

# ABB Flashers

## Solid State



- FSU..... 6.2
- FS126, FS127, FS146, FS147 ..... 6.3
- FS143, FS152, FS162..... 6.4
- FS200 ..... 6.5
- FS300 ..... 6.6
- FS400 ..... 6.7
- AF ..... 6.8

6

## Relay



- FS500 ..... 6.9

## Chasers



- SC3..... 6.10
- SC4..... 6.10

# Universal Flasher

## FSU1000 Series

### Solid State Flasher



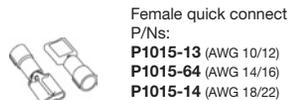
CE

10 YEAR WARRANTY

- All Solid State – No Moving Parts or Contacts
- Onboard Adjustable Flash Rate
- Loads up to 20 A
- High Inrush – Up to 200 A
- Universal Voltage – 24 ... 240 V AC

Approvals: 

#### Accessories



Female quick connect  
P/Ns:  
**P1015-13** (AWG 10/12)  
**P1015-64** (AWG 14/16)  
**P1015-14** (AWG 18/22)



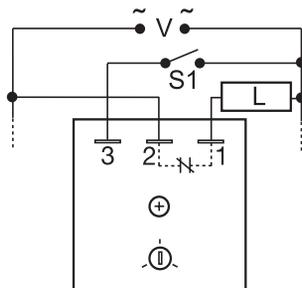
Quick connect to screw adaptor  
P/N: **P1015-18**

See accessory pages for specifications.

#### Description

The FSU1000 incorporates an onboard adjustable flash rate of 10 to 100 flashes per minute and a universal input voltage in one device. Its circuitry is encapsulated and is capable of controlling loads of up to 20 A. The versatility of the FSU1000 makes it ideal for applications where various flash rates and operating voltages are required.

#### Connection



Dashed lines are internal connections.

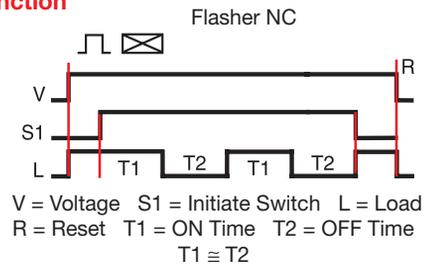
#### Operation

When input voltage is applied to terminal 2 and the load (lamp), the load energizes steadily. When input voltage is applied to terminal 3, the output flashes.

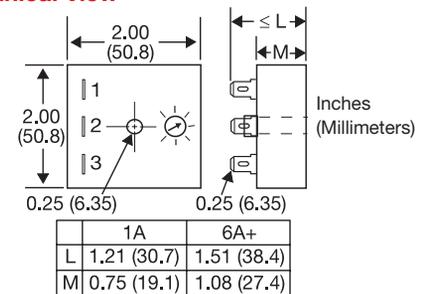
#### Optional Low Current Switch (S1)

This low current switch could be a limit switch or contact. While open, the operator sees the load (lamp) ON and operating. When the limit switch closes, the load (lamp) flashes to attract attention.

#### Function



#### Mechanical View



#### Ordering Table

Inrush Rating	Rating	Part Number
10 A	1 A	FSU1000
60 A	6 A	FSU1003
100 A	10 A	FSU1004
200 A	20 A	FSU1005

#### Technical Data

Operation ON/OFF recycling solid state flasher (continuous duty)  
Flash Rate Adjustable 10 ... 100 FPM  
ON/OFF Ratio ≅ 50%

#### Input

Range/Frequency 24 ... 240 V AC/ 50 ... 60 Hz

#### Output

Load Type Inductive, resistive, or incandescent  
Maximum Load Rating 1, 6, 10, or 20 A steady state  
Inrush 10 times steady state current

#### Mechanical

Mounting \* Surface mount with one #10 (M5 x 0.8) screw  
Termination 0.25 in. (6.35 mm) male quick connect terminals

#### Protection

Circuitry Encapsulated

#### Environmental

Operating Temperature -20°C ... +60°C (240 V AC +50°C)  
Storage Temperature -40°C ... +85°C  
Weight 1 A units: ≅ 2.4 oz (68 g)  
≥ 6 A units: ≅ 3.9 oz (111 g)

\*Units rated ≥ 6 A must be bolted to a metal surface using the included heat sink compound. The maximum mounting surface temperature is 90°C.

# Flasher - Low Cost

## FS100 Series

### Solid State Flasher



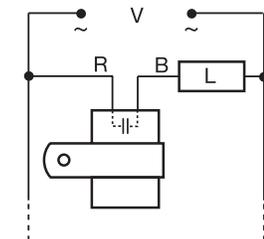
- Fixed Flash Rate at 75 Flashes Per Minute
- Custom Flash Rate 45 ... 150 F.P.M.
- 1 or 2 A Output
- 24 or 120 V AC are Available
- Small Size: 1.5 x 0.94 in. (38 x 23.9 mm)

Approvals:  

#### Description

The FS100 Series may be used to control inductive, incandescent or resistive loads. This series offers a 1 A (fullwave) or a 2 A (halfwave) steady state, 10 A inrush solid state output; and may be ordered with an input voltage of 24 or 120 V AC. The FS100 Series offers a factory fixed flash rate of 75 flashes per minute or may be ordered with a fixed custom flash rate ranging from 45 to 150 flashes per minute. Ideal for OEM applications where cost is a factor.

#### Connection



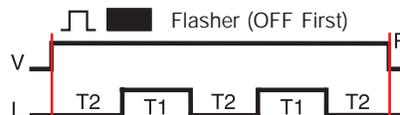
V = Voltage L = Load  
R = Red Wire B = Black Wire

#### Operation

Upon application of input voltage, the T2 OFF time begins. At the end of the OFF time, the T1 ON time begins and the load energizes. At the end of T1, T2 begins and the load de-energizes. This cycle repeats until input voltage is removed.

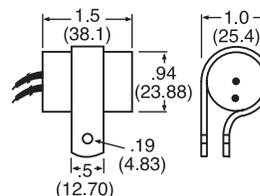
**Reset:** Removing input voltage resets the output and the sequence to T2.

#### Function



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

#### Mechanical View



Inches (Millimeters)

#### Ordering Table

Input	Output Rating	Output Type	Load Type *	Part Number
120 V AC	1 A	AC, Fullwave	A	FS126
120 V AC	1 A	AC, Fullwave	B	FS126RC
120 V AC	2 A	AC, Halfwave	A	FS127
24 V AC	1 A	AC, Fullwave	A	FS146
24 V AC	1 A	AC, Fullwave	B	FS146RC
24 V AC	2 A	AC, Halfwave	A	FS147

\* Load Type: A - Incandescent & Resistive B - Incandescent, Resistive & Inductive

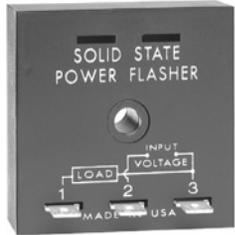
Technical Data	
<b>Specifications</b>	
Mode of Operation	OFF/ON solid state flasher for continuous duty
Flash Rate	Factory fixed at 75 flashes per minute +/-20%
Custom Flash Rates Available	From 45 ... 150 FPM +/-20%
ON/OFF Ratio	≅ 50%
<b>Input</b>	
Voltage	24, 120 V AC, +/-15%, 50 ... 60 Hz
<b>Output</b>	
Output	Fullwave AC or Halfwave rectified AC
Load Type	Incandescent, resistive, or inductive, (Choose RC Suffix for inductive loads)
Maximum Load Rating	Fullwave: 1A steady state; Halfwave: 2 A steady state
Inrush	10 A
<b>Mechanical</b>	
Mounting	Removable mounting bracket, use one #8 (M4 x 0.7) screw
Connection/Wires	18 AWG (0.82mm <sup>2</sup> ) wires 6 in. (15.2cm)
Package	1.5 x 0.94 in. (38.1 x 23.9 mm)
<b>Protection</b>	
Circuitry	Encapsulated
<b>Environmental</b>	
Operating/Storage Temperature	-20°C ... +60°C/-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 1.1 oz (31 g)

FS101B01 05.03.04

# Flasher - Medium/High Power

## FS100 Series

### Solid State Flasher



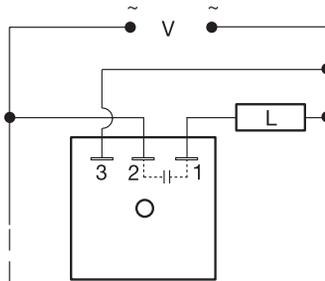
- Fixed at 90 Flashes per Minute
- Custom Flash Rate 10 ... 300 F.P.M.
- Switches Inrush Currents up to 30 A
- 24, 120, or 230 V AC Input Voltages
- Totally Solid State-- Encapsulated

Approvals:

#### Description

The FS100 Series may be used to control inductive, incandescent, or resistive loads. Input voltages of 24, 120, or 230 V AC are available. Factory fixed flash rate of 90 flashes per minute or may be ordered with a fixed custom flash rate ranging from 10 to 300 flashes per minute. Encapsulation provides protection against shock, vibration, and humidity. This group of solid state flashers has proven reliability with years of use throughout the world.

#### Connection



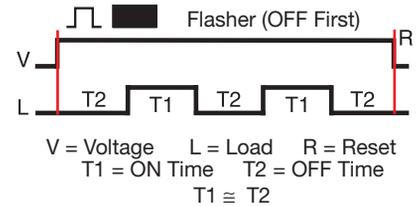
Dashed lines are internal connections.

#### Operation

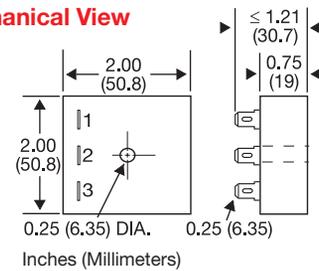
Upon application of input voltage, the T2 OFF time begins. At the end of the OFF time, the T1 ON time begins and the load energizes. At the end of T1, T2 begins and the load de-energizes. This cycle repeats until input voltage is removed.

**Reset:** Removing input voltage resets the output and the sequence to T2.

#### Function



#### Mechanical View



#### Ordering Table

Input	Rating	Part Number
24 V AC	3 A	FS143
120 V AC	3 A	FS152
230 V AC	3 A	FS162

#### Technical Data

**Operation**  
Flash Rate  
Custom Flash Rates  
ON/OFF Ratio

OFF/ON solid state flasher for continuous duty  
Factory fixed at 90 flashes per minute +/-10%  
Available from 10 ... 300 FPM +/-10%  
≅ 50%

**Input**  
Input Voltage

24, 120, or 230 V AC., +/-15%, 50 ... 60 Hz

**Output**  
Load Type  
Output  
Maximum Load Rating  
Inrush

Inductive, resistive, or incandescent  
Fullwave AC, solid state, SPST  
3 A steady state  
10 times steady state current

**Mechanical**  
Mounting  
Package  
Termination

Surface mount with one #10 (M5 x 0.8) screw  
2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)  
0.25 in. (6.35 mm) male quick connect terminals

**Protection**  
Circuitry

Encapsulated

**Environmental**  
Operating/Storage Temperature  
Weight

-20°... +60°C / -40°... +85°C  
≅ 2.2 oz (62 g)

#### Accessories

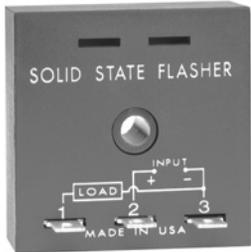
- Female quick connect  
P/N: **P1015-64** (AWG 14/16)
- Quick connect to screw adaptor  
P/N: **P1015-18**
- Mounting bracket  
P/N: **P1023-6**
- DIN rail P/Ns:  
**017322005** (Steel)  
**C103PM** (Al)  
DIN rail adaptor  
P/N: **P1023-20**

See accessory pages for specifications.

# DC Flasher

## FS200 Series

### Solid State Flasher



10 YEAR WARRANTY

- Fixed at 90 Flashes per Minute
- Custom Flash Rate 10 ... 180 F.P.M.
- 3 A SPST Output
- 12 ... 110 V DC Input Voltages in 5 Ranges
- Totally Solid State-- Encapsulated
- 0.25 in. (6.35 mm) Male Quick Connects

#### Description

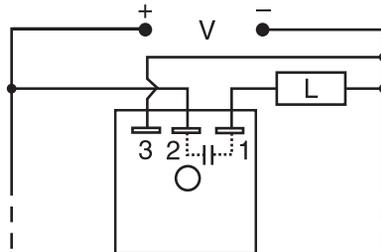
The FS200 Series may be used to control inductive, incandescent, or resistive loads. Input voltages of 12, 24, 36, 48, or 110 V DC are available. Factory fixed flash rate of 90 flashes per minute or may be ordered with a fixed custom flash rate ranging from 10 to 180 flashes per minute. Encapsulation provides protection against shock, vibration, and humidity. Uniform performance, high inrush current capability, and low RFI, make this series ideal for general industrial applications.

#### Operation

Upon application of input voltage, the T2 OFF time begins. At the end of the OFF time, the T1 ON time begins and the load energizes. At the end of T1, T2 begins and the load de-energizes. This cycle repeats until input voltage is removed.

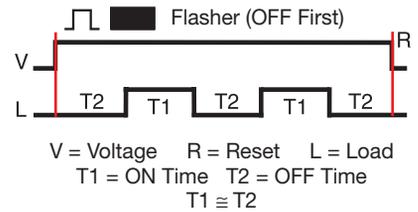
**Reset:** Removing input voltage resets the output and the sequence to T2.

#### Connection

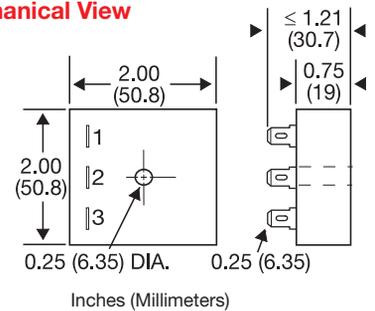


Dashed lines are internal connections.

#### Function



#### Mechanical View



6

#### Accessories

- Female quick connect  
P/N: **P1015-64** (AWG 14/16)
- Quick connect to screw adaptor  
P/N: **P1015-18**
- Mounting bracket  
P/N: **P1023-6**
- DIN rail adaptor  
P/N: **P1023-20**

See accessory pages for specifications.

#### Ordering Table

Input	Rating	Package	Part Number
12 V DC +/-20%	3 A	Quick Connect	FS219
24 V DC +/-20%	3 A	Quick Connect	FS224
36 V DC +/-20%	1 A	Quick Connect	FS236
48 V DC +/-15%	0.75 A	Quick Connect	FS248
110 V DC +/-15%	0.25 A	Quick Connect	FS290

#### Technical Data

**Operation**  
Flash Rate  
Custom Flash Rate  
ON/OFF Ratio

OFF/ON solid state flasher for continuous duty  
Factory Fixed at 90 flashes per minute +/-10%  
Available from 10 ... 180 flashes per minute  
≅ 50%

#### Input

Input Voltage: 12, 24, 36, 48, or 110 V DC

#### Output

Load Type: Inductive, resistive, or incandescent  
Maximum Load Rating: 0.25 ... 3 A steady state  
OFF State Leakage Current: ≤ 250 μA

Inrush: 10 times steady state current

#### Mechanical

Mounting: Surface mount with one #10 (M5 x 0.8) screw  
Package: 2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)  
Termination: 0.25 in. (6.35 mm) male quick connect terminals

#### Protection

Circuitry: Encapsulated

#### Environmental

Operating Temperature: -20°C ... +60°C  
Storage Temperature: -40°C ... +85°C  
Weight: ≅ 2.2 oz (62 g)

# DC Flasher FS300 Series Solid State Flasher



10 YEAR WARRANTY

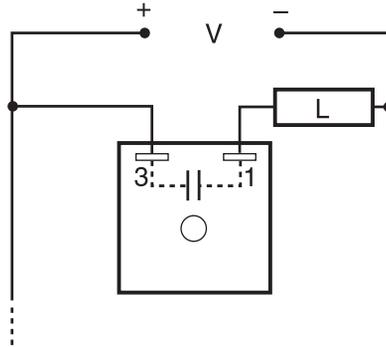
- Totally Solid State – No Mechanical Contacts to Arc and Wear
- High Surge Capability – Designed to Operate Incandescent Lamp Loads
- High Noise and Transient Protection
- Two-Terminal Series Connection
- Encapsulated – Protects Against Shock, Vibration, and Humidity

6

### Description

The FS300 Series of solid state flashers were specifically designed to operate lamp loads. Their two-terminal series connection feature makes installation easy. The high immunity to line noise and transients makes the FS300 Series ideal for moving vehicle applications. All solid state construction means reliability and long life.

### Connection



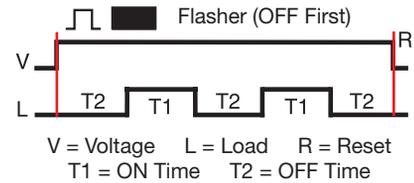
Note: Load may be in positive side

### Operation

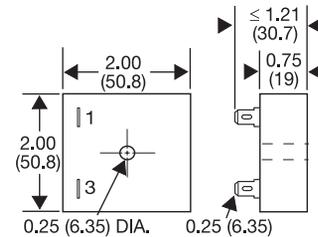
Upon application of input voltage, the T2 OFF time begins. At the end of the OFF time, the T1 ON time begins and the load energizes. At the end of T1, T2 begins and the load de-energizes. This cycle repeats until input voltage is removed.

**Reset:** Removing input voltage resets the output and the sequence to T2.

### Function



### Mechanical View



Inches (Millimeters)

### Ordering Table

Input	Maximum Load Current	Part Number
12 V DC +/-20%	2.5 A	FS312
24 V DC +/-20%	1.5 A	FS324
36 V DC +/-20%	1.0 A	FS336
48 V DC +/-15%	0.75 A	FS348
72 V DC +/-15%	0.5 A	FS372
110 V DC +/-15%	0.25 A	FS390

### Accessories



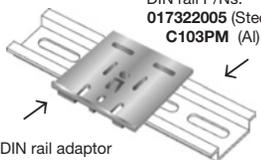
Female quick connect  
P/N: **P1015-64** (AWG 14/16)



Quick connect to screw adaptor  
P/N: **P1015-18**



Mounting bracket  
P/N: **P1023-6**



DIN rail P/Ns:  
**017322005** (Steel)  
**C103PM** (Al)

DIN rail adaptor  
P/N: **P1023-20**

See accessory pages for specifications.

### Technical Data

#### Specifications

Mode of Operation: OFF/ON recycling solid state flasher (continuous duty)  
Flash Rate: Fixed at 75 flashes per min +/-10%  
Custom Flash Rates: Available from 60 ... 150 flashes per min  
ON/OFF Ratio: ≈ 50%

#### Input

Input Voltage: 12, 24, 36, 48, 72, and 110 V DC

#### Output

Load Type: Incandescent or resistive  
Maximum Load Rating: 0.25 ... 2.5 A steady state  
Inrush: 10 times steady state current

#### Mechanical

Mounting: Surface mount with one #10 (M5 x 0.8) screw  
Package: 2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)  
Termination: 0.25 in. (6.35 mm) male quick connect terminals

#### Protection

Circuitry: Encapsulated

#### Environmental

Operating/Storage Temperature: -20°... +60°C / -40°... +85°C  
Humidity: 95% relative; non-condensing  
Weight: ≈ 2.2 oz (62 g)

# Flasher - LED Lamps

## FS400 Series

### Solid State Flasher

Flashers



- Low Leakage for LED Lamps
- Fixed Flash Rate at 75 Flashes Per Minute
- Custom Flash Rate 45 ... 150 F.P.M.
- 0.5 or 1 A Solid State Output
- 24 V to 240 V AC in 2 Ranges
- Small Size: 1.5 x 0.94 in. (38 x 23.9 mm)

Approvals:

#### Description

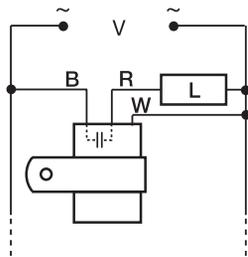
The FS400 Series is a low leakage AC flasher designed to control LED, or resistive loads. This series offers a solid state output and may be ordered with an input voltage of 24 V to 240 V AC, in two ranges. It offers a factory fixed flash rate of 75 flashes per minute or may be ordered with a fixed custom flash rate ranging from 45 to 150 flashes per minute. The FS400 is the perfect solution for LED lamp flashing.

#### Operation

Upon application of input voltage, the output energizes and the ON time begins. At the end of the ON time, the output de-energizes and the OFF time begins. At the end of the OFF time, the output energizes and the cycle repeats as long as input voltage is applied.

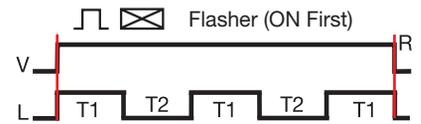
**Reset:** Removing input voltage resets the output and the flash sequence.

#### Connection



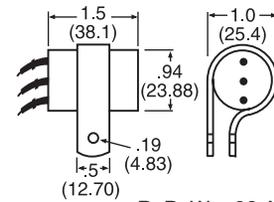
V = Voltage L = Load  
R = Red Wire B = Black Wire  
W = White Wire

#### Function



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

#### Mechanical View



R, B, W = 20 AWG (0.52 mm<sup>2</sup>) wires  
6 in. (15.2 cm)  
Mounting bracket is removable

#### Ordering Table

Input	Output Rating	Part Number
120 V AC ... 240 V AC	0.5 A	FS491
24 V AC	1 A	FS421

#### Technical Data

##### Operation

Mode of Operation  
Flash Rate  
ON/OFF Ratio  
Custom Flash Rates Available

ON/OFF solid state flasher for continuous duty  
Factory fixed at 75 flashes per minute +/-20%  
≅ 50%  
From 45 ... 150 FPM +/-20%

##### Input

Voltage  
Tolerance  
Frequency

24, or 120 ... 240 V AC  
+/- 15%  
50 ...60 Hz

##### Output

Load Type  
Output  
Maximum Load Rating 120 V AC...240 V AC  
24 V AC  
Max. Load Leakage Current  
Voltage Drop

LED or resistive  
Bridge Rectifier and FET  
0.5 A steady state; 5 A Inrush  
1A steady state; 10 A Inrush  
250 μA  
2 V Typical

##### Mechanical

Mounting  
Package

Surface mount with one #8 (M4 x 0.7) screw  
1.5 x 0.94 in. (38.1 x 23.9 mm)

##### Protection

Surge  
Circuitry

IEEE C62.41 - 1991 Level A  
Encapsulated

##### Environmental

Operating / Storage Temperature  
Humidity  
Weight

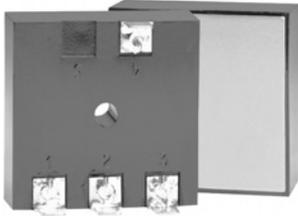
-20°C ... +60°C / -40°C ... +85°C  
95% relative, non-condensing  
≅ 1.1 oz (31 g)

FS401B01 02:10:05

# Alternating Flasher

## AF Series

### Solid State Flasher



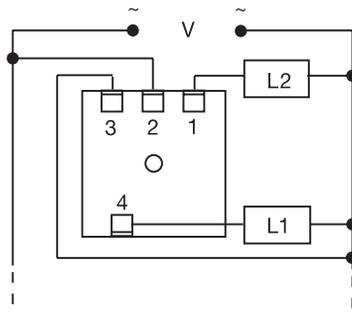
- Alternately Flashes Two High Current Loads
- High Surge Capacity -- Up to 200 A
- Small Size -- 2 x 2 x 1.30 in. (50.8 x 50.8 x 33 mm)
- Totally Solid State & Encapsulated

6

#### Description

The AF Series offers a high inrush capacity of up to 200 A. These devices exceed mechanical type relays in both performance and lifespan. The AF Series is constructed with no moving parts to arc, wear, and eventually fail; 100 million operations are typical. Circuitry is encapsulated to provide protection against vibration and moisture, making the AF Series ideal for outdoor applications.

#### Connection

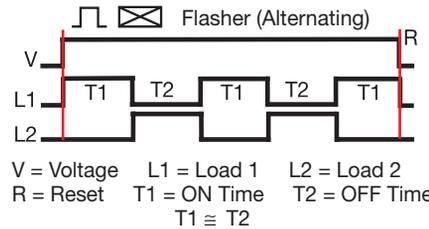


#### Operation

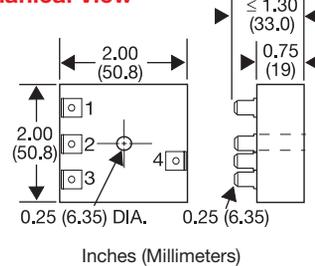
Upon application of input voltage T1 begins, Load 1 is ON and Load 2 is OFF. At the end of T1, T2 begins and Load 2 is now ON and Load 1 is OFF. At the end of T2, T1 repeats and this sequence continues until input voltage is removed. The duration of T1 and T2 is approximately equal.

**Reset:** Removing input voltage resets the flasher.

#### Function



#### Mechanical View



#### Ordering Table

AF Series	X Input	X Output Rating	X Flash Rate (flashes per min.)
	-1 - 24 V AC	-1 - 6 A	-1 - 10
	-2 - 120 V AC	-2 - 10 A	-2 - 30
	-3 - 230 V AC	-3 - 20 A	-3 - 60
			-4 - 90
			-5 - 120
			-6 - 140
			-9 - Custom Flash Rate

Example P/N: **AF224** Custom Flash Rate - **AF229-45**

#### Technical Data

Operation	Alternating solid state flasher rated for continuous duty
Flash Rate	Factory fixed at 10, 30, 60, 90, 120, or 140 flashes per min. +/-10%.
Custom Flash Rate Ratio	Specify as any number between 10 & 140, inclusive ≈ 50%
<b>Input</b>	
Input Voltage, Frequency	24, 120, or 230 V AC +/-15%, 50 ... 60 Hz
<b>Output</b>	
Load Type	Incandescent or resistive
Maximum Load Rating	6, 10, & 20 A steady state
Inrush	10 times steady state current
<b>Mechanical</b>	
Mounting *	Surface mount with one #10 (M5 x 0.8) screw
Package	2 x 2 x 1.30 in. (50.8 x 50.8 x 33 mm)
<b>Protection</b>	
Circuitry	Encapsulated
<b>Environmental</b>	
Operating / Storage Temperature	-20°C ... +60°C / -40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≈ 2.9 oz (82 g)

\*Must be bolted to metal surface using the included heat sink compound. The maximum mounting surface temperature is 90°C.

#### Accessories



Female quick connect P/Ns:  
**P1015-13** (AWG 10/12)  
**P1015-64** (AWG 14/16)  
**P1015-14** (AWG 18/22)



Quick connect to screw adaptor P/N: **P1015-18**

See accessory pages for specifications.

# Flasher - Relay Output

## FS500 Series

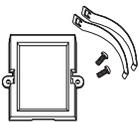
### Solid State Flasher



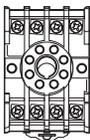
- Solid State Circuitry--Relay Output
- Industrial Standard Octal Plug-in
- Adjustable Flash Rate  
10 ... 100 FPM
- 10 A DPDT Output Contacts

Approvals: (some models)

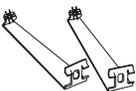
#### Accessories



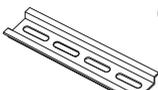
Panel mount kit  
P/N: **BZ1**



Octal  
8-pin socket  
P/N: **NDS-8**



Hold down clips  
P/N: **PSC8**



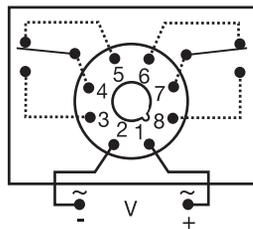
DIN rail P/Ns:  
**017322005** (Steel)  
**C103PM** (Al)

See accessory pages for specifications.

#### Description

The FS500 Series flash rate is adjustable from 10 to 100 flashes per minute. A locknut is provided to hold selected flash rate. The long-life electronic circuit combined with a quality electromechanical relay provides flexibility and reliability in most applications.

#### Connection



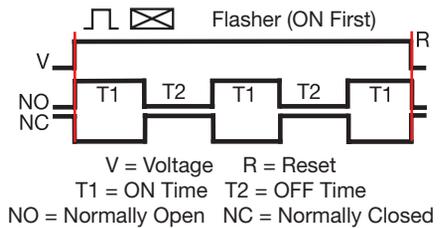
Dashed lines are internal connections.

#### Operation

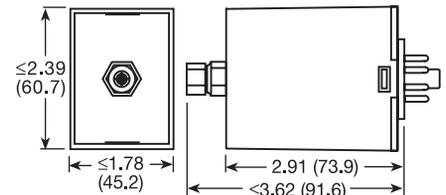
Upon application of input voltage, the output relay is energized and the ON time begins. At the end of the ON time, the output relay de-energizes and the OFF time begins. At the end of the OFF time, the output is energized and the cycle repeats as long as input voltage is applied.

**Reset:** Removing input voltage resets the output and the sequence.

#### Function



#### Mechanical View



Inches (Millimeters)

#### Ordering Table

Input	CSA	Part Number
12 V DC	*	FS512
24 V AC/DC	*	FS524
120 V AC/DC	*	FS590
230 V AC	*	FS599

#### Technical Data

##### Specifications

Mode of Operation  
Flash Rate

ON/OFF recycling flasher with adjustable flash rate  
Adjustable from 10 ... 100 operations per minute  
(guaranteed range)  
≅ 50%

ON/OFF Ratio

##### Input

Input Voltage  
Tolerance  
Frequency

12 V DC, 24 V AC/DC, 120 V AC/DC, 230 V AC  
-15% ... +20%  
-20% ... +10%  
50 ... 60 Hz

##### Output

Type  
Rating

Electromechanical relay DPDT  
10 A resistive at 120/240 V AC & 28 V DC;  
1/3 hp at 120/ 240 V AC

##### Mechanical

Mounting  
Termination

Plug-in socket  
8 pin Octal plug

##### Protection

Isolation Voltage  
Polarity

≥ 1500 V RMS input to output  
DC units are reverse polarity protected

##### Environmental

Operating/Storage Temperature  
Weight

-20°... +60°C / -30° ... +85°C  
≅ 5.8 oz (164 g)

# Chaser (Flasher) SC3/SC4 Series Timing Module



10 YEAR WARRANTY

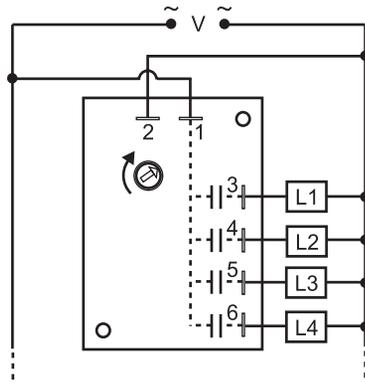
- Sequential 3 or 4 Circuit Flashing of Incandescent Loads
- Fixed or Adjustable Flash Rates - 30 ... 300 per m
- 1 A Steady State Output
- 24, 120, or 230 V AC Input Voltage
- Totally Solid State and Encapsulated

Approvals:

## Description

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.

## Connection



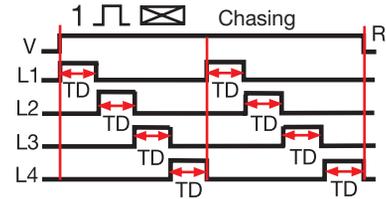
SC4 shown; for SC3, terminal 6 & load L4 are eliminated.  
Dashed lines are internal connections.

## 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.

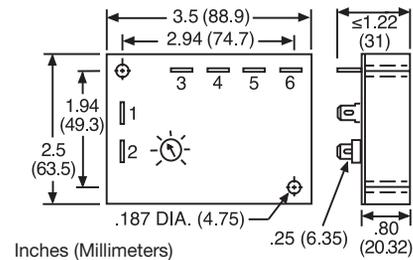
## Function



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)

## Mechanical View



## Ordering Table

**X**  
Series  
- SC3 (3 outputs)  
- SC4 (4 outputs)

**X**  
Input  
- 24 - 24 V AC  
- 120 - 120 V AC  
- 230 - 230 V AC

**X**  
Rate  
- A - Adjustable (30 ... 300)  
- F - Fixed \*  
\*If Fixed is selected, insert [30 ... 300] operations per minute.

Example P/N: SC3120A, SC424F100

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

## Accessories



Female quick connect  
P/Ns:  
P1015-13 (AWG 10/12)  
P1015-64 (AWG 14/16)  
P1015-14 (AWG 18/22)



Quick connect to screw adaptor  
P/N: P1015-18

See accessory pages for specifications.