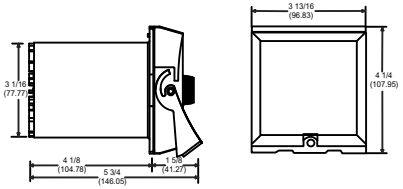
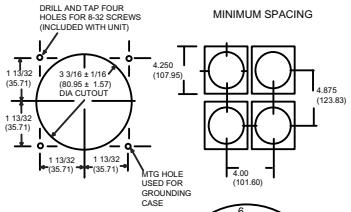
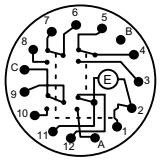
MOUNTING DIMENSIONS





TERMINALS AND WIRING DIAGRAM ON REAR OF TIMER CASE



ENCLOSURES

PART NUMBER	NAME CLASS	DESCRIPTION
HN308	1	Surface Mtg. with terminal block
HN364	1	Surface Mtg. without terminal block

ACCESSORIES

PART NUMBER	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
HP50-295E	Dial Lock

ORDERING INFORMATION

HP5E 15 A6 01

TIME RANGE

SYMBOL	RANGE	SYMBOL	RANGE
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 & FREQUNCY

SYMBOL	VOLTAGE & Hz
A6	120V 50/60 Hz
B6	240V 50/60 Hz

FEATURES

SYMBOL SUFFIX	DESCRIPTION
01	Reverse
07*	Dial Lock
22	Water resistant window and housing

*Dial Lock not available with water resistant housing

The following Bulletins Are Also Available
125C-3 Lubrication Instructions
125E Timer Parts List

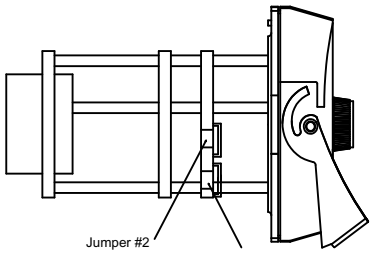


Figure B

EAGLE SIGNAL brand
HP5E SERIES
CYCL-FLEX® RESET TIMER

FM APPROVED

The HP5E CYCL-FLEX¨ Series Timer is a high quality, microprocessor based reset timer housed in the standard CYCL-FLEX¨ plug-housing. The HP5E is available in 16 standard time ranges from 5 seconds to 60 hours. Time ranges are knob adjustable and feature a circular LED array to indicate cycle progress by displaying the remaining time interval. The "zero" LED will flash continously when the timing cycle has completed. Calibrated dials are highly visible and are 5.20 inches in circumference providing easily read and space calibration of all ranges.

A pilot light is provided and indicates when the timer is timing. Standard timer operates when power is on terminals 1 & 2. As an option, a reverse action is available and will not reset on power failure.

The 15 terminal ABS (U.L. rated 94V-0) molded housing has high impact resistance and will not support combustion.

TYPICAL OPERATION

Application of power to terminal 1, 11(E) and 2 closes contacts 9-10, contacts 6-8 and start the timing period. At time out, contacts 4-3 close, 11-12 open and the timing stops. The timer will remain in this condition until power is removed from terminal 1 & 11(E).
Contacts 6-7-8 and 9-10-C are instantaneous contacts and operate with the application of power to 1, 11(E) and 2.
Contacts 3-4-5 and 11-12-A operate at time out with contacts 3-4-5 operating prior to contacts 11-12-A, STD delay is 1% of full scale. Field adjustable delay between contacts 3-4-5 & contacts 11-12-A See figure A & B

Jumper #3	Jumper #2	Delay
IN	IN	1% of full scale
IN	OUT	1/2% of full scale
OUT	IN	1 1/2% of full scale
OUT	OUT	2% of full scale

Figure A

5005-073
GASKET INSTALLATION INSTRUCTIONS

To provide adequate seal between timer and housing, the sponge gasket supplied must be mounted on housing before unit is plugged in, Peel back about one-third of paper backing and orient gasket on housing. Lining up with edge and (2) mounting holes. Remove reminder of backing and press into place.

SPECIFICATIONS

Time Ranges

CATALOG SYMBOL	DIAL	MINIMUM SETTING	DIAL DIVISION	REPEAT ACCURACY
17	5 Sec	1/5 Sec	1/5 Sec	± 05 Sec
15	10 Sec	1/5 Sec	1/5 Sec	± 05 Sec
14	15 Sec	1/2 Sec	1/2 Sec	± 08 Sec
0	30 Sec	1 Sec	1 Sec	± 1.5 Sec
1	60 Sec	1 Sec	1 Sec	± 3 Sec
2	150 Sec	5Sec	5 Sec	± 7.5 Sec
3	5 Min	12 Sec	12Sec	± 15 Sec
4	10 Min	12 Sec	12 Sec	± 2 Sec
18	15 Min	1 Min.	1 Min	± 4.5 Sec
5	30 Min	1 Min	1 Min	± 9 Sec
6	60 Min	1 Min	1 Min	± 18 Sec
7	150 Min	5Min	5 Min	± 45 Sec
8	5 Hr	12 Min	12 Min	± 1.5 Min
9	10 Hr	12 Min	12 Min	± 3 Min
10	30 Hr	1 Hr	1 Hr	± 9 Min
11	60 Hr	1 Hr	1 Hr	± 18 Min

Reset Time
500 mS at maximum setting

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

Burden
1.5 watts

Contact Rating
10 Amps Resistive / Inductive @ 120vAC 1/6 HP @ 120VAC
5 Amps Resistive / Inductive @ 240VAC 1/2 HP @ 240VAC

Electrical Lifetime
Contingent on load characteristics Average contact life at full load is 250,000 operations At 1 amp load out. 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

Operating Temperature
-10 to +140 F (-23 to +60 C)

Approximate weight
1.7 lb.

Laboratory Testing
UL/CUL Recognition E61735
Factory Mutual 3026925

Eagle Signal Controls
2100 West Broad St.
Elizabethtown, NC 28337
800-234-8731

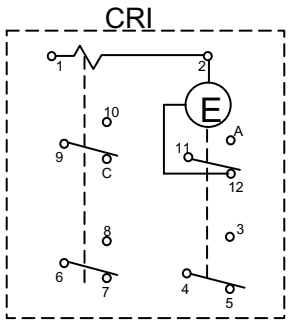
OPERATION

STANDARD START

Instantaneous contacts 9-10-C and 6-7-8 operates directly with power applied to 1, 11(E) and 2. Different operating sequences are possible 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



STANDARD
Factory Wiring

Standard Start	Reset	Timing	Timed Out
CRI	OFF	ON	ON
E	OPTIONAL	ON	OFF
9-10	O	X	X
9-C	X	O	O
6-8	O	X	X
6-7	X	O	O
4-3	O	O | X	X
4-5	X	X | O	O
11-12	X	X	O
11-A	O	O	X

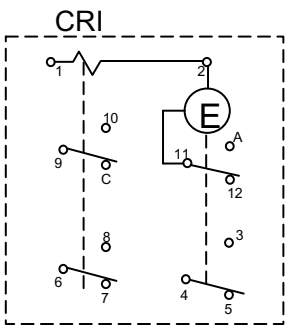
DIAL	DELAY ADJ	DIAL	DELAY ADJ
5 Sec	25 ms to 100 ms	15 Min	4.5 Sec to 18 Sec
10 Sec	50 ms to 200 ms	30 Min	9 Sec to 36 Sec
15 Sec	75 ms to 300 ms	60 Min	18 Sec to 72 Sec
30 Sec	150 ms to 600 ms	150 Min	45 Sec to 180 Sec
60 Sec	300 ms to 1200 ms	5 Hr	1.5 Min to 6 Min
150 Sec	750 ms to 3 Sec	10 Hr	3 Min to 12 Min
5 Min	1.5 Sec to 6 Sec	30 Hr	9 Min to 36 MIn
10 Min	3 Sec to 12 Sec	60 Hr	18 Min to 72 Min

REVERSE START

Instantaneous contacts 9-10-C and 6-7-8 operates directly with power applied to 1, 11(E) and 2. Different operating sequences are possible 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 position. Contacts 4- 5 and 11- 12 close and contacts 4- 3 and 11- A open when timer is reset.

SCHEMATIC DIAGRAM



REVERSE
Factory Wiring

Reverse Start	Reset	Timing	Timed Out
CRI	ON	OFF	OFF
E	OPTIONAL	ON	OFF
9-10	X	O	O
9-C	O	X	X
6-8	X	O	O
6-7	O	X	X
4-3	O	O | X	X
4-5	X	X | O	O
11-12	X	X	O
11-A	O	O	X

Switch 3-4-5 is set to operate before switch 11-12-A. The delay between these switches is directly proportional to the timer dial

WIRING DIAGRAMS **Bold Lines are Internal Wiring**

ON DELAY HP5E CYCL-FLEX TIMER

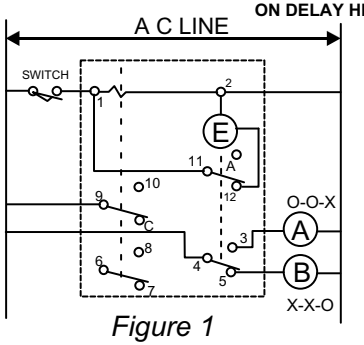


Figure 1

Sustained Control Switch. Close to Start, Open to Reset Simple delayed closing and opening of load circuits.

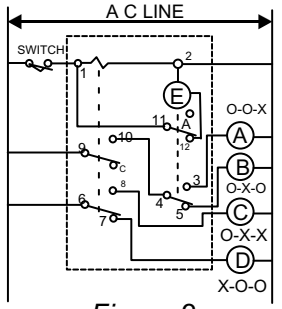


Figure 2

Sustained Control Switch. Close to Start, Open to Reset Additional load circuit operations obtained by connecting contacts in series.

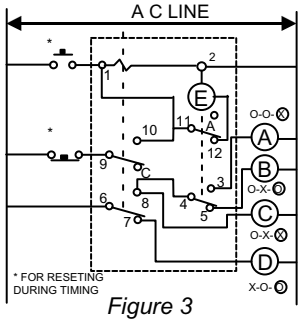


Figure 3

Momentary Control Switch. Close to Start, Resets Automatically Pushbutton start. Remains in 3rd switch position indicated by Ⓧ or Ⓞ for 1/2 to 1-1/2% of the dial range.

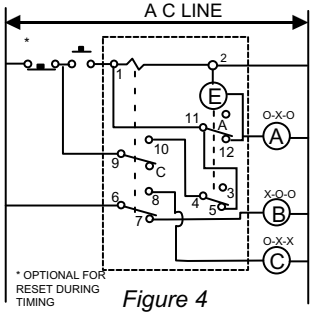


Figure 4

Momentary Control Switch. Close to Start, Resets Automatically - Use when the control switch may not always be opened before end of timing. This circuit insures shutting off timer motor at end of timing.

REVERSE START HP5E01 SERIES CYCL-FLEX TIMER

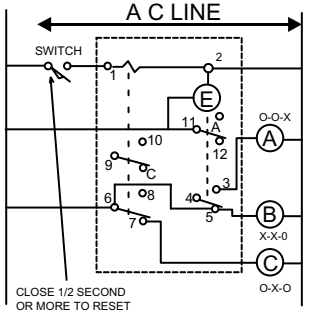


Figure 5

Open Control Switch to Start. Close to Reset Simple delayed closing and opening of load circuits.

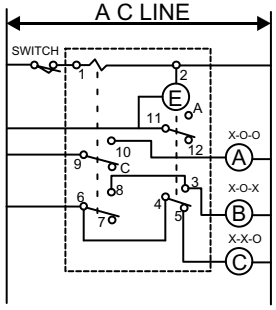


Figure 6

Open Control Switch to Start. Close to Reset Additional load circuit operations obtained by connecting contacts in series or parallel.