

## 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.

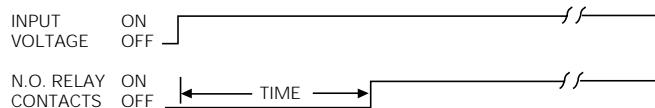
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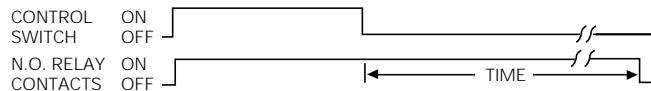
Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

## Timing Modes

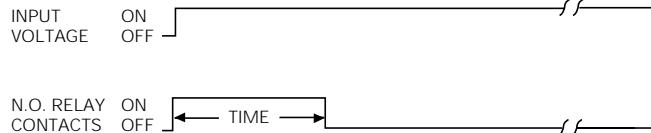
**Delay on operate** – Delay period begins when input voltage is applied. At the end of the delay period, the relay will operate and will not release until input voltage is removed. Reset occurs when input voltage is reapplied.



**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  $\pm 1/2$  cycle 60 Hz.):**

**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  $\pm 1$  cycle 60 Hz.):**  $\pm 10\%$ .

**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.

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

## Delay on Operate Models

Voltage	Time	Adjustment	Wiring Dia.	Part Number
24VAC	1 to 10 Sec.	Knob	1	CHB-38-30001
	1 to 180 Sec.			CHB-38-30003
120VAC	1 to 10 Sec.	Knob	1	CHB-38-70001
	1 to 60 Sec.			CHB-38-70002
	1 to 180 Sec.			CHB-38-70003
120VAC	10 Sec.	Fixed	1	CHA-38-70001
240VAC	1 to 10 Sec.	Knob	1	CHB-38-80001
24VDC	1 to 10 Sec.	Knob	1	CHD-38-30001
	1 to 60 Sec.			CHD-38-30002
	1 to 180 Sec.			CHD-38-30003

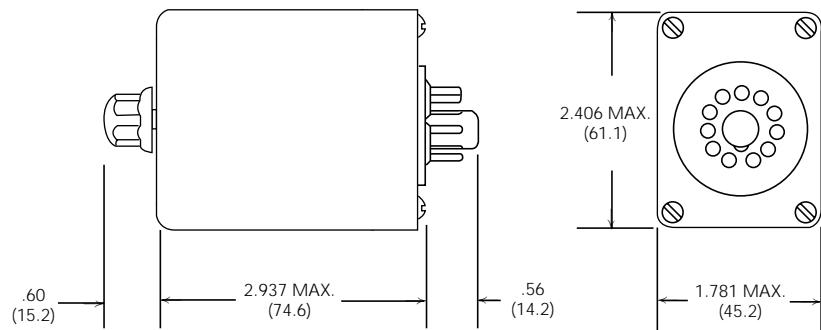
## Delay on Release Models

Voltage	Time	Adjustment	Wiring Dia.	Part Number
24VAC	1 to 10 Sec.	Knob	3	CHB-38-30011
	1 to 10 Sec.			CHB-38-70011
	1 to 60 Sec.			CHB-38-70012
120VAC	1 to 60 Sec.	Knob	3	CHB-38-70013
24VDC	1 to 10 Sec.	Knob	3	CHD-38-30011
	1 to 180 Sec.			CHD-38-30013

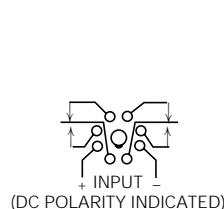
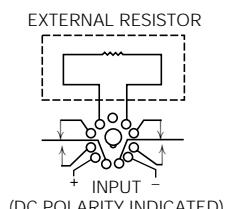
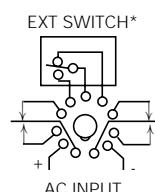
## Interval on Models

Voltage	Time	Adjustment	Wiring Dia.	Part Number
120VAC	1 to 10 Sec.	Knob	1	CHB-38-70021
	1 to 60 Sec.			CHB-38-70022
	1 to 180 Sec.			CHB-38-70023
24VDC	1 to 10 Sec.	Knob	1	CHD-38-30021

## Outline Dimensions



## Wiring Diagrams – Bottom Views (pins numbered clockwise from keyway)

Fig. 1  
8 PinFig. 2  
11 PinFig. 3  
11 Pin

\* If control switch is closed when power is applied, relay will immediately energize. A 50 millisecond minimum switch closure is required. IMPORTANT: A dry circuit switch is recommended. A "dry circuit" switch is one rated to reliably switch currents of less than 50mA. Use of a switch rated for other than dry circuit may result in failure of the time delay relay to function properly.

\*\* Note: Input polarity for DC operation. For most reliable operation on AC, connect high side to "+" and low side to "-".

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[CHB-38-70002](#)