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Jameco Part Number 497096



RKS series

5 TO 20 AMP PC BOARD MINIATURE RELAY

Meets VDE 8mm spacing, 4kV dielectric

File E22575

File LR15734-173

VDE-Reg. Nos. 3436, 3437, 3491

IMC Approved - Working Class C
All or nothing electrical relay.

FEATURES

- SPST through DPDT contact arrangements.
- Immersion cleanable[§], tape sealed plastic case.
- Meets VDE 8mm spacing, 4kV dielectric, coil to contacts.
- Conforms to VDE 0435, 0631, 0700 and 0806.
- Meets IEC 65 regulatory requirements.
- UL Class B coil insulation system.

[§] For additional details, refer to application note 13C265.
Mounting, Termination and Cleaning of PC Board Relays.

CONTACT DATA @ 25°C

Arrangements: 1 Form A (SPST-NO), 1 Form B (SPST-NC), 1 Form C (SPDT), 2 Form A (DPST-NO) and 2 Form C (DPDT).

Material: Silver-cadmium oxide.

Expected Mechanical Life: 10 million operations.

CONTACT RATINGS @ 25°C

Code	Arrangement	UL/CSA/VDE Ratings	Expected Life (Operations)	
G & X	SPST or SPDT	10A @ 250VAC	100,000	
		10A @ 277VAC/30VDC		
		360VA @ 240VAC, Pilot Duty		
	DPST-NO or DPDT	1/3 HP @ 250VAC	30,000	
		1/4 HP @ 120VAC		
		21.6 LRA, 10 FLA @ 240VAC		
DPST-NO or DPDT	30 LRA, 10 FLA @ 125VAC	25,000		
	3A Tungsten @ 120VAC (TV-3)			
	10A @ 277VAC			
G Only	SPST or SPDT	10A @ 30VDC	50,000	
		1/4 HP @ 240VAC		
W	SPST or SPDT	360VA @ 240VAC, Pilot Duty	25,000	
		1/8 HP @ 120VAC		
		5A Tungsten @ 120VAC (TV-5)		
		20A @ 277VAC/24VDC		20,000
		16A @ 277VAC/24VDC		50,000
		12A @ 277VAC/24VDC		100,000
		1/2 HP @ 120VAC		30,000
48 LRA, 8 FLA @ 240VAC				
58.8 LRA, 16 FLA @ 120VAC	25,000			
		5A Tungsten @ 120VAC (TV-5)		

INITIAL DIELECTRIC STRENGTH

- Between Open Contacts: 1,000V rms.
- Between Adjacent Contacts: 2,500V rms.
- Between Contacts and Coil: 4,000V rms.

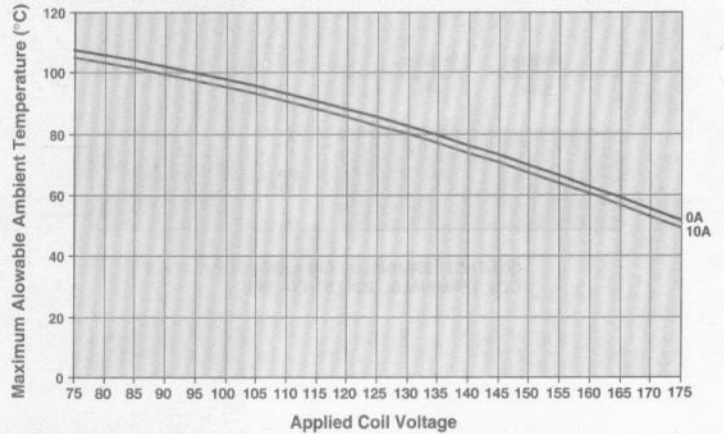
COIL DATA @ 25°C

- Voltage:** 5 to 110VDC.
- Maximum Power @ 25°C:** 1.6W.
- Nominal Power @ 25°C:** 520mW, approx.
- Temperature Rise:** 64°C per Watt.
- Maximum Temperature Per UL508:** Class B insulation: 130°C.
- Duty Cycle:** Continuous.
- Initial Insulation Resistance:** 100 megohms, min., at 25°C, 500VDC and 50% rel. humidity.

COIL DATA @ 25°C

	Nominal Voltage	DC Resistance in Ohms ±10%	Must Operate Voltage	Nominal Coil Current (mA)
DC Coils	5	47	3.6	106
	6	69	4.3	87
	9	155	6.5	58
	12	275	8.6	44
	18	620	13.0	29
	24	1,100	17.3	22
	48	4,400	34.6	11
	60	6,880	43.2	9
	110	23,100	79.2	5

MAXIMUM AMBIENT TEMPERATURE VS. COIL VOLTAGE



OPERATE DATA @ 25°C

- Must Operate Voltage:** 72% of nom. voltage or less.
- Operate Time (Excluding Bounce):** 15 ms, typ., at nom. voltage.
- Release Time (Excluding Bounce):** 5 ms, typ., at nom. voltage.

ENVIRONMENTAL DATA

- Temperature Range:**
- Storage:** -40°C to +130°C.
- Operating:** -40°C to +85°C.

MECHANICAL DATA

- Termination:** Printed circuit terminals.
- Enclosures:** Immersion cleanable, tape sealed plastic case.
- Weight:** 0.65 oz. (18.5 g) approximately.

ORDERING INFORMATION

Typical Part Number►

RKS

-5

D

W

-12

1. BASIC SERIES:

RKS = Miniature, printed circuit board relay with immersion cleanable case.

2. CONTACT ARRANGEMENT:

1 = 1 Form A (SPST-NO) 5 = 1 Form C (SPDT) 11 = 2 Form C (DPDT)
 2 = 1 Form B (SPST-NC) 7 = 2 Form A (DPST-NO)

3. COIL INPUT:

D = DC voltage.

4. CONTACT RATING & WIRING / PC BOARD LAYOUT DIAGRAM CODES:

G = 10 amps, diagram code 1 for 1 pole models. X = 10 amps, diagram code 2 for 1 pole models.
 10 amps, diagram code 4 for 2 pole models. 10 amps, diagram code 5 for 2 pole models.
 W = 20 amps, diagram code 3. **Note:** See diagrams below.

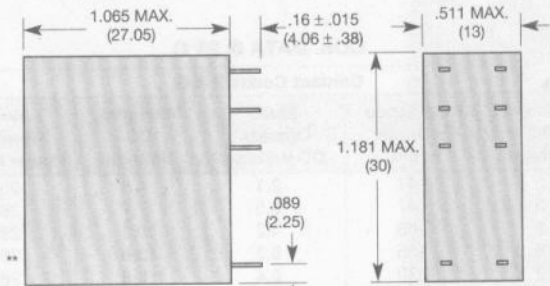
5. COIL VOLTAGE:

05 = 5VDC 09 = 9VDC 18 = 18VDC 48 = 48VDC 110 = 110VDC
 06 = 6VDC 12 = 12VDC 24 = 24VDC 60 = 60VDC

STOCK ITEMS - The following items are normally maintained in stock for immediate delivery.

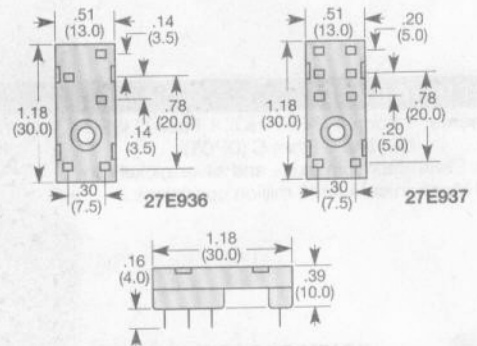
RKS-1DG-12	RKS-5DG-05	RKS-5DW-24	RKS-11DG-24
RKS-1DG-24	RKS-5DG-12	RKS-5DW-48	RKS-11DX-05
RKS-1DW-12	RKS-5DG-24	RKS-5DX-12	RKS-11DX-12
RKS-1DW-18	RKS-5DG-48	RKS-5DX-48	RKS-11DX-18
RKS-1DW-24	RKS-5DW-05	RKS-7DX-24	RKS-11DX-24
RKS-1DX-24	RKS-5DW-12	RKS-11DG-12	RKS-11DX-48

OUTLINE DIMENSIONS

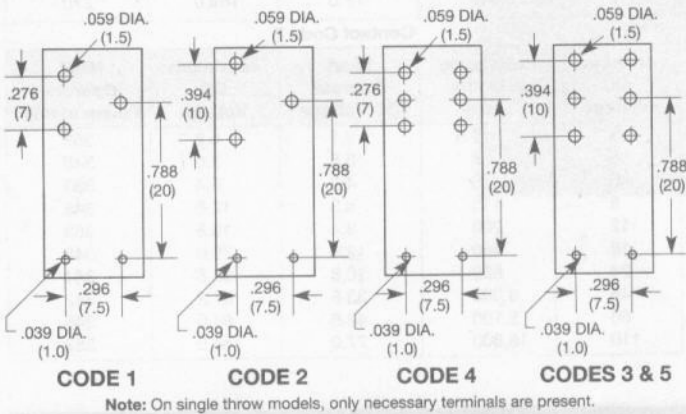


** Recommend tape tab be punctured or removed before relay is put in service.

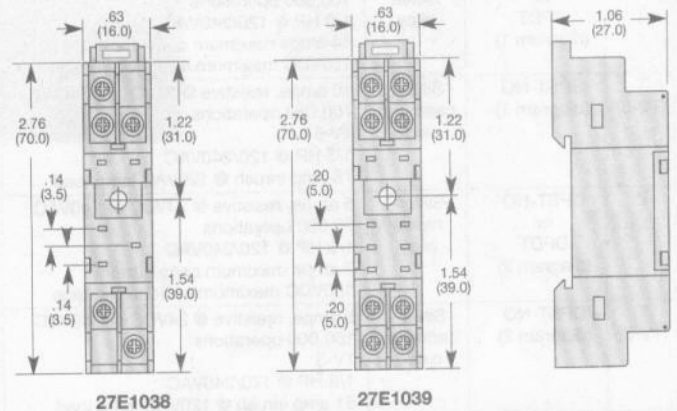
RK PC BOARD SOCKETS



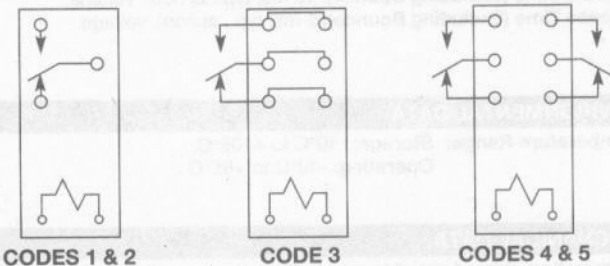
PC BOARD LAYOUTS (Bottom Views)



RK SCREW TERMINAL SOCKETS



WIRING DIAGRAMS (Bottom Views)



Note: On single throw models, only necessary terminals are present.

RK HOLD DOWN SPRING



Note: Sockets UL approved for Class A insulation.