



The SC3/SC4 Series are solid-state 3 or 4 channel, chasers designed for sequential three or four circuit flashing of incandescent lamp loads. Unlike electromechanical chasers, there are no contacts to arc, wear, and eventually fail. Fixed or adjustable rates of 30 to 300 operations per minute.

### Operation

Sequential 3 or 4 circuit flashing of incandescent loads with equal time delays for each load. Upon application of input voltage, Load 1 is energized. At the end of the time delay, Load 1 de-energizes and Load 2 energizes. At the end of the time delay, Load 2 de-energizes and Load 3 energizes. This cycle continues until input voltage is removed.

Reset: Removing input voltage resets the unit and cycle.

For more information see:


Appendix A, page 164 for Flasher (Chasing) function.

Appendix B, page 166, Figure 14 for dimensional drawing.

Appendix C, page 168, Figure 9 for connection diagram.

### Features:

- Sequential 3 or 4 circuit flashing of incandescent loads
- Fixed or adjustable at 30 - 300FPM
- 1A steady state output
- 24, 120, or 230VAC input voltage
- Totally solid state - encapsulated

Approvals: 

### Auxiliary Products:

- **Quick connect to screw adaptor:**  
P/N: P1015-18
- **Female quick connect:**  
P/N: P1015-13 (AWG 10/12)  
P/N: P1015-64 (AWG 14/16)  
P/N: P1015-14 (AWG 18/22)

### Available Models:

SC3120F30

If desired part number is not listed, please call us to see if it is technically possible to build.

### Order Table:

<u>SC3 (3 outputs)</u>	<u>X</u>	<u>X</u>
<u>SC4 (4 outputs)</u>	<u>Input Voltage</u>	<u>Rate</u>
	-24 - 24VAC	-A - Adjustable (30 - 300)
	-120 - 120VAC	-F - Fixed*
	-230 - 230VAC	

\*If Fixed is selected, insert (30 - 300) operations per minute.

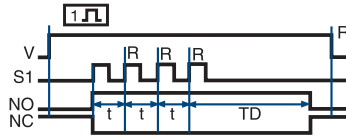
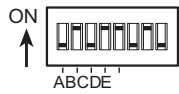
### Specifications

<b>Technical Data</b>		<b>Protection</b>	Encapsulated
Operation .....	Sequential 3 or 4 circuit flashing of incandescent lamp loads. Fixed or adjustable rates.	Circuitry .....	≥ 2000V RMS terminals to mounting surface
Rate .....	Adjustable: 30 - 300 operations per minute Fixed: 30 - 300 operations per minute (±10%)	Dielectric Breakdown .....	≥ 100 MΩ
<b>Input</b>		Insulation Resistance .....	≥ 100 MΩ
Voltage .....	24, 120, or 230VAC ±15%	<b>Environmental</b>	
AC Line Frequency .....	50/60 Hz	Operating / Storage Temperature .....	-20° to 60°C / -40° to 85°C
<b>Output</b>		Humidity .....	95% relative, non-condensing
Type .....	Solid state	Weight .....	≈ 5.4 oz (153 g)
Rating .....	1A steady state per output		
<b>Mechanical</b>			
Mounting .....	Surface mount with two #6 (M3.5 x 0.6) screws		
Termination .....	0.25 in. (6.35 mm) male quick connect terminals		
Dimensions .....	3.5 x 2.5 x 1.22 in. (88.9 x 63.5 x 31 mm)		

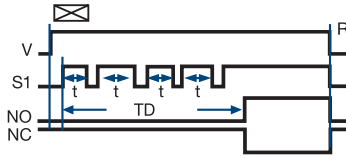
# Appendix A - Timer/Flasher Functions

## Single Functions

### Retriggerable Single Shot

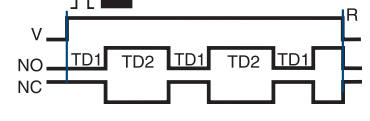
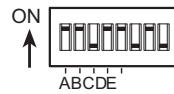


### Accumulative Delay-on-Make

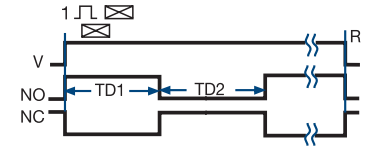
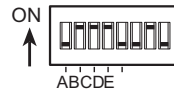


## Dual Functions

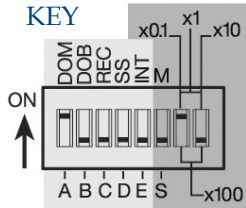
### \* Recycle (OFF Time First) Both Times Adjustable



### \* Interval Delay-on-Make



## KEY

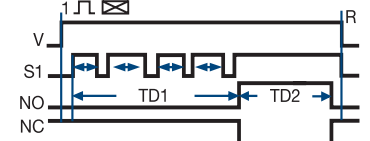
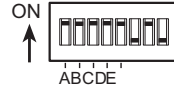


V=Voltage, R=Reset, S1=Initiate Switch,  
NO=Normally Open Contact, NC=Normally Closed Contact,  
TD,TD1,TD2=Complete Time Delay, t=Partial Time Delay,  
DOM=Delay-on-Make, DOB=Delay-on-Break, REC=Recycle,  
SS=Single Shot, INT=Interval, M=Minutes, S=Seconds,  
= } Undefined time

5 Switches for Function Selection  
3 Switches for Time Delay Range

NOTE: The time delay range is the same for both functions when dual functions are selected.

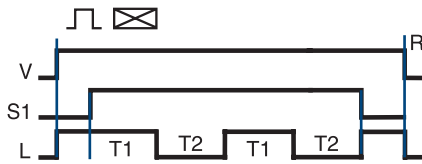
### Accumulative Delay-on-Make Interval



\* 9 Functions included in the 8 pin DPDT models

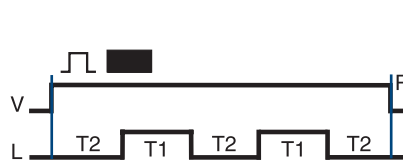
## Flasher Function Diagrams

### Flasher (NC)



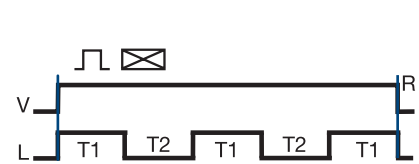
V = Voltage S1 = Initiate Switch L = Load  
R = Reset T1 = ON Time T2 = OFF Time  
T1 ≅ T2

### Flasher (OFF First)



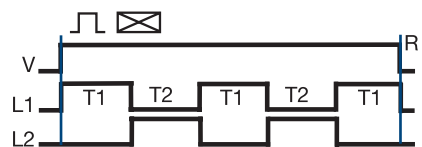
V = Voltage R = Reset L = Load  
T1 = ON Time T2 = OFF Time  
T1 ≅ T2

### Flasher (ON First)



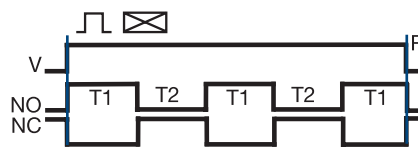
V = Voltage R = Reset L = Load  
T1 = ON Time T2 = OFF Time T1 ≅ T2  
ON time plus OFF time equals one complete flash.

### Flasher (Alternating)



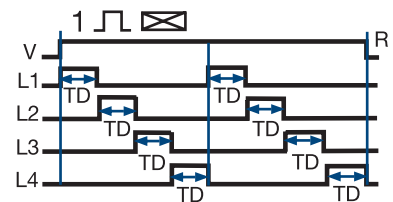
V = Voltage L1 = Load 1 L2 = Load 2  
R = Reset T1 = ON Time T2 = OFF Time  
T1 ≅ T2

### Flasher (ON First-DPDT)



V = Voltage R = Reset  
T1 = ON Time T2 = OFF Time  
NO = Normally Open NC = Normally Closed

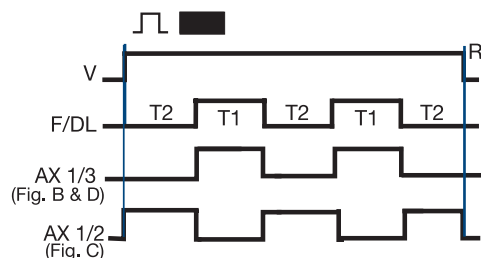
### Flasher (Chasing)



SC4 shown; SC3, L4 is eliminated and L1 TD begins as soon as L3 TD is completed.

V = Voltage R = Reset L (1...4) = Lamps  
TD = Time Delay (all are equal)

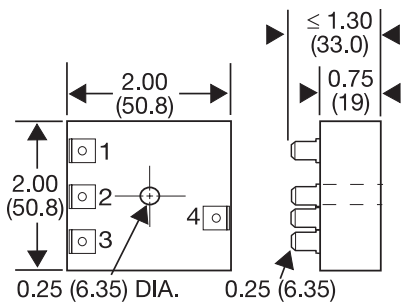
### Flashers & Aux. Modules



V = Voltage L = Load T1 = ON Time  
T2 = OFF Time R = Reset  
T1 ≅ T2

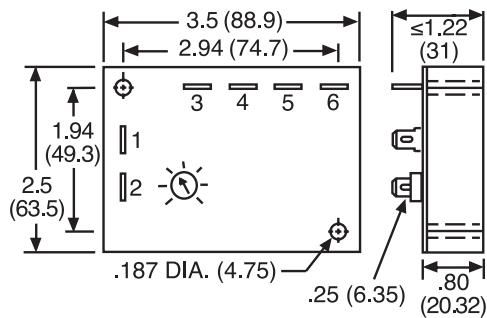
# Appendix B - Dimensional Drawings

**FIGURE 13**



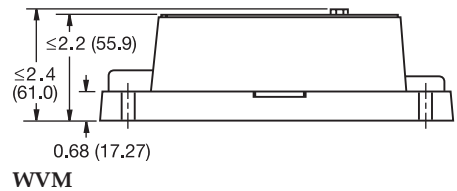
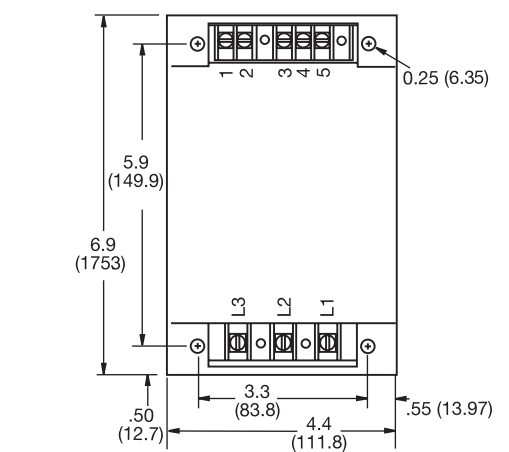
AF

**FIGURE 14**



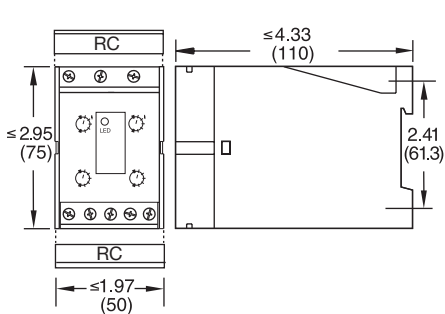
SC3; SC4; SQ

**FIGURE 15**



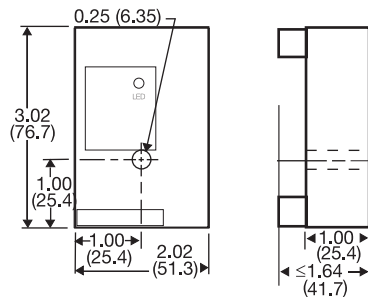
WVM

**FIGURE 16**



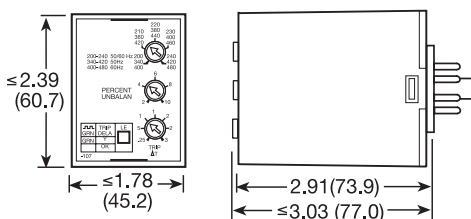
DLMU

**FIGURE 17**



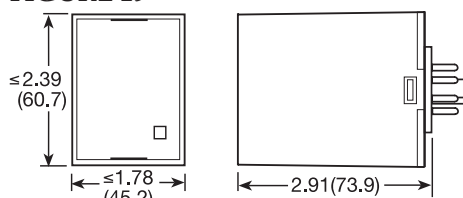
FB9L; HLMU; SCR9L

**FIGURE 18**



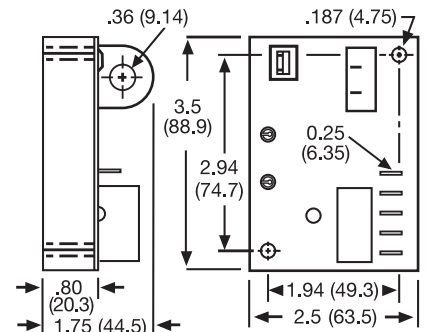
PLMU

**FIGURE 19**



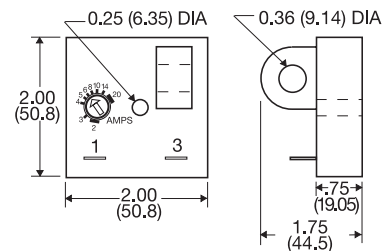
LLC4; LLC6; PLS

**FIGURE 20**



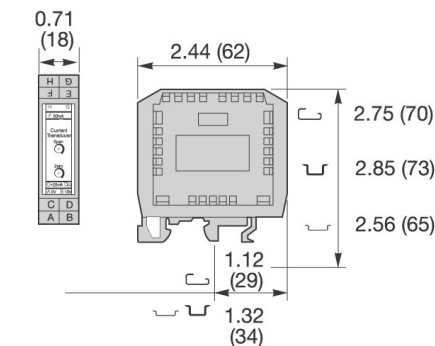
ECS; ECSW (ECS has spade connectors and ECSW has terminal board)

**FIGURE 21**



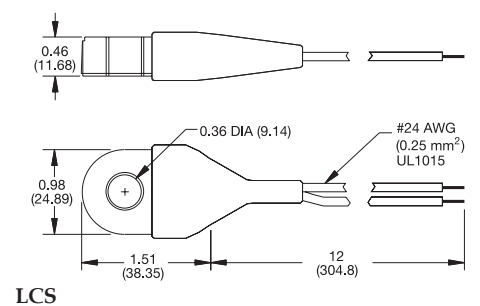
TCS; TCSA

**FIGURE 22**



DCSA

**FIGURE 23**

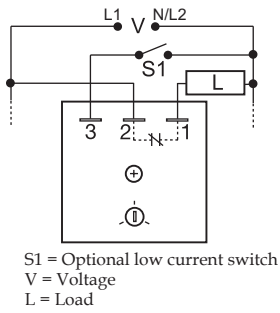


LCS

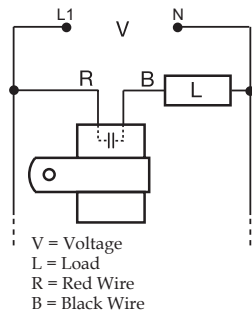
inches (millimeters)

# Appendix C - Connection Diagrams

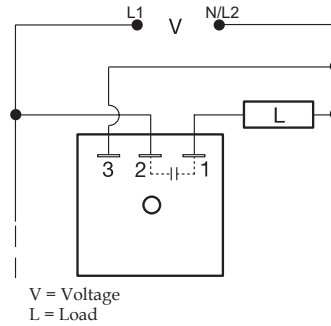
**FIGURE 1 - FSU1000 Series**



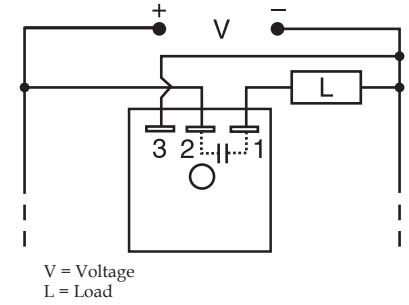
**FIGURE 2 - FS100 Series**



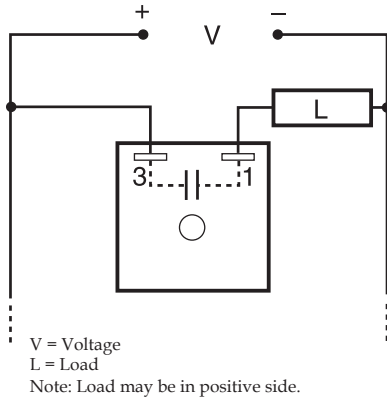
**FIGURE 3 - FS100 Series**



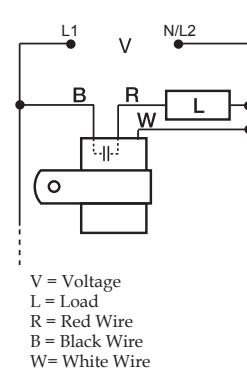
**FIGURE 4 - FS200 Series**



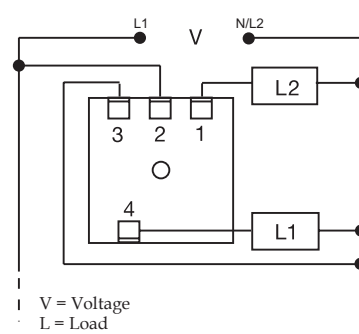
**FIGURE 5 - FS300 Series**



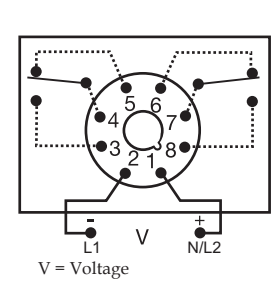
**FIGURE 6 - FS400 Series**



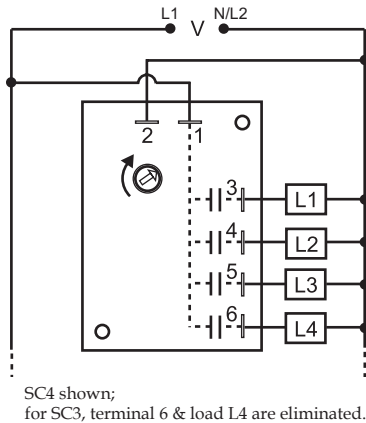
**FIGURE 7 - AF Series**



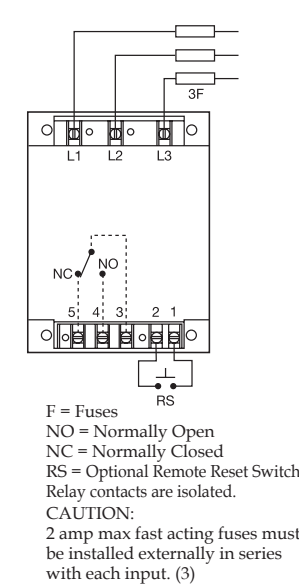
**FIGURE 8 - FS500 Series**



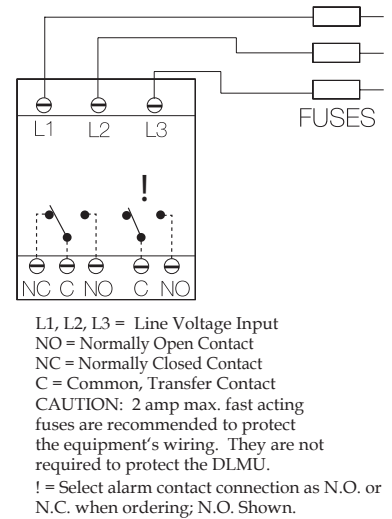
**FIGURE 9 - SC3/SC4 Series**



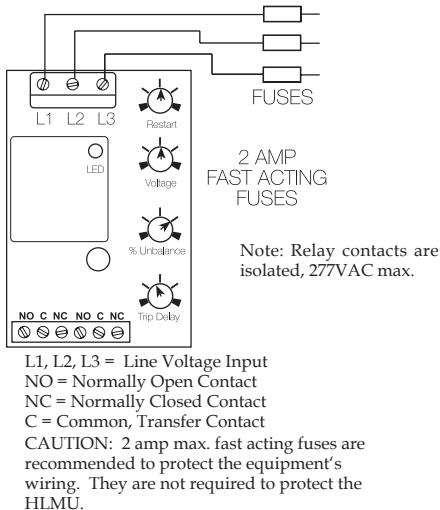
**FIGURE 10 - WVM Series**



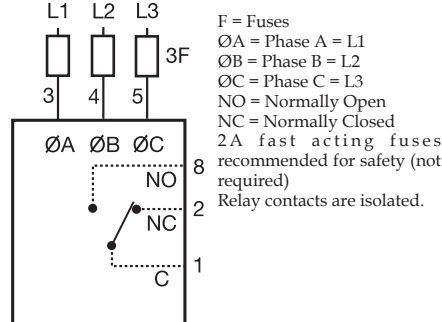
**FIGURE 11 - DLMU Series**



**FIGURE 12 - HLMU Series**



**FIGURE 13 - PLMU/PLM/PLR/PLS Series**



**FIGURE 14 - TVM/TVW Series**

