



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*



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

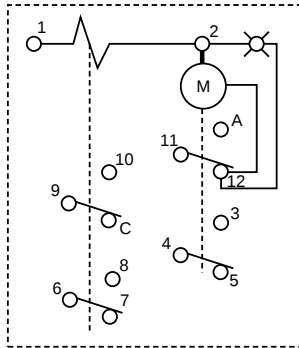
OPERATION

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



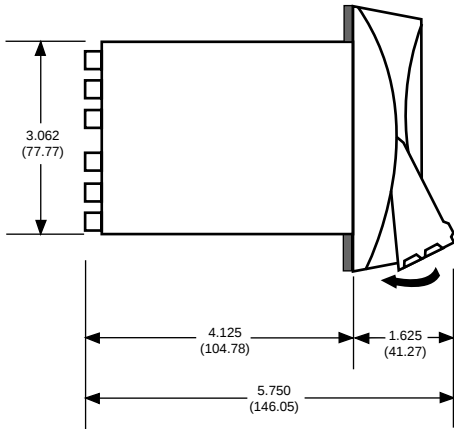
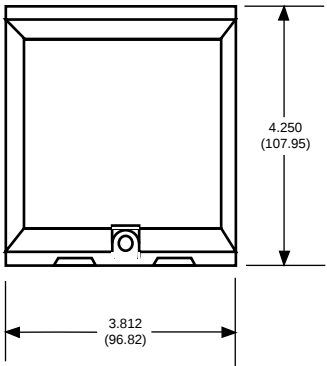
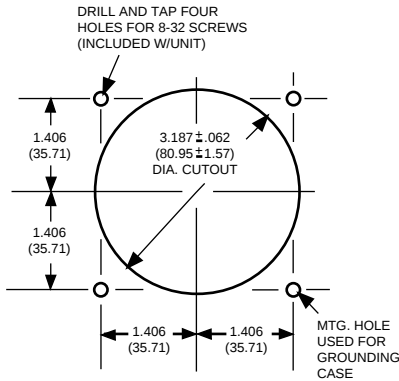
ENCLOSURES

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

MOUNTING



ORDERING INFORMATION

TIME RANGE				VOLTAGE & FREQUENCY		FEATURES	
Sym.	Description	Sym.	Description	Sym.	Description	Sym.	Description
17	0-5 Sec.	18	0-15 Min.	A6	120V, 60 Hz	01	Reverse Clutch Arrangement
15	0-10 Sec.	5	0-30 Min.	B6	240V, 60 Hz	07	Dial Lock
14	0-15 Sec.	6	0-60 Min.			19	Revision for Mtg. to HN383 Explosion Proof
0	0-30 Sec.	7	0-150 Min.			22	Cabinet. Add when purchased without cabinet. DOES NOT have pilot light.
1	0-60 Sec.	8	0-5 Hr.			92*	Water Resistant Window & Housing
2	0-150 Sec.	9	0-10 Hr.				Enclosed in HN383 Explosion Proof Cabinet
3	0-5 Min.	10	0-30 Hr.				
4	0-10 Min.	11	0-60 Hr.				

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