PCSP Module
KRPS ProgramaCube™
Timing Module

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

- Microcontrol... ...eat Accuracy
- Modul... ...mmed, Shipped Fast
- Choos... ...ctions
- Isolated ... Contacts
- Input Volta... ...230 V in 5 Ranges
- Delays from ... ...1000 h in 9 Ranges

Description

The KRPS Series is a factory programmed module available in any 1 of 11 functions and measures only 2 inches square. The KRPS offers a wide range of fixed or adjustable time delays. Modules are manufactured without the function assigned. When an order is received, the function software is added making the modules complete. This approach provides fast delivery on all part numbers. The output relay contacts offer a full 10 A rating with complete isolation. Its microcontroller timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KRPS Series is a cost effective approach for OEM applications that require small size, isolation, accuracy, long life, and In Stock modules. Special time ranges and functions are available; contact Applications Assistance for more information.

Patent Pending

- Approvals: UL CSA CE
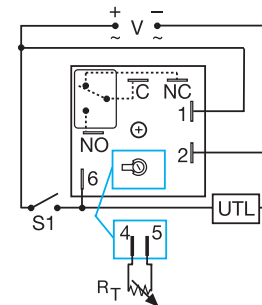
A knob is supplied for adjustable units, or R_T terminals for external adjust.

V = Voltage   C = Common
NC = Normally Closed
NO = Normally Open
S1 = Initiate Switch
UTL = Untimed Load

Ordering Table

KRPS	X	X	X	X
Series	Input	Adjustment	Time Delay*	Function**
	–1 - 12 V DC	**–1** - Fixed	**–1** - 0.1 ... 10 s	Specify Function
	–2 - 24 V AC/DC	**–2** - Adjustable	**–2** - 1 ... 100 s	(Refer to Function
	–4 - 120 V AC	**–3** - External	**–3** - 10 ... 1000 s	Chart for Code)
	–5 - 110 V DC	Adjust	**–4** - 0.1 ... 10 m	
	–9 - 120/230 V AC		**–5** - 1 ... 100 m	*If Fixed Delay is selected, insert
			–6 - 10 ... 1000 m	delay [**0.1 ... 1000**] followed by
	Example P/N: KRPS923RE		**–7** - 0.1 ... 10 h	(**S**) secs., (**M**) mins., or (**H**) hrs.
	Fixed KRPS9155SI		**–8** - 1 ... 100 h	
			–9 - 10 ... 1000 h	

**Function Chart

	Code
Delay On Make	M
Delay On Break	B
Recycle (ON Time First, Equal Times)	RE
Single Shot	S
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	PS
Alternating Relay	FT

Technical Data

Time Delay	
Type	Microcontroller circuitry
Range	0.1 s ... 1000 h in 9 adjustable ranges or fixed
Repeat Accuracy	+/-1% or 16 ms @ 60 Hz, 20 ms @ 50 Hz, whichever is greater
Tolerance (Factory Calibration)	≤ +/-2%
Recycle Time	≤ 250 ms
Initiate Time	≅ 40 ms
Time Delay vs Temperature & Input Voltage	≤ +/-2%
Input	
Voltage	12, 24, or 110 V DC; 24, 120, or 120/230 V AC
Tolerance 12 V DC & 24 V DC/AC	-15% ... +20%
110 ... 240 V AC/DC	-20% ... +10%
AC Line Frequency	50 ... 60 Hz
Power Consumption	12 VDC - ≤ 1 W, 24 V AC/DC - ≤ 1 VA 110 V DC - ≤ 2 W, 120/230 V AC - ≤ 2 VA
Output	
Type	Isolated relay contacts
Form	Single pole double throw, SPDT
Rating (at 40°C)	10 A resistive at 125 V AC 5 A resistive at 230 V AC 5 A resistive at 30 V DC, 1/4 hp at 125 V AC
Max. Switching Voltage	250 V AC
Life	Mechanical - 1 x 10⁷ operations Electrical - 1 x 10⁵ operations at rated load
Protection	
Circuitry	Encapsulated
Isolation Voltage	≥ 1500 V RMS Input to Output
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/Storage Temperature	-40°C ... +60°C / -40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)

Inches (Millimeters)
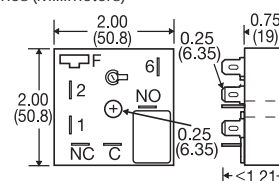
F = Cover (Factory Use Only)

Accessories

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

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

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

Versa-knob
P/N: P0700-7

DIN rail
C103PM

DIN rail adaptor
P1023-20

See accessory pages at the end of this section.