

## Timing Modes

Delay on operate - Delay period begins when input voltage is applied. At the end of the delay period, the relay will operate and will not release until input voltage is removed. Reset occurs when input voltage is reapplied.


Delay on release - Input voltage must be applied continuously to operate the internal relay. When the control switch is closed, the relay energizes. When the control switch is opened, timing begins. When timing is complete, the relay will de-energize. Time may be reset to zero during timing by closing the control switch.


Interval on - The relay energizes and timing begins when input voltage is applied. At the end of the time delay period the relay will de-energize. Reset is accomplished by removing, then reapplying, the input voltage.


## Timing Specifications

Timing Ranges: From 1 to 180 sec .
Timing Adjustment: Fixed and knob adjustable.
Tolerance (for AC units add $\pm \mathbf{1 / 2}$ cycle $\mathbf{6 0 ~ H z}$.):
Knob Adj. Types:-0, $+20 \%$ of max. specified at high end of timing range; min. specified, or less, at low end.
Fixed Types: $\pm 5 \%$.
Res. Adj. Types: $\pm 5 \%$ at high end of timing range; min. specified, or less, at low end.
Delta Time (for AC units add $\pm \mathbf{1}$ cycle $\mathbf{6 0 ~ H z . ) : ~} \pm 10 \%$.
Repeatability (for AC units add $\pm 1$ cycle 60 Hz. ): $\pm 2 \%$.
Release Time: 125 ms , typ.; 200 ms , max.
Recycle Time: 125 ms , typ.; 200 ms , max.

## CH series

## Mid- To Low-Priced CMOS IC Time Delay Relay

- Choice of timing modes
- Delay on operate
- Delay on release
- Interval on
- Fixed or knob adjustable types
- 10A output relay with DPDT contacts
- Various models time from 1 to 180 sec .


## T) File E22575 <br> (18 File LR15734

> Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

## Contact Data @ $\mathbf{2 5}^{\circ} \mathrm{C}$

Arrangements: 2 Form C (DPDT).
Material: Silver-cadmium oxide alloy.
Rating: 10A @ 30VDC or 277VAC, resistive; 1/2 HP @ 250VAC; 1/3 HP @ 120VAC.
Expected Mechanical Life: 10 million operations.
Expected Electrical Life: 100,000 operations, min., at rated load.

## Initial Dielectric Strength

Between Open Contacts: 500 V rms, 60 Hz .
Between All Other Conductors: 500 V rms, 60 Hz .

## Input Data @ $25^{\circ} \mathrm{C}$

Voltage: 24 through 240VAC and 24VDC.
Power Requirement: AC Types: Typically less than 3 VA. DC Types: Typically less than 3 W .
Transient Protection: Yes.
Reverse Voltage Protection: Yes.
Input Voltages \& Limits @ $\mathbf{2 5}^{\circ} \mathrm{C}$

| Voltage <br> Type | Nominal <br> Voltage | Minimum <br> Voltage | Maximum <br> Voltage |
| :---: | :---: | :---: | :---: |
| AC | 24 | 20 | 28 |
|  | 120 | 105 | 130 |
| DC | 240 | 210 | 260 |

Note: DC voltage must be filtered (5\% p-p ripple max. at nom. voltage).
AC models will operate on 50 or 60 Hz .

## Environmental Data

Temperature Range: Storage: $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$.
Operating: $-10^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$.

## Mechanical Data

Termination: 8- or 11-pin octal style plug.
Enclosure: White plastic case. Knob adjustable types have dial scale for reference only.
Sockets: Models with 8-pin base fit either 27E122 or 27E891 (snap-on) screw terminal sockets. 11-pin types fit either 27E123 or 27E892 (snap-on) screw terminal sockets.
Weight: $6 \mathrm{oz} .(170 \mathrm{~g})$ approximately.

Ordering Information - Authorized distributors are more likely to stock boldface items listed below.


