



**Solid state reset timer... housed in standard CYCL-FLEX® case**



The CD300 is a solid state reset timer housed in a standard CYCL-FLEX® case. The timer uses CMOS integrated circuits for the timing function. The timer is set by three digital thumbwheel switches on the front of the unit. Five neon annunciators on the front of the unit indicate when the unit is timing, and the timing cycle progress in increments of 25%, 50%, 75%, and 100% (timed out).

- Configured into one of three time ranges via program wire located on printed circuit board inside the unit (easily accessible when unit is removed from the case)
- Function is similar to Eagle Signal brand HP5 and CT530/531
- Easily programmable reverse start feature
- Two electromechanical relays control output sequences - one energizes when timer starts timing cycle and the other energizes when timer completes timing cycle
- Usable timing output available when instantaneous and delayed relay contacts are interconnected

## OPERATION

The timing is controlled by an internal oscillator. The oscillator output is directed to designated frequency dividers through a programming wire, providing the selection of one of three time ranges.

Relay (CR1) is energized when power is applied to the control input. For standard start units, timing starts when the clutch relay is energized. For reverse start units, the timer is reset when the clutch relay is energized and timing starts when the input to the relay is removed.

A delay relay (CR2) is energized when the timing cycle is complete. The operation of the delay relay is identical in both standard start and reverse start units.

## SPECIFICATIONS

### Time Ranges:

Sym.	Maximum Range	Minimum Setting
01	99.9 Sec.	.1 Sec.
02	999 Sec.	1 Sec.
03	99.9 Min.	.1 Min.

The 01 time range is standard. The CD is field programmable for the other time ranges.

**Operating Voltage/Frequency:** 120 VAC, 50/60 Hz  
240 VAC, 50/60 Hz

**Repeatability (Constant Voltage & Temperature):**  
±0.1% of setting or 35 ms, whichever is larger

**Repeatability (Voltage & Temperature Variation):**  
Variable Voltage: ±1% of setting or 35 ms  
Variable Temperature: ±2% of setting or 35 ms  
Variable Voltage and Temperature: ±3% or 35 ms

**Reset Time:** 100 ms

**Cycle Progress:** Cycle ON annunciator with time progression annunciators indicating elapsed time percentages of 25%, 50%, 75%, and 100% (cycle complete)

Burden:	Reset	Timing	Timed-Out
120 VAC	.8 VA max.	4.0 VA max.	7.3 VA max.
240 VAC	1.6 VA max.	4.8 VA max.	8.0 VA max.

**Power on Response:** 40 ms max. after application of line voltage to pins 1 and 2

**Operating Temperature:** +0° to 60°C (+32° to +140°F)

**Output Rating:** Relay: 10 amp steady state at 120 VAC, 60 Hz  
Mechanical Life: over 20 million operations  
Electrical Life: contingent on load characteristics

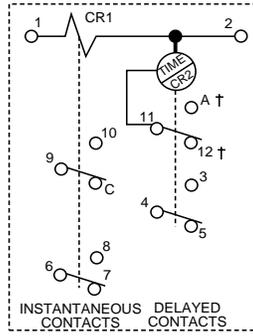
**Power Interruption:**  
Line voltage interruptions of 16 ms or less will not reset unit

**Transient Voltage Immunity:** Unaffected by 50 microseconds, 600 V peak transients superimposed on the line input

**Vibration:** Unit function is unaffected by 2.5G sinusoidal vibration magnitude in both directions of three perpendicular mounting axes imposed from 10 to 100 Hz

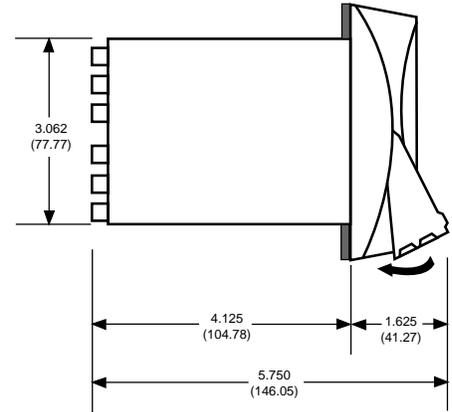
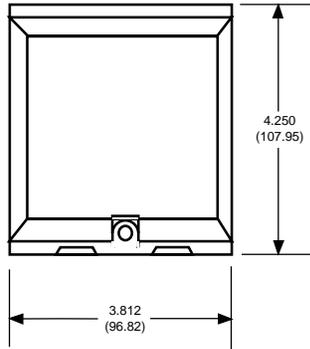
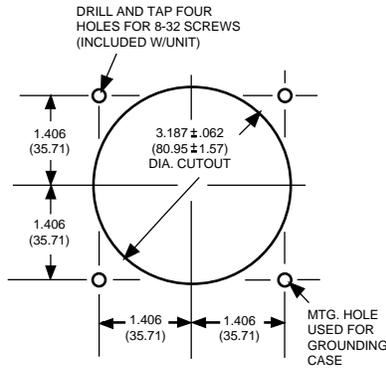
**Approvals:** UL Recognition E96337  
CSA Certification LR26861

### CD300 TERMINAL ASSIGNMENTS



† Terminals A and 12 are useable ONLY on 120 Volt

### MOUNTING



### ENCLOSURES

Model No.	NEMA Class	Description
HN308	1	Surface Mtg. with terminal block
HN364	1	Surface Mtg. without terminal block
HN368	1A	Dual unit cabinet with 9 position terminal block, timer housings, and DPST toggle switch
HN370	1A	Dual unit cabinet less unit cases and toggle switch, with 9 terminal block

### ACCESSORIES

Model No.	Description
H-5331	Mounting Brackets 2 req'd per timer
HP50-31	One Hole Mounting Ring
HP50-133	Surface Mounting Adapter to use in place of brackets

### ORDERING INFORMATION

#### PROGRAMMABLE TIME RANGES

Sym.	Description
01*	99.9 Sec.
02	999 Sec.
03	99.9 Minutes

\*The 01 Time Range is standard. The CD is field programmable for the other time ranges.

**CD3**      **01**      **A6**      **01**

#### VOLTAGE & FREQUENCY

Sym.	Description
A6	120 VAC, 50/60 Hz
B6	240 VAC, 50/60 Hz

#### CUSTOMER PROGRAMMABLE FEATURE

Sym.	Description
01	Reverse Start