

**INDUSTRIAL SOLID STATE
MULTIFUNCTION TIMER**

**MODEL 1090
PLUG-IN / PANEL MOUNT**



Multifunction—Multiple Time Ranges

FEATURES:

- 5 programmable timing functions
- 12 programmable time ranges from .02 secs to 100 hours
- Auto-calibrating dial provides direct reading of time setting in every range
- Wide range of operating voltage options from 12VDC to 240 VAC
- LED indicators for Power & Operate

ORDERING DATA

ORDERING CODE (Example: 1090-3-P-3-B)	1090	-	3	-	P	-	3	-	B
BASIC MODEL NUMBER	1090								
INPUT VOLTAGE	3								
TIME RANGE	P								
TIMING FUNCTION	B								
OUTPUT	B								

INPUT VOLTAGE

1	120VAC
2	240VAC
3	24VAC
4	24VDC
5	12VDC

TIME RANGE

P (Includes the following ranges)

.02 sec-1 sec	.02 min-1 min	.02 hr-1 hr
.10 sec-5 sec	.10 min-5 min	.10 hr-5 hr
.20 sec-10 sec	.20 min-10 min	.20 hr-10 hr
2.00 sec-100 sec	2.00 min-100 min	2.00 hr-100 hr

TIMING FUNCTION

3	Programmable
A	On Delay
B	One shot, interval
C	One shot, On/Off
D	Off Delay
E	Repeat cycle

OUTPUT

B	Relay DPDT
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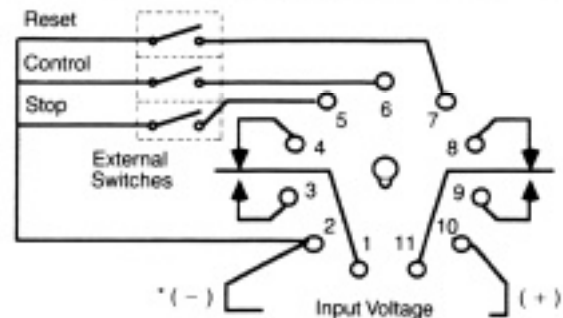
APPLICABLE ACCESSORIES

11 pin socket	RP-322
11 pin cable plug	RP-324
Panel mounting clamp	RP-325
Protective cover	RP-326

SPECIFICATIONS

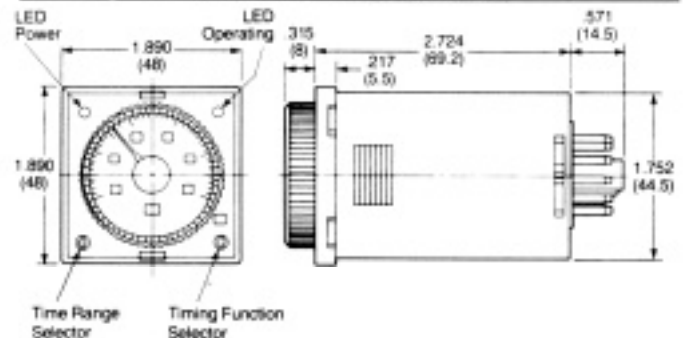
INPUT	VOLTAGE: 120VAC, 240VAC, 24VAC, 24VDC, 12VDC FREQUENCY: 50/60Hz (AC models) POWER CONSUMPTION: 10VA (AC models) 2W (DC models) TRANSIENT PROTECTION: MOV
OUTPUT	TYPE: Electromechanical Relay MECHANICAL LIFE: 10,000,000 operations ELECTRICAL LIFE: 100,000 operations minimum (at full rated load) RATING: 5A at 250VAC (resistive)
TIMING	TYPE: Multifunction REPEAT ACCURACY: ± .3% of setting TIMING RANGE: .02 secs to 100 hr in 12 ranges RESET TIME: < 100 ms at maximum time setting
PHYSICAL	OPERATING TEMPERATURE: - 10° to + 50° C (14° to 122° F) TIMING VARIATION VS TEMPERATURE: ± 2% maximum MOUNTING: Plug-in or panel mount TERMINATION: 11 pin socket HOUSING: Polycarbonate

WIRING



* Polarity indicated for DC models only.

DIMENSIONS inches (millimeters)



**INDUSTRIAL SOLID STATE
MULTIFUNCTION TIMER**

MODEL 1090

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TIMERS & FLASHERS

OPERATION

FUNCTION SELECTION	CONTROL WIRING	TIMING	
A: On Delay	Jumper terminals 2 & 6. Control via application of input power. (Terminals 2 & 10)		<p>Adjustable time delay on energizing</p> <ul style="list-style-type: none"> Closing the control circuit starts time delay Opening the control circuit during timing resets time delay to zero—no accumulation of time delay or false output
B: One Shot, Interval	One Shot Continuous power on input terminals 2 & 10. Control via isolated contact closure between terminals 2 & 6.		<p>Adjustable time output pulse</p> <ul style="list-style-type: none"> Closing the control circuit initiates timed output pulse Opening and closing control circuit during timing will not effect timing or output
	Maintained Interval Jumper terminals 2 & 6. Control via application of input power. (Terminals 2 & 10)		<p>Adjustable timed output interval</p> <ul style="list-style-type: none"> Closing the control circuit starts timed output interval Opening the control circuit during timing resets the time delay to zero and de-energizes the output
C: One Shot, On/Off (Retriggerable One Shot)	Continuous power on input terminals 2 & 10. Control via isolated contact closure between terminals 2 & 6.		<p>Adjustable time output pulse</p> <ul style="list-style-type: none"> Closing the control circuit initiates timed output pulse Opening or closing control circuit during timing will reset the timing cycle
D: Off Delay	Continuous power on input terminals 2 & 10. Control via isolated contact closure between terminals 2 & 6.		<p>Adjustable time delay on de-energizing</p> <ul style="list-style-type: none"> Closing the control circuit energizes output Opening the control circuit starts time delay Reclosing the control circuit during timing resets time delay to zero—no accumulation of time delay or false output
E: Repeat Cycle	Jumper terminals 2 & 6. Control via application of input power (Terminals 2 & 10)		<p>Adjustable repeat cycle</p> <ul style="list-style-type: none"> Closing the control circuit starts the timing sequence Opening the control circuit during either timing period resets both time delays to zero, and de-energizes the output

NOTE: The "Reset" and "Stop" functions are actuated by isolated contact closure between the appropriate terminals. These functions are utilized as applications may require:

- "Reset" will reset the timer at any point during the timing cycle. Ordinarily the timer resets upon removal of control or power.
- "Stop" causes the timing action to stop at any point during the timing cycle. Timing resumes from the stopped point when the "Stop" signal is removed.

**INDUSTRIAL SOLID STATE
TIMER**

**MODEL 1073
PLUG-IN / PANEL MOUNT**



On Delay



FEATURES:

- 12 programmable time ranges from .02 secs to 100 hours
- Auto-calibrating dial provides direct reading of time setting in every range.
- DPDT timed output or optional SPDT timed plus SPDT instantaneous
- Wide range of operating voltage options from 12VDC to 240 VAC
- LED indicators for Power & Operate

ORDERING DATA

ORDERING CODE 1073 - 1 - P - 1 - A
(Example: 1073-1-P-1-A)

BASIC MODEL NUMBER
1073

INPUT VOLTAGE
1 120VAC
2 240VAC
3 24VAC
4 24VDC
5 12VDC

TIME RANGE
P (includes the following time ranges)
.02 sec-1 sec .02 min-1 min .02 hr-1 hr
.10 sec-5 sec .10 min-5 min .10 hr-5 hr
.20 sec-10 sec .20 min-10 min .20 hr-10 hr
2.00 sec-100 sec 2.00 min-100 min 2.00 hr-100 hr

TIMING FUNCTION
1 On Delay

OUTPUT
A Instant Relay—1 SPDT
Timed Relay—1 SPDT
B Relay DPDT

APPLICABLE ACCESSORIES

- 8 pin socket RP-320
- 8 pin reversible socket RP-321
- 8 pin cable socket RP-323
- Panel mount clamp RP-325
- Protective cover RP-326

SPECIFICATIONS

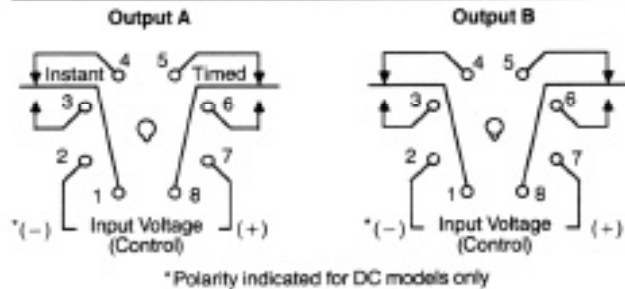
INPUT
VOLTAGE: 120VAC, 240VAC, 24VAC, 24VDC, 12VDC
FREQUENCY: 50/60 Hz (AC models)
TOLERANCE (VOLTAGE): -20% to +10% of nominal
POWER CONSUMPTION: 10VA (AC models)
2W (DC models)
TRANSIENT PROTECTION: MOV

OUTPUT
TYPE: Electromechanical relay
MECHANICAL LIFE: 10,000,000 operations
ELECTRICAL LIFE: 100,000 operations minimum
(at full rated load)
RATING: 5A at 250VAC (resistive)

TIMING
TYPE: On Delay
REPEAT ACCURACY: ± .3% of setting
TIMING RANGE: .02 secs to 100 hrs in 12 ranges
RESET TIME: < 100 ms at maximum time setting

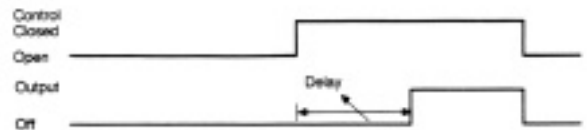
PHYSICAL
OPERATING TEMPERATURE: -10° to +50°C (14°-122°F)
TIMING VARIATION VS TEMPERATURE: ±2% maximum
MOUNTING: Plug-in or panel mount
TERMINATION: 8 pin socket
HOUSING: Polycarbonate

WIRING



OPERATION

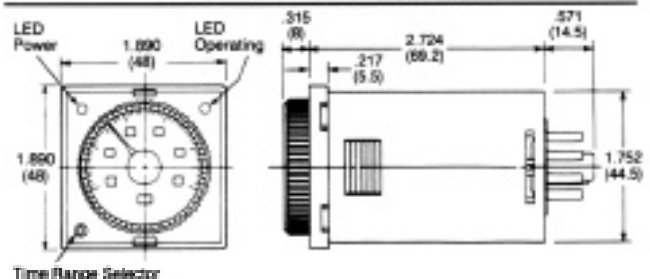
On Delay



Adjustable time delay on energizing

- Closing the control circuit starts time delay
- Opening the control circuit during timing resets time delay to zero—no accumulation of time delay or false output

DIMENSIONS inches (millimeters)



INDUSTRIAL SOLID STATE TIMER

MODEL 1068 PLUG-IN / PANEL MOUNT

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TIMERS & FLASHERS



Repeat Cycle

FEATURES:

- Repeat cycle operation in a compact, plug-in unit
- ON and OFF times are independently adjustable
- 12 programmable time ranges from .02 secs to 100 hours
- Auto-calibrating dial provides direct reading of time setting in every range
- LED indicators for Output On and Output Off
- Wide range of operating voltage options from 12VDC to 240VAC

ORDERING DATA

ORDERING CODE (Example: 1068-1-P-9-B)	1068	-	1	-	P	-	9	-	B
BASIC MODEL NUMBER	1068								
INPUT VOLTAGE	1								
1	120VAC								
2	240VAC								
3	24VAC								
4	24VDC								
5	12VDC								
TIME RANGE	P								
(Includes the following ranges)									
.02 sec-1 sec	.02 min-1 min	.02 hr-1 hr							
.10 sec-5 sec	.10 min-5 min	.10 hr-5 hr							
.20 sec-10 sec	.20 min-10 min	.20 hr-10 hr							
2.00 sec-100 sec	2.00 min-100 min	2.00 hr-100 hr							
TIMING FUNCTION	9								
9 Repeat Cycle									
OUTPUT	B								
B Relay DPDT									

APPLICABLE ACCESSORIES

8 pin socket	RP-320
8 pin reversible socket	RP-321
8 pin cable socket	RP-323
Panel mount clamp	RP-325
Protective cover	RP-326

SPECIFICATIONS

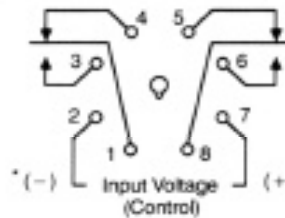
INPUT
VOLTAGE: 120VAC, 240VAC, 24VAC, 24VDC, 12VDC
FREQUENCY: 50/60 Hz (AC models)
TOLERANCE (VOLTAGE): - 20% to + 10% of nominal
POWER CONSUMPTION: 10VA (AC models)
 2W (DC models)
TRANSIENT PROTECTION: MOV

OUTPUT
TYPE: Electromechanical Relay
MECHANICAL LIFE: 10,000,000 operations
ELECTRICAL LIFE: 100,000 operations minimum
 (at full rated load)
RATING: 5A at 250VAC (resistive)

TIMING
TYPE: Repeat Cycle
REPEAT ACCURACY: ± .3% of setting
TIMING RANGE: .02 secs to 100 hr in 12 ranges
RESET TIME: < 300 ms at maximum time setting

PHYSICAL
OPERATING TEMPERATURE: - 10° to + 50°C (14° to 122°F)
TIMING VARIATION VS TEMPERATURE: ± 2% maximum
MOUNTING: Plug-in or panel mount
TERMINATION: 8 pin socket
HOUSING: Polycarbonate

WIRING

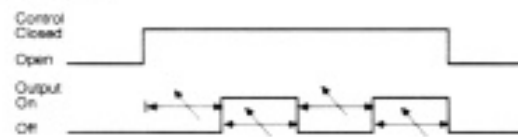


* (-) Input Voltage (Control) (+)

*Polarity indicated for DC models only

OPERATION

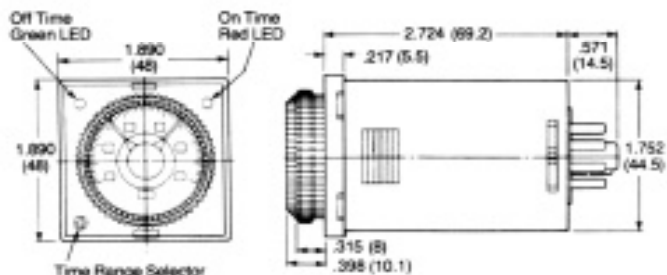
Repeat Cycle



Adjustable repeat cycle

- Closing the control circuit starts the timing sequence
- Opening the control circuit during either timing period resets both time delays to zero, and de-energizes the output

DIMENSIONS (Inches (millimeters))



INDUSTRIAL SOLID STATE TIMER

MODEL 1071 PLUG-IN



On Delay

Multi-Range unit is programmable for 8 different time ranges. The 1071 reduces inventory requirements by offering the time range capacity of eight separate timers in one unit.

Input Power Actuates timing sequence, eliminating the need for a separate control circuit. Removing power automatically resets timing sequence.

Input Is Compatible with both standard mechanical switches and solid state proximity sensors.

 UL File No. E50957

 CSA File No. LR92815

ORDERING DATA

ORDERING CODE 1071 - 2 - P - 1 - A

(Example: 1071-2-P-1-A)

BASIC MODEL NUMBER 1071

INPUT VOLTAGE

- 1 120VAC
- 2 24VAC/DC

TIME RANGE (Secs)

P (includes the following time ranges)

- | | |
|---------------|-------------------|
| 0) 200 - 2000 | 5) .2 - 2.0 |
| 1) 50 - 500 | 6) .06 - .5 |
| 2) 12 - 120 | 7) .025 - .13 |
| 3) 3 - 30 | 8) Not applicable |
| 4) .75 - 7.5 | 9) Not applicable |

TIMING FUNCTION

- 1 On delay

OUTPUT

- * A. Relay SPDT w/ remote adjust (8 pin)
- B. Relay DPDT (8 pin)
- * C. Relay DPDT wireremote adjust (11 pin)

* Units with remote adjust do not include a potentiometer in the timer. A separate 100K ohm potentiometer must be used with a maximum length of 12 feet of shielded twisted pair wire.

APPLICABLE ACCESSORIES

- | | |
|--------------------|-------|
| Potentiometer | RP204 |
| Reference dial | RP218 |
| Locking attachment | RP217 |
| 8 pin socket | RP302 |
| 11 pin socket | RP303 |
| Hold down clip | RP305 |

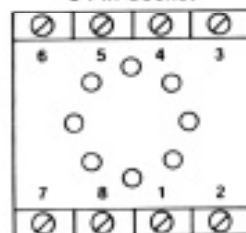
SPECIFICATIONS

INPUT	VOLTAGE: 120VAC/DC, 24VAC/DC
	FREQUENCY: 50/60 Hz or DC
OUTPUT	TOLERANCE (VOLTAGE): ± 15% of nominal
	POWER CONSUMPTION: 4VA maximum
TIMING	TRANSIENT PROTECTION: MOV
	TYPE: Electromechanical relay
PHYSICAL	RATING: 5A—240 AC maximum
	TYPE: On delay
REPEAT ACCURACY: .5% or .004 sec, whichever greater	RESET TIME: 40ms minimum
	INDICATION: LED — ON when timing
TIMING RATIO: 10 to 1 potentiometer	TIME RANGES: 8 per unit
	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
	OPERATING TEMPERATURE: -20° to 70°C (-4° to 158°F)
TIMING VARIATION VS. TEMPERATURE: ±5% maximum	MOUNTING: Plug-in
	TERMINATION: 8 or 11 pin socket
HOUSING: Plastic	

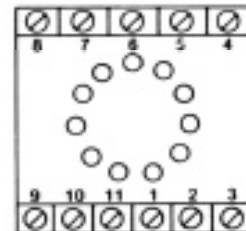
WIRING

- | | |
|--|-----------------------------|
| OUTPUT A | OUTPUT B |
| 2-7 Voltage input (control) | 2-7 Voltage input (control) |
| 1-3 N.O. timed | 1-3 N.O. timed |
| 1-4 N.C. timed | 1-4 N.C. timed |
| 5-8 Remote adjust | 8-8 N.O. timed |
| 8 Not used | 8-5 N.C. timed |
| Caution: Never apply voltage to 5-6 | |
| OUTPUT C | |
| 2-10 Voltage input (control) | 11-8 N.C. timed |
| 1-3 N.O. timed | 5-8 Remote adjust |
| 1-4 N.C. timed | 7 Not used |
| 11-9 N.O. timed | |
| Caution: Never apply voltage to 5-6 | |

Wiring Terminal Location
8 Pin Socket



11 Pin Socket



DIMENSIONS inches (millimeters)

