# For new designs refer to RT series.



#### **Features**

- SPST through DPDT contact arrangements.
  Immersion cleanable<sup>§</sup>, tape sealed plastic case.
- Meets VDE 8mm spacing, 4kV dielectric, coil to contacts.
- Conforms to VDE 0435, 0631, 0700 and 0806.
- UL Class B coil insulation system.
- § For more 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 with relay properly vented. Remove tape over vent hole after soldering and cleaning.

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

#### **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.

# **RKS** series

## 5 To 20 Amp PC Board **Miniature Relay**

Meets VDE 8mm spacing, 4kV dielectric

**FII** File E22575

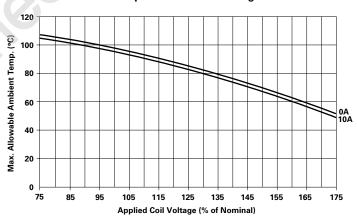
**File LR15734-173** 

File Nos. 3436, 3491, 5369

#### Coil Data @ 25°C

	Nominal Voltage	DC Resistance in Ohms ±10%	Must Operate Voltage	Nominal Coil Current (mA)
	5	47	3.6	106
	6	69	4.3	87
	9	155	6.5	58
DC	12	275	8.6	44
Coils	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, max., at nom. voltage.

#### **Environmental Data**

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

Operating: -40°C to +70°C (agency temperature).

#### **Mechanical Data**

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

# Ordering Information

Typical Part Number ▶

**RKS** 

-5

D

-12

1. Basic Series:

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

**Contact Arrangement:** 

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

11 = 2 Form C (DPDT)

3. Coil Input:

D = DC voltage.

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.

Coil Voltage:

09 = 9VDC 05 = 5VDC06 = 6VDC

18 = 18VDC

48 = 48VDC 60 = 60VDC 110 = 110 VDC

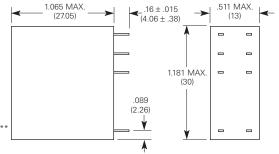
12 = 12VDC 24 = 24VDC

# For new designs refer to RT series.

### Stock Items - The following items are normally maintained in stock for immediate delivery.

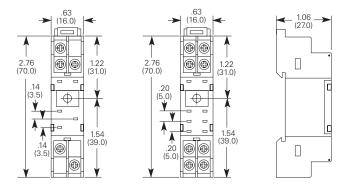
RKS-1DG-12 RKS-1DW-24 RKS-5DG-24 RKS-5DW-24 RKS-7DX-24 RKS-11DX-05 RKS-1DG-24 RKS-5DG-05 RKS-5DW-05 RKS-5DW-48 RKS-11DG-12 RKS-11DX-12 RKS-11DX-24 RKS-1DW-12 RKS-5DG-12 RKS-5DW-12 RKS-5DX-12 RKS-11DG-24

#### **Outline Dimensions**



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

#### **RK Screw Terminal Sockets** 27E1038 27E1039



#### **RK Hold Down Spring** 20C330



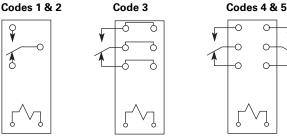
Note: Sockets UL approved for Class A insulation.

Siemens Electromechanical Components, Inc. 700 Westpark Drive Peachtree City, GA 30269-1498

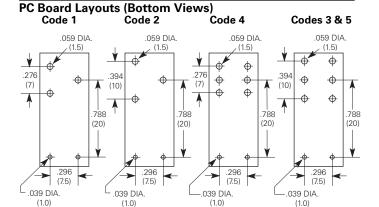
## **RK PC Board Sockets**

# 27E936 27E937 (30.0)

# Wiring Diagrams (Bottom Views)



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



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