

KRPS Series Single Function Time Delay Relay



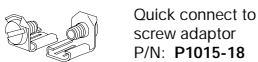
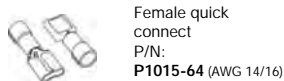
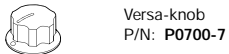
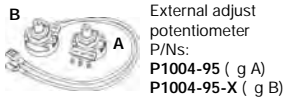
US Patent 6708135



- Choose 1 of 13 Standard Functions
- Special Time Ranges and Functions Available
- Factory Programmed Microcontroller Circuitry, +/-0.5% Repeat Accuracy
- Isolated 10 A SPDT Output Contacts
- Input Voltage from 12...240 V in 2 Ranges
- Delays from 100 ms...1000 h in 9 Ranges

Approvals:

Accessories

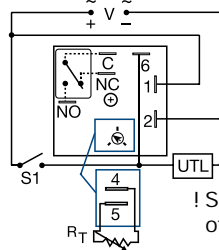


See accessory pages for specifications.

Description

The KRPS Series is a factory programmed time delay relay available in any 1 of 13 functions and measures only 2 inches square. The KRPS offers a wide range of fixed, onboard, or externally 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, and long life. Special time ranges and functions are available; contact Technical Assistance (see below) for more information.

Connection



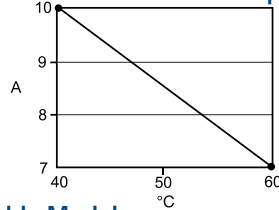
V = Voltage C = Common, Transfer Contact
NC = Normally Closed NO = Normally Open
S1 = Initiate Switch UTL = Untimed Load

A knob is supplied for adjustable units, or R_T terminals 4 & 5 for external adjust. See external adjustment vs. time delay chart. The untimed load is optional. S1 is not used for some functions. Dashed lines are internal connections.

External Resistance vs Time Delay

For details on external R_T see the external resistance vs. time delay chart at the beginning of this section.

Output Current/Ambient Temperature



Available Models-

KRPS1110SM	KRPS4160MM	KRPS425M
KRPS913MB	• KRPSA10.1SFT	KRPSA10.5SS
KRPSA110SM	KRPSA12SM	KRPSA12STS
KRPSA15SM	KRPSA18SPSD	KRPSA21B
KRPSA21RE	KRPSA22B	KRPSA22M
KRPSA23B	KRPSA24RE	KRPSA25B
KRPSA25M	KRPSA28PSE	KRPSD10.1SF
KRPSD10.1SFT	KRPSD10.1SM	KRPSD21M
KRPSD21TS	KRPSD22B	KRPSD22S
KRPSD24B	KRPSD24M	KRPSD25S
KRPSD31B	KRPSD35PSD	

Don't see what you need? Call us for a minimum quantity and price quote!

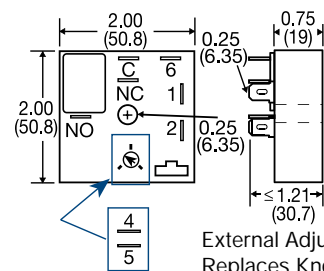
Ordering Table

KRPS Series	X Input	X Adjustment	X Time Delay*	X Function**
	A - 24 ... 240 V AC/DC	1 - Fixed	1 - 0.1 ... 10 s	Specify Function (Refer to Function Chart for Code)
	D - 12 ... 48 V DC	2 - Onboard Adjustment	2 - 1 ... 100 s	
		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	
			8 - 1 ... 100 h	
			9 - 10 ... 1000 h	

*If Fixed Delay is selected, insert delay [0.1 ... 1000] followed by (S) secs., (M) mins., or (H) hrs.

Example P/N: KRPSA23RE Fixed - KRPSD10.5SI

Mechanical View



External Adjust Detail
Replaces Knobs if Ordered

Inches (Millimeters)

**Function Chart

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
Alternating Relay	FT

For a Complete List of Functions with Descriptions, see Timer Function Section.

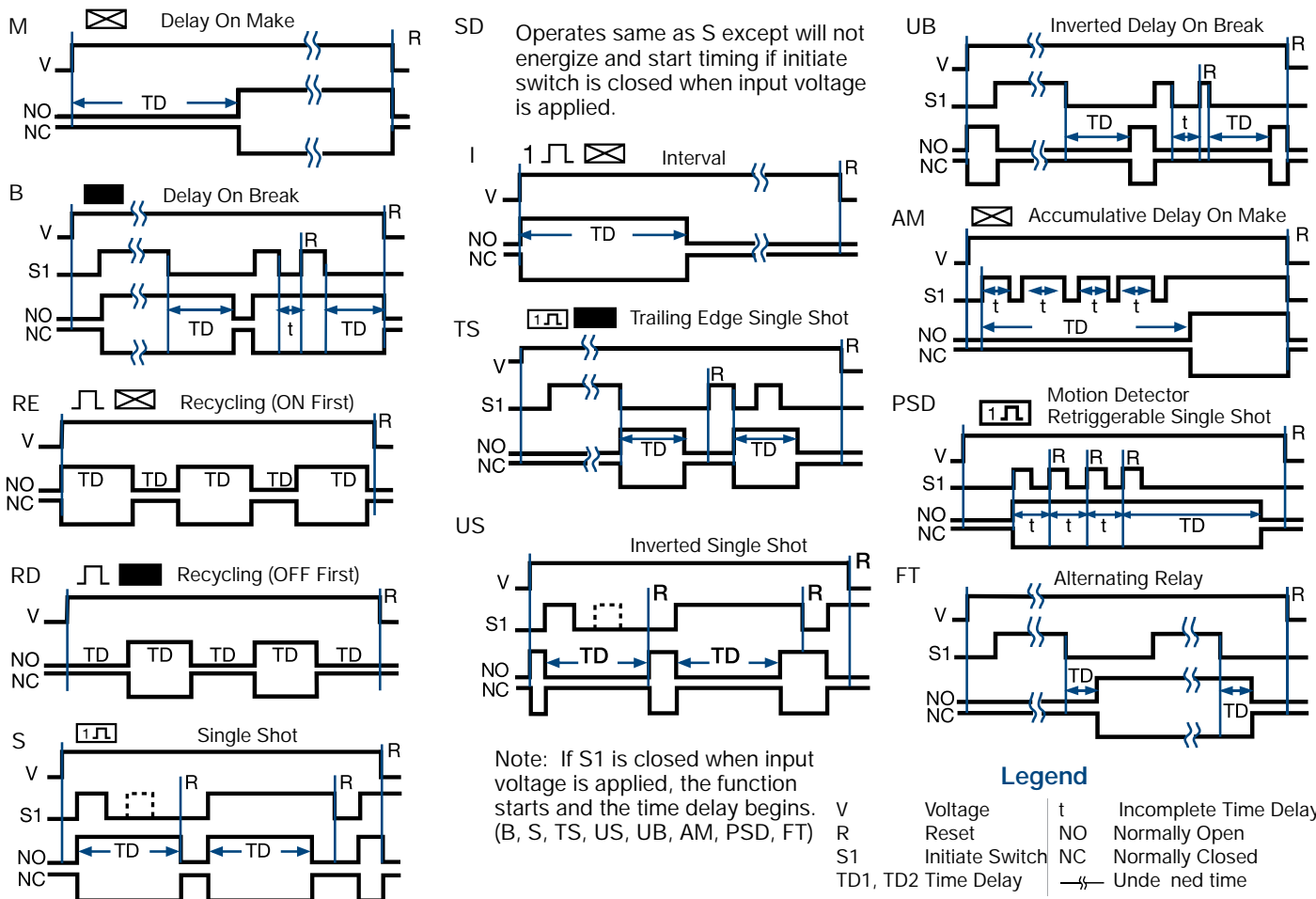
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Technical Data

Time Delay Type: Microcontroller circuitry Range: 0.1 s ... 1000 h in 9 adjustable ranges or xed Repeat Accuracy: +/-0.5% or 20 ms, whichever is greater Tolerance (Factory Calibration): +/-2% Reset Time: 150 ms Initiate Time: 40 ms; 750 operations per minute Time Delay/Temp. & Input Voltage: +/-2%		Protection Circuitry: Encapsulated Isolation Voltage: 1500 V RMS Input to Output Insulation Resistance: 100 M Polarity: DC units are reverse polarity protected	
Input Voltage: 12 ... 48 V DC Tolerance: 12 ... 48 V DC -15% ... +20% 24 ... 240 V AC/DC -20% ... +10% Line Frequency/DC Ripple: 50 ... 60 Hz/ 10% Power Consumption: AC 2 VA; DC 2 W		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	
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 & 28 V DC 1/4 hp at 125 V AC Max. Switching Voltage: 250 V AC Life (Operations): Mechanical - 1 x 10 ⁷ Electrical - 1 x 10 ⁵		Environmental Operating Temp.: -40°C ... +60°C Storage Temp.: -40°C ... +85°C Humidity: 95% relative, non-condensing Weight: ≈ 2.6 oz (74 g)	

Function Diagrams

For a Complete List of Functions with Descriptions, see Timer Function Section.



KRPSGen 09.10