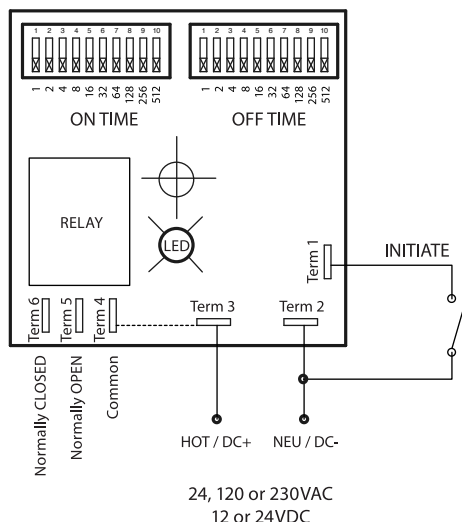
Red LED indicates output relay is on; green LED indicates output relay is off. "On" and "Off" time periods may be dissimilar.



### FEATURES

- Precise digital timing
- Binary dipswitch adjustable
- Wide selection of time ranges for both on and off times
- Wide selection of AC and DC input voltages
- Totally encapsulated for protection from harsh environments
- 100% operational testing
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- RoHS compliance available

## BASIC WIRING AND DIMENSIONS



## SPECIFICATIONS

**Input Voltage:** 24, 120 or 230 VAC; 12 or 24 VDC

**Input Voltage Tolerance:** ±10%

**Output Current:** 10A resistive, max.

**Time Delay:** adjustable from 0.1 second to 1023 minutes in 5 ranges, each range with a 1-to-1023 ratio

**Repeatability:** 0.1% or 20mS, whichever is greater

**Time Delay Accuracy:** 0.5% of full scale

**Recycle Time:** 250 milliseconds

**Temperature Ranges:** *Storage:* -40°C to +85°C  
*Operating:* -25°C to +60°C

**Physical Data:** 2.5" x 2.5" case, Surface mount with one #8 or #10 screw; 0.25" QC terminals for input and output

**Protection:** Encapsulated circuitry, MOV transient protection, passes EFT test at 2500V

## OPTIONS SELECTION

Mode of Operation	Series	Relay Common	Input Voltage	On Time Delay	Off Time Delay	EE	Output Option	Output Control
Repeat Cycle	<b>TGKAD</b> ON Time First	NONE Relay common unconnected	<b>1</b> 120VAC	<b>102S3</b> 0.1s–102.3s	<b>102S3</b> 0.1s–102.3s	Dual dipswitch adjustable	<b>1H</b> SPDT <b>2H</b> SPST	NONE No output control <b>S</b> Initiate Control
		<b>B</b> Connected to Hot or + Unconnected is standard	<b>2</b> 230VAC <b>3</b> 24VAC <b>4</b> 24VDC <b>7</b> 12VDC	<b>1023</b> 1s–1023s <b>10230</b> 10s–10230s <b>102M3</b> 0.1m–102.3m <b>1023M</b> 1m–1023m	<b>1023</b> 1s–1023s <b>10230</b> 10s–10230s <b>102M3</b> 0.1m–102.3m <b>1023M</b> 1m–1023m			
On/Off			Custom voltages available	Custom times available	Custom times available			

Additional time delays, input voltages and output current options available upon request.

**EXAMPLE** TGKAD 2 102S3 102M3 EE 2H S TGKAD timer, ON Time first, standard relay common, input voltage 120VAC, On time range 0.1sec–102.3sec, Off time range 0.1min–102.3min, dual dipswitch adjustable, with single pole/single throw relay output and initiate control.