



Also see Series HP5E
in Section 5 for Solid-
State Model

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



6

ELECTRIC
TIMERS

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
17	5 Sec.	1/6 Sec.	.05 Sec.	±.05 Sec.
15	10 Sec.	1/3 Sec.	1/6 Sec.	±.05 Sec.
14	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%), 60 Hz
240V (+10, -15%), 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
RoHS

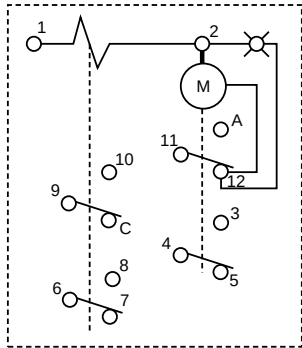
OPERATION

Standard and Reverse Start

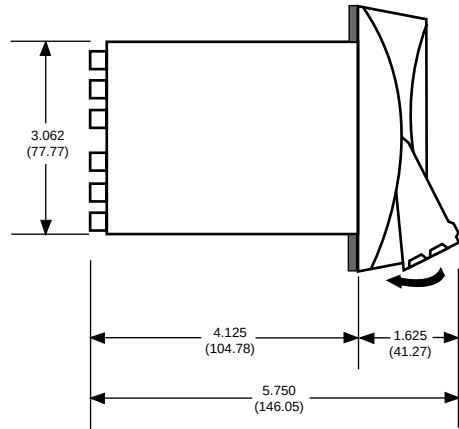
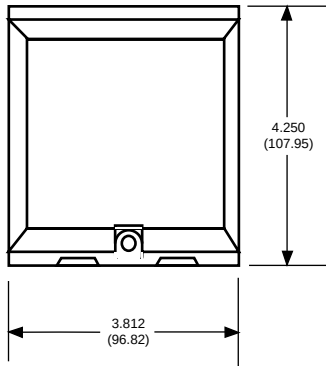
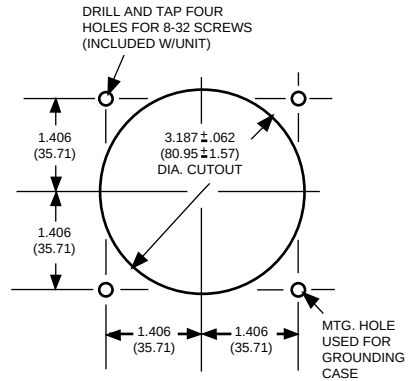
Instantaneous contacts 9-10-C and 6-7-8 operate directly with the clutch offering different sequences of operation depending on the control circuit configuration.

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



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.

VOLTAGE & FREQUENCY

Sym.	Description
A6	120V, 60 Hz
B6	240V, 60 Hz

FEATURES

Sym.	Description
01	Reverse Clutch Arrangement
07	Dial Lock
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

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
HP50-103	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