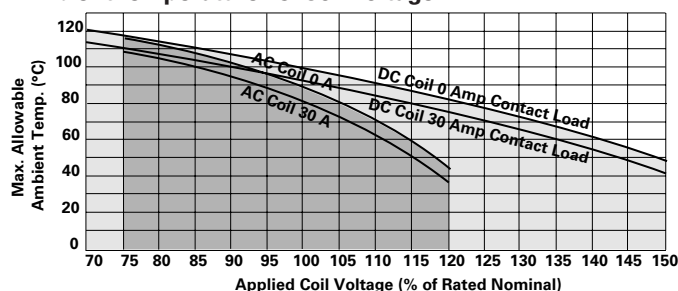




## Ambient Temperature vs. Coil Voltage



## Assumptions:

1. Thermal resistance = 35°C per Watt (DC only.)
2. Still air.
3. Nominal coil resistance.
4. Max. mean coil temperature = 155°C (change of resistance method).
5. Coil temperature rise due to load = 6.3°C @ 30 amps.
6. Curves are based on 1.7W at 25°C (DC only.)

## Operate Data

**Must Operate Voltage:** AC Coil: 80% of nominal voltage or less.  
DC Coil: 75% of nominal voltage or less.

**Must Release Voltage:** 10% of nominal voltage or more.

**Initial Operate Time<sup>(2)</sup>:** 15 ms typical, (25 ms max. w/bounce).

**Initial Release Time<sup>(2)</sup>:** 10 ms typical, (25 ms max. w/bounce).

**Max Operating Frequency:** 14 operations per minute.

## Environmental Data

## Temperature Range:

**Storage:** -55°C to +155°C.

**Operating:** AC Coil: -40°C to +65°C.

DC Coil: Silver cadmium oxide contacts: -40°C to +85°C.  
Silver tin indium oxide contacts: -40°C to +70°C.

**Vibration:** 0.065" (1.65mm) double amplitude for 10-55 Hz., functional.

**Shock, Operational:** 10g for 11 ms, 1/2 sine wave pulse with no contact opening > 100µs.

## Mechanical Data

**Termination:** Printed circuit terminals; .250" (6.35mm) quick connects for coil and contacts; .187" (4.75mm) quick connects for coil and .250" (6.35mm) quick connects for contacts; or M4 screws with captive pressure plates for coil and contacts.

**Enclosure:** Dust protected plastic case or wash-tight, tape sealed, (washable) plastic case.

**Weight:** 3 oz. (86g) approximately.

## Conditions

All parametric, environmental and life tests are performed according to EIA Standard RS-407-A at standard test conditions (25°C ambient, 20-50% RH, 29.5 ± 1" Hg.) unless otherwise noted.

## Notes

- (1) FLA, LRA ratings are compatible with 3.5 ton compressor applications.
- (2) Nominal voltage, no coil suppression, excluding bounce.

## Ordering Information

| Typical Part Number ►   |  | T92 | S | 11 | D | 2 | 2 | -24 |
|---|--|-----|---|----|---|---|---|-----|
| <b>1. Basic Series:</b><br>T92 = Printed circuit board / panel mount power relay.   |  |     |   |    |   |   |   |     |
| <b>2. Enclosure:</b><br>P = Dust protected plastic case.<br>S = Wash-tight, tape sealed, plastic case (Mounting & Termination Type 1).<br>Top sealed, not wash-tight, not tape sealed on bottom (Mounting & Termination Types 2, 3 & 4).  |  |     |   |    |   |   |   |     |
| <b>3. Contact Arrangement:</b><br>7 = 2 form A (DPST-NO).                      11 = 2 form C (DPDT).  |  |     |   |    |   |   |   |     |
| <b>4. Coil Input:</b><br>A = AC voltage, 60 Hz. or 50/60 Hz. (See Coil Data Table)                      D = DC voltage.   |  |     |   |    |   |   |   |     |
| <b>5. Mounting &amp; Termination:</b><br>1 = Printed circuit board mount; printed circuit board terminals.<br>2 = Panel mount via flanged cover; .250" (6.35mm) x .032" (.81mm) quick connect terminals.<br>3 = Panel mount via flanged cover; .187" (4.75mm) x .032" (.81mm) quick connect terminals for coil and .250" (6.35mm) for contacts.<br>4 = Panel mount via flanged cover, .187" (4.75mm) x .020" (.51mm) quick connect terminals for coil and .250" (6.35mm) for contacts.<br>5 = Panel mount via flanged cover, M4 screw terminals w/ captive pressure plates. Requires Enclosure P and Contact Arrangement 7. |  |     |   |    |   |   |   |     |
| <b>6. Contact Material:</b><br>2 = Silver cadmium oxide.                      4 = Silver tin indium oxide.  |  |     |   |    |   |   |   |     |
| <b>7. Coil Voltage: (See Coil Data Table)</b><br>(DC)                      12 = 12VDC                      24 = 24VDC                      48 = 48VDC                      110 = 110VDC<br>(60Hz.)                      12 = 12VAC                      24 = 24VAC<br>(50/60Hz.)                      110 = 100/110VAC                      120 = 110/120VAC                      208 = 200/208VAC                      240 = 220/240VAC                      277 = 250/277VAC  |  |     |   |    |   |   |   |     |

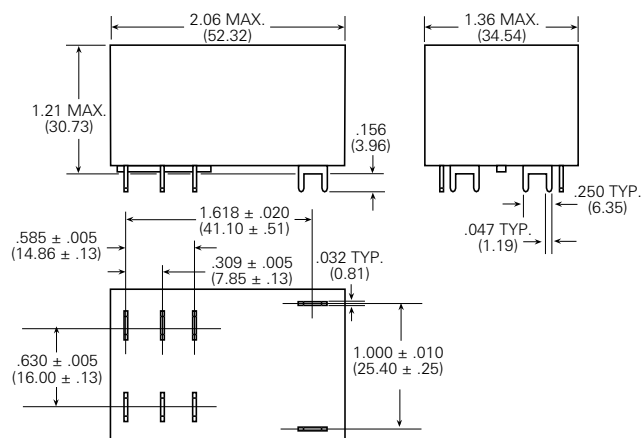
NOTE: All part numbers are RoHS compliant.

## Stock Items – We recommend that our authorized distributors stock the following items for immediate delivery.

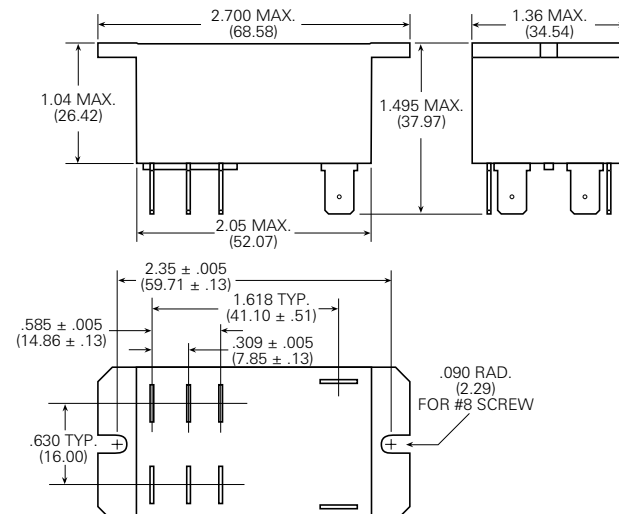
|              |              |             |              |               |              |             |              |
|--------------|--------------|-------------|--------------|---------------|--------------|-------------|--------------|
| T92P7A22-24  | T92P7A22-240 | T92P7D12-24 | T92P7D22-24  | T92P11A22-120 | T92P11D22-12 | T92S7D12-12 | T92S11D22-12 |
| T92P7A22-120 | T92P7D12-12  | T92P7D22-12 | T92P11A22-24 | T92P11A22-240 | T92P11D22-24 | T92S7D12-24 | T92S11D22-24 |

## Outline Dimensions

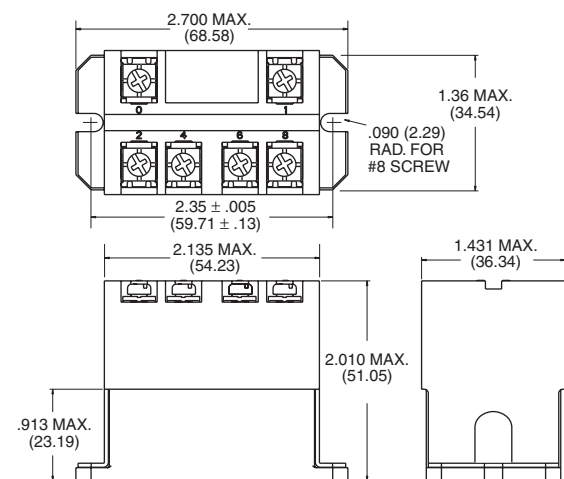
### Mounting & Termination Type 1



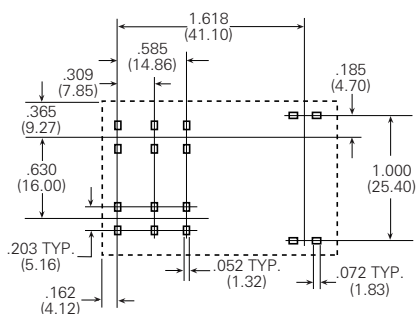
### Mounting & Termination Types 2, 3 & 4



### Mounting & Termination Type 5

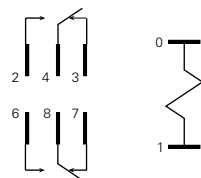


### Suggested PC Board Layout (Bottom View)



**Note:** An alternate PC board layout utilizes .076 ± .003 (1.93 ± .076) diameter holes on the same center-to-center spacing shown above. Use of the rectangular holes is recommended for improved solderability.

### Wiring Diagram



Only necessary terminals are present on single throw models.