

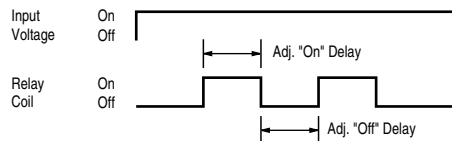
# Time Delay Relays

## Repeat Cycle CKK Series

**Operating Logic:** Upon application of voltage to the input terminals, the "off" delay is initiated. At the end of the "off" preset time, the relay coil is activated and the "on" delay starts. At the end of the "on" preset time, the relay coil is de-activated and a new cycle begins. The "on" and "off" cycles will continue to alternate until voltage is removed.



### Logic Function Diagram:



### Specifications

#### Time Delay

**Adjustment:** Knobs, factory fixed on special order (Minimum order required)

**Range:** 50 mS to 10 hours in 14 ranges

**Repeatability:**  $\pm 1\%$  at constant temperature

**Accuracy:** Maximum time -0%, + 10%;  
Minimum time +0%, -50%

**Reset Time:** 500 milliseconds maximum

#### Input

**Operating Voltage:** 12, 24 VDC; 24, 120 VAC  $\pm 10\%$  (D.C. models have reverse polarity protection. Unfiltered input voltage to them must be full-wave rectified)

**Power Consumption:** 3 VA maximum

**Frequency:** 50/60 Hz

#### Output

**Type:** Relay D.P.D.T. (2 form C)  
Silver Cad. Oxide material

**Rating:** 10 amp. max. resistive at 240 volts A.C.;  
100 mA at 5 VDC min. Load current

**Life:** Mechanical -10,000,000 operations  
Full Load - 500,000 operations

#### Protection

**Transient Voltage:** 12 and 24 volt timers are protected by an 8.8 joule metal oxide varistor  
120 volt timers are protected by a 30 joule metal oxide varistor

**Dielectric Breakdown:** 1500 volts RMS minimum at 60 Hz between input and outputs and between outputs

#### Mechanical

**Termination:** 8-pin plug

#### Mounting:

Socket Mount - Part Number MSO-0008P-012

#### Environmental

**Storage Temperature:** -23°C to 70°C

**Operating Temperature:** -23°C to 55°C

### Ordering Information

Input Voltage and Appropriate Part Numbers				
Time Range	12VDC	24VDC	24VAC	120VAC
.05 -2 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-00002-461
.05 -5 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-00005-461
1-10 Seconds	CKK-00010-466	CKK-00010-462	CKK-00010-467	CKK-00010-461
3-30 Seconds	CKK-00030-466	CKK-00030-462	CKK-00030-467	CKK-00030-461
6-60 Seconds	CKK-00060-466	CKK-00060-462	CKK-00060-467	CKK-00060-461
1.2-120 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-00120-461
1.8-180 Seconds	CKK-00180-466	CKK-00180-462	CKK-00180-467	CKK-00180-461
3-300 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-00300-461
6-600 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-00600-461
18-1800 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-01800-461
36-3600 Seconds	CKK-03600-466	CKK-03600-462	CKK-03600-467	CKK-03600-461
72-7200 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-07200-461
180-18000 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-18000-461
360-36000 Seconds	Ⓞ	Ⓞ	Ⓞ	CKK-36000-461

© Call For Availability

**AMETEK NCC**  
National Controls Corp.

Phone 800-323-2593

630-231-5900

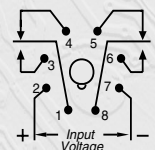
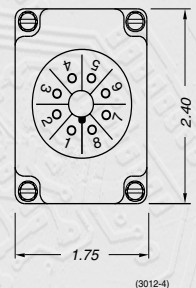
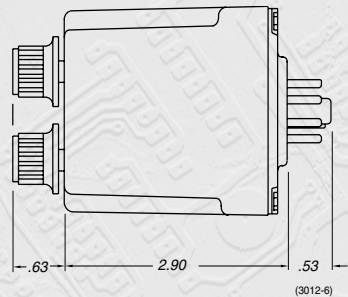
Fax 630-231-1377

Internet [www.natcon.com](http://www.natcon.com)

[www.nationalcontrols.com](http://www.nationalcontrols.com)

### Features

- File #E59090
- 100% Life Tested
- Digital Timing Circuit
- Time Delays To 10 Hours
- $\pm 1\%$  Repeatability
- Individually Adjustable "On" and "Off" times
- Fiberglass Reinforced Circuit Board
- Internal Components Supported By Heavy-duty Chassis
- Reinforced Base Locator Pin
- Polycarbonate Flame-Retardant Housing
- Made in U.S.A.



**PIN CONFIGURATION**  
Polarity Shown is for D.C. Models

1