



The KSPS Series is a factory programmed module available in any 1 of 14 standard functions. The KSPS offers a single, fixed, externally or onboard adjustable time delay. 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 KSPS Series is a cost effective approach for OEM applications that require small size and solid state reliability.

See Appendix B, page 165, Figure 1 for dimensional drawing.

Features:

- Choose 1 of 14 standard functions
 - Special time ranges & functions available
 - Factory programmed
 - Microcontroller circuitry, $\pm 0.5\%$ repeat accuracy
 - Solid-state output 1A steady, 10A inrush
 - Fixed, external, or onboard adjustment
 - 12 to 240V in 3 options
 - Delays from 0.1s - 1000h in 9 ranges
- Approvals:

Auxiliary Products:

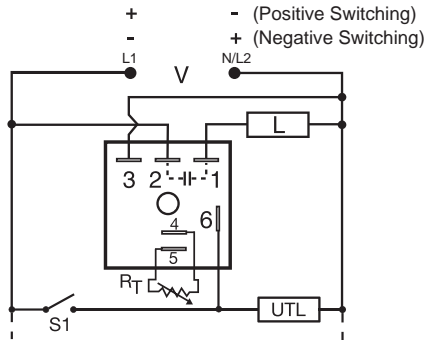
- **External adjust potentiometer:**
P/N: P1004-95
P/N: P1004-95-X
- **Versa-knob:** P/N: P0700-7
- **Female quick connect:**
P/N: P1015-64 (AWG 14/16)
- **Quick connect to screw adaptor:**
P/N: P1015-18
- **DIN rail:** P/N: C103PM (Al)
- **DIN rail adaptor:** P/N: P1023-20

Available Models:

KSPS121TS	KSPSA24US
KSPS124PS	KSPSN110SI
KSPS2180SB	KSPSN21B
KSPS3115SRE	KSPSP110SI
KSPSA21FT	KSPSP145SM
KSPSA23SD	KSPSP160MB
KSPSA24B	

If desired part number is not listed, please call us to see if it is technically possible to build.

Connection:



L = Load
UTL = Untimed Load
V = Voltage
S1 = Initiate Switch

Order Table:

KSPS	X	X	X	X
	Input	Adjustment	Time Delay*	Function
	A - 24 to 240VAC	1 - Fixed	1 - 0.1 - 10s	Specify function Functions: M, B, RE, RD, S, SD, FT I, TS, US, UB, AM, PS, PSD
	P - 12 to 120VDC positive switching	2 - Onboard adjust	2 - 1 - 100s	
	N - 12 to 120VDC negative switching	3 - External adjust	3 - 10 - 1000s	
	1 - 12VDC positive switching		4 - 0.1 - 10m	
	2 - 24VAC		5 - 1 - 100m	
	3 - 24VDC positive switching		6 - 10 - 1000m	
			7 - 0.1 - 10h	
			8 - 1 - 100h	
			9 - 10 - 1000h	

*If fixed delay is selected, insert delay (0.1-1000) followed by (S) secs., or (M) mins., or (H) hrs.

For a complete list of functions with descriptions and diagrams, see Appendix A - Timer Functions, pages 156-164.

Specifications

Time Delay	Microcontroller circuitry	Voltage Drop	AC $\cong 2.5V @ 1A$; DC $\cong 1V @ 1A$
Type	0.1s - 1000h in 9 adjustable ranges or fixed	OFF State Leakage Current	AC $\cong 5mA @ 240VAC$, DC $\cong 1mA$
Range	$\pm 0.5\%$ or 20ms, whichever is greater	Protection	
Repeat Accuracy	$\leq \pm 2\%$	Circuitry	Encapsulated
Tolerance (Factory Calibration)	$\leq 150ms$	Dielectric Breakdown	$\geq 2000V$ RMS terminals to mounting surface
Reset Time	$\leq 20ms$; ≤ 1500 operations per minute	Insulation Resistance	$\geq 100 M\Omega$
Initiate Time	$\leq \pm 2\%$	Polarity	DC units are reverse polarity protected
Time Delay vs Temp. & Voltage		Mechanical	
Input		Mounting	Surface mt. with one #10 (M5 x 0.8) screw
Voltage	12 to 120VDC; 24 to 240VAC	Dimensions	2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)
Tolerance	$\leq \pm 15\%$	Termination	0.25 in. (6.35 mm) male quick connects
AC Line Frequency / DC Ripple	50/60Hz / $\leq 10\%$	Environmental	
Power Consumption	AC $\leq 2VA$; DC $\leq 1W$	Operating / Storage Temperature	-40° to 60°C / -40° to 85°C
Output		Humidity	95% relative, non-condensing
Type	Solid-state output	Weight	$\cong 2.4$ oz (68 g)
Rating	1A steady, 10A inrush for 16ms		