

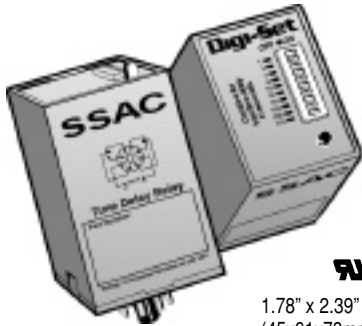
## IN STOCK

## Digi-Set • Time Delay Relay

### ✓ High Repeat Accuracy and Stable Operation

# 10

# TIMERS & FLASHERS



1.78" x 2.39" x 3.08"  
(45x61x78mm)

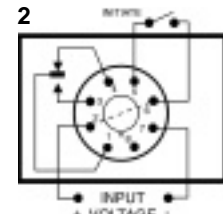
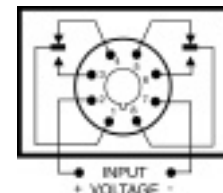
### TDM, TDB, TDI, TDS Series

- Delay on Make, Delay on Break, Interval or Single Shot
- Digital Integrated Circuitry
- Switch Setable Time Delay
- Three Time Ranges from 100 Milliseconds to Over 2.8 Hours
- $\pm 0.1\%$  Repeat Accuracy, No First-Shot Effect
- $\pm 2\%$  Setting Accuracy
- SPDT & DPDT, 10 Amperes Output Contacts
- LED Indication

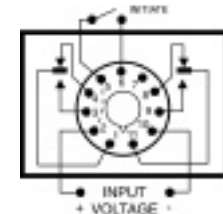
**Description:** The TD Series of time delay relays are comprised of digital circuitry and a separate oscillator to provide high accuracy and stability. The delay is selected by means of ten binary switches, which allow the setting of the desired delay the first time and every time. Full 10 ampere isolated output contacts.

### Connection Diagrams

1 (Use NDS-8 Socket)



3 (Use NDS-11 Socket)



Mode of Operation	Voltage	Time Delay Seconds	Part Number	Connection Diagram
Delay On Make (DPDT)	12VDC	0.1 to 102.3	TDML12DL	1
	24VDC	0.1 to 1,023	TDM12DL	
	24VAC	0.1 to 102.3	TDML24DL	
	24VAC	1 to 1,023	TDM24DL	
	120VAC	0.1 to 102.3	TDM120AL	
	120VAC	1 to 1,023	TDM120AL	
Interval (DPDT)	120VAC	10 to 10,230	TDMH120AL	1
	230VAC	1 to 1,023	TDM230AL	
	230VAC	1 to 1,023	TDM230AL	
Single Shot (SPDT)	24VAC	0.1 to 102.3	TDIL120AL	2
	120VAC	1 to 1,023	TDI120AL	
	120VAC	10 to 10,230	TDIH120AL	
Delay On Break (SPDT)	24VAC	1 to 1,023	TDS24AL	2
	120VAC	0.1 to 102.3	TDSL24AL	
	120VAC	1 to 1,023	TDS120AL	
Single Shot (DPDT)	24VAC	0.1 to 102.3	TDB24AL	2
	120VAC	1 to 1,023	TDB120AL	
	120VAC	10 to 10,230	TDBH120AL	
Delay On Break (DPDT)	120VAC	1 to 1,023	TDS120ALD	3
	120VAC	0.1 to 102.3	TDBL120ALD	
	120VAC	1 to 1,023	TDB120ALD	

Other Voltages and Options Available.

All Part Numbers are In Stock



1.78" x 2.39" x 3.08"  
(45x61x78mm)

### TDR Series (On/Off Recycling)

- Digital Integrated Circuitry
- Switch Selectable Time Delays from 100 Milliseconds to 2.8 Hours
- Independent Adjustability of ON time and OFF time, On time first
- $\pm 2\%$  Setting Accuracy
- $\pm 0.1\%$  Repeat Accuracy
- Standard Octal Plug-in Base
- DPDT 10 Ampere Output Contacts

Part Number	Voltage	First Delay ON Time (Seconds)	Second Delay OFF Time (Seconds)	Conn. Diagram	In Stock
TDR4A11	120VAC	0.1 to 102.3	0.1 to 102.3	1	•
TDR4A22	120VAC	1 to 1,023	1 to 1,023	1	•
TDR4A33	120VAC	10 to 10,230	10 to 10,230	1	•

Other Voltages and Options Available.

### Accessories



**BZ1**  
Panel Mount Kit  
for use with all  
SSAC Plug-in  
Time Delay  
Relays

Fits  
35mm  
DIN  
Rail



### NDS-8

8 Pin Octal Socket

### NDS-11

11 Pin Magnal Socket  
Screws and Captive Wire  
Clamps on Both



### PSC8

2 Hold Down Clips  
for NDS-8 Socket

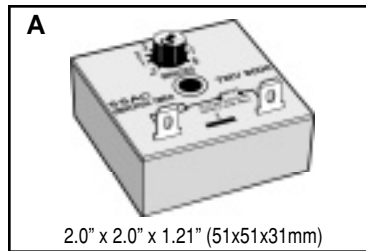
### PSC11

2 Hold Down Clips  
for NDS-11 Socket

## IN STOCK

## Timing Modules

✓ Solid State Encapsulated - 1-Amp Output

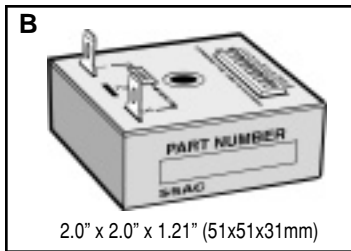


### TMV8000

- Delay-On-Make Timing
- Solid State Circuitry
- Knob Adjustable: 0.1 to 8 Minutes
- Operates On 19 to 288 VAC/DC
- $\pm 2\%$  Timing Accuracy

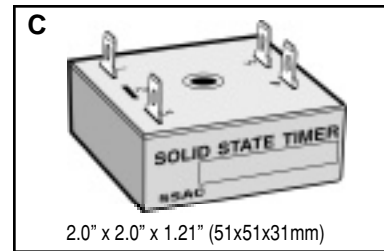
### ALL 3 INCLUDE:

- .25" (6.35mm) Quick Connects
- .25" (6.35mm) Mounting Hole for #8 - 10 Screw
- Plastic Package - Encapsulated



### TDU Series

- Delay-On-Make Timing
- $\pm 5\%$  Timing Accuracy
- Switch Adjustable
- 0.1 Sec to 2.8 Hours In 3 Ranges
- Operates on 19 to 288 VAC/DC in 2 Ranges



### TS Series

- Economical
- External Adjust - See VTP/VTR Module
- 0.05 to 600 Seconds in 4 Ranges
- Delay On Make, Delay On Break, Interval Or Single Shot
- Operates On 120 VAC
- $\pm 2\%$  Timing Accuracy

**Description:** SSAC general purpose timing modules are used in OEM equipment applications around the world. Their solid state outputs and encapsulated construction means they will control relays, contactors, valves and solenoids for millions of operations even in harsh industrial environments. Analog circuitry is used for  $\pm 2\%$  repeat accuracy and digital circuitry for  $\pm 0.5\%$  repeat accuracy. Knob or switch adjustment, universal voltage or single voltage models are available.

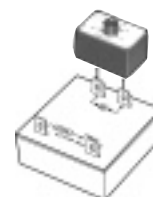
Fig.	Delay On Make	Conn. Dia.	Delay In Seconds	SSAC No	Accessory VTP/P/N
A	19 to 288 VAC/DC	1	0.1 to 8 Mins.	TMV8000	N/A
C		1	0.1 to 8 Mins.	TSU2000	VTP4S

Fig.	Delay On Make	Conn. Dia.	Delay In Seconds	SSAC No.
B	19 to 144 VAC/DC	1	0.1 to 102.3 1 to 1,023 10 to 10,230	TDUL3000A TDU3000A TDUH3000A
B	80 to 288 VAC/DC	1	0.1 to 102.3 1 to 1,023 10 to 10,230	TDUL3001A TDU3001A TDUH3001A

Fig.	Mode Of Operation	Conn. Dia.	Delay In Seconds	SSAC No.	Accessory VTP/VTR P/N
C	Delay On Make (120VAC)	1	0.05 to 3 0.5 to 60 2 to 180 5 to 600	TS1421 TS1422 TS1423 TS1424	VTP4B VTP4F VTP4J VTP5N
C	Interval (120VAC)	2	0.05 to 3 0.5 to 60 2 to 180 5 to 600	TS2421 TS2422 TS2423 TS2424	VTP4B VTP4F VTP4J VTP5N
C	Delay On Break (120VAC)	3	0.05 to 3 0.5 to 60 2 to 180 5 to 600	TSB421 TSB422 TSB423 TSB424	VTR4B VTR4F VTR4J VTR5N
C	Single Shot (120VAC)	3	0.05 to 3 0.5 to 60 2 to 180 5 to 600	TSS421 TSS422 TSS423 TSS424	VTR4B VTR4F VTR4J VTR5N

Other Voltages and Options Available.

### Accessories

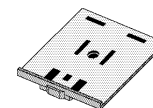


#### Plug-On Adjust Modules

#### VTR & VTP Modules

Pushes On Adjustment Terminals Quick, Easy, Cost Effective

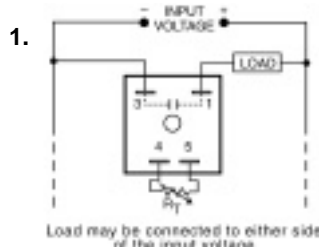
.99" x 1.26" x .80"  
(25.1x32x 20.3mm)



#### 35mm DIN Rail Adaptor

For Use With SSAC Timer Modules (Comes With Hardware)

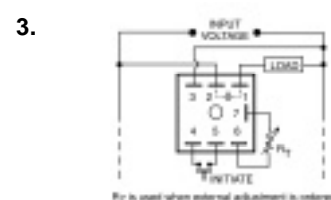
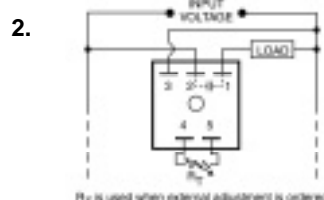
2.0" x 2.0" (51x51mm)  
Part Number: P1023-20 (S102320-1)



Terminals #4 & #5 - TS1 Series & TSU2000 Only  
TSU2000  $R_T = 6.5K/SEC$

### Connection Diagrams

For TS1, TS2, TSS, and TSB:  $R_T = 3$  Megohms, except 5 - 600 Sec. devices = 5 Megohms



**IN STOCK**

## Universal Time Delay Relay

✓ **Multi-Function, Multi-Range, Multi-Voltage**

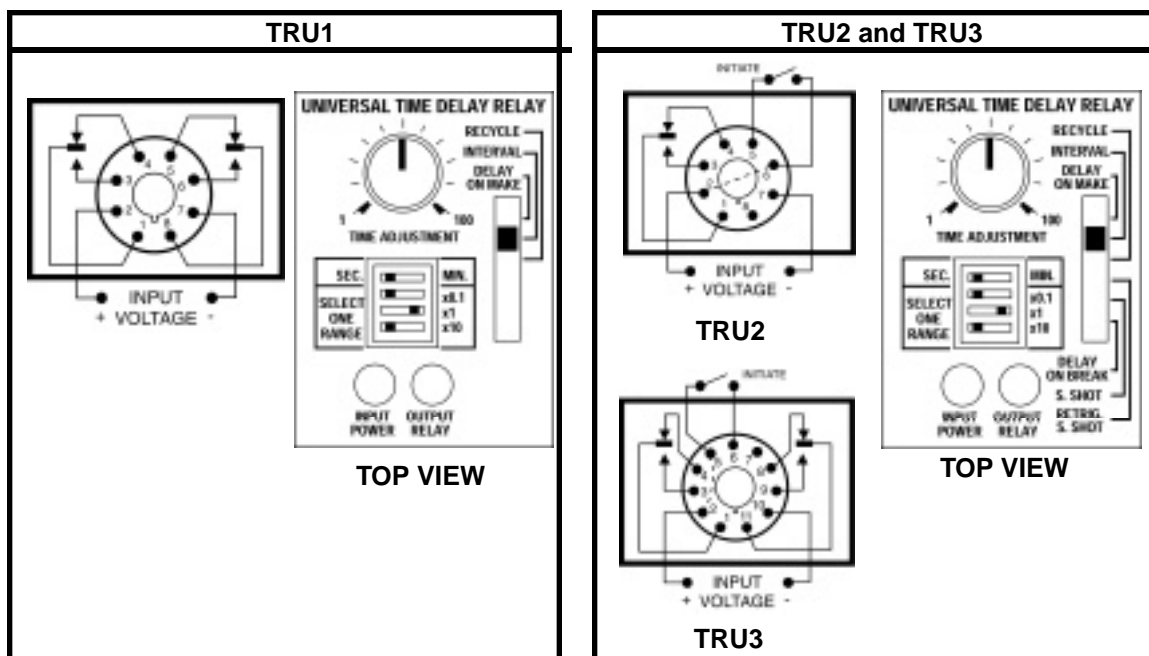


1.78"x 2.39" x 3.44" (45x61x87mm)

### TRU Series

- Custom Microprocessor Controlled with Watchdog Circuitry
- Multi-Function — Onboard Selectable Modes of Operation: Delay on Make, Interval, Single Shot, Recycle, Delay on Break & Retriggerable Single Shot
- Multi-Range — Six Built-in Ranges Cover from 0.1 Seconds to 1000 Minutes
- Multi-Voltage — Operated from 19-264 VAC and 19-30 VDC Automatically
- 10 Amperes Output Contacts, SPDT and DPDT Available
- Industry Standard Octal or Magnal Plug-in Versions are Available




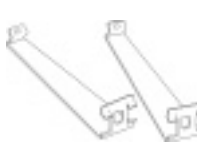
**Description:** The TRU Series is truly universal. Both function and time range can be selected on the face of the unit. The TRU operates over the entire voltage range of 19 to 264 volts and 19 to 30VDC without having to rewire. Full 10 ampere contact rating.



Part Number	Modes of Operation
TRU1	Delay On Make Interval Recycling (On Time First)
TRU2 & TRU3	Delay On Make Interval Recycling (On Time First) Retriggerable Single Shot Single Shot Delay On Break

**All Part Numbers Are In Stock**

### Accessories

 <p><b>BZ1</b> Panel Mount Kit for use with all SSAC Plug-in Time Delay Relays</p>	<p><b>Fits 35mm DIN Rail</b></p> 	 <p><b>NDS-8</b> 8 Pin Octal Socket</p> <p><b>NDS-11</b> 11 Pin Magnal Socket Screws and Captive Wire Clamps on Both</p>	 <p><b>PSC8</b> 2 Hold Down Clips for NDS-8 Socket</p> <p><b>PSC11</b> 2 Hold Down Clips for NDS-11 Socket</p>
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**TIMERS & FLASHERS**

# 10

## IN STOCK

## Universal Time Delay Relay

### ✓ 21 Modes of Operation in One Unit



1.78" x 2.39" x 3.1" (45x61x79mm)

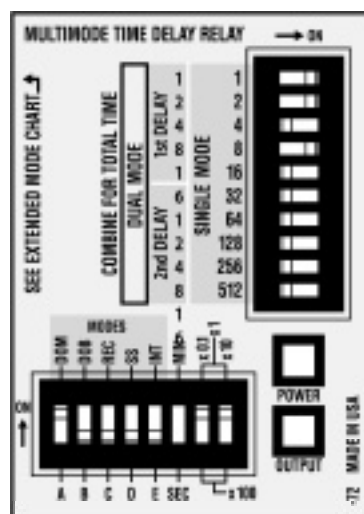
### TRDU Series

- One Unit Replaces up to 1000 Timers
- Dual modes can replace up to 3 standard timers
- Switch Selectable Modes, Time Ranges, & Time Delays
- 0.1 Seconds to 1705 Hours in 8 Ranges
- 1000 to 1 adjustment range for single modes
- AC and DC Operating Voltages are Available
- 10 Amps SPDT or DPDT Contacts
- 8 or 11 Pin Plug-in Base
- Popular Part Numbers are In Stock

**Description:** The TRDU is the designer's choice. 21 modes of operation make the TRDU the most flexible timer available. Microcomputer control,  $\pm 0.1\%$  timing accuracy, and positive switch selection of the mode, range, and timing delay make the TRDU an easy to use, cost effective solution to all your timing needs.

### 21 Modes of Operation

- DELAY ON MAKE
- INTERVAL
- RECYCLE (ON Time First–Equal Times)
- RECYCLE (ON Time First–Both Times Adjustable)
- RECYCLE (OFF Time First–Both Times Adjustable)
- DELAY ON MAKE/RECYCLE (ON Time First)
- DELAY ON MAKE/INTERVAL
- INTERVAL/DELAY ON MAKE
- INTERVAL/RECYCLE (ON Time First)
- DELAY ON BREAK
- INVERTED DELAY ON BREAK
- SINGLE SHOT
- INVERTED SINGLE SHOT
- MOTION DETECTOR (Retriggerable Single Shot)
- ACCUMULATIVE DELAY ON MAKE
- ACCUMULATIVE DELAY ON MAKE/INTERVAL
- DELAY ON MAKE/DELAY ON BREAK
- DELAY ON MAKE/SINGLE SHOT
- DELAY ON BREAK/RECYCLE (ON Time First)
- SINGLE SHOT/RECYCLE (ON Time First)
- TRAILING EDGE TRIGGERED SINGLE SHOT

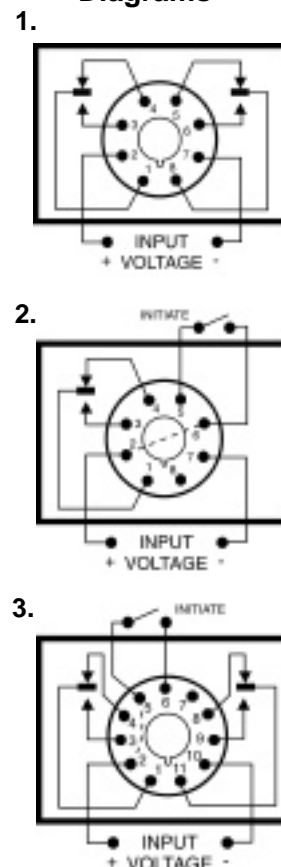


Cover View

Voltage	Connection	Part Number	In Stock Part Numbers
12 VDC	3	TRDU12D3	
24VAC/DC	2	TRDU24A2	
120AC	1	TRDU120A1	•
120AC	2	TRDU120A2	•
120AC	3	TRDU120A3	•
230AC	3	TRDU230A3	

Other combinations are available

### Connection Diagrams

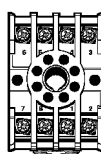


### Accessories



**BZ1**  
Panel Mount Kit  
for use with all  
SSAC Plug-in  
Time Delay  
Relays

Fits  
35mm  
DIN  
Rail



**NDS-8**

8 Pin Octal Socket

**NDS-11**

11 Pin Magnal Socket  
Screws and Captive Wire  
Clamps on Both



**PSC8**

2 Hold Down Clips  
for NDS-8 Socket

**PSC11**

2 Hold Down Clips  
for NDS-11 Socket

## Knob Adjust Time Delay Relay

✓ **Accurate Knob Adjustable Plug-in Time Delays**



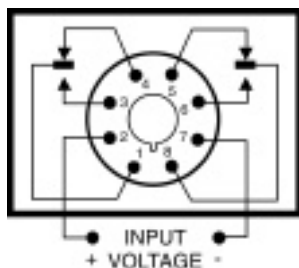
1.78"x 2.39"x 3.62" (45x61x92mm)

### PRL Series

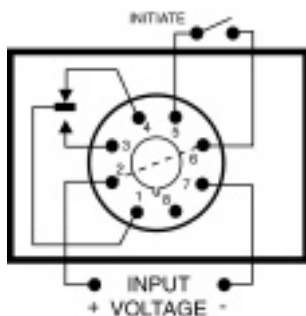
- Knob Adjustable Time Delays
- Delay On Make, Delay On Break or Single Shot Operation
- 0.05 to 600 Seconds in 6 Ranges
- Analog Circuitry  $\pm 2\%$  Accuracy
- AC Operating Voltages are Available (DC Voltages made to order)
- 10 Amps Isolated SPDT or DPDT Contacts
- LED Indicates Relay Status and Timing

**Description:** The PRL Series is a quality timing product designed for general use. It offers low cost control, full 10 Amps relay output, and onboard LED indication. The knob-adjustment provides a guaranteed time range of up to 10 minutes in 6 ranges. The onboard LED indicates if the unit is timing (flashing LED) and the status of the output. The PRL utilizes the industry standard octal plug-in connection for easy installation.

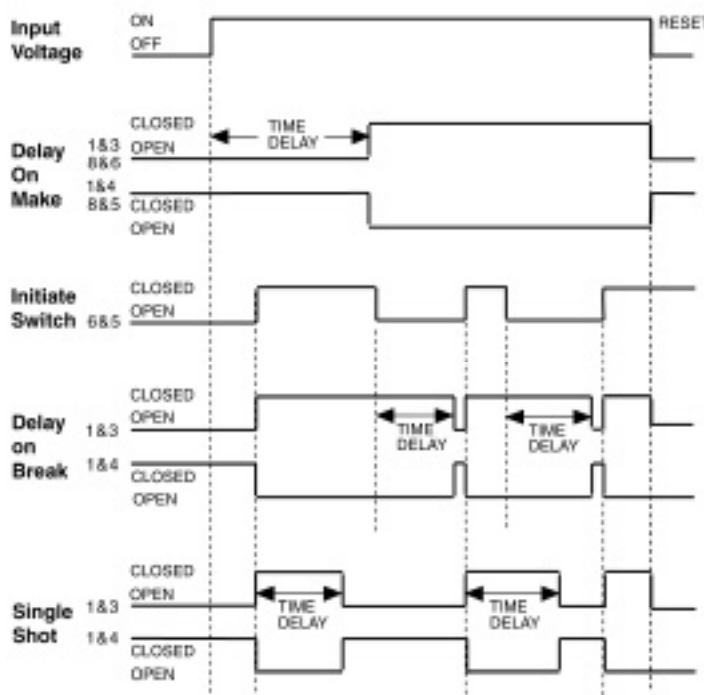
### Connection Diagrams



PRLM




PRLB, PRLS



Mode	Voltage	Time Delay Range	Part Number
Delay on Make	24VAC	1 to 60 S	PRLM223
		0.1 to 10 S	PRLM422
		1 to 60 S	PRLM423
		7 to 600 S	PRLM426
Delay on Break	120VAC	1 to 60 S	PRLB423
		7 to 600 S	PRLB426
Single Shot		0.1 to 10 S	PRLS422
		1 to 60 S	PRLS423


Other options and voltages available

### Accessories




**BZ1**  
Panel Mount Kit  
for use with all  
SSAC Plug-in  
Time Delay  
Relays

Fits  
35mm  
DIN  
RAIL



**NDS-8**  
8 Pin Octal Socket  
Screws and Captive  
Wire Clamps



**PSC8**  
2 Hold Down Clips  
for NDS-8 Socket

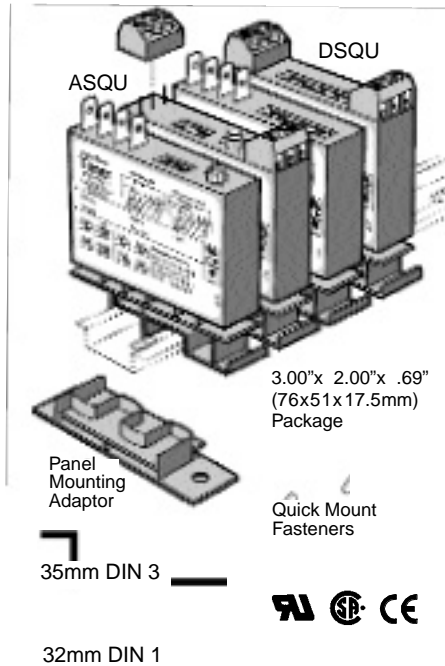
TIMERS & FLASHERS

10

## New

## MicroTime-Universal Timer

✓ Microcomputer Accuracy in a 17.5mm Package



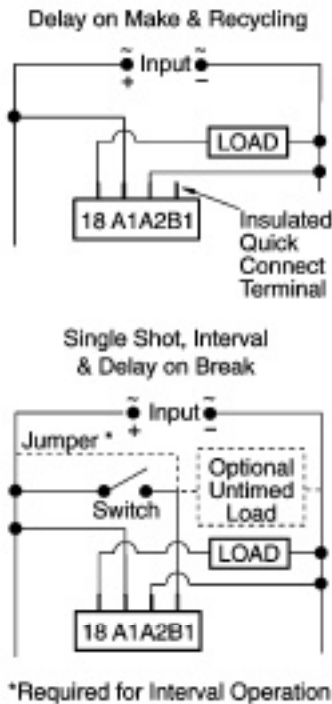
### ASQU/ASTU Series (Universal Knob Adjustable) DSQU/DSTU Series (Universal Switch Adjustable)

- **Repeat Accuracy** – ASQU/ASTU: 1% DSQU/DSTU: 0.1%
- **Multimode:**  
Onboard Switch Selectable Modes of Operation:  
Delay on Make, Interval, Single Shot, Recycling, & Delay on Break
- **Multirange:**  
ASQU/ASTU – Knob Adjustable from 0.1 secs. to 100 mins. in 4 ranges  
DSQU/DSTU – Switch Adjustable from 0.1 secs. to 63 mins. in 4 ranges
- **Multivoltage:** 24 to 240VAC or 9 to 110VDC
- **0.7 A Steady, 10A Inrush, Rated Solid State Output**
- **0.25" (6.35mm) Quick-Connect or Removable Terminal Block Connections**

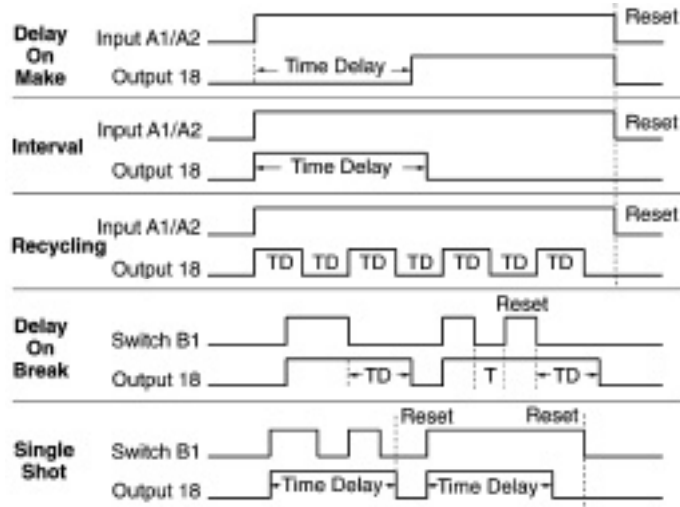
**Description:** The ASQU/ASTU & DSQU/DSTU Series are SSAC's 17.5mm wide universal solution to your solid state timing requirements. They include 5 modes of operation (delay on make, delay on break, interval, single shot, and recycling ON time first), a universal time delay range, and a universal input voltage range from 24 to 240VAC (AC Models) or 9 to 110VDC (DC Models). The mode and time range can be selected with 4 DIP switches on the top of the unit.

They are encapsulated for use in harsh industrial environments. They can be snapped on 32mm DIN 1 & 35mm DIN 3 rail, or mounted on a panel with the quick mount fasteners supplied, or #6 screws. All part numbers include both removable mounting bases and two quick mount fasteners.

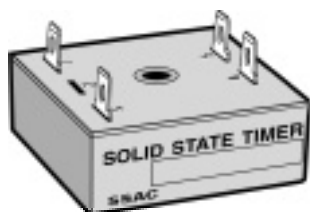
### Connection Diagrams



### Time Diagram



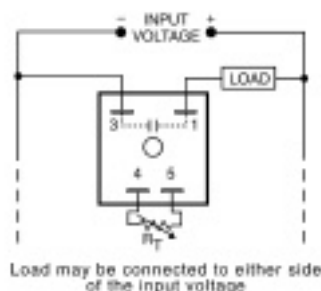
Adjustment	Input Voltage	Termination	Part Number
Knob 0.1 sec.to 100 mins.	24 to 240VAC	Quick Connects	ASQUA3
	9 to 110VDC	Quick Connects	ASQUD3
	24 to 240VAC	Terminal Blocks	ASTUA3
	9 to 110VDC	Terminal Blocks	ASTUD3
Switch 0.1 sec.to 63 mins.	24 to 240VAC	Quick Connects	DSQUA3
	9 to 110VDC	Quick Connects	DSQUD3
	24 to 240VAC	Terminal Blocks	DSTUA3
	9 to 110VDC	Terminal Blocks	DSTUD3



2.0" x 2.0" x 1.21"  
(51x51x31mm)



Fig. 1



✓ Accurate, Reliable Digital Timing For OEM Equipment

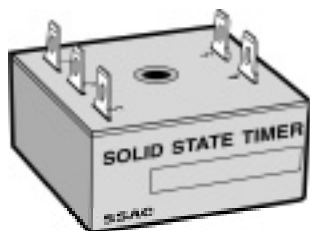
## KSD Series, 1 Amp Timing Modules

- Digital Circuitry  $\pm 0.5\%$  Accuracy
- 1 Sec. to 100 Minutes in 2 Ranges
- External Adjustment
- AC and DC Input Voltages
- 1 Amp Steady - 10 amps Inrush
- Totally Solid State - Encapsulated

**Description:** SSAC general purpose timing modules are a combination of digital accuracy and cost effective quality construction. These timers are an excellent choice for most OEM equipment applications. Their 1 amp rated solid state output can switch relays, contactors, valves and solenoids for millions of operations. For 35mm DIN Rail mounting, order part number P1023-20 adaptor.

Mode	Figure	Voltage	Time Delay	Part Number	Accessory VTP P/N
Delay on Make	1	12VDC	1 to 100 S	KSD1121	VTP2G
		24VDC	1 to 100 S	KSD1321	
		24VAC	1 to 100 S	KSD1221	
		120VAC	1 to 100 S	KSD1421	VTP2P
		120VAC	1 to 100 M	KSD1424	
Delay on Break	2	230VAC	1 to 100 S	KSD1621	VTP2G
Single Shot	2	120VAC	1 to 100 S	KSDB421	VTP5G
			1 to 100 M	KSDB424	VTP5P
Interval	3		1 to 100 S	KSDS421	VTP2G
Recycling on 1st	3		1 to 100 S	KSD2421	
			1 to 100 S	KSD3421A	

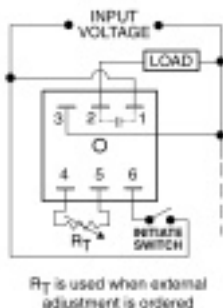
Other options and voltages available



2.0" x 2.0" x 1.51"  
(51x51x38mm)



Fig. 2



## THD Series, Power Timing Modules

- Digital Circuitry  $\pm 0.5\%$  Accuracy
- Up to 20 Amps Steady State - 200 Amps Inrush
- 1 Sec. to 100 Minutes in 2 Ranges
- 24 or 120VAC Input Voltages
- Totally Solid State - Encapsulated
- External Adjustment

**Note:** Units with over 1 amp output rating must be mounted to a metal surface. The back of these units has a metal heat transfer plate. The maximum heat transfer plate temperature is 90 degrees C. Heat sink grease is included with each unit.

Mode	Figure	Voltage	Output Rating	Time Delay	Part Number	Accessory VTP P/N
Delay on Make	4	24VAC	10 A	1 to 100 S	THD1B221	VTP5G
		120VAC	10 A	1 to 100 S	THD1B421	
		120VAC	20 A	1 to 100 S	THD1C421	
		120VAC	10 A	1 to 100 M	THD1B424	VTP5P
Delay on Break	2	120VAC	10 A	1 to 100 S	THDB421B	VTP5G
		120VAC	10 A	1 to 100 M	THDB424B	VTP5P
Single Shot	2	120VAC	10 A	1 to 100 S	THDS421B	VTP5G
Interval	3	120VAC	10 A	1 to 100 S	THD2B421	
Recycling on 1st	3	120VAC	10 A	1 to 100 S	THD3B42A1	

Other options and voltages available

Fig. 3

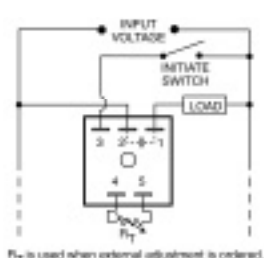
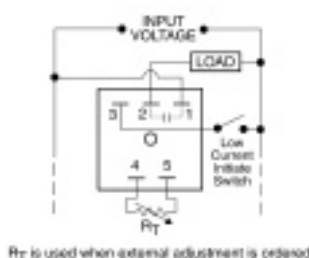


Fig. 4

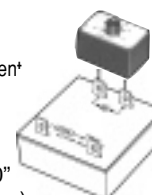


## Accessory:

### PLUG-ON ADJUST MODULE

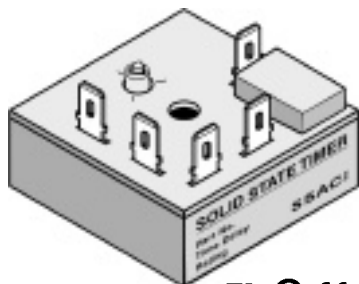
**VTP Module**  
Pushes On Adjustment\*  
Terminals Quick,  
Easy, Cost  
Effective

.99" x 1.26" x .80"  
(25.1x32x20.3mm)



## Compact Time Delay Relay

✓ *The Smallest Time Delay Relay Available*



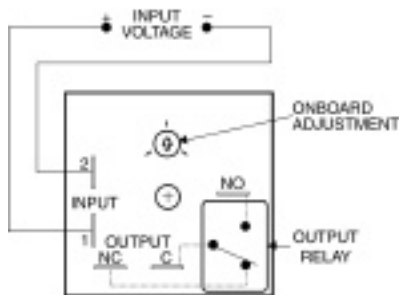
2.0" x 2.0" x 1.21" (51x51x31mm)

### KRD Series

- Compact Time Delay Relay
- Solid State Encapsulated Circuitry
- Repeat Accuracy +/-0.5% (KRDI, KRDM) +/-1% (KRDB, KRDS)
- Input Voltages from 12 to 120 Volts
- Full 10 Amp Isolated SPDT Relay Contacts
- Onboard Adjust or Factory Fixed Delays
- Delays from 1 Second to 100 Minutes in 3 Ranges

**Description:** The KRD Series is a compact time delay relay measuring only 2 inches square. Its isolated output relay contacts are rated 10 amps resistive. Its solid state timing circuit provides excellent repeat accuracy and stability. The KRD Series can be surface mounted or 35mm DIN rail mounted using the P1023-20 mount adaptor. Encapsulation protects against shock, vibration, and humidity. The KRD Series is a cost effective approach for OEM applications that require small size, isolation, reliability, and long life.

### Connection Diagram



Mode of Operation	Input Voltage	Time Delay	Part Number
Delay on Make	12VDC	1 to 100 S	KRDM121
	24VDC	1 to 100 S	KRDM321
	24VAC	1 to 100 S	KRDM221
	120VAC	1 to 100 S	KRDM421
		10 to 1000 S	KDRM422
Interval	120VAC	1 to 100 M	KRDM424
		1 to 100 S	KRDI321
		1 to 100 M	KRDI421
Delay on Break	24VDC	1 to 100 S	KRDB321
	120VAC	1 to 100 S	KRDB421
		1 to 100 M	KRDB424
Single Shot	24VDC	1 to 100 S	KRDS321
	120VAC	1 to 100 S	KRDS421
		1 to 100 M	KRDS424

Other Voltages and Options Available.



2.0" x 2.0" x 1.21" (51x51x31mm)

### KRDR Recycling both times adjustable

Mode of Operation	Voltage Input	First Time Delay	Second Time Delay	Part Number
Recycling (Both Times Adjustable)	24VDC	ON - 1 to 100 S	OFF - 1 to 100 S	KRDR321A1
	24VAC	ON - 1 to 100 S	OFF - 1 to 100 S	KRDR221A1
	120VAC	ON - 1 to 100 S	OFF - 1 to 100 S	KRDR421A1
		ON - 1 to 100 M	OFF - 1 to 100 M	KRDR424A4
		ON - 1 to 100 S	OFF - 1 to 100 M	KRDR421A4

Other Voltages and Options Available.

### Accessory:

#### 35mm DIN Rail Adaptor

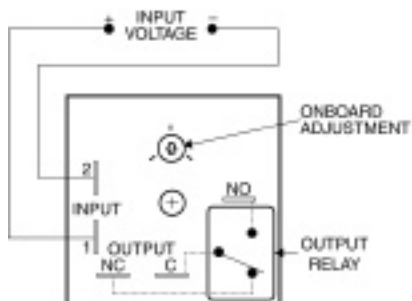


2.0"x 2.0"  
(51x51mm)

For Use With SSAC Timer Modules  
(Comes With Hardware)

Part Number: P1023-20 (S102320-1)

### Connection Diagram





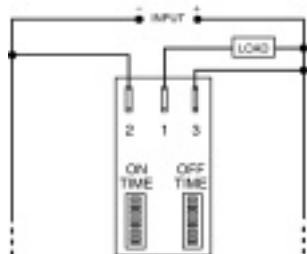
## Recycling Timing Modules

✓ Digital Accuracy- Switching External Adjust



3.13" x 4.50" x 1.28" (80x114x33mm)

### Connection Diagram



### RS Series (On/Off Recycling)

- Digital C/MOS Integrated Circuitry
- Switch Selectable Delays from 0.1 Second to 17.05 Hours, in 3 ranges
- Independent Adjustment of On time and Off time, On time first
- ± 0.1% Repeat Accuracy
- Fully Solid State and Encapsulated
- Output: 1 Ampere Steady State, 10 Amperes Inrush at 60°C
- Operating Temperature: -40°C to +80°C
- .25" (6.35mm) Quick Connect Terminals

**Description:** The RS Series is a solid state, encapsulated, recycling timer designed for tough industrial environments. It's used by many testing labs as a life cycle tester; by others as a cycle controller. The RS Series has separate 10 switch adjustments for the ON delay and the OFF delay. These make possible accurate adjustment the first time and every time. Digital circuitry means accuracy and stability

Part Number	Operating Voltage	First Delay ON Time	Second Delay OFF Time
RS4A11	120VAC	0.1 to 102.3 sec	0.1 to 102.3 sec
RS4A22	120VAC	0.1 to 102.3 min	0.1 to 102.3 min
RS4A33	120VAC	1 to 1,023 min	1 to 1,023 min

Other Voltages and Options Available.

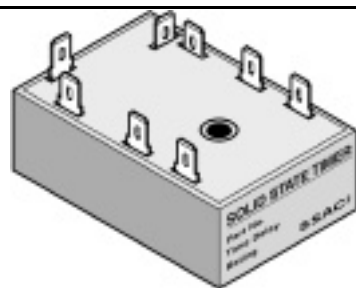
**The Above Part Numbers are In Stock**

Other Options and Voltages are Available

### Digi-Set Binary Switch Operation



Example Ranges 1,2  
6.3 Seconds or  
Minutes



2.0" x 3.0" x 1.50"  
(51x76x38mm)



### HRDR Series (ON/OFF or OFF/ON Recycling)

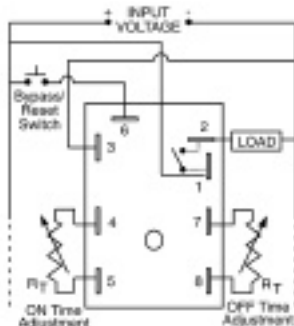
- High Power Recycling Time Delay Relay
- 15 Amps UL-30 Amps CSA SPST Contacts
- External Adjustment (Fixed Delays are Available)
- 1 Second to 500 Minutes in 4 Ranges
- Digital Circuitry ±0.5% Accuracy
- 120VAC Input Voltage
- Encapsulated Circuitry
- Single Screw Mounting

**Description:** The HRDR Series combines digital recycling timing with a high power relay output. Both time delays are separately adjustable with external potentiometers. The bypass/reset option allows the operator to interrupt the normal recycling sequence and energize the output relay. The relay remains energized until the switch is released. The normal recycling operation then continues from the beginning of the first delay. This option is excellent for stirring, venting, defrost, or drying applications.

Input Voltage	ON Time	OFF Time	First Delay	Part Number	Accessory VTP P/N	
					ON	OFF
120VAC	1 to 100 S	1 to 100S	ON Time	HRDR431A1R	VTP2G, VTP2G	
	1 to 100 S	1 to 100 M	ON Time	HRDR431A4R	VTP2G, VTP2P	
	1 to 100 S	1 to 100 M	OFF Time	HRDR431B4R	VTP2G, VTP2P	
	10 to 1000 S	5 to 500 M	OFF Time	HRDR432B5R	VTP2K, VTP2R	

Other options and voltages available

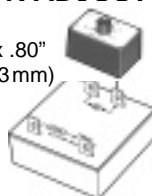
### Connection Diagram



### Accessories:

#### PLUG-ON ADJUST MODULE

.99" x 1.26" x .80"  
(25.1x32x 20.3mm)



#### VTP Module

Pushes On Adjustment Terminals Quick, Easy, Cost Effective

#### 35mm DIN Rail Adaptor



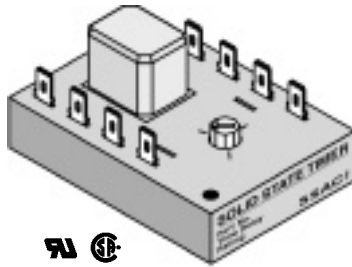
2"x 2"  
(51x51mm)

For Use With SSAC Timer Modules  
(Comes With Hardware)

Part Number:P1023-20 (S102320-1)

## Surface Mounting OEM Time

### ✓ Econo-Timer Encapsulated Time Delay Relay



2.50" x 3.50" x 1.62"  
(64x89x41mm)

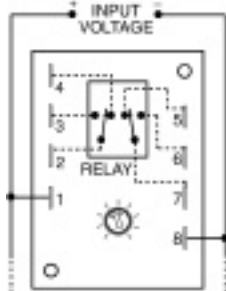
#### ERD Series

- Cost Effective Surface Mount Package
- Encapsulated Circuitry
- Delay on Make or Interval or Single Shot
- Knob Adjustable Time Delays
- 0.6 Seconds to 10 Minutes in 3 Ranges
- Digital Circuitry,  $\pm 0.5\%$  Accuracy
- 120VAC Input Voltage
- 10 Amps Resistive SPDT or DPDT Contacts

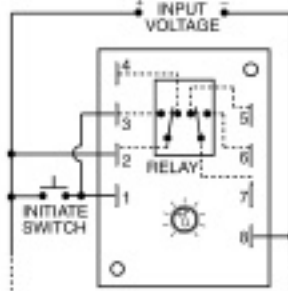
**Description:** Econo-Timers are a unique combination of digital electronics and an electro-mechanical relay. The digital circuit provides excellent accuracy and stability over the temperature and voltage range. The relay provides multiple outputs for relay logic circuits, and isolation of input and output. The output form is DPDT for Delay on Make and Interval operations, SPDT for Single Shot operation. The digital circuitry is encapsulated in a durable plastic housing. The time delays are knob adjustable (external adjust. or fixed are available). The ERD Series is a cost effective time delay relay for OEM applications.

#### Connection Diagrams

Delay on Make



Interval/Single Shot

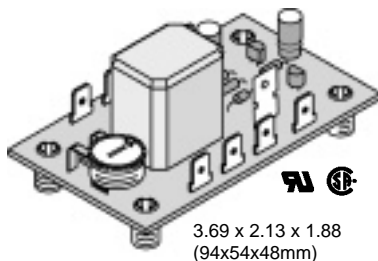


Note: Relay contacts are isolated from input voltage.

Mode of Operation	Input Voltage	Time Delay (Seconds)	Part Number
Delay On Make	120VAC	0.6 to 60 S	ERDM426
		0.1 to 10 M	ERDM428
		1 to 100 M	ERDM4210
Interval (Single Shot)		0.6 to 60 S	ERDI426
		0.1 to 10 M	ERDI428
		1 to 100 M	ERDI4210

Other Voltages and Options Available.

## Open PC Board Time Delay Relay



3.69 x 2.13 x 1.88  
(94x54x48mm)

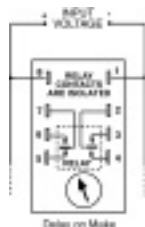


#### OR Series

- Low Cost Open Board Construction
- Delay on Make, Break or Single Shot
- Knob Adjustable Time Delays
- 0.6 to 300 Seconds in 2 Ranges
- 120VAC Input Voltage
- 10 Amps Resistive, DPDT Contacts
- $\pm 2\%$  Repeat Accuracy

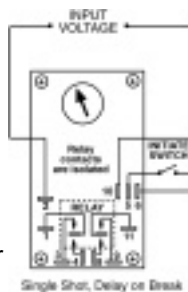
**Description:** The OR Series features proven circuitry and low cost board assembly. The OR Series offers the OEM designer excellent economy without sacrificing performance and reliability. The output relay has isolated DPDT contacts, rated 10 amps resistive. The time delays are knob adjustable (external adjust, or fixed are available).

#### Connection Diagrams



35mm DIN Rail Adaptor  
P1011-38

Delay on Make



Single Shot,  
Delay on Break

Mode of Operation	Input Voltage	Time Delay (Seconds)	Part Number
Delay on Make	120VAC	0.6 to 60 S	ORM120A23
		3 to 300 S	ORM120A25
Single Shot		0.6 to 60 S	ORS120A23D
		3 to 300 S	ORS120A25D
Delay on Break		0.6 to 60 S	ORB120A23D
		3 to 300 S	ORB120A25D

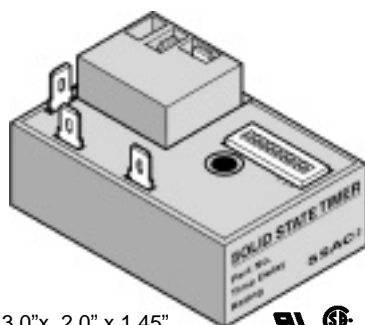
Other Voltages and Options Available.

## Solid State Vending Timers

### ✓ Single Shot Timing Modules

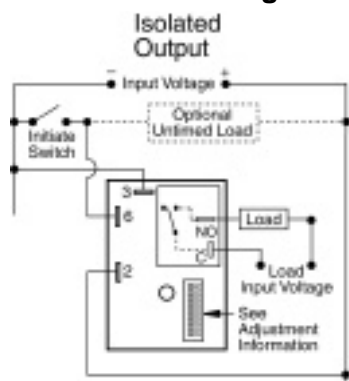
# 10

# TIMERS & FLASHERS

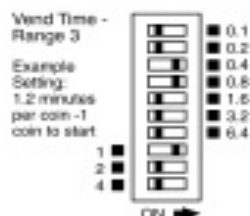


3.0" x 2.0" x 1.45"  
(76.2x51x37mm)

### Connection Diagram



### Adjustment Information

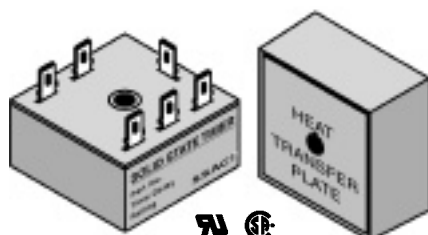
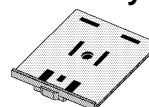


Combine upper seven switches in "ON" position for vend time in minutes. Combine lower three switches in "ON" position for number of closures to start.

Input Voltage	Time Delay (Per Initiate)	Part Number
24VAC	1 to 127 Sec.	HRV21AE
	0.1 to 12.7 Min	HRV23AE
120VAC	1 to 127 Sec.	HRV41AE
	0.1 to 12.7 Min	HRV43AE

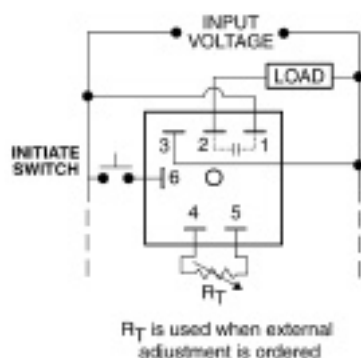
Other options and voltages available

**Accessory—** 35mm DIN Rail Adaptor  
For Use With SSAC Timer Modules (Comes With Hardware)  
2.0" x 2.0" (51x51mm)  
Part Number: P1023-20 (S102320-1)



2.0" x 2.0" x 1.51" (51x38mm)

### Connection Diagram



### THC Series (Non-Accumulating Single Shot Timer)

- Fast Initiate Circuitry for Coin Vending
- Analog Circuitry  $\pm 2\%$  Accuracy
- Up to 20 Amps Steady State - 200 Amps Inrush
- Compact Size
- 0.1 Seconds to 600 Seconds in 4 Ranges
- External Adjustment
- AC Operating Voltages are Available
- Totally Solid State - Encapsulated

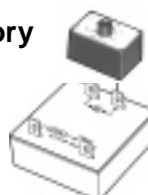
**Description:** The THC Series was designed to be used in single coin vending equipment. It has faster initiate circuitry so that it can be used with momentary switches in coin drops. Its high power solid state output allows direct switching of motors, heaters, and lamps. When used with loads over 3 Amps, the THC must be mounted on a metal surface. The back surface is a heat transfer plate. The maximum plate temperature is 90 degree C. Heat sink compound is provided with each unit.

Input Voltage	Output Rating	Time Delay	Part Number	Accessory VTP P/N
120VAC	10 Amps	2 to 180 S	THC423B	VTP4J
		5 to 600 S	THC424B	VTP5N
	20 Amps	2 to 180 S	THC423C	VTP4J
		5 to 600 S	THC424C	VTP5N

### Accessory

### Plug-On Adjust Modules

VTP Modules  
Pushes On Adjustment Terminals  
Quick, Easy, Cost Effective  
.99" x 1.26" x .80"  
(25.1x32x 20.3mm)

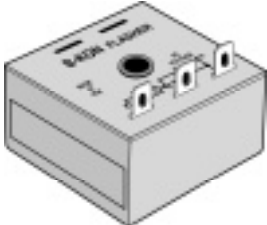





**IN STOCK**

## Tower and Obstruction Lighting Controls

✓ **Full Line of Solid State Products for All Your Lighting Control Needs**

SSAC offers a complete line of solid state products to control the lights on communication towers and tall structures. Single or multiple flashing, sensing of lamp failure with alarm and spare lamp output, plus a photo control for ON/OFF control.

FLASHER	DESCRIPTION	MODEL
 <p>2.0"x 2.0"x 1.51"(51x51x38mm)</p>	Standard Beacon Flasher (2500 Watts)† 30FPM	FS155-30T
	Flasher for High RF Installations (2500 Watts)† 30FPM	FS155-30RF
	Auxiliary Unit for Synchronous Operation of Additional Beacons. (2500 Watts)†	FA155-2
	Auxiliary Unit Provides Alternate Operation for Constant Line Loading. (2500 Watts)†	FA155
PHOTO CONTROL	DESCRIPTION	MODEL
 <p>6.25"x 5.0"x 5.44"(159x127x140mm)</p>	Precision Photo Control Calibrated to FAA and FCC Specifications for Tower and Obstruction Lighting. Includes Cast Aluminum Housing. 20 Ampere Contacts. Terminal block connection.	PCR11
	Same as above except without Aluminum Housing	PCR10
LAMP ALARM RELAY	DESCRIPTION	MODEL
 <p>3.50"x 2.50"x 1.64"(89x64x42mm)</p>	Universal Light Alarm Relay, Senses the Failure of One Lamp Out of 1, 2, 3, or 4 Lamps. 116 or 620 Watts. 10 Ampere Isolated Alarm Contacts.	SCR430T
	Side Light Alarm Relay. Senses the Failure of One Lamp Out of 2, 3, 4, 5, 6, 7, 8, or 9 Steadily Burning 116 Watt - 120 VAC Lamps. 10 Ampere Isolated Alarm Contacts.	SCR490D
FLASHER & LAMP ALARM RELAY	DESCRIPTION	MODEL
 <p>3.50"x 2.50"x 1.64"(89x64x42mm)</p>	For Use with One Beacon (two 620 Watt @ 120VAC lamps). Senses Failure of Lamp(s) or the Flasher. SPDT Isolated Relay Alarm Contacts Solid State Normally Open Alarm Output for Failed Flasher, and One for Failed Lamp(s)	FB120A

Note: Units shown are 120VAC 50/60 Hertz. 230VAC units are available.

† Must be mounted to a metal surface for proper heat dissipation. Maximum plate temperature is 80 °C. Heat sink compound included.