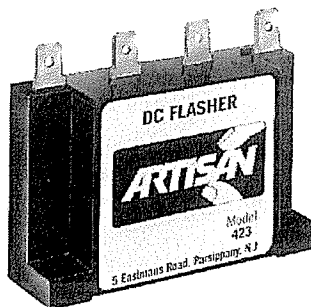




# Solid State Timers and Controllers

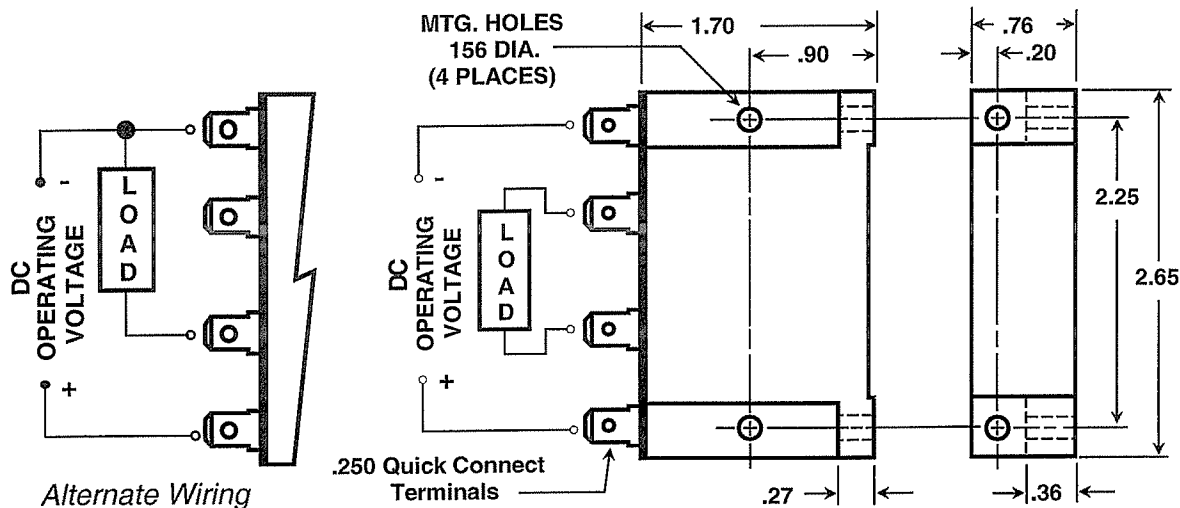
## 423

## Solid State DC Flasher

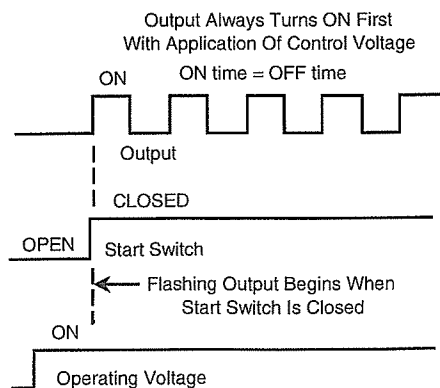


Unlike most solid state devices that switch the low or ground side of the DC operating voltage, the model 423 switches the high side of the DC operating voltage to an external load circuit when switched "ON." The flash rate can be specified over a wide range from 1 flash per minute to 600,000 flashes per minute. The duty cycle of the flashing rate is 50%. Load currents to 1 ampere may be driven with the output of the model 423. The model 423 has internal transient protection devices to assure reliable operation even when driving inductive load circuits such as relays or solenoids. The model 423 is available only in a fixed flash rate version.

### Mechanical & Wiring



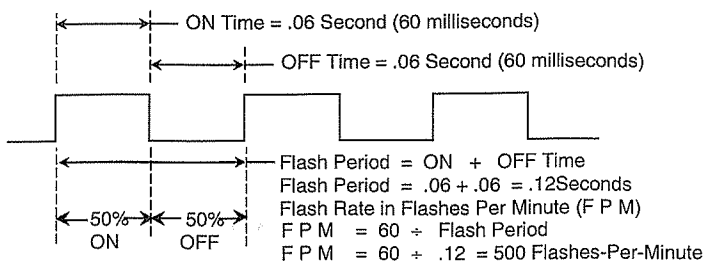
### Timing Diagram



### How To Find The Flash Rate

The timing diagram shown below is for an application that requires the load circuit to be ON for 60 milliseconds and OFF for 60 milliseconds. (Remember - the ON and OFF times will essentially be equal due to the 50% duty cycle specification inherent in the model 423)

The voltage across the load circuit would look something this:



Artisan Controls Corporation,  
 111 Canfield Ave, Bldg B15-18, Randolph, New Jersey 07869, USA  
 Tel: 973-598-9400 • Fax: 973-598-9410 • Toll Free: 800-457-4950  
 website: [www.artisancontrols.com](http://www.artisancontrols.com)



# Solid State Timers and Controllers

## Specifications .....

**Voltage:** 5V DC, 12V DC, 24V DC, 48V DC.

**Voltage Tolerances:** ±20%.

**Timing Mode:** Flasher.

**Fixed Flash Rate:** Factory fixed at any rate from 1 to 600,000 flashes-per-minute (FPM)

**Flash Rate Duty Cycle:** 50%.

**Flash Rate Duty Cycle Tolerance:** ±10%.

**Tolerances On Flashing Rate:** ±10%

**Flash Rate Variation:** Less than 4% over full temperature and voltage range.

**Repeatability Of Flashing Period:** ±1% at stabilized operating voltage temperature.

**Recycle Time:** Operating voltage must be removed for a minimum of 10 milliseconds to assure that the flasher and output circuits are reset.

**Output Rating:** 0 to 1A inductive with inrush current to 20A for 10 milliseconds.

**Output Switch Characteristics:** 3 volt drop maximum across output switch when ON and load current is 1A, 5mA leakage when OFF.

**Dielectric:** 1500V rms all terminals to case.

**Operating Temperature:** -20°C to +85°C.

**Construction:** Encapsulated module with .25 quick connect wiring terminals.

**Data Sheet Revision Date:** September 5, 2000

## Ordering Information .....

Part Number	Operating Voltage	Flash Rate
423 -	5V DC	Specify In Flashes Per Minute FPM From 1 To 600,000
	12V DC	
	24V DC	
	48V DC	

## Examples Of Part Numbers .....

423 - 12VDC - 90 Is a model 423 with 12V DC operating voltage, with a fixed FPM (Flashes Per Minute) of 90  
Voltage to the load circuit is ON for 333 milliseconds, and OFF for 333 milliseconds.

423 - 24VDC - 500 Is a model 423 with 24V DC operating voltage, with a fixed FPM (Flashes Per Minute) of 500.  
Voltage to the load circuit is ON for 60 milliseconds, and OFF for 60 milliseconds.

423 - 24VDC - 30000 Is a model 423 with 24V DC operating voltage, with a fixed FPM (Flashes Per Minute) of 30,000.  
Voltage to the load circuit is ON for 1 millisecond, and OFF for 1 millisecond.