*Programa*Cube®

*Programa*Cube®
KSPS Series Single Function
Timing Module (1A Solid State Output)

US Patent 6708135

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The KSPS Series is a factory programmed module available in any 1 of 14 standard functions. Modules are manufactured without the function assigned. When an order is received, the function and time delay software are added. This approach allows QuickShip delivery on a large number of part numbers. The 1 A steady, 10 A inrush rated solid state output provides 100 million operations typical. 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.

Choose from 1 of 14 standard single functions, fixed or onboard or external adjustment, and 9 time ranges. All available through the QuickShip program.

■ Choose 1 of 14 Standard Functions
■ Factory Programmed
■ Microcontroller Circuitry, +/-0.5% Repeat Accuracy
■ Solid State Output 1 A Steady, 10 A Inrush
■ Onboard, External Adjust or Fixed Time Delay
■ Universal Voltage 24 ... 240 V AC
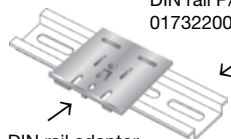■ Delays from 100 ms...1000 h in 9 Ranges

Complete Product Details: http://www.ssac.com/pp1.htm

Connection

A knob is supplied for adjustable units, or RT terminals 4 & 5 for external adjustment. Select a 100K ohm potentiometer for full time range adjustment. The untimed load is optional. S1 is not used for some functions. Dashed lines are internal connections.

Function Chart

	Code
Delay on Make	**M**
Delay on Break	**B**
Recycle (ON Time First, Equal Times)	**RE**
Recycle (OFF Time First, Equal Times)	**RD**
Single Shot	**S, SD**
Interval	**I**
Trailing Edge Single Shot	**TS**
Inverted Single Shot	**US**
Inverted Delay on Break	**UB**
Accumulative Delay on Make	**AM**
Motion Detector/Retriggerable Single Shot	**PSD. PSE**
Flip Flop (trailing edge, alternating)	**FT**
Flip Flop (leading edge)	**F**

See page 9 for function time diagrams

Accessories

100 K Ohm External adjust potentiometer P/Ns:
P1004-95 (fig A)
P1004-95-X (fig B)

Versa-knob P/N: P0700-7

DIN rail P/Ns: 017322005 (Steel)
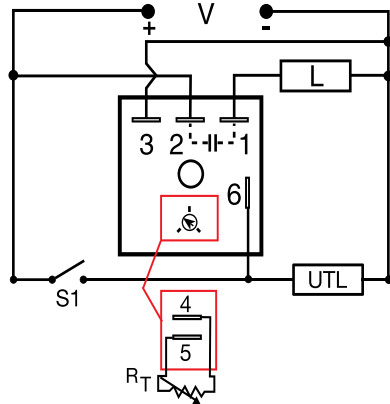
DIN rail adaptor P/N: P1023-20

See accessory pages

Technical Data

Output	
Rating	1 A steady, 10 A inrush for 16 ms
Mechanical	
Mounting	Surface mt. 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 connects

Ordering Table

KSPS	X	X	X	X
Series	**Input**	**Adjustment**	**Time Delay***	**Function****
	– **A** - 24 ... 240 V AC	– **1** - Fixed	– **1** - 0.1 ... 10 s	Specify Function
	– **P** - 12 ... 120 V DC Positive Switching	– **2** - Onboard Adjustment	– **2** - 1 ... 100 s	(Refer to Function Chart for Code)
	– **N** - 12 ... 120 V DC Negative Switching	– **3** - External Adjustment	– **3** - 10 ... 1000 s	
			– **4** - 0.1 ... 10 m	
			– **5** - 1 ... 100 m	
			– **6** - 10 ... 1000 m	
			– **7** - 0.1 ... 10 h	* If Fixed Delay is selected, insert delay
			– **8** - 1 ... 100 h	[**0.1** ... **1000**] followed by (**S**) secs.,
			– **9** - 10 ... 1000 h	(**M**) mins., or (**H**) hrs.

†**Note:** Grayed options are available in standard lead time.

Example P/N:

KSPSA23RE = Universal AC voltage, onboard adjustment, 10...1000 sec., recycling, ON time first
KSPSA10.5SI = Universal AC voltage, fixed delay of 0.5 sec., interval function

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Low Voltage Products & Systems

1SXU000023C0202   ABB Inc. • Sales Sales & Technical Information 1-888-385-1221 8AM to 5PM CST - Product Information www.ssac.com/pp1.htm

KSPSpp   01.02.08