600 series
15 Amp Sensitive PC Board Relay

UL File E38802
CSA 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-O.
• Applications include sensor and timer controls, emergency lighting, instrmentation, 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 sadmium oxide, find 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.

Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

www.tycoelectronics.com
Technical support:
Refer to inside back cover.

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Ordering Information

Typical Part Number ▶	60	3	– 24	V	Y	Q

1. Basic Series Type:
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)

2. Contact Arrangement:
1 = 1 Form A (SPST-NO)   2 = 1 Form B (SPST-NC)   3 = 1 Form C (SPDT)

3. Coil Voltage:
| 3 = 3VDC | 9 = 9VDC | 18 = 18VDC | 28 = 28VDC |
| 6 = 6VDC | 12 = 12VDC | 24 = 24VDC | 48 = 48VDC |

4. Contact Material:
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).

5. Electrical Spacing:
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

6. Enclosure Type
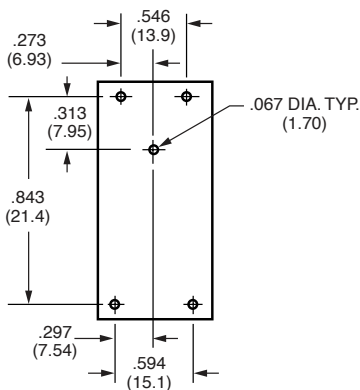Leave Blank = Unsealed dust cover   Q = Sealed cover

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Our authorized distributors are more likely to stock the following items for immediate delivery.
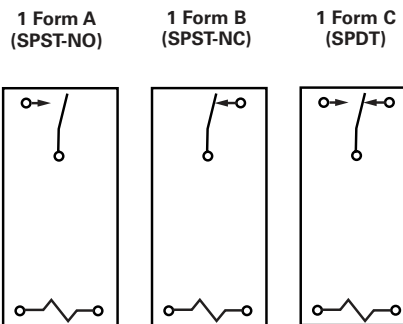None at present.

Outline Dimensions

1.250 MAX. (31.75)
.775 MAX. (19.69)
1.200 MAX. (30.48)
.240 (6.1)
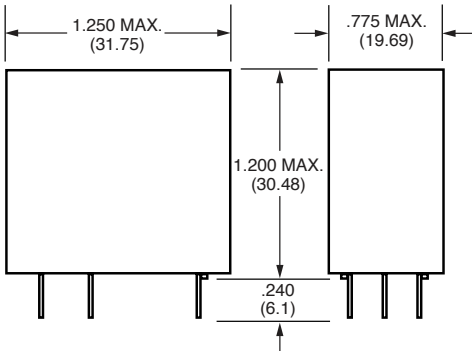
PC Board Layout (Bottom View)

.546 (13.9)
.273 (6.93)
.313 (7.95)
.067 DIA. TYP. (1.70)
.843 (21.4)
.297 (7.54)
.594 (15.1)

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

Wiring Diagrams (Bottom Views)

1 Form A (SPST-NO)   1 Form B (SPST-NC)   1 Form C (SPDT)

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