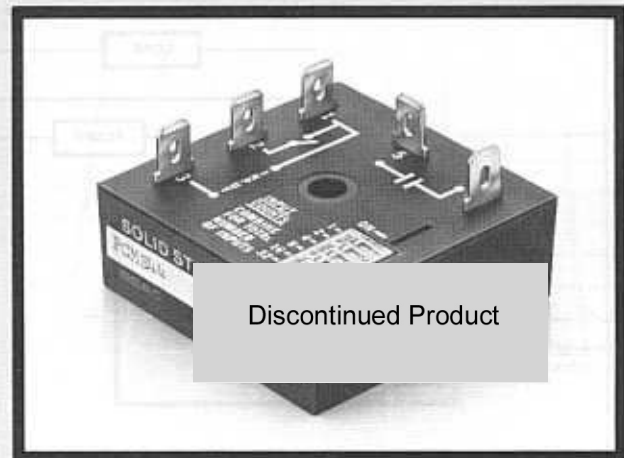


## PCMS Series

- Low Cost
- Auto Reset
- Switch Setable
- 1 to 63 Counts
- Isolated Solid State Output
- Totally Solid State

DIN Track Adaptor available, see *Accessories*, Section I.

## DESCRIPTION

The PCMS is a predetermined counter that is totally solid state and encapsulated in modular form (suitable for hostile environments). The count is adjustable by means of six binary coded switches located on the top surface of the module. The input and output are optically isolated so that the switch input and output load can be operated from separate power sources. The PCMS is accurate, versatile, reliable and low cost.

## SPECIFICATIONS

## 1. Count Function

- 1.1 Type: Solid state C/MOS digital integrated circuitry
- 1.2 Count Input
  - a. Type: Mechanical contact (counts on closure)
  - b. Switch operate times:
    - Close Period: 30 milliseconds minimum
    - Open Period: 70 milliseconds minimum
- 1.3 Preset Count: 1 to 63 counts
- 1.4 Count Adjustment: Six binary coded switches located on each control

## 2. Output

- 2.1 Type: Solid state pulse output for AC operation. (AC outputs provide 1/2 wave rectified AC)
- 2.2 Pulse Width: 300 milliseconds  $\pm 20\%$
- 2.3 Rate: 10 counts per minute maximum
- 2.4 Current Rating: 100 milliamps max.
- 2.5 Voltage Drop: 1.5 volts maximum
- 2.6 Isolation (Input to Output): 1500 volts RMS min.

## 3. Line Voltage

- 3.1 Nominal: 24 to 230 volts AC
- 3.2 Tolerance:  $\pm 15\%$
- 3.3 Frequency: 50/60 Hertz

## 4. Mechanical

- 4.1 Mounting: Surface mount with one #8 or #10 screw
- 4.2 Package: Molded housing with encapsulated circuitry
- 4.3 Termination: 1/4 inch male quick connect terminals

## 5. Protection

- 5.1 Transient Protected
- 5.2 Dielectric: 1500 volts RMS minimum
- 5.3 Insulation Resistance: 100 megohms minimum

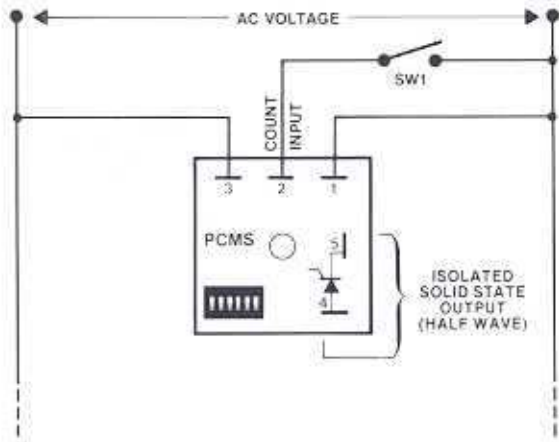
## 6. Environmental

- 6.1 Operating Temperature:  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- 6.2 Storage Temperature:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- 6.3 Humidity: 95% relative

# CONNECTION

1234567891011121314151617181  
 192021222324252627282930313233  
 34353637383940414243444546  
 47484950515253545556575859606  
 616263646566676869707172737475767778798081828384858687888990919293949596979899100

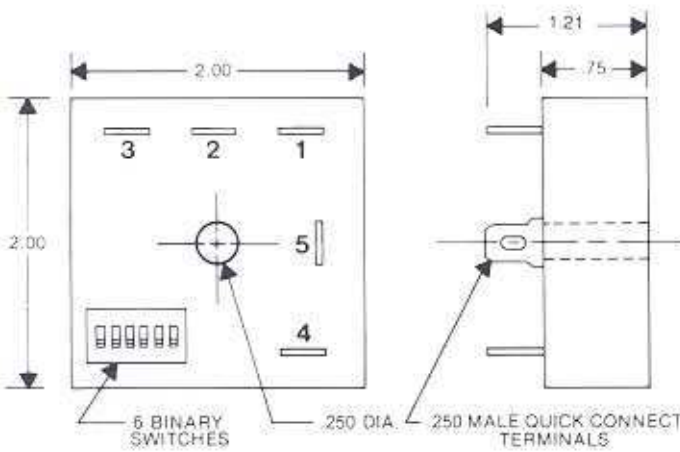
# OPERATION



The PCMS will count and accumulate each and every closure of SW1. When the total number of counts (closures of SW1) equals the value set by the six switches located on the PCMS, a momentary closure of the output will occur. At that point the PCMS will reset to zero and is ready to start another cycle.

Reset during an operation is accomplished by removal of input power from terminals 1 or 3.

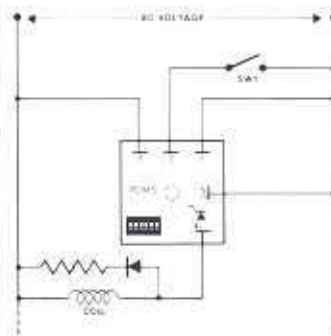
## MECHANICAL



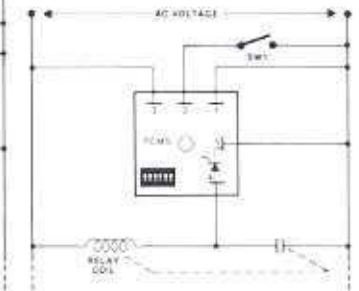
Note: All dimensions in inches.

## TYPICAL APPLICATIONS

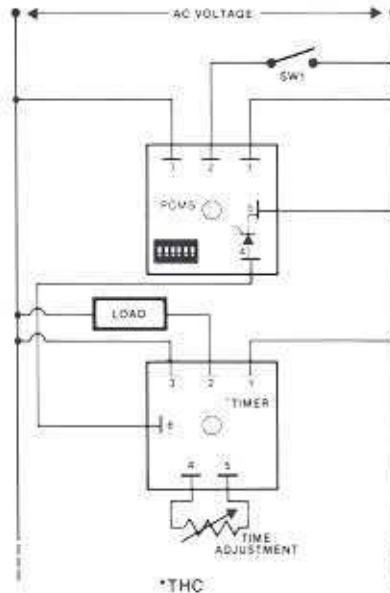
### 1. DRIVING A RELAY OR SOLENOID COIL



### 2. LATCHING A RELAY



### 3. PCMS DRIVING A TIME DELAY



Upon reaching the preset number of counts, PCMS will initiate the timer. The timer will energize the load for the delay period.

## ORDERING INFORMATION

Series	Operating Voltage	Output Voltage Rating
☆ PCMS	☆ 2— 24VAC 4— 120VAC 6— 230VAC	2— 24VAC ☆ 4— 120VAC 6— 230VAC

☆ Example Part Number: PCMS24 solid state preset counter with a count switch voltage of 24VAC and a load voltage of 120VAC.

Note: Please contact an SSAC Applications Engineer to insure proper use of this product.