

INDUSTRIAL SOLID STATE MODEL 1010 c. TIMER BASE MOUNT

KANSON ELECTRONICS, INC.

Fast cycle rate timer available in four timing functions.

Features:

Power

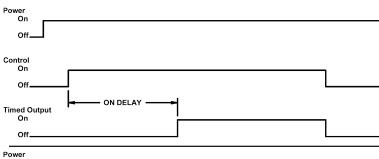
On

Timed Output On

- •External plug-in DPDT relay / accessory solid state output.
- Timing control contacts independent of unit input power.
- •Time ranges from 0.06 to 500 seconds.
- •120 or 230 VAC input.
- •10 amp relay output.
- Remote adjust capability.
- Optional timing indication LED

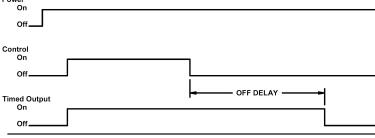
MANSON BECROWES INC. DOVE, IA, U.S.A. WITH 118 50/40 OUTHOUT 118 10 JAAPS PART NO. MORPHIA A U.S.A. PART NO. MORPHIA THE SOLID DOVE THE SOLID

TIMING



ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before output turns on.
- •The output remains on until the unit is reset either by removing power or control.

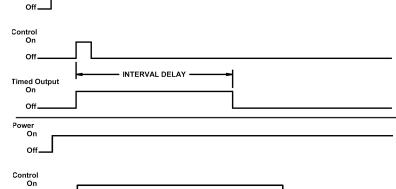


OFF DELAY

- Control is independent of unit power.
- When control turns on, the output turns on.
- When control turns off, the delay starts and output turns off after time elapses.

PULSE INTERVAL Control is indep

- Control is independent of unit power.
- When control turns on, the output turns on. Output remains on while delay time elapses.
- Turning control on and off during delay time has no effect on the output or timing.



INTERVAL

- Control is independent of unit power.
- When control turns on, output turns on and delay time elapses before output returns to normal.
- If control changes during the delay time period, the output turns off and the delay time will reset.



INDUSTRIAL SOLID STATE MODEL 1010 TIMER BASE MOUNT

KANSON ELECTRONICS, INC.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC/230VAC

FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal 10VA maximum Isolation transformer

OUTPUT

TYPE: Electromechanical relay (solid state available as an accessory)

RATING: 10A @ 240VAC maximum

TIMING

AVAILABLE TYPES: ON Delay, OFF Delay, Pulse Interval, Interval

REPEAT ACCURACY: ±1% of setting

INDICATION: Optional LED - on when timing

(OFF Delay - LED on when output energized)

TIMING RAMP: 0.06 sec. minimum time - $100k\Omega/sec.$,

0.5~sec. minimum time - $10\text{k}\Omega/\text{sec.}$

TIME RANGE: 0.06 to 500 seconds in 12 ranges

RANGE TOLERANCE: ≤10% of setting

CONTROL: Isolated contact closure

CONTROL TERMINALS: E-F

VOLTAGE PRESENT AT CONTROL TERMINALS: 24VDC min./40VDC max.

PHYSICAL

OPERATING TEMP: 0° to 50° C (32° to 120° F)

TIMING VARIATION VS. TEMP: ±5% maximum **MOUNTING:** ±5% maximum Base mount

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

WIRING

OUTPUT B WIRING TERMINAL LOCATION

A-B Voltage Input (constant) C-D Remote Adjust (jumper not used)

E-F Control

(starts timing function)

G-H Not used

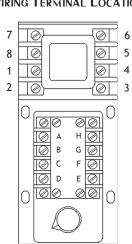
1-2 N.O. timed

3-4 N.C. timed

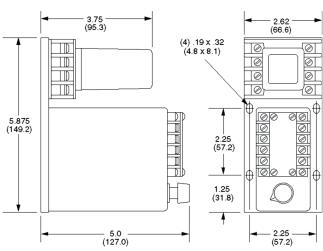
5-6 N.C. timed

7-8 N.O. timed

Caution: Never apply voltage to terminals C-D-E-F



DIMENSIONS INCH (MM)





INDUSTRIAL SOLID STATE MODEL 1010 BASE MOUNT

ORDERING DATA

ORDERING C	ODE	1010 - 1 - F - 4 - B
BASIC MODE	L NUMBER -	
	1010	
INPUT VOLT	AGE ——	
	1	120 VAC
	2	230 VAC
TIME RANGE	(secs) ——	
	Α	0.06 - 0.10
	В	0.06 - 0.25
	C	0.06 - 0.50
	D	0.06 - 1.0
	E	0.06 - 2.5
	F	0.06 - 5.0
	G	0.06 - 10.0
	Н	0.06 - 25.0
	J	0.5 - 50.0
	K	0.5 - 100
	L	0.5 - 250
	M	0.5 - 500
	W	Factory fixed
		(within 5% of customer specified time)
TIMING FUN	CTION ——	
	1	ON Delay
	2	OFF Delay
	4	Pulse Interval
	5	Interval
OUTPUT -		
	В	Relay DPDT
		(see accessories for solid state plug in outputs)
OPTION (If d	lesired) —	
	OP6	Timing indication light
		(on when timing / OFF Delay - on when output energized)

APPLICABLE ACCESSORIES

See accesory section for details

Output modules RP-101, RP-104 thru RP-106

Potentiometers RP-201 thru RP-210

Reference dial RP-216 Locking attachment RP-217



INDUSTRIAL SOLID STATE MODEL 1012 c. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

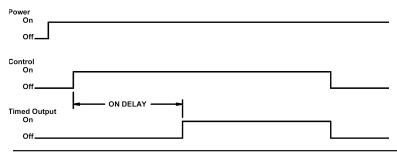
Available in three timing functions

Features:

- •12 pin plug-in base.
- •Control contacts independant of input power.
- •Time ranges from 0.06 to 500 seconds.
- •120 or 24 VAC input.
- •10 amp relay output.
- Remote adjust capability.
- Optional timing indication LED

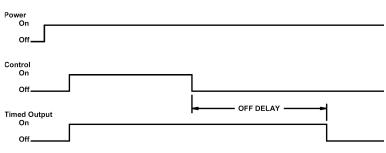


TIMING



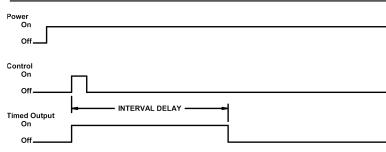
ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before output turns on.
- •The output remains on until the unit is reset either by removing power or control.



OFF DELAY

- Control is independent of unit power.
- When control turns on, the output turns on.
- When the control turns off, the delay starts and output turns off after time elapses.



PULSE INTERVAL

- Control is independent of unit power.
- When control turns on, the output turns on. Output remains on while delay time elapses.
- Turning control on and off during delay time has no effect on the output or timing.



INDUSTRIAL SOLID STATE MODEL 1012 c. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC, 24VAC/DC

FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal 10VA maximum

TRANSIENT PROTECTION: Isolation transformer (120VAC only)

OUTPUT

TYPE: Electromechanical relay
MECHANICAL LIFE: 10,000,000 operations
ELECTRICAL LIFE: 300,000 operations
RATING: 10A @ 240VAC maximum

TIMING

AVAILABLE TYPES: ON Delay, OFF Delay, Pulse Interval

REPEAT ACCURACY: $\pm 1\%$ of setting

INDICATION: Optional LED - on when timing

TIMING RAMP: 0.06 sec. minimum time - $100k\Omega/sec.$,

0.5 sec. minimum time - $10k\Omega/sec$.

TIME RANGE: 0.06 to 500 seconds in 9 ranges

RANGE TOLERANCE: ≤10% of setting

CONTROL: Isolated contact closure

CONTROL TERMINALS: 5-6

VOLTAGE PRESENT AT CONTROL TERMINALS: 24VDC min./40VDC max.

PHYSICAL

OPERATING TEMP: 0° to 50° C (32° to 120° F)

TIMING VARIATION VS. TEMP: ±5% maximum

MOUNTING: Plug-In TERMINATION: 12-pin socket

HOUSING: Metal

WIRING

OUTPUT B

1-2 Voltage Input (constant)

3-4 Remote Adjust

(jumper not used)

5-6 Control

(starts timing function)

7-8 N.O. timed

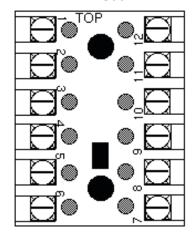
8-9 N.O. timed

10-11 N.C. timed

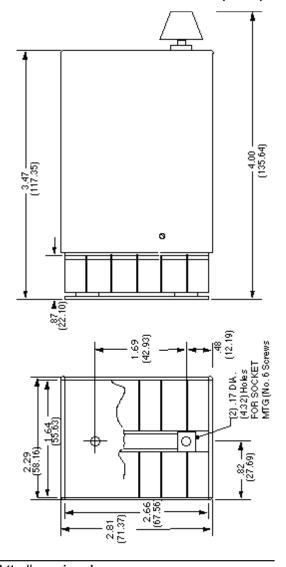
11-12 N.C. timed

Caution: Never apply voltage to terminals 3-4-5-6

WIRING TERMINAL LOCATION 12-PIN SOCKET



DIMENSIONS INCH (MM)



ORDERING DATA

ORDERING CODE	1012 - 1 - E - 1 - B
BASIC MODEL NUMBER - 1012	
INPUT VOLTAGE	
1	120 VAC
2	24 VAC/DC
TIME RANGE (secs) —	
D	0.06 - 1.0
Е	0.06 - 2.5
F	0.06 - 5.0
G	0.06 - 10.0
Н	0.06 - 25.0
J	0.5 - 50.0
K	0.5 - 100
L	0.5 - 250
M	0.5 - 500
W	Factory fixed
	(within 5% of customer specified time)
TIMING FUNCTION ——	
1	ON Delay
2	OFF Delay
4	Pulse Interval
OUTPUT —	
В	Relay DPDT
OPTION (If desired) ——	
OP6	Timing indication light
	(on when timing / OFF Delay - on when output energized)

APPLICABLE ACCESSORIES

See accesory section for details

Potentiometers RP-201 thru RP-210

Reference dial RP-216 Locking attachment RP-217 12 pin socket (one included) RP-301



INDUSTRIAL SOLID STATE MODEL 1013 TIMER BASE MOUNT

KANSON ELECTRONICS, INC.

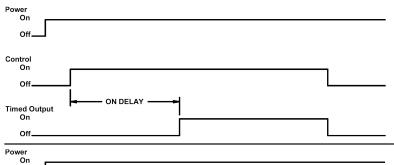
Fast cycle rate timer available in four timing functions.

Features:

- Timing control contacts independent of unit input power.
- •Time ranges from 0.06 to 500 seconds.
- •120 VAC input.
- •10 amp relay output.
- Remote adjust capability.
- •LED indicating timing



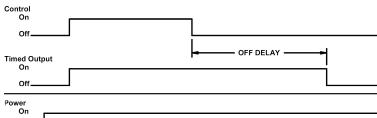
TIMING



ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before output turns on.
- •The output remains on until the unit is reset either by removing power or control.

Off



OFF DELAY

- Control is independent of unit power.
- When control turns on, the output turns on.
- When control turns off, the delay starts and output turns off after time elapses.

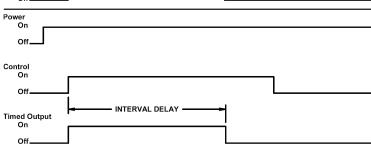
Off Control On Off INTERVAL DELAY **Timed Output**

PULSE INTERVAL

- Control is independent of unit power.
- When control turns on, the output turns on. Output remains on while delay time elapses.
- Turning control on and off during delay time has no effect on the output or timing.

INTERVAL

- Control is independent of unit power.
- When control turns on, output turns on and delay time elapses before output returns to normal.
- If control changes during the delay time period, the output turns off and the delay time will reset.





INDUSTRIAL SOLID STATE MODEL 1013 TIMER BASE MOUNT

KANSON ELECTRONICS, INC.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal 10VA maximum Isolation transformer

OUTPUT

TYPE: Electromechanical relay RATING: 10A @ 240VAC maximum

TIMING

AVAILABLE TYPES: ON Delay, OFF Delay, Pulse Interval, Interval

RESET TIME: ±1% of setting
SO msec minimum
LED - On when timing.

TIMING RAMP: 0.06 sec. minimum time - $100k\Omega/sec.$, 0.5 sec. minimum time - $10k\Omega/sec.$

TIME RANGE: 0.06 to 500 seconds in 12 ranges

RANGE TOLERANCE: ≤10% of setting

CONTROL: Isolated contact closure

CONTROL TERMINALS: E-F

VOLTAGE PRESENT AT CONTROL TERMINALS: 24VDC min./40VDC max.

PHYSICAL

OPERATING TEMP: 0° to 50° C (32° to 120° F)

TIMING VARIATION VS. TEMP: ±5% maximum MOUNTING: ±5% maximum Base mount

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

DIMENSIONS INCH (MM)

1.44

(4.8)

Depth

4.25 (108.0)

WIRING

OUTPUT B, B1, B2

A-B Voltage Input (constant)

C-D Remote Adjust (jumper not used)

E-F Control

(starts timing function)

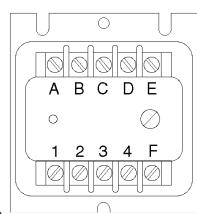
1-2 N.O. timed

(except B2, N.C.)

3-4 N.O. timed (except B1, N.O.)

Caution: Never apply voltage to terminals C-D-E-F

WIRING TERMINAL LOCATION





INDUSTRIAL SOLID STATE MODEL 1013 NC. TIMER BASE MOUNT

ORDERING DATA

ORDERING CODE	1013 - 1 - A - 2 - B
BASIC MODEL NUMBER	
1013	
INPUT VOLTAGE ——	
1	120 VAC
TIME RANGE (secs) —	
Α	0.06 - 0.10
В	0.06 - 0.25
С	0.06 - 0.50
D	0.06 - 1.0
E	0.06 - 2.5
F	0.06 - 5.0
G	0.06 - 10.0
Н	0.06 - 25.0
J	0.5 - 50.0
K	0.5 - 100
L	0.5 - 250
M	0.5 - 500
W	Factory fixed
	(within 5% of customer specified time)
TIMING FUNCTION —	
1	ON Delay
2	OFF Delay
4	Pulse Interval
OUTPUT 5	Interval
В	Relay DPDT

APPLICABLE ACCESSORIES

See accesory section for details

Potentiometers

RP-201 thru RP-210

Reference dial RP-216



INDUSTRIAL SOLID STATE MODEL 1014 c. TIMER BASE MOUNT

KANSON ELECTRONICS, INC.

Instant contacts energize with application of control signal while timed contacts follow timing function.

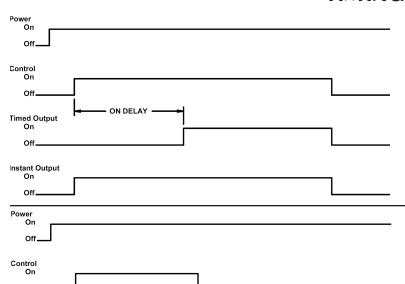
Features:

Off _____

- Control compatible with AC proximity sensors.
- •Control independant of input power.
- •Time ranges from 0.06 to 500 seconds.
- •120 VAC input.
- •10 amp relay output.
- Remote adjust capability.
- •Timing indicating LED.



TIMING



OFF DELAY

ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before timed output turns on.
- •The timed output remains on until the unit is reset either by removing power or control.
- Instant output directly follows control input.

OFF DELAY

- Control is independent of unit power.
- When control turns on, timed output turns on.
- When control turns off, the delay starts and timed output turns off after delay elapses.
- Instant output directly follows control input.



INDUSTRIAL SOLID STATE MODEL 1014 BASE MOUNT

KANSON ELECTRONICS, INC.

SPECIFICATIONS INPUT

VOLTAGE: 120VAC FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal 10VA maximum Isolation transformer

OUTPUT

TYPE: Two electromechanical relays RATING: 10A @ 240VAC maximum

TIMING

AVAILABLE TYPES:

REPEAT ACCURACY:

RESET TIME:

INDICATION:

ON Delay, OFF Delay

±1% of setting

50 msec minimum

LED - On when timing.

TIMING RAMP: 0.06 sec. minimum time - $100k\Omega/sec.$,

0.5 sec. minimum time - $10k\Omega/sec.$ 0.06 to 500 seconds in 12 ranges

RANGE TOLERANCE: ≤10% of setting

CONTROL: Isolated contact closure or AC proximity sensor.

CONTROL TERMINALS: A-C

VOLTAGE PRESENT AT CONTROL TERMINALS: Same as input voltage.

PHYSICAL

OPERATING TEMP: 0° to 50° C (32° to 120° F)

TIMING VARIATION VS. TEMP: ±5% maximum MOUNTING: ±5% maximum Base mount

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

WIRING

OUTPUT A

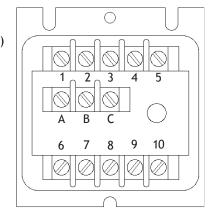
TIME RANGE:

- A-B Voltage Input (constant)
- A-C Control (starts timing function)
- 1-2 Remote Adjust (jumper not used)
- 3-4 N.O. instant
- 4-5 N.C. instant
- 6-7 N.O. timed
- 7-8 N.C. timed
- 9-10 N.O. timed

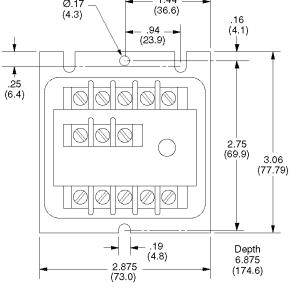
OUTPUT B

- A-B Voltage Input (constant)
- A-C Control (starts timing function)
- 1-2 N.O. instant
- 2-3 N.C. instant
- 4-5 N.O. instant
- 6-7 N.O. timed
- 7-8 N.C. timed
- 9-10 N.O. timed

WIRING TERMINAL LOCATION



DIMENSIONS INCH (MM) Ø.17 — 1.44 — 1.6





INDUSTRIAL SOLID STATE MODEL 1014 NC. TIMER BASE MOUNT

ORDERING DATA

ORDERING	CODE	1014 - 1 -	G - 2 - B
BASIC MOD	EL NUMBER		
	1014		
INPUT VOL	TAGE ——		
	1	120 VAC	
TIME RANG	SE (secs) —		_
	Α	0.06 - 0.10	
	В	0.06 - 0.25	
	С	0.06 - 0.50	
	D	0.06 - 1.0	
	E	0.06 - 2.5	
	F	0.06 - 5.0	
	G	0.06 - 10.0	
	Н	0.06 - 25.0	
	J	0.5 - 50.0	
	K	0.5 - 100	
	L	0.5 - 250	
	M	0.5 - 500	
	W	Factory fixed	
		(within 5% of customer specified time)	
TIMING FUN	NCTION -	,	
	1	ON Delay	
	2	OFF Delay	
OUTPUT -		·	
	Α	Instant Relay 1 SPDT	
		Timed Relay 1 SPDT, 1 N.O.	
	В	Instant Relay 1 SPDT, 1 N.O.	
		Timed Relay 1 SPDT, 1 N.O.	
		•	
ADDI ICARI	E ACCESSOR	DIES	

APPLICABLE ACCESSORIES

See accesory section for details

Potentiometers RP-201 thru RP-210

Reference dial RP-216 Locking attachment RP-217



INDUSTRIAL SOLID STATE 1017SP7 BASE MOUNT KANSON ELECTRONICS, INC.

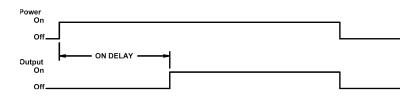
ON Delay timer for electric utility applications.

Features:

- Input power initiates the timing sequence.
- High voltage DC switching capablity.
- Equipped with transient voltage protection.
- •Metal housing to maximize noise immunity.
- •Time ranges from 1.5 cycles (60Hz) to 300 seconds.



TIMING



ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before output turns on.
- •The output remains on until the unit is reset by removing power.

SPECIFICATIONS

INPUT

24VAC/DC, 48VAC/DC, 120VAC/125VDC, 240VAC/250VDC **VOLTAGE:**

TOLERANCE (VOLTAGE): ±15% of nominal, ±10% for 24V

POWER CONSUMPTION: 16W maximum TRANSIENT PROTECTION: TVS Diode

OUTPUT

TYPE: Electromechanical relay

3A @ 150VDC maximum, 10A @ 240VAC 80% PF maximum **RATING:**

TIMING

AVAILABLE TYPES: ON Delay **REPEAT ACCURACY:** ±1% of setting **RESET TIME:** 50 msec minimum

1.5 cycles (60Hz) to 300 sec in 8 ranges TIME RANGE:

RANGE TOLERANCE: ≤10% of setting

PHYSICAL

OPERATING TEMP: -40° to 65° C (-72° to 117° F)

TIMING VARIATION VS. TEMP: ±5% maximum **Base Mount MOUNTING:**

TERMINATION: Terminal blocks on face of timer

HOUSING:

HI-POT: 1500V terminals to case, 1200V between open contacts



INDUSTRIAL SOLID STATE 1017SP7 BASE MOUNT KANSON ELECTRONICS, INC.

WIRING

DIMENSIONS INCH (MM)

OUTPUT A

A-B Voltage Input (control)

N.C. timed(1 positive)

N.O. timed(4 positive)

OUTPUT B

A-B Voltage Input (control)

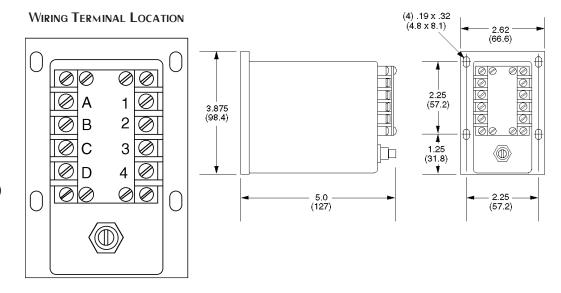
2-1 N.C. timed(2 positive)

N.O. timed(2 positive)

D-4 N.C. timed(D positive)

N.O. timed(D positive)

In DC applications indicated polarity provides optimum arc suppression.



ORDERING DATA

ORDERING	CODE		1017SP7	- B - 9 - B
	DEL NUMBER 1017SP7			
INPUT VOL		041/40/50		
	D	24 V AC/DC		
	Α	48 V AC/DC		
	В	120 VAC/125 VDC		
	С	240 VAC/250VDC		
TIME RANG	SE (secs) —			
	1 ′	1.5 - 30 cycles (60Hz)		
	2	1.5 - 45 cycles (60Hz)		
	3	1.5 - 60 cycles (60Hz)		
	4	1.5 - 120 cycles (60Hz)		
	7	0.5 - 30 seconds		
	8	0.5 - 60 seconds		
	9	0.5 - 120 seconds		
OUTPUT -	10	0.5 - 300 seconds		
OUIFUI .	A B	Relay 1 N.O. & 1 N.C. Relay DPDT		



INDUSTRIAL SOLID STATE MODEL 1018 c. TIMER PLUG-IN PLUG-IN

KANSON ELECTRONICS, INC.

Reliable plug-in timer available in three timing functions.

Features:

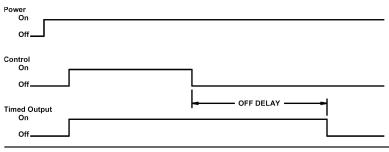
- •Time ranges from 0.06 to 1000 sec.
- •120 or 24 V AC/DC input.
- •10 amp relay output.
- Remote adjustable (only output 2).



UL File No. E50957

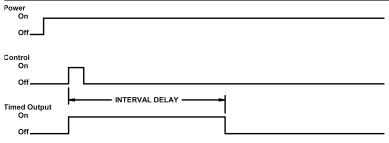


TIMING



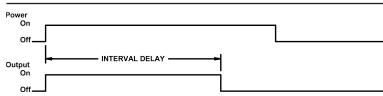
OFF DELAY

- Control is independent of unit power.
- When control turns on, the output turns on.
- When control turns off, the delay starts and output turns off after time elapses.



PULSE INTERVAL

- Control is independent of unit power.
- When control turns on, the output turns on. Output remains on while delay time elapses.
- Turning control on and off during delay time has no effect on the output or timing.



INTERVAL

- Control is affected with power application.
- When power is applied, output turns on and remains on till delay time is elapsed.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC/DC, 24VAC/DC

FREQUENCY: 50/60Hz or DC ±10% of nominal **TOLERANCE (VOLTAGE):** POWER CONSUMPTION: 3VA maximum

TRANSIENT PROTECTION: MOV



INDUSTRIAL SOLID STATE MODEL 1018 PLUG-IN TIMER

SPECIFICATIONS CON'T

OUTPUT

TYPE: Electromechanical relay

RATING: 10A @ 240VAC

TIMING

OFF Delay, Pulse Interval*, Interval **AVAILABLE TYPES:**

* Standard unit shipped as an OFF Delay. Remove jumper clip (see dimensions) for Pulse Interval.

REPEAT ACCURACY: ±1% of setting or 8 msecs, whichever is greater

CONTROL: Isolated contact closure

CONTROL TERMINALS: 5-6 (Standard), 2-7 (Option 13)

VOLTAGE PRESENT AT CONTROL TERMINALS:

70 VDC (120VAC/DC - Standard)

30VDC (24VAC - Standard), 24VDC (24VDC - Standard)

Same as input voltage (Option 13)

RESET TIME: 50 msec minimum - Standard only

100 msec minimum - Option 13

RANGE TOLERANCE: ≤30% of setting

INDICATE TIME: 5 msec minimum - Standard only

INDICATION: LED - On when timing

TIMING RAMP: 0.06 sec minimum time - $1M\Omega/\text{sec}$

8-9

5-6

0.5 sec minimum time - $100k\Omega/sec$ 5 sec minimum time - $10k\Omega/sec$

PHYSICAL

OPERATING TEMP: 0° to 50° C (32° to 120° F)

±5% maximum or 8 msec, whichever is greater (up to 500 seconds) TIMING VARIATION VS. TEMP:

MOUNTING: Plug-in

8 or 11-pin socket **TERMINATION:**

HOUSING: Plastic

WIRING

00	0
2-10	Voltage Input
	(constant)
1-3	N.O. timed
1-4	N.C. timed
11-9	N.O. timed
11-8	N.C. timed
5-6	Control
7	Not used

Caution: Never apply

voltage to 5-6

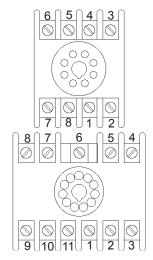
OUTPUT 1

OUTPUT 2 OPTION 13 (Output 1 only) 2-10 Voltage Input Maintained Interval (constant) 1-4 N.C. timed 1-3 N.O. timed 2-7 Voltage Input N.C. timed 1-4 (control)

Remote adjust 8-5 N.C. timed Control 8-6 N.O. timed 7-11 Not used

Caution: Never apply voltage to 5-6-8-9

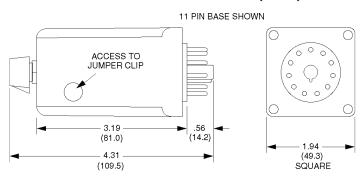
WIRING TERMINAL LOCATION





INDUSTRIAL SOLID STATE MODEL 1018 TIMER PLUG-IN

DIMENSIONS INCH (MM)



ORDERING DATA

ORDERING	CO	DE	1018 - M - 1
BASIC MOD		NUMBER 18	
TIME RANG	3E (s	secs) —	
	Α	0.06 - 1.0	J 5 - 1000
	В	0.5 - 10.0	L 0.06 - 2.5
	С	5 - 100	M 0.5 - 25.0
	D	5 - 250	N 0.5 - 50.0
	Ε	5 - 500	R 0.06 - 5.0
OUTPUT -			
	1		Relay DPDT
			(11 pin plug standard, 8 pin plug for OP13)
	2		Relay SPDT with remote adjust (11 pin plug)
OPTION (If	desi	red) —	
	OF	P4	24 VDC input
	OF	P13	Interval timing function - Only available with 8 pin plug and output 1.

APPLICABLE ACCESSORIES

see accesory section for details	
Potentiometers	RP-207 thru RP-210
Reference dial	RP-216
Locking attachment	RP-217
8 pin socket	RP-302
11 pin socket	RP-303
Hold down clip	RP-305



INDUSTRIAL SOLID STATE MODEL 1019 c. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

Economical timer plugs into 11 position relay socket.

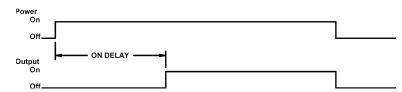
Features:

- Power control ON delay.
- •Time ranges from 0.02 to 500 seconds.
- •120 V AC/DC input.
- •10 amp relay output.
- Remote adjustable (only output 3).



UL File No. E50957





ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before timed output turns on.
- •The timed output remains on until the unit is reset by removing power.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC/DC FREQUENCY: 50/60Hz or DC **TOLERANCE (VOLTAGE):** ±10% of nominal POWER CONSUMPTION: 3VA maximum

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay

RATING: 10A @ 240VAC

TIMING

AVAILABLE TYPES: ON Delay REPEAT ACCURACY: ±1% of setting

Application of power initiates timing cycle. CONTROL:

CONTROL TERMINALS:

VOLTAGE PRESENT AT CONTROL TERMINALS: Same as input voltage.

40 msec minimum RESET TIME: **RANGE TOLERANCE:** ≤30% of setting

TIMING RAMP: 0.02 sec minimum time - $1M\Omega/sec$

> 0.6 sec minimum time - $100k\Omega/sec$ 0.5 sec minimum time - $10k\Omega/sec$



INDUSTRIAL SOLID STATE MODEL 1019 TIMER PLUG-IN

KANSON ELECTRONICS, INC.

SPECIFICATIONS

PHYSICAL

OPERATING TEMP: 0° to 50° C (32° to 120° F)

TIMING VARIATION VS. TEMP: ±5% maximum

MOUNTING: Plug-in

TERMINATION: 11-pin blade socket

HOUSING: Plastic

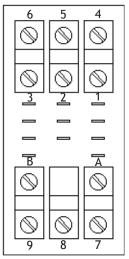
WIRING

OUTPUT 1		OUT	PUT 3	OPTION 4			
A-B	Voltage Input	A-B	Voltage Input	A-B	Voltage Input		
4-7	N.O. timed	4-7	N.O. timed	1-7	N.C. timed		
1-7	N.C. timed	1-7	N.C. timed	4-7	N.O. timed		
6-9	N.O. timed	6-9	N.O. timed	3-9	N.C. timed		
3-9	N.C. timed	3-9	N.C. timed	6-9	N.O. timed		
2-5-8	Not used	2-5	Remote adjust	2-8	N.C. timed		
			(jumper if not	5-8	N.O. timed		
			used)				
		8	Not used				

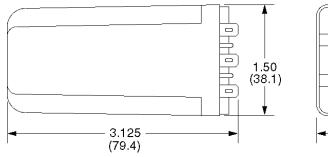
Caution: Never apply voltage to 2-5

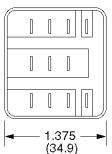
WIRING TERMINAL LOCATION

11-PIN BLADE SOCKET



DIMENSIONS INCH (MM)





ORDERING DATA

ORDERING	CODE	1	019	-	1	-	4	-	2
	DEL NUMBER 1019								
OUTPUT	5E (secs) — 1 5 10 50 100 500	0.02 - 1.0 0.02 - 5.0 0.06 - 10.0 0.06 - 50.0 0.5 - 100 0.5 - 500							
INPUT —	1 3 4	Relay DPDT Relay DPDT with remote adj Relay 3PDT	ust						
IINI OI	1	120 V AC/DC							

APPLICABLE ACCESSORIES

See accesory section for details

Potentiometers RP-207 thru RP-210 Reference dial RP-216 11 pin socket RP-304 Hold down clip RP-306



INDUSTRIAL SOLID STATE MODEL 1020 BASE MOUNT

KANSON ELECTRONICS, INC.

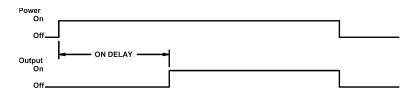
ON Delay timer for electric utility motor over-run applications.

Features:

- •Input power initiates the timing sequence.
- High voltage DC switching capablity.
- Factory fixed delay from 0.5 sec. to 20 min.
- Reset button and LED indicating energized output
- Equipped with transient voltage protection.
- Metal housing to maximize noise immunity.



TIMING



ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before output turns on.
- •The output remains on until the unit is reset by removing power or pressing reset button.

SPECIFICATIONS

INPUT

VOLTAGE: 24VAC/DC, 48VAC/DC,

120VAC/125VDC, 240VAC/250VDC

TOLERANCE (VOLTAGE): $\pm 15\%$ of nominal, $\pm 10\%$ for 24V

POWER CONSUMPTION: 16W maximum TRANSIENT PROTECTION: TVS Diode

OUTPUT

TYPE: Electromechanical relay

RATING: 3A @ 150VDC maximum, 10A @ 240VAC 80% PF maximum

TIMING

AVAILABLE TYPES: ON Delay **REPEAT ACCURACY:** ±1%

TIME RANGE: Factory fixed to customer specifications from 0.5 sec. to 20 min.

RESET TIME: 50 msec minimum

DELAY TOLERANCE: ≤10%



INDUSTRIAL SOLID STATE MODEL 1020 BASE MOUNT

SPECIFICATIONS CON'T

PHYSICAL

OPERATING TEMP: -40° to 65° C (-40° to 149° F)

TIMING VARIATION VS. TEMP: ±5% maximum MOUNTING: ±5% maximum Base Mount

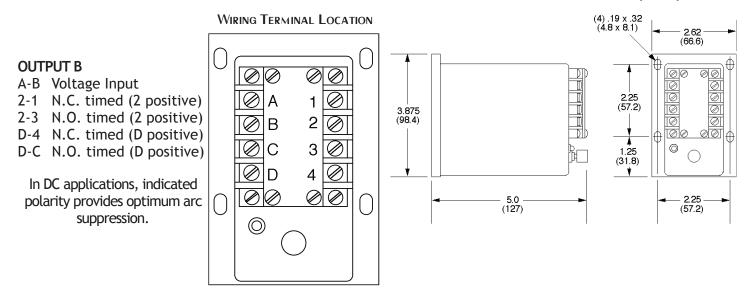
TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

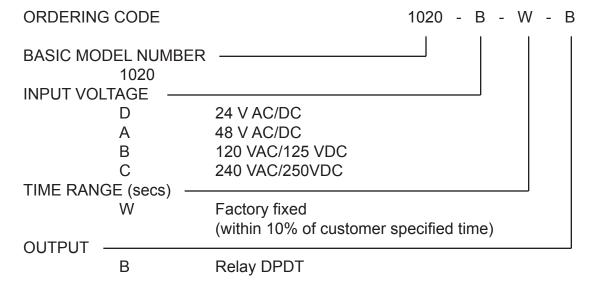
HI-POT: 1500V terminals to case, 1200V between open contacts

WIRING

DIMENSIONS INCH (MM)



ORDERING DATA





INDUSTRIAL SOLID STATE MODEL 1025 c. TIMER BASE MOUNT

KANSON ELECTRONICS, INC.

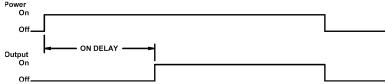
ON Delay timer for electric utility motor over-run applications.

Features:

- •Input power initiates the timing sequence.
- High voltage DC switching capablity.
- •6PDT relay output.
- Factory fixed delay from 0.5 sec. to 20 min.
- Reset button and LED indicating energized output
- Equipped with transient voltage protection.
- •Metal housing to maximize noise immunity.



TIMING



ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before output turns on.
- •The output remains on until the unit is reset by removing power or pressing reset button.

SPECIFICATIONS

INPUT

VOLTAGE: 48VAC/DC,

120VAC/125VDC,

240VAC/250VDC

TOLERANCE (VOLTAGE): ±15% of nominal 16W maximum TRANSIENT PROTECTION: TVS Diode

OUTPUT

TYPE: Electromechanical relay RATING: 7 A @ 240 VAC maximum

TIMING

AVAILABLE TYPES: ON Delay REPEAT ACCURACY: ±1%

TIME RANGE: Factory fixed to customer specifications from 0.5 sec to 20 min.

RESET TIME: 50 msec minimum

DELAY TOLERANCE: ≤10%

SPECIFICATIONS CON'T

PHYSICAL

-40° to 65° C (-40° to 149° F) **OPERATING TEMP:**

TIMING VARIATION VS. TEMP: ±5% maximum **Base Mount MOUNTING:**

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

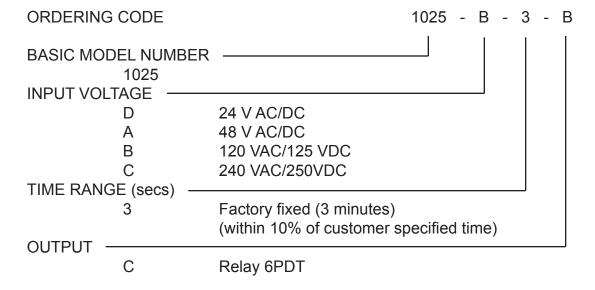
HI-POT: 1500V terminals to case, 1000V between open contacts

WIRING

DIMENSIONS INCH (MM)

OUTPUT C A-B Voltage Input 2-1 N.C. timed (2 positive) 2-3 N.O. timed (2 positive) 5-4 N.C. timed (5 positive) 5-6 N.O. timed (5 positive) 8-7 N.C. timed (8 positive) 8-9 N.O. timed (8 positive) 11-10 N.C. timed (11 positive) 11-12 N.O. timed (11 positive) 14-13 N.C. timed (14 positive) 14-15 N.O. timed (14 positive) 17-16 N.C. timed (17 positive)	49 (124.5)	5.39 (137) 28 429 (109) 0 0	5.24 (133) 4.41 (112)	2.91 (74)
8-9 N.O. timed (8 positive) 11-10 N.C. timed (11 positive) 11-12 N.O. timed (11 positive) 14-13 N.C. timed (14 positive) 14-15 N.O. timed (14 positive)	4.9 (124.5)		(133)	2.91 (74)

ORDERING DATA





INDUSTRIAL SOLID STATE MODEL 1026 c. TIMER BASE MOUNT

KANSON ELECTRONICS, INC.

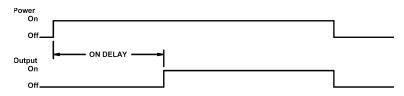
ON Delay timer for electric utility applications.

Features:

- •Input power initiates the timing sequence.
- High voltage DC switching capablity.
- •6PDT relay output.
- Time ranges from 1.5 cycles (60Hz) to 300 seconds.
- Reset button and LED indicating energized output
- Equipped with transient voltage protection.
- •Metal housing to maximize noise immunity.



TIMING



ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before output turns on.
- •The output remains on until the unit is reset by removing power or pressing reset button.

SPECIFICATIONS

INPUT

VOLTAGE: 48VAC/DC,

120VAC/125VDC, 240VAC/250VDC

TOLERANCE (VOLTAGE): ±15% of nominal 16W maximum TRANSIENT PROTECTION: TVS Diode

OUTPUT

TYPE: Electromechanical relay RATING: 7 A @ 250 VAC maximum

TIMING

AVAILABLE TYPES: ON Delay REPEAT ACCURACY: ±1% of setting

TIME RANGE: 1.5 cycles (60Hz) to 300 sec in 8 ranges

RESET TIME: 50 msec minimum RANGE TOLERANCE: ≤10% of setting

PHYSICAL

OPERATING TEMP: -40° to 65° C (-40° to 149° F)

TIMING VARIATION VS. TEMP: ±5% maximum MOUNTING: ±5% maximum Base Mount

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

HI-POT: 1500V terminals to case, 1000V between open contacts



INDUSTRIAL SOLID STATE MODEL 1026 NC. TIMER BASE MOUNT

WIRING

DIMENSIONS INCH (MM)

OUTPUT C	In DC applications,		5.39 (137)	-	
A-B Voltage Input	indicated polarity provides		4.29 (109)		
2-1 N.C. timed (2 positive)	optimum arc suppression.	_	(*) † (*) (*) (*)	+	
2-3 N.O. timed (2 positive))	
5-4 N.C. timed (5 positive)					
5-6 N.O. timed (5 positive)					
8-7 N.C. timed (8 positive)				5.24	and a
8-9 N.O. timed (8 positive)		4.9 (124.5)		(133)	44
11-10 N.C. timed (11 positive)			4.41 (112)	
11-12 N.O. timed (11 positive)				
14-13 N.C. timed (14 positive)				
14-15 N.O. timed (14 positive)		⊕ ⊕ ⊕		201.70
17-16 N.C. timed (17 positive)		◄ 5.0 (127) →		← 2.91 (74) ←
17-18 N.O. timed (17 positive)				

ORDERING DATA

ORDERING	CODE		1026 -	B - 4	∔ - B
BASIC MOD	DEL NUMBER 1026				
INPUT VOL	A B C	48 V AC/DC 120 VAC/125 VDC 240 VAC/250VDC		_	
TIME RANG	SE (secs) —				J
	1	1.5 - 30 cycles (60Hz)			
	2	1.5 - 45 cycles (60Hz)			
	3	1.5 - 60 cycles (60Hz)			
	4	1.5 - 120 cycles (60Hz)			
	7	0.5 - 30 seconds			
	8	0.5 - 60 seconds			
	9	0.5 - 120 seconds			
	10	0.5 - 300 seconds			
OUTPUT					
	С	Relay 6PDT			

KANSON ELECTRONICS, INC.

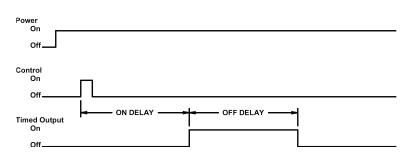
Dual time control timer available in three timing functions.

Features:

- External plug-in DPDT relay.
- Timing control contacts independent of unit input power.
- •Time ranges from 0.06 to 500 seconds.
- •120, 230 or 24 VAC input.
- •10 amp relay output.
- Remote adjust capability.
- Output energized indication LED

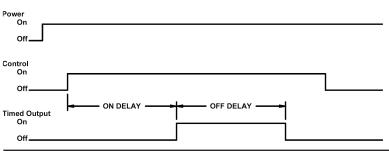


TIMING



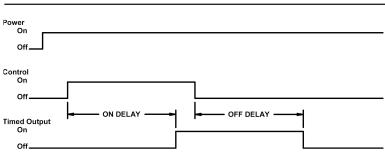
PULSE ONE CYCLE

- Control is independent of unit power.
- When control turns on, OFF time elapses before output turns on.
- The ON time then starts and output turns back off once time has elapsed.
- Turning control on and off during delay time has no effect on the output or timing.



ONE CYCLE

- Control is independent of unit power.
- When control turns on, OFF time elapses before output turns on.
- The ON time then starts and output turns back off once time has elapsed.
- When control turns off; unit resets.



ON DELAY / OFF DELAY

- Control is independent of unit power.
- When control turns on, OFF time elapses before output turns on.
- When the control turns off, the ON time starts and output turns off after time elapses.
- If control turns off while output is off; unit resets immediately.



INDUSTRIAL SOLID STATE MODEL 1030 BASE MOUNT

KANSON ELECTRONICS, INC.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC, 24VAC, 240VAC

FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal 10VA maximum

TRANSIENT PROTECTION: Isolated transformer (120VAC and 240VAC only)

OUTPUT

TYPE: Electromechanical relay RATING: 10A @ 240VAC maximum

TIMING

AVAILABLE TYPES: Pulse One Cycle, One Cycle, ON Delay / OFF Delay

INDICATION: LED - On when output energized

REPEAT ACCURACY: $\pm 1\%$ of setting

TIME RANGE: 0.06 to 500 seconds in 9 ranges

TIME RAMP: 0.06 sed. min. time - $100k\Omega/sec.$, 0.5 sec. min. time - $10k\Omega/sec.$

RESET TIME: 50 msec minimum RANGE TOLERANCE: ≤10% of setting

CONTROL: Isolated contact closure

CONTROL TERMINALS: E-F

VOLTAGE PRESENT AT CONTROL TERMINALS: 24VDC minimum, 40VDC maximum

PHYSICAL

OPERATING TEMP: 0° to 55° C (32° to 131° F)

TIMING VARIATION VS. TEMP: ±5% maximum MOUNTING: ±5% maximum Base Mount

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

WIRING

OUTPUT B

A-B Voltage Input (contant)

C-D Remote adjust for OFF time, (jumper if not used)

E-F Control

(starts timing function)

G-H Remote adjust for ON time, (jumper if not used)

1-3 N.O. timed

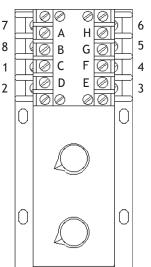
1-4 N.C. timed

5-8 N.C. timed

6-8 N.O. timed

Caution: Nevery apply voltage to C-D-E-F-G-H

WIRING TERMINAL LOCATION



(4) .19 x .32 (66.6) (6

DIMENSIONS INCH (MM)

ORDERING DATA

ORDERING CODE	1030 - 1 - E - E - 6 - B
BASIC MODEL NUMBER — 1030	
INPUT VOLTAGE ———	
1	120 VAC
2	240 VAC
3	24 VAC
TIME RANGE (secs)	Off time —
	On time
ON and OFF delay time ran	ges must have the same minimum time.
D	0.06 - 1.0
E	0.06 - 2.5
F	0.06 - 5.0
G	0.06 - 10.0
Н	0.06 - 25.0
J	0.5 - 50.0
K	0.5 - 100
L	0.5 - 250
M	0.5 - 500
TIMING FUNCTION ———	
6	Pulse One Cycle
7	One Cycle
8	ON Delay / OFF Delay
OUTPUT —	
В	Relay DPDT

APPLICABLE ACCESSORIES

See accesory section for details

Output modules RP-101

Potentiometers RP-201 thru RP-210

RP-216 Reference dial Locking attachment RP-217



INDUSTRIAL SOLID STATE MODEL 1032 PLUG-IN

KANSON ELECTRONICS, INC.

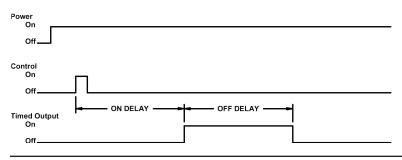
Dual time control timer available in three timing functions.

Features:

- •12 plug-in base socket included.
- Timing control contacts independent of unit input power.
- •Time ranges from 0.06 to 500 seconds.
- •120 or 24 VAC input.
- •10 amp relay output.
- Remote adjust capability (Off delay only).
- Output energized indication LED

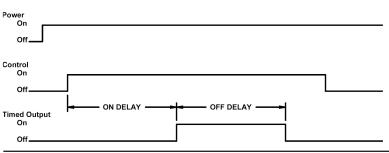


TIMING



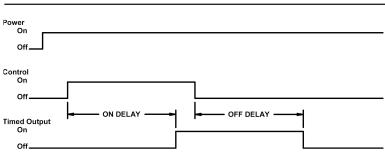
PULSE ONE CYCLE

- Control is independent of unit power.
- When control turns on, OFF time elapses before output turns on.
- The ON time then starts and output turns back off once time has elapsed.
- Turning control on and off during delay time has no effect on the output or timing.



ONE CYCLE

- Control is independent of unit power.
- When control turns on, OFF time elapses before output turns on.
- The ON time then starts and output turns back off once time has elapsed.
- When control turns off; unit resets.



ON DELAY / OFF DELAY

- Control is independent of unit power.
- When control turns on, OFF time elapses before output turns on.
- When the control turns off, the ON time starts and output turns off after time elapses.
- If control turns off while output Is on; unit resets immediately.



INDUSTRIAL SOLID STATE MODEL 1032 C. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

SPECIFICATIONS

INPUT

120VAC/DC, 24VAC/DC **VOLTAGE:**

FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal **POWER CONSUMPTION:** 10VA maximum

Isolated transformer (120VAC only) TRANSIENT PROTECTION:

OUTPUT

TYPE: Electromechanical relay 10,000,000 operations **MECHANICAL LIFE:** 300,000 operations **ELECTRICAL LIFE: RATING:** 10A @ 240VAC maximum

TIMING

AVAILABLE TYPES: Pulse One Cycle, One Cycle, ON Delay / OFF Delay

LED - On when output energized INDICATION:

REPEAT ACCURACY: ±1% of setting

TIME RANGE: 0.06 to 500 seconds in 9 ranges TIME RAMP: 0.06 sed. min. time - $100k\Omega/sec.$, 0.5 sec. min. time - $10k\Omega/sec$.

50 msec minimum

RESET TIME: RANGE TOLERANCE: ≤10% of setting

CONTROL: Isolated contact closure

CONTROL TERMINALS: 5-6

VOLTAGE PRESENT AT CONTROL TERMINALS: 24VDC min., 40VDC max.

PHYSICAL

0° to 55° C (32° to 131° F) OPERATING TEMP:

TIMING VARIATION VS. TEMP: ±5% maximum MOUNTING: Plug-in

12-pin socket TERMINATION:

HOUSING: Metal

WIRING

WIRING TERMINAL LOCATION **OUTPUT B**

1-2 Voltage Input (constant)

3-4 Remote Adjust, ON time (jumper not when used)

5-6 Control

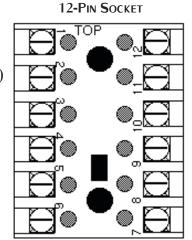
(starts timing function)

7-8 N.O. timed

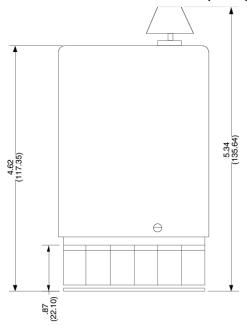
8-9 N.O. timed 10-11 N.C. timed

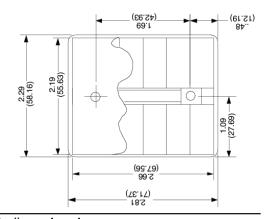
11-12 N.C. timed

Caution: Never apply voltage to terminals 3-4-5-6



DIMENSIONS INCH (MM)





ORDERING DATA

ORDERING (CODE		1032	- 1	-	Н	-	Н	-	8	-	В
BASIC MODE	EL NUMBER — 1032											
INPUT VOLT	AGE ———											
	1	120 VAC										
	2	24 VAC										
TIME RANGE	E (secs)	OFF time ————————————————————————————————————				_ 						
ON and OFF delay time ranges must have the same minimum time.												
	В	0.06 - 0.25										
	C	0.06 - 0.50										
	D	0.06 - 1.0										
	E	0.06 - 2.5										
	F	0.06 - 5.0										
	G	0.06 - 10.0										
	Н	0.06 - 25.0										
	J	0.5 - 50.0										
	K	0.5 - 100										
	L	0.5 - 250										
	M	0.5 - 500										
TIMING FUN	ICTION ——									J		
	6	Pulse One Cycle										
	7	One Cycle										
	8	ON Delay / OFF Delay										
OUTPUT -												┙
	В	Relay DPDT										

APPLICABLE ACCESSORIES

See accesory section for details

Potentiometers RP-201 thru RP-210
Reference dial RP-216
Locking attachment RP-217
12 pin socket (included) RP-301



INDUSTRIAL SOLID STATE MODEL 1060 C. TIMER BASE MOUNT **BASE MOUNT**

KANSON ELECTRONICS, INC.

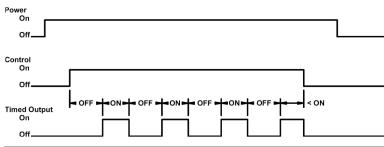
Dual time control timer available in two timing functions.

Features:

- •External plug-in DPDT relay.
- Timing control contacts independent of unit input power.
- •Time ranges from 0.06 to 500 seconds.
- •120, 230 or 24 VAC input.
- •10 amp relay output.
- Remote adjust capability.
- Output energized indication LED

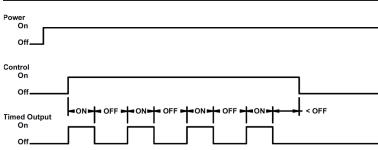


TIMING



REPEAT CYCLE START OFF

- Control is independent of unit power.
- When control turns on, the output remains off while OFF time elapses. The output then turns on while ON time elapses.
- This cycle then repeats until power is removed from the unit or control turns off.



REPEAT CYCLE START ON

- Control is independent of unit power.
- When control turns on, the output turns on while ON time elapses. The output then turns back off while OFF time elapses.
- This cycle then repeats until power is removed from the unit or control turns off.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC **FREQUENCY:** 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal **POWER CONSUMPTION:** 10VA maximum TRANSIENT PROTECTION: Isolated transformer

OUTPUT

Electromechanical relay (Solid State available as accessory) TYPE:

RATING: 10A @ 240VAC maximum



INDUSTRIAL SOLID STATE MODEL 1060 BASE MOUNT KANSON ELECTRONICS, INC.

SPECIFICATIONS CON'T

TIMING

AVAILABLE TYPES: Repeat Cycle (start ON or start OFF) INDICATION: LED - On when output energized

REPEAT ACCURACY: ±1% of setting

0.06 to 500 seconds in 9 ranges TIME RANGE:

0.06 sed. min. time - $100k\Omega/sec.$, 0.5 sec. min. time - $10k\Omega/sec.$ TIME RAMP:

RESET TIME: 50 msec minimum **RANGE TOLERANCE:** ≤10% of setting

CONTROL: Isolated contact closure

CONTROL TERMINALS: E-F

VOLTAGE PRESENT AT CONTROL TERMINALS: 24VDC minimum, 40VDC maximum

PHYSICAL

0° to 55° C (32° to 131° F) **OPERATING TEMP:**

TIMING VARIATION VS. TEMP: ±5% maximum **MOUNTING: Base Mount**

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

WIRING

OUTPUT B

A-B Voltage Input (contant)

C-D Remote adjust for first

time period

(jumper if not used)

E-F Control

(starts timing function)

G-H Remote adjust for second

time period

(jumper if not used)

1-3 N.O. timed

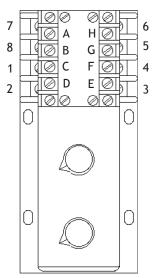
1-4 N.C. timed

5-8 N.C. timed

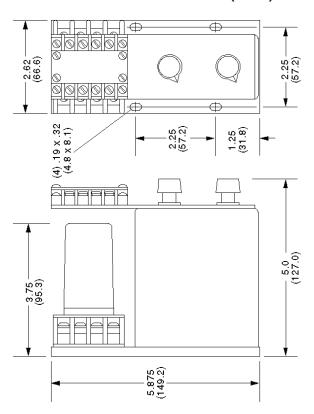
6-8 N.O. timed

Caution: Nevery apply voltage to C-D-E-F-G-H

WIRING TERMINAL LOCATION



DIMENSIONS INCH (MM)



ORDERING DATA

ORDERING (CODE		1060 - 1	- D -	D -	2 -	В
BASIC MODEL NUMBER 1060							
INPUT VOLT	AGE —						
	1	120 VAC					
TIME RANGI	E (secs)	ON time					
		OFF time ————					
ON and OFF delay time ranges must have the same n			nimum	time.			
	D	0.06 - 1.0					
	E	0.06 - 2.5					
	F	0.06 - 5.0					
	G	0.06 - 10.0					
	Н	0.06 - 25.0					
	J	0.5 - 50.0					
	K	0.5 - 100					
	L	0.5 - 250					
	M	0.5 - 500					
TIMING FUN	ICTION ——					┙	
	1	Repeat Cycle Start ON					
	2	Repeat Cycle Start OFF					
OUTPUT -		-					
	В	Relay DPDT					

APPLICABLE ACCESSORIES

See accesory section for details

Output modules RP-101

Potentiometers RP-201 thru RP-210

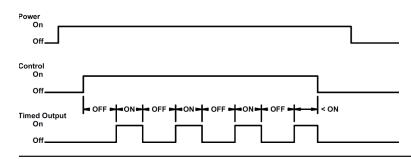
Reference dial RP-216 Locking attachment RP-217 Totally solid state dual timer available in two timing functions.

Features:

- •Timing control contacts independent of unit input power.
- •Time ranges from 0.06 to 500 seconds.
- •120 VAC input.
- •35 VA output @ input voltage.
- •Optional timing indication light.

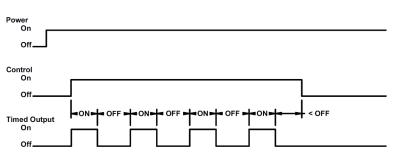


TIMING



REPEAT CYCLE START OFF

- Control is independent of unit power.
- When control turns on, the output remains off while OFF time elapses. The output then turns on while ON time elapses.
- This cycle then repeats until power is removed from the unit or control turns off.



REPEAT CYCLE START ON

- Control is independent of unit power.
- When control turns on, the output turns on while ON time elapses. The output then turns back off while OFF time elapses.
- This cycle then repeats until power is removed from the unit or control turns off.



INDUSTRIAL SOLID STATE MODEL 1061 TIMER BASE MOUNT

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal 10VA maximum

OUTPUT

TYPE: Solid State

RATING: 35VA continuous, 150VA in-rush @ 120VAC

TIMING

AVAILABLE TYPES: Repeat Cycle (start ON or start OFF)

INDICATION: Optional incadescent light - On when output energized

TIME RANGE: 0.06 to 500 seconds in 9 ranges

TIME RAMP: 0.06 sec. min. time - $100k\Omega/sec.$, 0.5 sec. min. time - $10k\Omega/sec.$

RANGE TOLERANCE: ≤10% of setting

CONTROL: Isolated contact closure

CONTROL TERMINALS: E-F

VOLTAGE PRESENT AT CONTROL TERMINALS: Same as input voltage

PHYSICAL

OPERATING TEMP: 0° to 55° C (32° to 131° F)

TIMING VARIATION VS. TEMP: ±5% maximum MOUNTING: ±5% maximum Base Mount

TERMINATION: Terminal blocks on face of timer

HOUSING: Metal

WIRING

A-B Voltage input (constant)

E-F Control

(starts timing function)

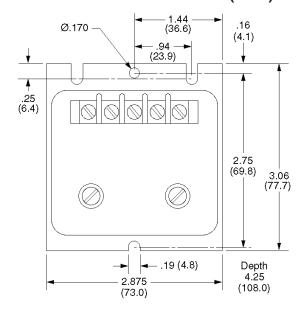
B-2 N.O. timed output

Caution: Never apply voltage

E-F



DIMENSIONS INCH (MM)



INDUSTRIAL SOLID STATE MODEL 1061 NC. TIMER BASE MOUNT

ORDERING DATA

ORDERING CODE	1061 - 1 - G - G - 2 - C
BASIC MODEL NUMBER 1061	
INPUT VOLTAGE ——	
1	120 VAC
TIME RANGE (secs)	ON time ————————————————————————————————————
	OFF time
ON and OFF delay time ra	anges must have the same minimum time.
D	0.06 - 1.0
E	0.06 - 2.5
F	0.06 - 5.0
G	0.06 - 10.0
Н	0.06 - 25.0
J	0.5 - 50.0
K	0.5 - 100
L	0.5 - 250
M	0.5 - 500
TIMING FUNCTION —	
1	Repeat Cycle Start ON
2	Repeat Cycle Start OFF
OUTPUT —	
C OPTION (if desired) —	Solid State (AC) 1 N.O. 35VA
OP6	Timing indication light

APPLICABLE ACCESSORIES

See accesory section for details

Potentiometers RP-201 thru RP-210

Reference dial RP-216 Locking attachment RP-217



INDUSTRIAL SOLID STATE MODEL 1068 c. TIMER PANEL MOUNT

KANSON ELECTRONICS, INC.

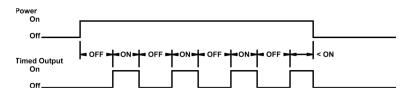
Dual time control repeat cycle timer.

Features:

- Input power initiates the timing sequence.
- •Time ranges from 0.1 to 500 seconds.
- •100-240 VAC, 24 V AC/DC or 12 VDC input.
- •5 amp relay output.
- •Output indication LEDs.



TIMING



REPEAT CYCLE

- Control is affected with power application.
- When power turns on, the output remains off while OFF time elapses.
- The output then turns on while ON time elapses.
- This cycle then repeats until power is removed from the unit.

SPECIFICATIONS

TIMING

AVAILABLE TYPES: Repeat Cycle
REPEAT ACCURACY: ±0.3% of setting
RESET TIME: 300 msec minimum

TIME RANGE: 0.1 secs to 500 hours in 16 ranges

INPUT

VOLTAGE: 100-240VAC, 24VAC/DC, 12VDC

FREQUENCY: 50/60Hz (AC Models)
TOLERANCE (VOLTAGE): -10% to 15% of nominal

POWER CONSUMPTION: 10VA (100-240VAC), 2.5VA (24VAC), 2W (12VDC & 24VDC)

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay MECHANICAL LIFE: 20,000,000 operations

ELECTRICAL LIFE: 100,000 operations minimum (at full rated load)

RATING: 5A @ 240VAC (resistive)

PHYSICAL

OPERATING TEMP: -10° to 50° C (14° to 122° F)

TIMING VARIATION VS. TEMP: ±2% maximum

MOUNTING: Plug-in or panel mount

TERMINATION: 8-pin socket or screw terminals

HOUSING: Polycarbonate

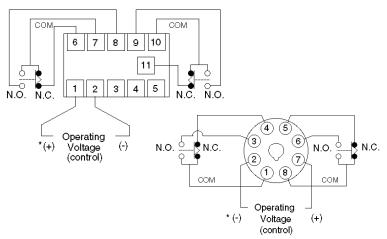
DEGREE OF PROTECTION: IP50 (standard), IP65 (special)



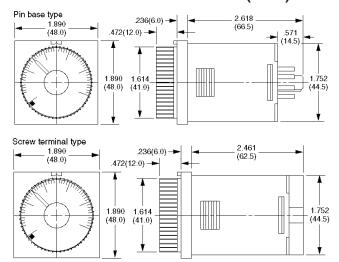
INDUSTRIAL SOLID STATE MODEL 1068 c. TIMER PANEL MOUNT

KANSON ELECTRONICS, INC.





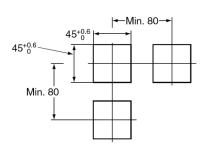
DIMENSIONS INCH (MM)



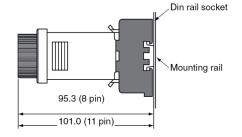
MOUNTING MM

PANEL MOUNT Panel mount clip RP-325 allows access to the timer face though

the panel.



DIN RAIL MOUNT 8 Pin socket RP-320 has built in hold down clips and is DIN rail compatible.





INDUSTRIAL SOLID STATE MODEL 1068 TIMER PANEL MOUNT

ORDERING DATA

ORDERING CO	DDE			1068 -	1 -	Р -	9	-	В -	1	-	1
BASIC MODEL	. NUMBER —											
	1068											
INPUT VOLTA	GE —				J							
	1	100-240 VAC										
	2	24 V AC/DC										
	3	12 VDC										
TIME RANGE						J						
	Р											
	secs	mins	hrs	10 hrs								
	0.1-1.0	0.1-1.0	0.1-1.0	1.0-10								
	0.5-5.0	0.5-5.0	0.5-5.0	5.0-50								
	1.0-10	1.0-10	1.0-10	10-100								
	5.0-50	5.0-50	5.0-50	50-500								
TIMING FUNC	TION ——											
	9	Repeat Cycle										
OUTPUT —									J			
	В	Relay DPDT										
TERMINATION												
	1	8 pin plug-in	base									
	2	Screw termin	als									
DEGREE OF P	ROTECTION -											J
	1	IP50 Standard										
	2	IP65 Sealed u	nit									
APPLICABLE A	ACCESSORIES		• • •									
	See accesory	section for det	tails	BB 220								
		8 pin socket		RP-320								
		8 pin reversib		RP-321								
		8 pin cable so		RP-323								
		Panel mount	clip	RP-325								
		Stop rings		RP-327								



INDUSTRIAL SOLID STATE MODEL 1071 TIMER PLUG-IN

Multi time range ON delay timer.

Features:

- Input power initiates timing sequence.
- •Selectable time ranges from 0.025 to 2000 sec.
- •120 VAC or 24 V AC/DC input.
- •5 amp relay output.
- Remote adjustable (only output A & C).

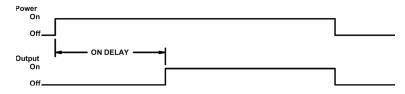


SUL File No. E50957



SP CSA File No. LR92518





ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before output turns on.
- The output remains on until the unit is reset by removing power.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC/DC, 24VAC/DC

FREQUENCY: 50/60Hz or DC **TOLERANCE (VOLTAGE):** 15% of nominal **POWER CONSUMPTION:** 4VA maximum

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay **RATING:** 5A @ 240VAC maximum

TIMING

AVAILABLE TYPES: ON Delay

REPEAT ACCURACY: ±0.5% of setting or 0.004 seconds, whichever is greater

RESET TIME: 40 msec minimum TIME RATIO: 10 to 1 potentiometer

TIME RANGE: 8 per unit

LED - ON when timing INDICATION:

RANGE TOLERANCE: ≤10% typical

CONTROL: Power actuated or AC proximity sensor

CONTROL TERMINALS: 2-7 (8-pin unit), 2-10 (11-pin unit) **VOLTAGE PRESENT AT CONTROL TERMINALS:** Same as input voltage



INDUSTRIAL SOLID STATE MODEL 1071 TIMER PLUG-IN

KANSON ELECTRONICS, INC.

SPECIFICATIONS CON'T

PHYSICAL

OPERATING TEMP: -20° to 70° C (-4° to 158° F)

TIMING VARIATION VS. TEMP: ±5% maximum

MOUNTING: Plug-in

TERMINATION: 8- or 11-pin socket

HOUSING: Plastic

WIRING

OUTPUT A

2-7 Voltage input (control)

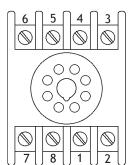
1-3 N.O. timed

1-4 N.C. timed

5-6 Remote adjust

8 Not used

Caution: Never apply voltage to 5-6



OUTPUT B

2-7 Voltage input (control)

1-3 N.O. timed

1-4 N.C. timed

8-6 N.O. timed

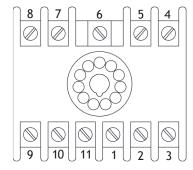
8-5 N.C. timed

OUTPUT C

2-7 Voltage input (control)
11-8 N.C. timed
1-3 N.O. timed
5-6 Remote adjust
1-4 N.C. timed
7 Not used

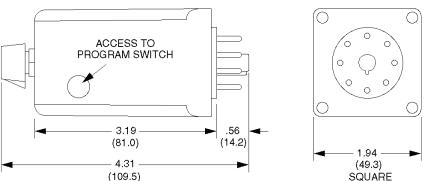
11-9 Remote adjust

Caution: Never apply voltage to 5-6



DIMENSIONS INCH (MM)

OCTAL BASE SHOWN



INDUSTRIAL SOLID STATE MODEL 1071 TIMER PLUG-IN

ORDERING DATA

ORDERING CO	DDE			1071 - 1 -	P - 1 - B
BASIC MODEL	NUMBER 071				
INPUT VOLTAG	SE				
1		120 VAC			
2		24 V AC/DC			
TIME RANGE (secs) —				_ _
		sitions as follow)			
0		,	0.2-2.0		
1	50-500	6	0.06 - 0.5		
2	12-120		0.025 - 0.		
	3.0-30		not used		
4	0.75-7.5		not used		
TIMING FUNCT					
1		ON Delay			
OUTPUT —					
A		Relay SPDT - re	emote adiu	st (8 pin plua)	
В		Relay DPDT (8	•	ot (o piii piag)	
C		Relay DPDT - re		ıst (11 nin nlua)	
_	Remote adj	ust units require			meter - RP-204.)
APPLICABLE A	CCESSOF	RIES			
Se	ee accesor	y section for deta	ails		
		Potentiometers		RP-204	
		Reference dial		RP-216	
		Locking attachn	nent	RP-217	
		8 pin socket		RP-302	
		11 pin socket		RP-303	
		Hold down clip		RP-305	
		riola down clip		111 -303	



INDUSTRIAL SOLID STATE MODEL 1073 c. TIMER PLUG-IN KANSON ELECTRONICS, INC.

Multifunction timer with instant contacts or ON delay timer.

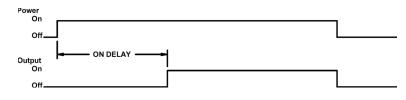
Features:

- •5 timing functions.
- •Input power initiates the timing sequence.
- •Time ranges from 0.1sec to 500 hr.
- •100-240 VAC, 24 V AC/DC or 12 VDC input.
- •5 amp relay output.
- Power and output indication LEDs.



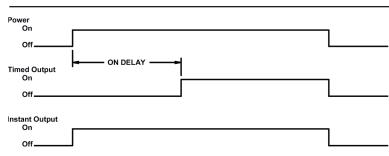


TIMING



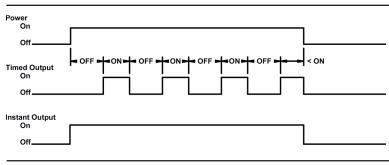
ON DELAY - output B

- Control is affected with power application.
- When power turns on, delay time elapses before output turns on.
- The output remains on until the unit is reset by removing power.



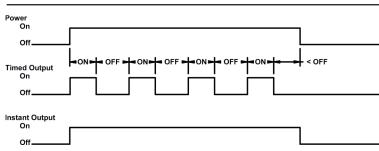
ON - ON DELAY - output A

- Control is affected with power application.
- When power turns on, delay time elapses before timed output turns on.
- The timed output remains on until the unit is reset by removing power.
- Instant output directly follows control input.



FL - REPEAT CYCLE START OFF - output A

- Control is affected with power application.
- When power turns on, the output remains off while time elapses.
- The output then turns on while time elapses.
- This cycle then repeats until power is removed from the unit.
- Instant output directly follows control input.



FO - REPEAT CYCLE START ON - output A

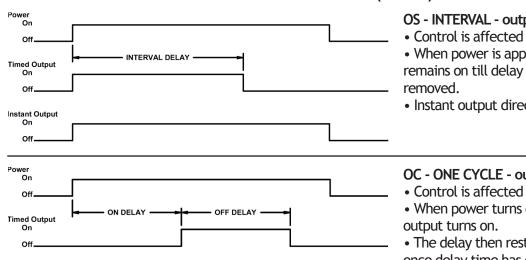
- Control is affected with power application.
- When power turns on, the output turns on while delay time elapses.
- The output then turns off while delay time elapses
- This cycle then repeats until power is removed from the unit.
- Instant output directly follows control input.



INDUSTRIAL SOLID STATE MODEL 1073 **PLUG-IN** TIMER

KANSON ELECTRONICS, INC.





OS - INTERVAL - output A

- Control is affected with power application.
- When power is applied, timed output turns on and remains on till delay time is elapsed or power is
- Instant output directly follows control input.

OC - ONE CYCLE - output A

- Control is affected with power application.
- When power turns on, delay time elapses before
- The delay then restarts and output turns back off once delay time has elapsed.
- Instant output directly follows control input.

SPECIFICATIONS

INPUT

VOLTAGE: 100-420VAC, 24VAC/DC, 12VDC

FREQUENCY: 50/60Hz (AC Models) TOLERANCE (VOLTAGE): -15% to +10% of nominal

POWER CONSUMPTION: 10VA (100-240VAC), 2.5VA (24VAC), 2W (12VDC & 24VDC)

MOV TRANSIENT PROTECTION:

Instant Output On

Off

OUTPUT

TYPE: Electromechanical relay **MECHANICAL LIFE:** 20,000,000 operations

ELECTRICAL LIFE: 100,000 operations minimum (at full rated load)

5A @ 240VAC (resistive) RATING:

TIMING

On Delay only TYPE: Output B:

> Output A: On Delay, Repeat Cycle Start Off,

> > Repeat Cycle Start On, Interval, One Cycle

REPEAT ACCURACY: ±0.3% of setting RESET TIME: 100 msec minimum

TIME RANGE: 0.01 to 500 hours in 16 ranges

PHYSICAL

OPERATING TEMP: -10° to 50° C (-14° to 122° F)

TIMING VARIATION VS. TEMP: ±2% maximum

MOUNTING: Plug-in or Panel Mount

TERMINATION: 8-pin socket or screw terminals

HOUSING: Polycarbonate

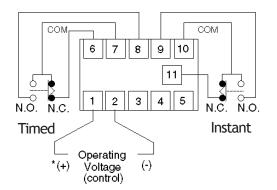
DEGREE OF PROTECTION: IP50 (standard, IP65 (special)



INDUSTRIAL SOLID STATE MODEL 1073 c. TIMER PLUG-IN

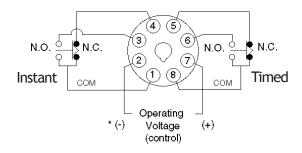
KANSON ELECTRONICS, INC.

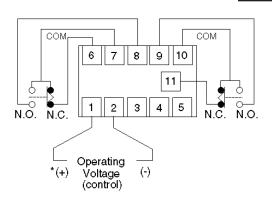
WIRING



OUTPUT A

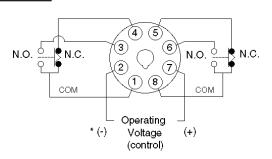
*Polarity indicated for DC Models only.



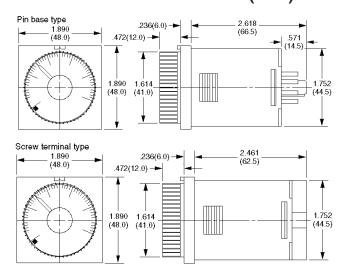


OUTPUT B

*Polarity indicated for DC Models only.



DIMENSIONS INCH (MM)





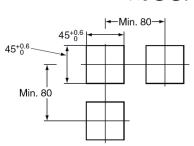
INDUSTRIAL SOLID STATE MODEL 1073 c. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

MOUNTING MM

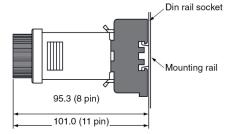
PANEL MOUNT

Panel mount clip RP-325 allows access to the timer face though the panel.



DIN RAIL MOUNT

8 Pin socket RP-320 has built in hold down clips and is DIN rail compatible.



ORDERING DATA

		•		0. 27.17.1			
ORDERING CO	ODE			1073 - 1 -	P - 2 -	- A - 1	- 1
BASIC MODEL	NUMBER —						
	1073						
INPUT VOLTA	GE —						
	1	100-240 VAC					
	2	24 V AC/DC					
	3	12 VDC					
TIME RANGE							
	Р						
	secs	mins	hrs	10 hrs			
	0.1-1.0	0.1-1.0	0.1-1.0	1.0-10			
	0.5-5.0	0.5-5.0	0.5-5.0	5.0-50			
	1.0-10	1.0-10	1.0-10	10-100			
	5.0-50	5.0-50	5.0-50	50-500			
TIMING FUNC	TION and OUT	ΓPUT ———					
	1 - B	ON Delay wit	h DPDT relay	,			
	2 - A			nteval, One Cycle			
			-	tant relay SPDT			
TERMINATION	· ———			<u> </u>			
	1	8 pin plug-in	base				
	2	Screw termin					
DEGREE OF P	ROTECTION -						
	1	IP50 Standard	d				
	2	IP65 Sealed u					
			-				
ADDI ICARI E	ACCESSORIES						

APPLICABLE ACCESSORIES

See accesory section for details

8 pin socket

8 pin reversible socket

8 pin cable socket

RP-321

8 pin cable socket

RP-323

Panel mount clip

RP-325

Stop rings

RP-327



INDUSTRIAL SOLID STATE MODEL 1081 c. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

True Off Delay timer.

Features:

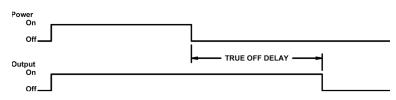
- •Input power initiates the timing sequence.
- •Time ranges from 0.04 sec to 10 min.
- •12 to 240 volt inputs in 5 options.
- •3 amp relay output.
- Power indication LEDs.



ZF.



TIMING



TRUE OFF DELAY

- Control is affected with power application.
- When power turns on, the output turns on.
- When power turns off, a capacitor, which charges in less than 100 ms, maintains output on while the delay time elapses.

SPECIFICATIONS

INPUT

VOLTAGE: 100-120VAC, 200-240VAC,

24VAC, 24VDC, 12VDC

FREQUENCY: 50/60Hz (AC Models)
TOLERANCE (VOLTAGE): -15% to +10% of nominal

POWER CONSUMPTION: 5VA (AC Models), 2W (DC Models)

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay MECHANICAL LIFE: 10,000,000 operations

ELECTRICAL LIFE: 100,000 operations minimum (at full rated load)

RATING: 3A @ 240VAC (resistive)

TIMING

TYPE: True OFF Delay REPEAT ACCURACY: $\pm 0.3\%$ of setting

RESET TIME: 100 msec minimum at maximum time setting

TIME RANGE: 0.04 seconds to 10 seconds or 0.04 minutes to 10 minutes

PHYSICAL

OPERATING TEMP: -10° to 50° C (-14° to 122° F)

TIMING VARIATION VS. TEMP: ±2% maximum

MOUNTING: Plug-in or Panel Mount

TERMINATION: 8-pin socket **HOUSING:** Polycarbonate

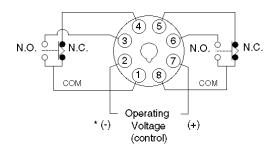
DEGREE OF PROTECTION: IP50 (standard), IP65 (special)



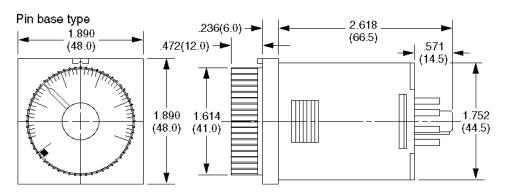
INDUSTRIAL SOLID STATE MODEL 1081 c. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

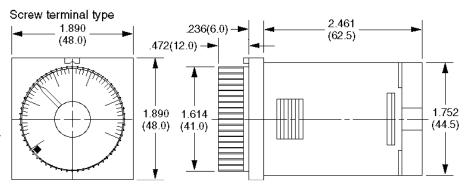
WIRING



DIMENSIONS INCH (MM)



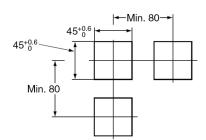
Model 1081 is not available with screw terminals - dimensions shown for model 1090 only.



MOUNTING MM

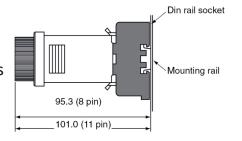
PANEL MOUNT Panel mount clip

RP-325 allows access to the timer face though the panel.



DIN RAIL MOUNT

8 Pin socket RP-320 has built in hold down clips and is DIN rail compatible.



INDUSTRIAL SOLID STATE MODEL 1081 NC. TIMER PLUG-IN

ORDERING DATA

ORDERING CODE		1081 -	1 - B - 2 - B - 1
BASIC MODEL NU	MBER		
10			
INPUT VOLTAGE			_
1	120 VAC		
2	240 VAC		
3	24 VAC		
4	24 VDC		
5	12 VDC		
TIME RANGE			
A			
	0.04 - 1.0 sec		
	0.2 - 5.0 sec		
	0.4 - 10 sec		
В			
	0.04 - 1.0 min		
	0.4 - 10 min	, i	
	0.2 - 5.0 min		
TIMING FUNCTIO	N		
2	OFF Delay		
OUTPUT —			
В	Relay DPDT		
DEGREE OF PROT	ECTION —————		
1	IP50 Standard		
2	IP65 Sealed unit	t	
APPLICABLE ACC	ESSORIES		
Se	e accesory section for detail	ls	
	8 pin socket	RP-320	
	8 pin reversible	socket RP-321	
	8 pin cable sock	ket RP-323	
	Panel mount cli	p RP-325	
	Stop rings	RP-327	



INDUSTRIAL SOLID STATE MODEL 1090 C. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

Multifunction timer with single time control.

Features:

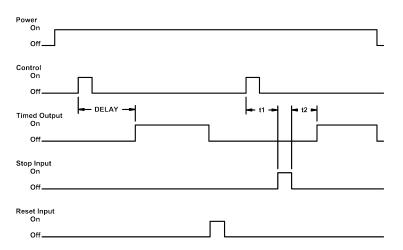
- •8 timing functions.
- •Control, stop and reset contacts independent of unit power.
- •Time ranges from 0.1sec to 500 hr.
- •100-240 VAC, 24 V AC/DC or 12 VDC input.
- •5 amp relay output.
- Power and output indication LEDs.



R

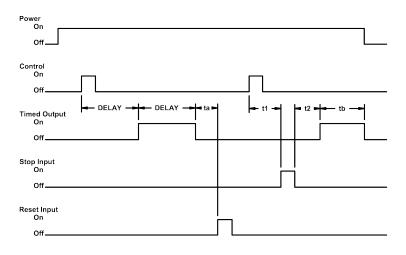


TIMING



ON - PULSE ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before output turns on.
- The output remains on until the unit is reset either by removing power or applying independent reset control
- Turning control on and off during delay time has no effect on the output or timing. (t1 + t2 = DELAY)

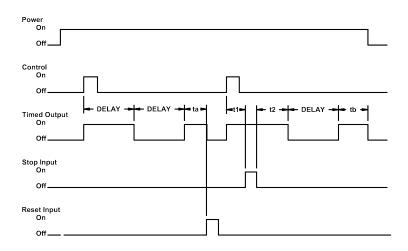


FL - PULSE REPEAT CYCLE START OFF

- Control is independent of unit power.
- When control turns on, the output remains off while delay time elapses.
- The output then turns on and remains on while delay time elapses.
- This cycle then repeats until power is removed from the unit or independent reset control is applied.
- Turning control on and off while cycling has no effect on the output or timing. (ta<DELAY; tb<DELAY; t1 + t2 = DELAY)

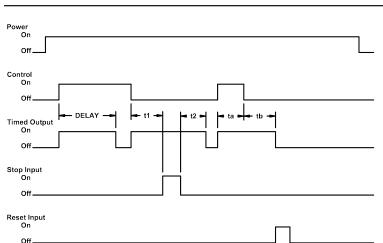
INDUSTRIAL SOLID STATE MODEL 1090 c. TIMER PLUG-IN KANSON ELECTRONICS, INC.

TIMING (CONT)



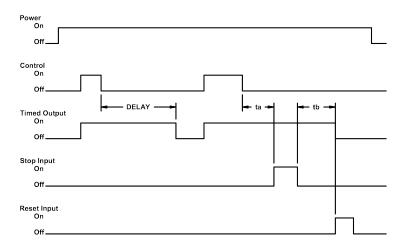
FO - PULSE REPEAT CYCLE START ON

- Control is independent of unit power.
- When control turns on, the output turns on while delay time elapses.
- The output then turns back off while delay time elapses.
- This cycle then repeats until power is removed from the unit or independent reset control is applied.
- Turning control on and off while cycling has no effect on the output or timing. (ta<DELAY; tb<DELAY; t1+t2=DELAY)



OF1 - MOTION DETECT

- Control is independent of unit power.
- When control changes, output turns on and delay time elapses before output returns to normal.
- If control changes during the delay time period, the output remains on and the delay time will restart. (t1+t2=DELAY; ta<DELAY; tb<DELAY)



SF - OFF DELAY

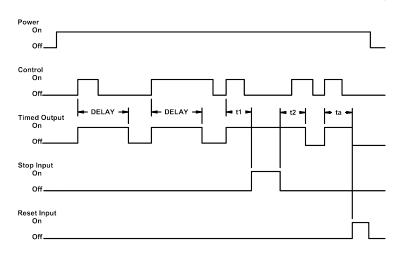
- Control is independent of unit power.
- When control turns on, the output turns on.
- When the control turns off, the delay starts and output turns off after time elapses.

(ta + tb = DELAY)

INDUSTRIAL SOLID STATE MODEL 1090 C. TIMER PLUG-IN

KANSON ELECTRONICS, INC.

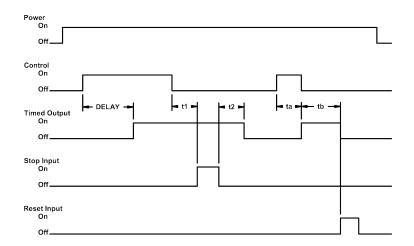
TIMING (CONT)



OS - PULSE INTERVAL

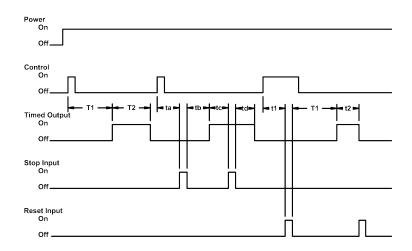
- Control is independent of unit power.
- When control turns on, the output turns on.
- Output remains on while delay time elapses.
- Turning control on and off while cycling has no effect on the output or timing.

(t1+t2=DELAY; ta<DELAY)



OF2 - NO DELAY / OFF DELAY

- Control is independent of unit power.
- When control changes, delay time elapses before output changes state.
- If control changes during the delay time period, the output changes state and the delay time restarts.
 (t1+t2=DELAY; ta<DELAY; tb<DELAY)



OC - PULSE ONE CYCLE

- Control is independent of unit power.
- When control turns on, delay time elapses before output turns on.
- The output remains on ~0.8 seconds then turns back off.
- Turning control on and off during delay time has no effect on the output or timing.

(T2 = 0.8 sec; ta+tb=T1; tc+td=T2; t1<T1; t2<T2)



INDUSTRIAL SOLID STATE MODEL 1090 L. TIMER PLUG-IN

SPECIFICATIONS

INPUT

VOLTAGE: 100-240VAC, 24VAC, 12VDC FREQUENCY: 50/60Hz (AC Models)

TOLERANCE (VOLTAGE): -15% to +10% of nominal

POWER CONSUMPTION: 10VA (100-240VAC), 2.5VA (24 VAC), 2W (12VDC & 24VDC)

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay MECHANICAL LIFE: 20,000,000 operations

ELECTRICAL LIFE: 100,000 operations minimum (at full rated load)

RATING: 5A @ 240VAC (resistive)

TIMING

TYPE: Multifunction programmable (Pulse ON Delay,

Repeat Cycle Start OFF, Repeat Cycle Start ON,

Motion Detect, OFF Delay, Pulse Interval ON Delay / OFF Delay, Pulse One Cycle)

REPEAT ACCURACY: ±0.3% of setting
RESET TIME: ±0.00 msec minimum

TIME RANGE: 0.1 seconds to 500 hours in 16 ranges

PHYSICAL

OPERATING TEMP: -10° to 50° C (-14° to 122° F)

TIMING VARIATION VS. TEMP: ±2% maximum

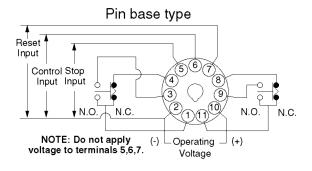
MOUNTING: Plug-in or Panel Mount

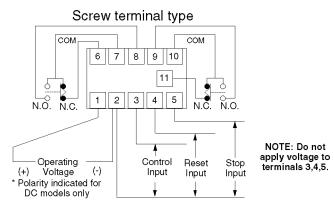
TERMINATION: 11-pin socket or screw terminals

HOUSING: Polycarbonate

DEGREE OF PROTECTION: IP50 (standard), IP65 (special)

WIRING





Control, Reset & Stop input is accomplished by isolated contact closure between indicated terminals.

INDUSTRIAL SOLID STATE MODEL 1090 PLUG-IN

DIMENSIONS & MOUNTING

Same as Model 1081

ORDERING DATA

ORDERING CO	ODE			1090 - 1 -	P - 3	- B	- 1 - 1
BASIC MODEL	NUMBER — 1090						
INPUT VOLTA	\GE						
	1	100-240 VAC					
	2	24 V AC/DC					
	3	12 VDC					
TIME RANGE		12 100					
TIME RANGE	Р						
		:	la ura	40 h			
	secs	mins	hrs	10 hrs			
	0.1-1.0	0.1-1.0	0.1-1.0	1.0-10			
	0.5-5.0	0.5-5.0	0.5-5.0	5.0-50			
	1.0-10	1.0-10	1.0-10	10-100			
	5.0-50	5.0-50	5.0-50	50-500			
TIMING FUNC							
	3	Selectable					
	3		av Bulsa Bana	at Cycla Start O			
				at Cycle Start O			
		=	-	N, Motion Detec			
			·	ON Delay / OFF	Delay,		
		Pulse One Cy	rcle				
OUTPUT -							
	В	Relay DPDT					
TERMINATION	l 						
	1	11 pin plug-i	n hase				
	2	Screw termin					
		sciew terrin	ials				
DEGREE OF P		1DE0.6: 1					
	1	IP50 Standar					
	2	IP65 Sealed i	unit				
APPLICABLE	ACCESSORIES						
	See accessory	y section for d	etails				
		11 pin socke		RP-322			
		11 pin socke		RP-324			
		Panel mount	ctip	RP-325			
		Stop rings		RP-327			



INDUSTRIAL SOLID STATE MODEL 1094 c. TIMER PANEL MOUNT

KANSON ELECTRONICS, INC.

Multifunction digital timer with single time control.

Features:

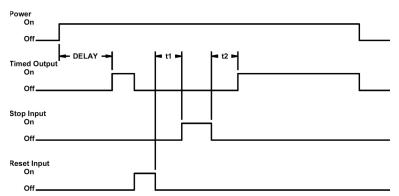
- •8 timing functions.
- •Control, stop and reset contacts independent of unit power.
- •Time ranges from 0.001sec to 9,999 hr.
- •100-240 VAC, 24 VAC or 12-24 VDC input.
- •5 amp relay or open collector transistor output.
- •EE-PROM memory setting and elapsed delay.







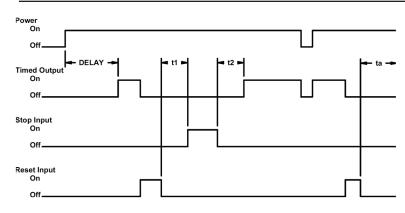
TIMING



A - ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before output turns on.
- The output remains on until the unit is reset either by removing power or by applying the independant reset input.

(t1+t2=DELAY)

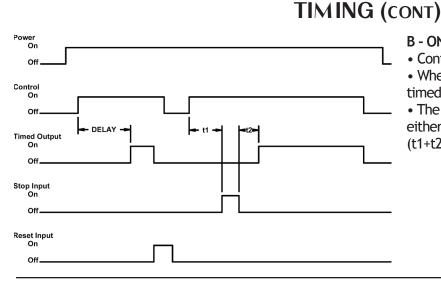


A2 - ON DELAY

- Control is affected with power application.
- When control turns on, delay time elapses before output turns on.
- The output remains on until the unit is reset by applying the independent reset input.
- Elapsed time and output state are retained in memory in the event of power or control interruption. (t1+t2=DELAY; ta<DELAY)

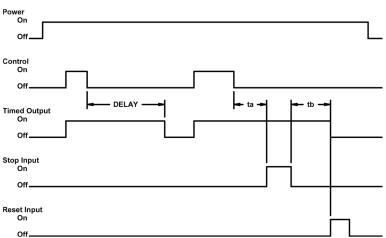


INDUSTRIAL SOLID STATE MODEL 1094 c. TIMER PANEL MOUNT **PANEL MOUNT** KANSON ELECTRONICS, INC.



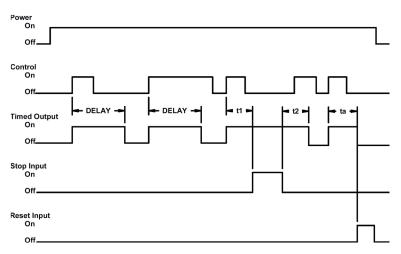
B-ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before timed output turns on.
- The timed output remains on until the unit is reset either by removing power or control. (t1+t2=DELAY)



C - OFF DELAY

- Control is independent of unit power.
- When control turns on, the output turns on.
- When control turns off, the delay starts and output turns off after time elapses. (ta+tb=DELAY)



D - PULSE INTERVAL

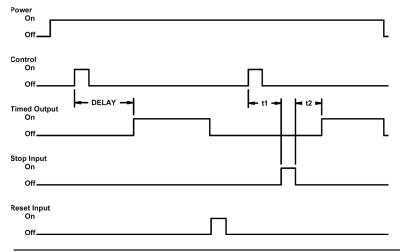
- Control is independent of unit power.
- When control turns on, the output turns on.
- Output remains on while delay time elapses.
- Turning control on and off during delay time has no effect on the output or timing.

(t1+t2=DELAY; ta<DELAY)



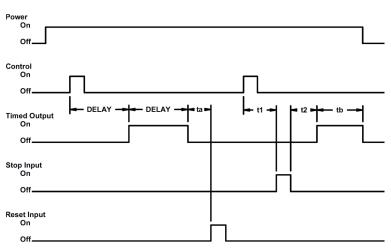
INDUSTRIAL SOLID STATE MODEL 1094 **PANEL MOUNT** KANSON ELECTRONICS, INC.

TIMING (CONT)



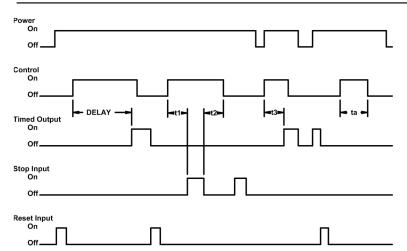
E - PULSE ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before
- The output remains on until the unit is reset either by removing power or applying independent reset input.
- Turning control on and off during delay time has no effect on the output or timing. (t1+t2=DELAY)



F - PULSE REPEAT CYCLE

- Control is independent of unit power.
- When control turns on, the output remains off while delay time elapses.
- The output then turns on while delay time elapses.
- This cycle then repeats until power is removed from the unit or independent reset control is applied
- Turning control on and off while cycling has no effect on the output or timing. (ta<DELAY; tb<DELAY; t1+t2=DELAY;)



G - TOTALIZED ON DELAY

- Control is independent of unit power.
- When control turns on, delay time elapses before output turns on.
- Elapsed time totalizes through interuptions in control.
- The output remains on until the unit is reset either by removing power or applying the independent reset control.
- Elapsed time and output state are retained in memory in the event of a control interruption. (t1+t2+t3=DELAY; ta<delay)



INDUSTRIAL SOLID STATE MODEL 1094 c. TIMER PANEL MOUNT

SPECIFICATIONS

INPUT

VOLTAGE: 100-240 V AC/DC, 24 VAC, 12-24 VDC

FREQUENCY: 50/60Hz (AC Models)

POWER CONSUMPTION: 2.5VA (AC Models), 2W (DC Models)

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay or transistor MECHANICAL LIFE: 10,000,000 operations (Relay only)

ELECTRICAL LIFE: Relay - 100,000 operations minimum (at full rated load)

Transistor - 10,000,000 operations min.

RATING: 5A @ 240VAC (resistive)

TIMING

TYPE: Multifunction REPEAT ACCURACY: ±0.005% of setting

RESET TIME: 20 msec

TIME RANGE: 0.001 seconds to 9999 hours

PHYSICAL

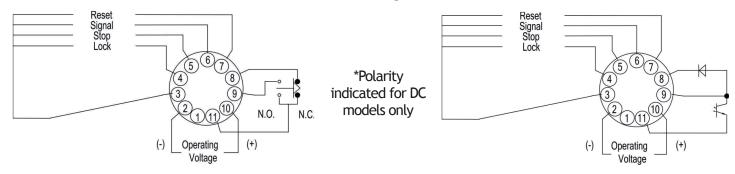
OPERATING TEMP: -10° to 50° C (-14° to 122° F)

TIMING VARIATION VS. TEMP: ±0.005%

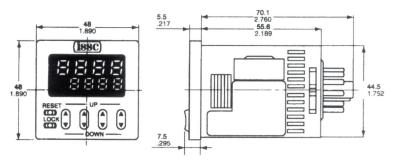
MOUNTING: Plug-in or Panel Mount

TERMINATION: 11-pin socket **HOUSING:** Polycarbonate

WIRING



DIMENSIONS INCH (MM)





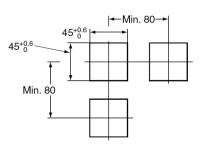
INDUSTRIAL SOLID STATE MODEL 1094 C. TIMER PANEL MOUNT

KANSON ELECTRONICS, INC.

MOUNTING MM

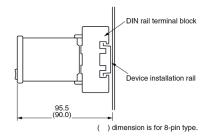
PANEL MOUNT

Panel mount clip RP-325 allows access to the timer face though the panel.



DIN RAIL MOUNT

11 Pin socket RP-322 has built in hold down clips and is DIN rail compatible.



ORDERING DATA

ORDERING	ORDERING CODE 1094 - 1 - P - 3					
BASIC MOD	EL NUMBER — 1094					
INPUT VOL	- '					
1111 01 102	1	100-240 VAC				
	2	12-24 VDC				
	3	24 VAC				
TIME RANG	_					
	– Р					
	0.001 sec to	9,999 hr				
TIMING FUN						
	3	Selectable				
		Α	ON Delay - Power Control			
		A2	ON Delay - Power Control - Memory*			
		В	ON Delay			
		C	OFF Delay			
		D	Pulse Interval			
		Е	Pulse ON Delay			
		F	Pulse Repeat Cycle			
		G	ON Delay - Totalizing			
	* A2 retains ela	psed time during p	ower off periods			
OUTPUT -						
	Α	Relay SPDT				
	C	Open collect	or transistor			

APPLICABLE ACCESSORIES

See accesory section for details

11 pin socket	RP-322
11 pin cable socket	RP-324
Panel mount clip	RP-325
Protective cover	RP-326

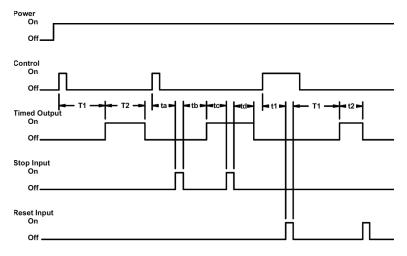
Multifunction digital timer with dual time control.

Features:

- •6 timing functions.
- •Control, stop and reset contacts independent of unit power.
- •Time ranges from 0.001sec to 9,999 hr.
- •100-240 VAC, 24 VAC or 12-24 VDC input.
- •5 amp relay or open collector transistor output.
- •EE-PROM memory setting and elapsed delay.

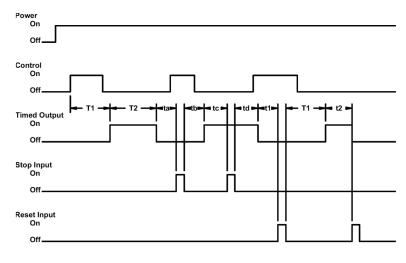


TIMING



PULSE A - ONE CYCLE

- Control is independent of unit power.
- When control turns on, T1 delay time elapses before output turns on.
- The T2 delay then starts and output turns back off once time has elapsed.
- Turning control on and off during delay time has no effect on the output or timing. (ta+tb=T1; tc+td=T2; t1<T1; t2<T2)



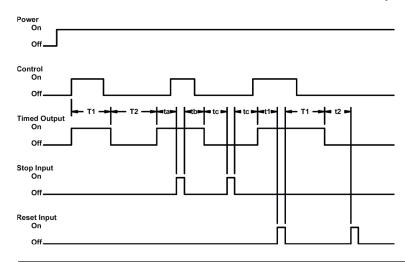
PULSE B - REPEAT CYCLE START OFF

- Control is independent of unit power.
- When control turns on, the output remains off while T1 delay time elapses.
- The output then turns on while T2 delay time elapses.
- This cycle then repeats until power is removed from the unit or independent reset control is applied.
- Turning control on of off while cycling has no effect on the output or timing.

(ta+tb=T1; tc+td=T2; t1<T1; t2<T2)

INDUSTRIAL SOLID STATE MODEL 1096 **PANEL MOUNT** KANSON ELECTRONICS, INC.

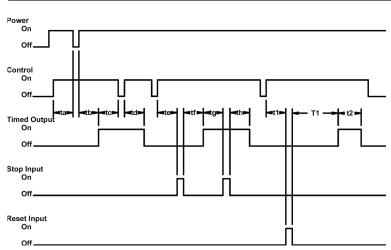
TIMING (CONT)



PULSE C - REPEAT CYCLE START ON

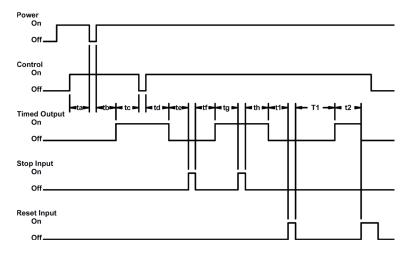
- Control is independent of unit power.
- When control turns on, the output turns on while T1 delay time elapses.
- The output then turns back off while T2 delay time
- This cycle then repeats until power is removed from the unit or independent reset control is applied.
- Turning control on and off while cycling has no effect on the output or timing.

(ta+tb=T1; tc+td=T2; t1<T1; t2<T2)



TOTAL A - ONE CYCLE

- Control is independent of unit power.
- When control turns on, T1 delay time elapses before output turns on.
- The T2 delay time then starts and output turns back off once time has elapsed.
- Elapsed time and output state are retained in memory in the event of power or control interruption. (ta+tb=T1; tc+td=T2; te+tf=T1; tg+th=T2; t1<T1; t2<T2)



TOTAL B - REPEAT CYCLE START OFF

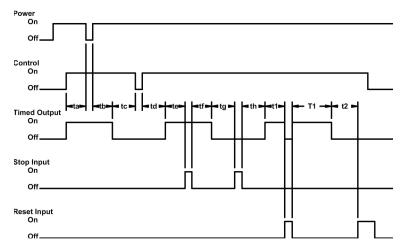
- Control is independent of unit power.
- When control turns on, the output turns on while T1 delay time elapses.
- The output then turns on while T2 delay time
- This cycle then repeats until an independent reset signal is applied.
- Elapsed time and output state are retained in memory in the event of power or control interruption. (ta+t2=T1; tc+td=T2; te+tf=T1; tg+th=T2; t1<T1; t2<T2)



INDUSTRIAL SOLID STATE MODEL 1096 c. TIMER PANEL MOUNT

KANSON ELECTRONICS, INC.

TIMING (CONT)



TOTAL C - REPEAT CYCLE START ON

- Control is independent of unit power.
- When control turns on, T1 delay time elapses before output turns on.
- The output turns back off while T2 delay time elapses.
- This cycle then repeats until an independent reset signal is applied.
- Elapsed time and output state are retained in memory in the event of power or control interruption. (ta+t2=T1; tc+td=T2; te+tf=T1; tg+th=T2; t1<T1; t2<T2)

SPECIFICATIONS

INPUT

VOLTAGE: 100-240VAC/DC, 24VAC, 12-24VDC

FREQUENCY: 50/60Hz (AC Models)

POWER CONSUMPTION: 2.5VA (AC Models), 2.5W (DC Models)

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay or transistor MECHANICAL LIFE: 10,000,000 operations (Relay only)

ELECTRICAL LIFE: Relay - 100,000 operations minimum (at full rated load)

Transistor - 10,000,000 operations min.

RATING: Relay - 5A @ 240VAC (resistive)

Transistor - 100mA, 30VDC maximum

TIMING

TYPE: Multifunction
REPEAT ACCURACY: ±0.005% of setting

RESET TIME: 20 msec

TIME RANGE: 0.001 seconds to 9999 hours

PHYSICAL

OPERATING TEMP: -10° to 50° C (-14° to 122° F)

TIMING VARIATION VS. TEMP: ±0.005%

MOUNTING: Plug-in or Panel Mount

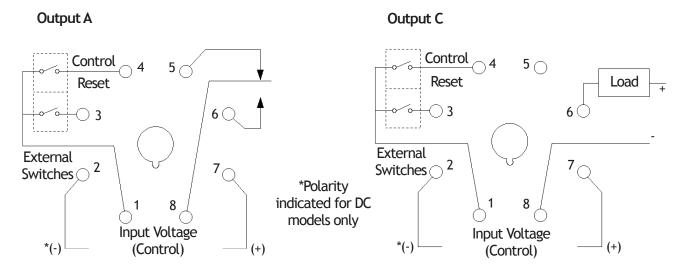
TERMINATION: 8-pin socket **HOUSING:** Polycarbonate



INDUSTRIAL SOLID STATE MODEL 1096 c. TIMER PANEL MOUNT

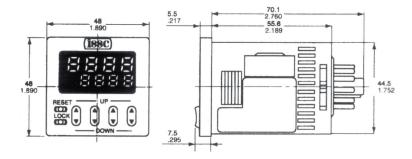
KANSON ELECTRONICS, INC.

WIRING



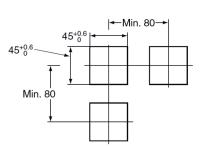
Do not apply voltage to pins 3 and 4. Control and Reset accomplished by isolated contact closure.

DIMENSIONS

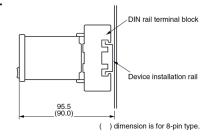


MOUNTING

PANEL MOUNT
Panel mount clip
RP-325 allows
access to the
timer face though
the panel.

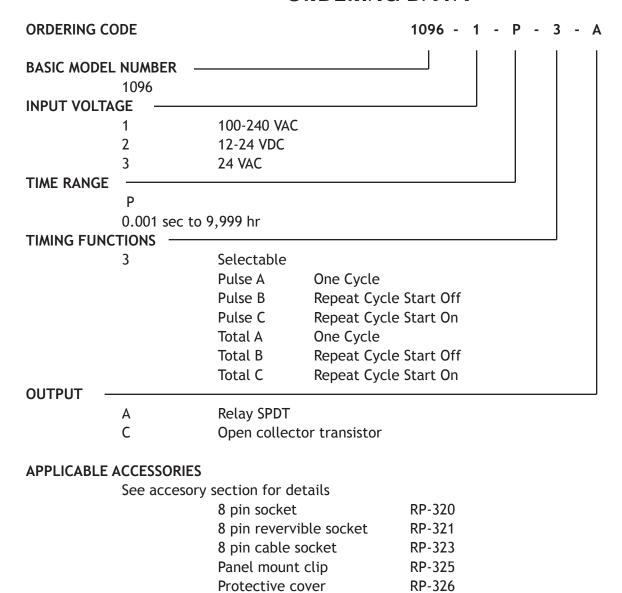


Bin socket RP-320 has built in hold down clips and is DIN rail compatible.



INDUSTRIAL SOLID STATE MODEL 1096 c. TIMER PANEL MOUNT

ORDERING DATA





INDUSTRIAL SOLID STATE MODEL 2110 BLOCK

KANSON ELECTRONICS, INC.

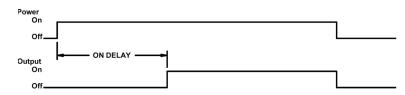
Compact encapsulated timer with simple two-wire installation.

Features:

- Time ranges selectable from 0.1 to 10230 seconds.
- 24 to 140 V AC/DC or 100 to 240 V AC/DC input.
- 1Amp solid state output.



TIMING



ON DELAY

- Control is affected with power application.
- When power turns on, delay time elapses before timed output turns on. The timed output remains on until the unit is reset by removing power.

SPECIFICATIONS

INPUT

VOLTAGE: 24-140VAC/DC or 100-240VAC/DC

FREQUENCY: 50/60Hz or DC
TOLERANCE (VOLTAGE): ±10% of nominal
POWER CONSUMPTION: 1VA maximum
TRANSIENT PROTECTION: Transient protected

OUTPUT

TYPE: Solid State N.O.

RATING: 1A @ 240VAC/DC maximum (10A 1 cycle surge)

VOLTAGE DROP: 2.5V typical @ 1A

TIMING

TYPE: On delay

REPEAT ACCURACY: ≤0.5% of setting

RESET TIME: ≤50 msec

TIME RANGE: 0.1 to 10230 seconds in 3 ranges

RANGE TOLERANCE: ±5% of setting

CONTROL: Power applied to input initiates timing cycle

PHYSICAL

OPERATING TEMP: -40° to 80° C (-40° to 176° F)

TIMING VARIATION VS. TEMP: ±5% maximum

MOUNTING: Surface with #8 or #10 screws

TERMINATION: 0.250 inch male guick connect terminals

HOUSING: Plastic

CDECIFIC A TIONS

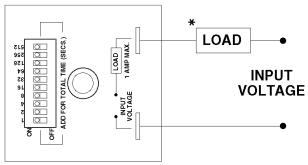


INDUSTRIAL SOLID STATE MODEL 2110 c. TIMER BLOCK

KANSON ELECTRONICS, INC.

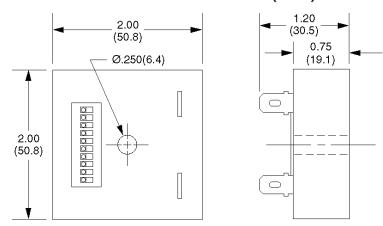
WIRING

Warning: Connection of power without a series load will cause permanent damage.



^{*}Load may be connected to either side of line.

DIMENSIONS INCH (MM)



ORDERING DATA

ORDERING CODE		2110 - 1 - A - 1 - C	
BASIC MODEL NUMBER - 2110 INPUT VOLTAGE			
1	24 - 140 V AC/DC		
2	100 - 240 V AC/DC		
TIME RANGE (seconds) –			
Α	0.1 - 102.3		
В	1.0 - 1023		
С	10 - 10230		
TIMING FUNCTION ——			
1	ON Delay		
OUTPUT			
C	Solid state N.O. 1 amp maxin	num	



INDUSTRIAL SOLID STATE MODEL 2115 TIMER BLOCK

KANSON ELECTRONICS, INC.

Compact encapsulated timer with a simple three-wire installation.

Features:

- Time ranges from 0.1 to 10230 seconds.
- 120 VAC or 240 VAC
- 1Amp solid state output.

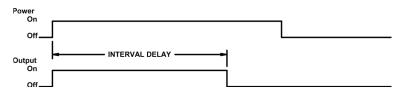






INTERVAL

TIMING



INTERVAL

- Control is affected with power application.
- When power is applied, output turns on and remains on till delay time is elapsed.

SPECIFICATIONS

INPUT

VOLTAGE: 120VAC or 240VAC

FREQUENCY: 50/60Hz

TOLERANCE (VOLTAGE): ±15% of nominal **POWER CONSUMPTION:** 1VA maximum TRANSIENT PROTECTION: Transient protected

OUTPUT

TYPE: Solid State N.O.

1A @ 240VAC/DC maximum (10A 1 cycle surge) **RATING:**

VOLTAGE DROP: 2.5V typical @ 1A

TIMING

MAINTAINED TYPE: Interval

REPEAT ACCURACY: ≤0.5% of setting **RESET TIME:** ≤50 msec

0.1 to 10230 seconds in 3 ranges TIME RANGE:

RANGE TOLERANCE: ±5% of setting

CONTROL: Power applied to input initiates timing cycle

PHYSICAL

 -40° to 60° C (-40° to 140° F) **OPERATING TEMP:**

TIMING VARIATION VS. TEMP: ±5% maximum

MOUNTING: Surface with #8 or #10 screws

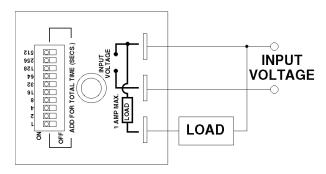
TERMINATION: 0.250 inch male quick connect terminals

HOUSING: Plastic

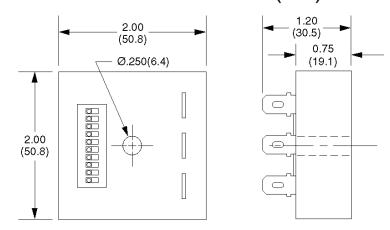


INDUSTRIAL SOLID STATE MODEL 2115 c. TIMER BLOCK

WIRING



DIMENSIONS INCH (MM)



ORDERING DATA

ORDERING	CODE		2115	-	1	-	В	-	5	-	C
BASIC MOD	EL NUMBER -										
	2110										
INPUT VOL	TAGE ———				J						
	1	120 VAC									
	2	240 VAC									
TIME RANG	E (seconds) -						┙				
	Α	0.1 - 102.3									
	В	1.0 - 1023									
	C	10 - 10230									
TIMING FUN	NCTION								┙		
	5	Interval									
OUTPUT -											┙
	C	Solid state N.O. 1 amp maxim	ıum								



INDUSTRIAL SOLID STATE MODEL 1105C c. COUNTER PANEL MOUNT

KANSON ELECTRONICS, INC.

Multifunction digital counter with dual input control.

Features:

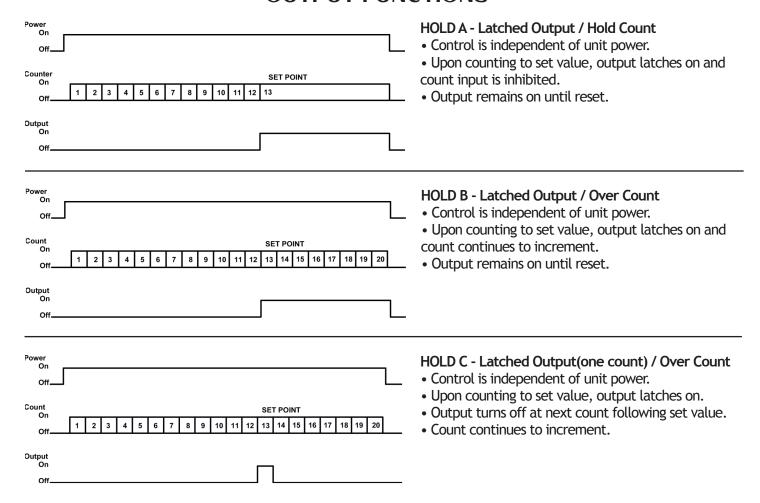
- •7 output control functions.
- •5 input modes.
- Both input and reset contacts independent of unit power.
- •100-240 VAC or 12-24 VDC input.
- •5 amp relay or open collector transistor output.
- •Battery backed up memory.



UR



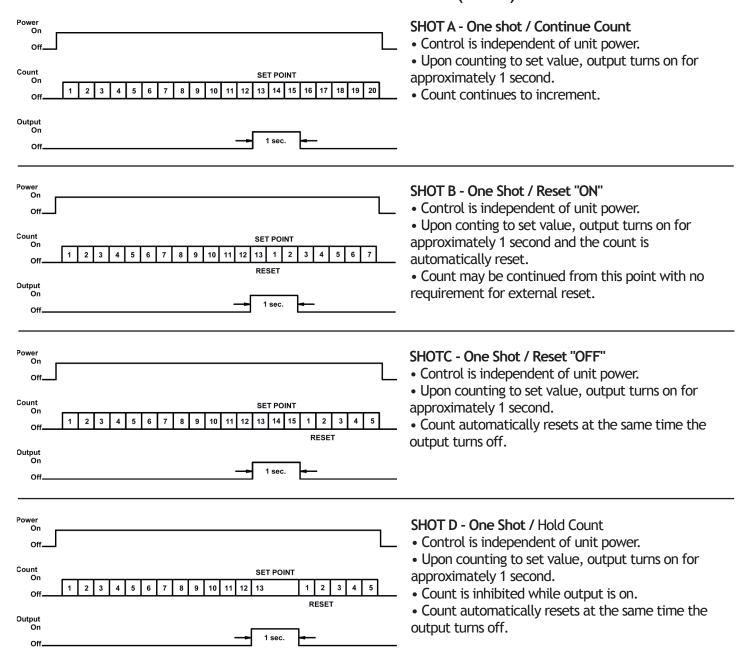
OUTPUT FUNCTIONS





INDUSTRIAL SOLID STATE MODEL 1105C COUNTER PANEL MOUNT

OUTPUT FUNCTIONS (CONT)





INDUSTRIAL SOLID STATE MODEL 1105C COUNTER PANEL MOUNT

KANSON ELECTRONICS, INC.

INPUT MODE

UP - Count up to set value. •Input 1 is count input.

•Input 2 inhibits count input.

DOWN - Count down from set value •Input 1 is count input.

•Input 2 inhibits count input.

DIR - Directional count - UP or DOWN • Input 1 is count input.

Input 2 off - count will go up.Input 2 on - count will go down.

IND - Independant inputs •Input 1 counts up.

•Input 2 counts down.

PHASE - Phasing of inputs • If input 1 is phased ahead of input 2 - count is up.

determines count direction •If input 2 is phased ahead of input 1 - count is down.

SPECIFICATIONS

INPUT

VOLTAGE: 100-240VAC/DC, 12-24VAC FREQUENCY: 50/60Hz (AC Models)
POWER CONSUMPTION: 2.5VA (AC Models)

2.5W (DC Models)

TRANSIENT PROTECTION: MOV

OUTPUT

TYPE: Electromechanical relay or transistor MECHANICAL LIFE: 10,000,000 operations (Relay only)

ELECTRICAL LIFE: Relay - 100,000 operations minimum (at full rated load)

Transistor - 10,000,000 operations min.

RATING: Relay - 5A @ 240VAC (resistive)

Transistor - 100mA, 30VDC maximum

COUNTER OUTPUT

MODES: 7 (Programmable)

DISPLAY: 6 digit LCD

CONTROL INPUT

TYPE: Multifunction

SPEED: 30/sec. or 5000/sec.

NUMBER OF INPUTS: Two

INPUT METHOD: Isolated contact or transistor

PHYSICAL

OPERATING TEMP: -10° to 50° C (-14° to 122° F)

MOUNTING: Plug-in or Panel Mount

TERMINATION: Relay Output - 11-pin socket, Transistor Output - 8-pin socket

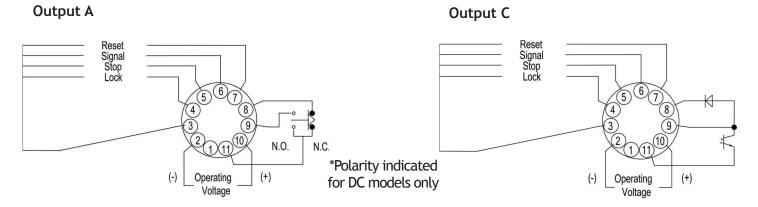
HOUSING: Polycarbonate



INDUSTRIAL SOLID STATE MODEL 1105C COUNTER PANEL MOUNT

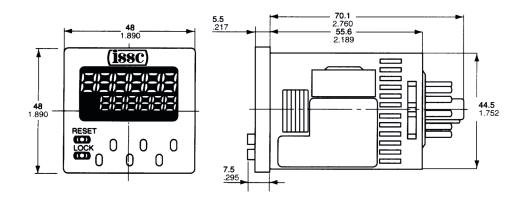
KANSON ELECTRONICS, INC.

WIRING



Do not apply voltage to pins 5,6,7. Reset and Count inputs accomplished by isolated contact closure.

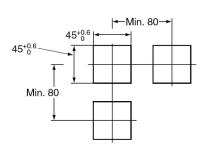
DIMENSIONS INCH (MM)



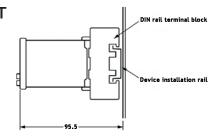
MOUNTING MM

PANEL MOUNT
Panel mount clip
RP-325 allows
access to the
timer face though

the panel.



Pin socket RP-320 has built in hold down clips and is DIN rail compatible.





INDUSTRIAL SOLID STATE MODEL 1105C NC. COUNTER PANEL MOUNT

ORDERING DATA

ORDERING C	ODE			1105C - 1 -	P - 3	3 - A
BASIC MODEI	L NUMBER —					
	1105C					
INPUT VOLTA	\GE					
	1	100-240 VAC				
	2	12-24 VDC				
INPUT MODE						
	Р					
	UP	Counts up				
	DOWN	Counts down				
	DIR	Directional co	ount			
	IND	Independant	inputs			
	PHASE Phased	d inputs				
TIMING FUNC	CTIONS —	-				J
	3	Selectable				
		HOLD A	Latched Outp	ut / Hold Count		
		HOLD B	•	ut / Over Count		
		HOLD C	Latched Outp	ut (one count) / (One Cou	unt
		SHOT A	One Shot / Co	,		
		SHOT B	One Shot / Re	eset "ON"		
		SHOT C	One Shot / Re	eset "OFF"		
		SHOT D	One Shot / Ho	old Count		
OUTPUT _						
	Α	Relay SPDT				
	С	Open collecto	or transistor			
APPLICABLE	ACCESSORIES					
		section for det	ails			
		11 pin socket		RP-322		
		11 pin cable s		RP-324		
		Panel mount		RP-325		
		Protective co	•	RP-326		



INDUSTRIAL SOLID STATE MODEL 1120H NC. HOURMETER PANEL MOUNT

KANSON ELECTRONICS, INC.

The Model 1120H Features:

- Ideal for scheduling routine maintanance.
- DC powerd.
- Suitable for harsh environments IP66 compliant.
- High performance compact sync. motor.
- Ultra-accurate quartz oscillator.



SPECIFICATIONS

INPUT

VOLTAGE: 12 or 24 VDC **POWER CONSUMPTION:** 1.5 W at 25 °C

TIMING

RANGE: 0.0 to 9999.9 Hours

MINIMUM DISPLAY: 6 Minutes

PHYSICAL

VIBRATION RESISTANCE: 10 to 55 Hz: 1 cycle/min double amplitude

of 0.5 mm (10 min on 3 axes)

SHOCK RESISTANCE: Functional: Min. 98m/s² (4 times on 3 axes)

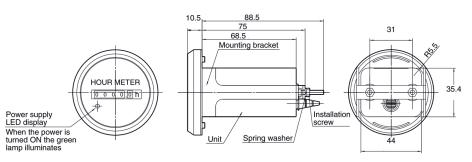
Destructive: 980m/s² (4 times on 3 axes)

OPERATING TEMP: -20° to 60° C (-4° to 140° F)
OPERATING HUMIDITY: 45% to 85% relative humidity

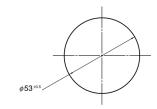
TERMINATION: Screw terminals

HOUSING: Plastic - IP66 compliant at panel face

DIMENSIONS MM



Panel cutout dimensions



ORDERING DATA

ORDERING CODE

BASIC MODEL NUMBER

1120H

INPUT VOLTAGE

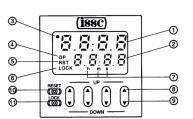
1 12 VDC
2 24 VDC



DIGITAL CONTROLLER PROGRAMMING INSTRUCTIONS

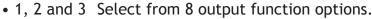
1094 PROGRAMMING

- 1 Elapsed time display
- Set time display
- 3 Time delay indicator
- Controlled output indicator
- Reset indicator
- 6 Lock indicator
- Time units display



- UP keys
- Changes the corresponding digit of the set time in the addition direction (upwards)
- 9 DOWN keys
- Changes the corresponding digit of the set time in the subtraction direction (downwards)
- RESET switch Resets the elapsed time and the output
- LOCK switch
 Locks the operation of all keys on
 the unit

DIP Switches:



• 4 Set minimum input signal length

(reset, signal, stop and lock).

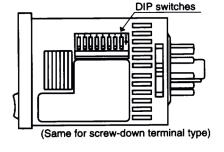
• 5 Sets direction of time delay

(addition or subtraction).

• 6, 7 and 8 Select T1 time range.

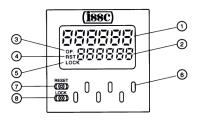
(0.001 s to 9.999 s thru 0.1 h to 999.9h)

Set dip switches before installation!

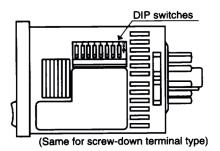


1105C PROGRAMMING

- ① Counter display
- ② Set value display
- 3 Controlled output indicator
- Reset indicator
- 5 Lock indicator



- (§) UP keys Increases the value of the corresponding digit of the set value display
- ③ RESET switch Resets the set value and the output
- LOCK switch
 Locks the operation of all
 keys on the unit



DIP Switches:

- 1, 2 and 3 Select from 7 output function options.
- 4 Set minimum input signal length

(reset, input 1, input 2 and lock).

- 5 Sets maximum count speed
 - (30 Hz or 5kHz).
- 6, 7 and 8 Select from 5 input options.

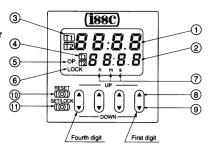
Set dip switches before installation!



DIGITAL CONTROLLER PROGRAMMING INSTRUCTIONS

1096 PROGRAMMING

- 1 Elapsed time display
- Set time display
- T₁/T₂ operation indicator
 T₁/T₂ setting value
- selectable indicator
- ⑤ Controlled output indicator
- 6 Lock indicator
- Time units display



- UP keys
- Changes the corresponding digit of the set time in the addition direction (upwards)
- DOWN keys
- Changes the corresponding digit of the set time in the subtraction direction (downwards)
- 10 RESET switch
 - Resets the elapsed time and the output
- 1 Set/lock switch

Changes over the display between T₁/T₂ settings, sets the operational mode, checks the operational mode and locks the operation of each key (such as up, down or reset key).

Checking Timing Function:

Hold down (SET/LOCK). Toggle 2nd key up or down. Release (SET/LOCK). Display returns to normal after two seconds.

Changing Timing Function:

Hold down (SET/LOCK). Toggle 1st key up or down. Release (SET/LOCK). Toggle 1st key to select desired timing function. Press (RESET) key to accept timing function. Procedure is independant of T1 or T2.

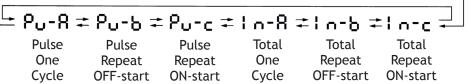
Setting T1 and T2:

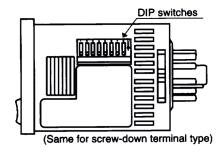
Press (SET/LOCK) key to switch between T1 and T2. Time is set using the toggle keys on the front of the timer. Each key is for the corresponding digit on the display.

Setting The Lock:

Hold down (SET/LOCK). Toggle 4th key up or down. Release (SET/LOCK). Lock is set. Repeat procedure to unlock.

Timing function representations:





DIP Switches:

- 1, 2 and 3 Select T1 time range.
 - (0.001 s to 9.999 s thru 0.1 h to 999.9h)
- Set minimum input signal length • 4
 - (reset, signal, and lock).
- 5 Sets direction of time delay
 - (addition or subtraction).
- 6, 7 and 8 Select T2 time range. (0.001 s to 9.999 s thru 0.1 h to 999.9h)

Set dip switches before installation!