PCSP Module
KSPU ProgramaCube™ Timing Module

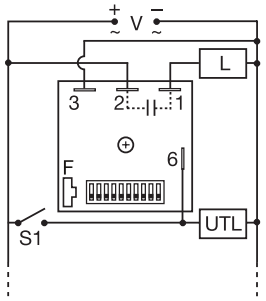
TEN YEAR WARRANTY
Obsolete Specification
Redesigned product is available
see new specifications at:
www.ssac.com/standard/standard.htm

- In Stock, Fa... ...d Fast
- Choose ...
- Micro... ...% Repeat Accuracy
- Solid... ...dy, 10 A Inrush
- Accura... ...ment
- 12 ... 23... ...nges
- Delays fro... ...ms ... 1023 h

Description

The KSPU Series is a factory programmed module available in any 1 of 12 standard functions. The KSPU offers a single adjustable timer or counter function. Modules are manufactured without the function assigned. When an order is received, the function software is added. This approach provides fast delivery on all part numbers. Switch adjustment allows accurate selection of the time delay or number of counts. The 1 A steady, 10 A 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, accurate switch adjustment, and are In Stock. Special time ranges and functions are available; contact Applications Assistance for more information.

Patent Pending
■ Approvals:



V = Voltage L = Load UTL = Untimed Load
S1 = Initiate Switch F = Cover (Factory use only)

Ordering Table

KSPU Series

X Input
- 1 - 12 V DC
- 2 - 24 V AC
- 3 - 24 V DC
- 4 - 120 V AC
- 5 - 120 V DC
- 9 - 120/230 V AC

X Time Delay/Counts
- 1 - 0.1 ... 102.3 s
- 2 - 1 ... 1023 s
- 3 - 0.1 ... 102.3 m
- 4 - 1 ... 1023 m
- 5 - 0.1 ... 102.3 h
- 6 - 1 ... 1023 h
- 7 - 1 ... 165 counts (straight) w/pulsed output
- 8 - 1 ... 1023 counts (binary) w/pulsed output
- 9 - 1 ... 7 counts to start 1 ... 63 s or m interval time

X Function**
Specify Function (Refer to Function Chart for Code)

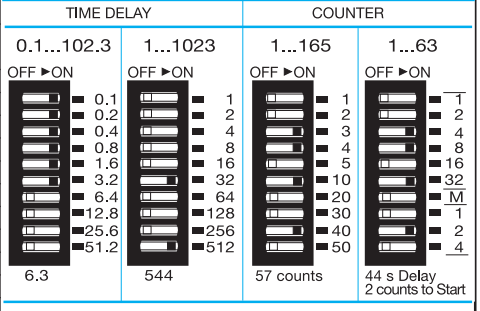
Example P/N: KSPU92RE

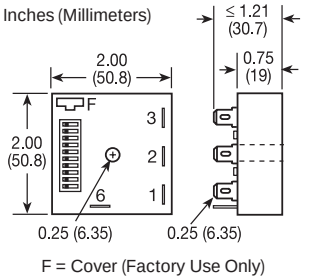
**Function Chart	Code
Counter/Pulsed Output	C
Counter/Interval Output	CI
Delay on Make Timer	M
Delay on Break Timer	B
Recycle Timer (ON Time First, Equal Times)	RE
Single Shot Timer	S
Interval Timer	I
Trailing Edge Single Shot Timer	TS
Motion Detector/Retriggerable Single Shot Timer	PS
Inverted Single Shot Timer	US
Accumulative Delay on Make Timer	AM
Inverted Delay on Break Timer	UB

Technical Data

Time Delay	
Type	Microcontroller circuitry
Range	0.1 ... 102.3 s, m or h in 0.1 s, m or h increments 1 ... 1023 s, m or h in 1 s, m or h increments 1 ... 63 s or m in 1 s or m increments
Repeat Accuracy	+/-0.1% or 16 ms at 60 Hz, 20 ms at 50 Hz, whichever is greater
Tolerance (Factory Calibration)	≤ +/-2%
Recycle Time	≤ 250 ms
Initiate Time	≅ 40 ms
Time Delay vs. Temperature & Voltage	≤ +/-2%
Count Range	1 ... 1023 in 3 ranges
Count Rate	≤ 10 counts per s
Input	
Voltage	12, 24, or 120 V DC; 24, 120, or 120/230 V AC
Tolerance	≤ +/-15%
Line Frequency	50 ... 60 Hz
Power Consumption (DC Voltages)	≤ 1 W
Output	
Type	Solid state output
Rating 12, 24 V DC; 24, 230 V AC	1 A steady, 10 A inrush for 16 ms at 60°C
120 V DC	0.5 A @ 40°C
Voltage Drop	≅ 2.5 V at 1 A
Counter Output (Variable 7 & 8)	Pulse width: 300 ms +/-20%
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V 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
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
Environmental	
Operating Temperature	-40°C ... +60°C
Storage Temperature	-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)

Adjustment Switch Operation

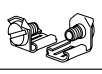




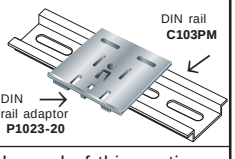
F = Cover (Factory Use Only)

Accessories

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



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



See accessory pages at the end of this section.