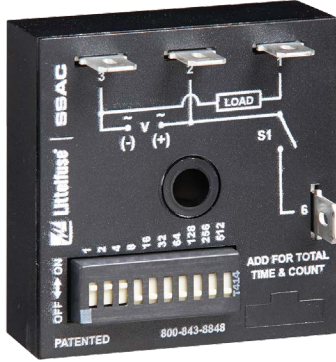
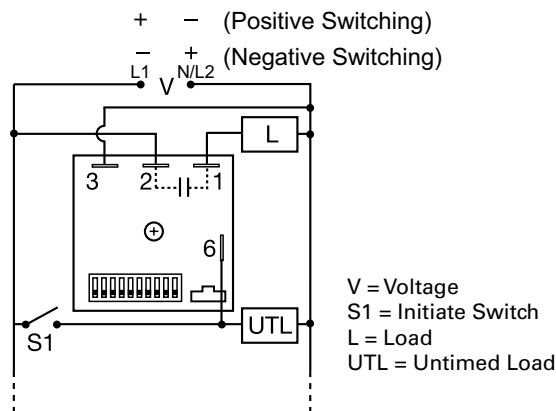


## KSPU SERIES



### Wiring Diagram



### Ordering Information

| MODEL   | INPUT VOLTAGE | TIME DELAY/COUNTS                           | FUNCTION                   |
|---------|---------------|---------------------------------------------|----------------------------|
| KSPUA2I | 24 to 240VAC  | 1 - 1023s                                   | Interval                   |
| KSPUA8C | 24 to 240VAC  | 1 - 1023 counts (binary) with pulsed output | Counter with pulsed output |

If you don't find the part you need, call us for a custom product 800-843-8848

### Description

The KSPU Series is a factory programmed module available in any 1 of 14 standard functions. The KSPU offers a single adjustable timer or counter function. Switch adjustment allows accurate selection of the time delay or number of counts the first time and every time. The 1A steady, 10A inrush rated solid-state output provides 100 million operations, typical. Its microcontroller timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KSPU Series is a cost effective approach for OEM applications that require small size, solid state reliability, and accurate switch adjustment.

### Features & Benefits

| FEATURES                                        | BENEFITS                                                                                                         |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Microcontroller based</b>                    | Repeat Accuracy + / - 0.1%                                                                                       |
| <b>Compact design</b>                           | Allows flexibility for OEM applications                                                                          |
| <b>1A steady, 10A inrush solid-state output</b> | Provides 100 million operations in typical conditions.                                                           |
| <b>Totally solid state and encapsulated</b>     | No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity |

### Accessories



#### **P1015-64 (AWG 14/16), P1015-14 (AWG 18/22) Female Quick Connect**

These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



#### **P1015-18 Quick Connect to Screw Adapter**

Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.



#### **C103PM (AL) DIN Rail**

35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



#### **P1023-20 DIN Rail Adapter**

Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

## KSPU SERIES

### Specifications

#### Time Delay

##### Range\*

0.1 - 102.3s, m or h in 0.1s, m or h increments  
1 - 1023s, m or h in 1s, m or h increments  
1 - 63s or m in 1s or m increments

##### Repeat Accuracy

±0.1% or 20 ms, whichever is greater

##### Setting Accuracy

≤ ±1% or 20 ms, whichever is greater

##### Reset Time

≤ 150ms

##### Initiate Time

≤ 20ms

##### Time Delay vs. Temperature & Voltage

≤ ±2%

#### Input

##### Voltage/Tolerance

24 to 240VAC, 12 to 120VDC/≤ ±15%

##### AC Line Frequency/DC Ripple

50/60 Hz/≤ 10%

##### Power Consumption

AC ≤ 2VA; DC ≤ 1W

#### Output

##### Type

Solid state

##### Form

NO, SPST-NO

##### Rating

1A steady state, 10A inrush for 16ms

##### Voltage Drop

AC ≅ 2.5V @ 1A; DC ≅ 1V @ 1A

##### Off State Leakage Current

AC ≅ 5mA @ 240VAC; DC ≅ 1 mA

##### Counter Output

Output pulse width: 300ms ±20%

Time Delay/Counts Variable 7 & 8

#### Protection

##### Circuitry

Encapsulated

##### Dielectric Breakdown

≥ 2000V RMS terminals to mounting surface

##### Insulation Resistance

≥ 100 MΩ

##### Polarity

DC units are reverse polarity protected

#### Mechanical

##### Mounting

Surface mount with one #10 (M5 x 0.8) screw

##### Dimensions

H 50.8 mm (2"); W 50.8 mm (2");

D 30.7 mm (1.21")

0.25 in. (6.35 mm) male quick connect terminals

##### Termination

#### Environmental

##### Operating/Storage

-40° to 60°C / -40° to 85°C

##### Humidity

95% relative, non-condensing

##### Weight

≅ 2.4 oz (68 g)

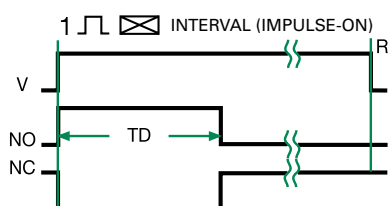
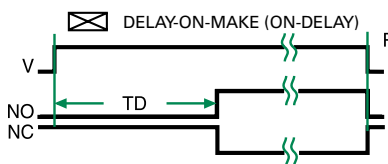
\*For CE approved applications, power must be removed from the unit when a switch position is changed.

### Adjustment Switch Operation

| TIME DELAY  |          | COUNTER   |                                 |
|-------------|----------|-----------|---------------------------------|
| 0.1...102.3 | 1...1023 | 1...165   | 1...63                          |
| OFF ► ON    | OFF ► ON | OFF ► ON  | OFF ► ON                        |
| 0.1         | 1        | 1         | 1                               |
| 0.2         | 2        | 2         | 2                               |
| 0.4         | 4        | 3         | 4                               |
| 0.8         | 8        | 4         | 8                               |
| 1.6         | 16       | 5         | 16                              |
| 3.2         | 32       | 10        | 32                              |
| 6.4         | 64       | 20        | M *                             |
| 12.8        | 128      | 30        | 1                               |
| 25.6        | 256      | 40        | 2                               |
| 51.2        | 512      | 50        | 4                               |
| 6.3         | 544      | 57 counts | 44 s Delay<br>2 counts to Start |

\* for selecting time in minutes or seconds

### Function Diagrams



V = Voltage  
NO = Normally Open Contact  
NC = Normally Closed Contact  
TD = Time Delay  
R = Reset  
— = Undefined Time