



*The high quality timer that has become an industry standard... knob setpoint, cycle progress pointer, pilot light, and patented plug-in housing*



The HP5 CYCL-FLEX® series timer is a high quality, synchronous motor driven reset timer housed in the standard CYCL-FLEX® plug-in housing.

- 16 standard time ranges from 5 seconds to 60 hours
- Knob adjustable time ranges - progress pointer for each
- Highly visible, calibrated dials (7.85 inch circumference)
- Easily read and well-spaced calibrations
- Red progress pointer displays remaining time interval
- Pilot light indicates when timer motor is energized
- Standard timers supplied with "power on" clutch operation
- Optional reverse action clutch will not reset on power failure
- 15 terminal ABS (UL rated 94V-0) molded housing has high impact resistance and will not support combustion

## OPERATION

Application of power to terminals 1, 2, and 11 energizes the clutch coil, closes contacts 9-10 and 6-8, and starts the timing period. At time out, contacts 4-3 close, 11-12 open, and the motor stops. The timer will remain in this condition until power is removed from the clutch coil.

Contacts 6-7-8 and 9-10-C are instantaneous contacts and operate with the application of power to the clutch coil. Contacts 3-4-5 and 11-12-A operate at time out with contacts 3-4-5 operating prior to contacts 11-12-A.

## SPECIFICATIONS

### Time Ranges:

Sym.	Dial	Minimum Setting	Dial Divisions	Repeat Accuracy
7	5 Sec.	1/6 Sec.	.05 Sec.	±.05 Sec.
5	10 Sec.	1/3 Sec.	1/6 Sec.	±.05 Sec.
4	15 Sec.	1/2 Sec.	1/4 Sec.	±.08 Sec.
0	30 Sec.	1 Sec.	1/2 Sec.	±.15 Sec.
1	60 Sec.	2 Sec.	1 Sec.	±.3 Sec.
2	150 Sec.	4.5 Sec.	2 Sec.	±.75 Sec.
3	5 Min.	9 Sec.	3 Sec.	±1.5 Sec.
4	10 Min.	20 Sec.	10 Sec.	±3 Sec.

### Time Ranges Cont.:

Sym.	Dial	Minimum Setting	Dial Divisions	Repeat Accuracy
18	15 Min.	30 Sec.	15 Sec.	±4.5 Sec.
5	30 Min.	1 Min.	1/2 Min.	±9 Sec.
6	60 Min.	2 Min.	1 Min.	±18 Sec.
7	150 Min.	4.5 Min.	2 Min.	±45 Sec.
8	5 Hr.	9 Min.	3 Min.	±1.5 Min.
9	10 Hr.	20 Min.	10 Min.	±3 Min.
10	30 Hr.	1 Hr.	1/2 Hr.	±9 Min.
11	60 Hr.	2 Hr.	1 Hr.	±18 Min.

**Reset Time:** 1/2 second at max. setting

**Voltage/Frequency:** 120V (+10, -15%), 50/60 Hz  
240V (+10, -15%), 50/60 Hz

**Burden:** Motor: 2.45 VA, 120 VAC  
Clutch: 10.5 VA

**Output Rating:** 10 amps, resistive, 120 VAC  
5 amps, resistive, 240 VAC

**Electrical Lifetime:** Contingent on load characteristics. Average contact life at full load is 250,000 operations. At 1 amp load, switch life increases to 5 million cycles. Inrush current should not exceed 10 amps.

**Power On Response:** 28 ms average pull-in  
17 ms average drop-out

**Temperature Range:** 0° to 140°F (-18° to +60°C)

**Vibration:** Unaffected by 2.5G sinusoidal vibration magnitudes in both directions of three perpendicular mounting axes imposed from 10 to 900 Hz

**Approximate Weight:** 2 lb. 14 oz.

**Agency Approvals:** UL Recognition E61735  
UL Recognition 71726 (Feature 92 only)  
CSA Certification LR26861  
CSA Certification (Feature 92 only)  
FM Approval 15030

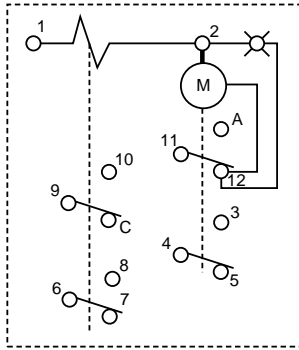
## OPERATION

### Standard and Reverse Start

Instantaneous contacts 9-10-C and 6-7-8 operate directly with the clutch offering different sequences of operation depending on the control circuit configuration.

Delayed contacts 4-3 and 11-A close and contacts 4-5 and 11-12 open when timer reaches a timed out condition. Contacts 4-5 and 11-12 close and contacts 4-3 and 11-A open when timer is reset.

### Schematic Diagram



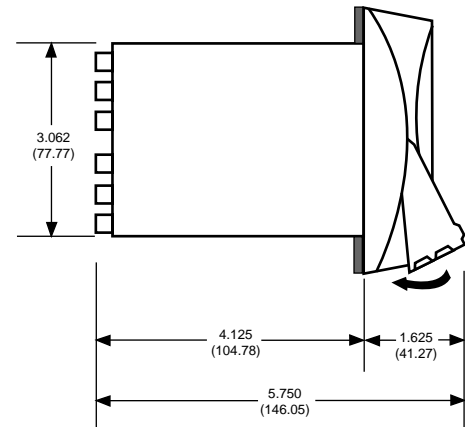
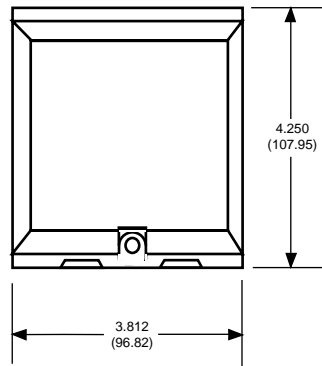
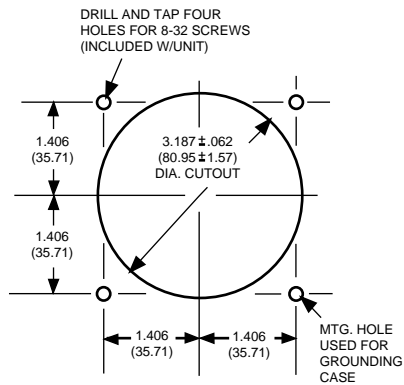
## ENCLOSURES

Model No.	NEMA Class	Description
HN308	1	Surface Mtg. with terminal block
HN364	1	Surface Mtg. without terminal block
HN368	!A	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
HP50-103	120 VAC, 50/60 Hz Repeat Cycle Kit Not applicable with Feature 19
HP50-131	CYCL-FLEX® Water-Sealed Housing
HP50-133	Surface Mounting Adapter to use in place of brackets
HP50-295	Dial Lock

## MOUNTING



## ORDERING INFORMATION

### TIME RANGE

Sym.	Description	Sym.	Description
17	0-5 Sec.	18	0-15 Min.
15	0-10 Sec.	5	0-30 Min.
14	0-15 Sec.	6	0-60 Min.
0	0-30 Sec.	7	0-150 Min.
1	0-60 Sec.	8	0-5 Hr.
2	0-150 Sec.	9	0-10 Hr.
3	0-5 Min.	10	0-30 Hr.
4	0-10 Min.	11	0-60 Hr.

**HP5**

**15**

**A6**

**01**

### VOLTAGE & FREQUENCY

Sym.	Description
A5	120V, 50 Hz
A6	120V, 60 Hz
B5	240V, 50 Hz
B6	240V, 60 Hz

### FEATURES

Sym.	Description
01	Reverse Clutch Arrangement
05	Chrome Plated Bezel
07	Dial Lock
15	Stainless Steel Handle & Housing Plate
19	Revision for Mtg. to HN383 Explosion Proof Cabinet. Add when purchased without cabinet. DOES NOT have pilot light.
22	Water Resistant Window & Housing
92*	Enclosed in HN383 Explosion Proof Cabinet

\*Laboratory Testing: UL Recognition E61735  
CSA Certification LR45132-1