EAGLE SIGNAL brand

Electric Timers

HP5 CYCL-FLEX® Reset Timer



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

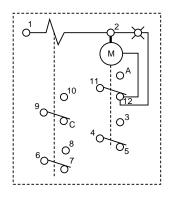
OPERATION

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



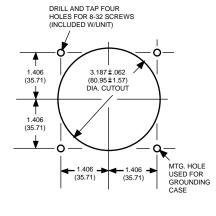
ENCLOSURES

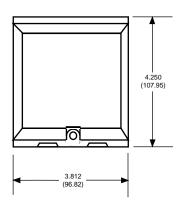
| Model No. | NEMA Class | Description |
|-----------|------------|---------------------------------------|
| HN308 | 1 | Surface Mtg. with terminal block |
| HN364 | 1 | Surface Mtg. without terminal block |
| HN368 | !A | Dual unit cabinet with 9 position |
| | | terminal block, timer housings, and |
| | | 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 |

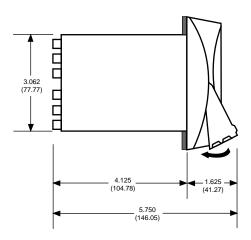
MOUNTING



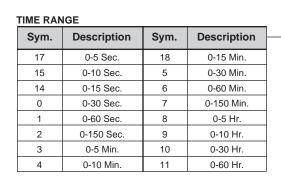


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HP5



ORDERING INFORMATION



VOLTAGE & FREQUENCY

Sym. Description

A5 120V, 50 Hz

A6

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

FEATURES

01

| 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