



# 600 series

## 15 Amp Sensitive PC Board Relay

File E38802

File LR48569

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

### Features

- Low power sensitive coil.
- 1 Form A, 1 Form B and 1 Form C contact arrangements.
- Various contact materials and types for ratings to 15 amps.
- Coil assembly rated 130°C, 94V-0.
- Applications include sensor and timer controls, emergency lighting, instrumentation, alarm systems, smoke and fire detectors, business equipment and vending machines.

### Contact Data

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

**Material and Type:** Gold-silver crossbar, silver-cadmium crossbar, palladium crossbar, gold-flashed silver cadmium, silver cadmium oxide, fine silver, gold-flashed coin silver.

**Expected Mechanical Life:** 10 million operations, minimum.

**Expected Electrical Life:** 100,000 operations, minimum, at rated load.

### UL/CSA Ratings @ 25°C

Code	Contact Material	Rating
B	Au Flashed AgCd	75VA@24VAC Pilot Duty§ 1A@120VAC General Purpose 1.5A@50VDC Resistive 600W@277VAC Gen'l. Purpose SPST-NO Only 240W@277VAC Gen'l. Purpose SPST-NC Only 480VA@277VAC Pilot Duty SPDT Only 480VA@Ballast SPDT Only 1/10 HP@120VAC
G	Au Ag	3A@28VDC Resistive 125VA@120VAC Pilot Duty§ 1/8 HP@120/240 VAC
H	AgCdO	15A@150VAC Inductive 0.4 PF NO Only 10A@277VAC Resistive 15A@28VDC Resistive TV5@NO Contacts TV2@NC Contacts 600W@277VAC Tungsten SPDT-NO Only 240W@277VAC Tungsten SPDT-NC Only 480VA@277VAC Pilot Duty SPDT Only § 480VA@277VAC Ballast SPDT Only 1/3 HP@120/240VAC NO 1/6 HP@120/240VAC NC
K	Au Flashed Coin Ag	5A@240VAC Resistive 5A@28VDC 125VA@240VAC Pilot Duty § 125VA@125VAC Pilot Duty §
R	Fine Ag	15A@150VAC Resistive 15A@28VDC Resistive 10A@277VAC Resistive 480VA@240VAC Pilot Duty TV2@NC Contacts TV4@NO Contacts 480W@120VAC Tungsten NO 240W@120VAC Tungsten NC
S	Ag Cd	3A@240VAC Resistive 3A@28VDC Resistive
V	Palladium	2A@28VDC Resistive

§ Only when Code Y Electrical Spacing is specified.

### Initial Dielectric Strength

**Between Open Contacts:** 500VAC, 60 Hz., 2 seconds.

**Between Coil and Contacts:** 1,000VAC, 60 Hz., 2 seconds.

### Coil Data @ 25°C

**Rated Voltage:** 3 to 48VDC.

**Maximum Voltage @ 85°C:** 120% of Rated Voltage.

**Nominal Power @ 25°C:** 110mW for 3A and 5A rated models;  
240mW for 15A rated models.

**Maximum Power @ 25°C:** 1W.

**Duty Cycle:** Continuous.

**Initial Insulation Resistance:** 10,000 megohms, min., at 25°C, 500VDC and 50% rel. humidity.

### Coil Data @ 25°C

Nominal Voltage VDC	DC Resistance in Ohms ±10%		Must Operate Voltage VDC	Must Release Voltage VDC
	3 A & 5A Types	15A Types		
3	82	38	2.25	0.3
6	327	150	4.5	0.6
9	736	338	6.75	0.9
12	1,309	600	9.0	1.2
18	2,945	1,350	13.5	1.8
24	5,236	2,400	18.0	2.4
28	7,127	3,267	21.0	2.8
48	20,945	9,600	36.0	4.8

### Operate Data @ 25°C

**Must Operate Voltage:** 75% of nominal.

**Must Release Voltage:** 10% of nominal.

**Operate Time:** 10 ms, typ.

**Release Time:** 10 ms, typ.

### Environmental Data

**Temperature Range:**

**Storage:** -55°C to +85°C.

**Operating:** -55°C to +85°C.

### Mechanical Data

**Termination:** Printed circuit terminals.

**Enclosures:** Unsealed dust cover or sealed plastic case.

**Weight:** 1.6 oz. (45g) approximately.

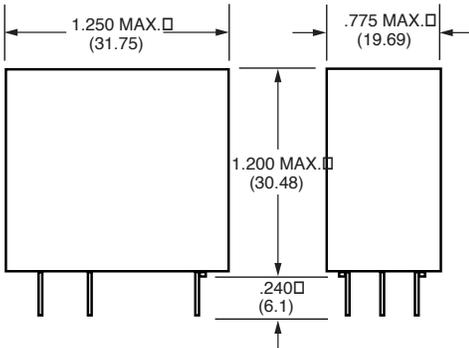
**Ordering Information**

<b>Typical Part Number ▶</b>	<b>60</b>	<b>3</b>	<b>- 24</b>	<b>V</b>	<b>Y</b>	<b>Q</b>
<p><b>1. Basic Series Type:</b>          60 = Miniature, PC board relay rated 3A or 5A (Contact Material Code G, S, V or B only)          61 = Miniature, PC board relay rated 15A (Contact Material Code H or R only)          65 = Miniature, PC board relay rated 5A (Contact Material Code K only)</p>						
<p><b>2. Contact Arrangement:</b>          1 = 1 Form A (SPST-NO)      2 = 1 Form B (SPST-NC)      3 = 1 Form C (SPDT)</p>						
<p><b>3. Coil Voltage:</b>          3 = 3VDC      9 = 9VDC      18 = 18VDC      28 = 28VDC          6 = 6VDC      12 = 12VDC      24 = 24VDC      48 = 48VDC</p>						
<p><b>4. Contact Material:</b>          G = Au Ag crossbar, rated 3A (Only available with Basic Series Type 60).          S = Au Cd crossbar, rated 3A (Only available with Basic Series Type 60).          V = Pd crossbar, rated 3A (Only available with Basic Series Type 60).          B = Au-flashed AgCd crossbar, rated 5A (Only available with Basic Series Type 60).          H = AgCdO, rated 15A (Only available with Basic Series Type 61).          R = Fine Ag, rated 15A (Only available with Basic Series Type 61).          K = Au-flashed coin Ag, rated 5A (Only available with Basic Series Type 65).</p>						
<p><b>5. Electrical Spacing:</b>          Leave Blank = 0.125 in (3.175 mm) Clearance and 0.125 in (3.175 mm) Creepage          Y = 0.125 in (3.175 mm) Clearance and 0.250 in (6.35 mm) Creepage</p>						
<p><b>6. Enclosure Type</b>          Leave Blank = Unsealed dust cover      Q = Sealed cover</p>						

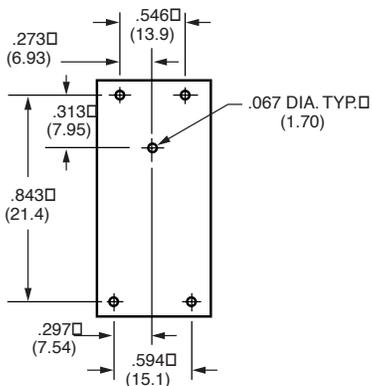
**Our authorized distributors are more likely to stock the following items for immediate delivery.**

None at present.

**Outline Dimensions**

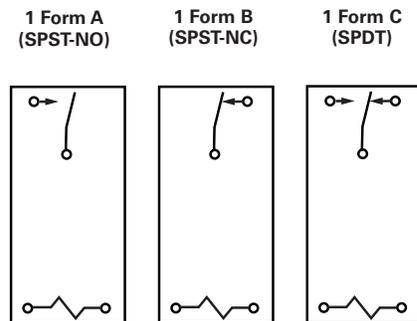


**PC Board Layout (Bottom View)**



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

**Wiring Diagrams (Bottom Views)**



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