

Distributor: [Electro-Stock www.electrostock.com](http://www.electrostock.com) Tel: 630-682-1542 Fax: 630-682-1562

**FEATURES:**

- Switching capacity up to 20A
- Small size and light weight
- Low coil power consumption
- High contact load
- Strong resistance to shock and vibration



**UL** US **E197851**

L x 27.6 x 26.0 mm

**CONTACT DATA**

|                           |   |
|---------------------------|---|
| Contact Arrangement       | 1A, 1B, 1C = SPST N.O., SPST N.C., SPDT<br>2A, 2B, 2C = DPST N.O., DPST N.C., DPDT<br>3A, 3B, 3C = 3PST N.O., 3PST N.C., 3PDT<br>4A, 4B, 4C = 4PST N.O., 4PST N.C., 4PDT  |
| Contact Rating            | 1 Pole: 20A @ 277VAC & 28VDC<br>2 Pole: 12A @ 250VAC & 28VDC; 10A @ 277VAC; ½ hp @ 125VAC<br>3 Pole: 12A @ 250VAC & 28VDC; 10A @ 277VAC; ½ hp @ 125VAC<br>4 Pole: 12A @ 250VAC & 28VDC; 10A @ 277VAC; ½ hp @ 125VAC |
| Contact Resistance        | < 50 milliohms initial  |
| Contact Material          | AgCdO   |
| Maximum Switching Power   | 5540VA, 560W  |
| Maximum Switching Voltage | 300VAC  |
| Maximum Switching Current | 20A   |

**DC COIL DATA**

| Coil Voltage VDC |       | Coil Resistance Ω ± 10% |       |       | Pick Up Voltage VDC (max) | Release Voltage VDC (min) | Coil Power W     | Operate Time ms | Release Time ms |
|------------------|-------|-------------------------|-------|-------|---------------------------|---------------------------|------------------|-----------------|-----------------|
| Rated            | Max.  | .9W                     | 1.4W  | 1.5W  | 75% of rated voltage      | 10% of rated voltage      |                  |                 |                 |
| 6                | 6.6   | 40                      | N/A   | N/A   | 4.5                       | .6                        | .9<br>1.4<br>1.5 | 25              | 25              |
| 12               | 13.2  | 160                     | 100   | 96    | 9.0                       | 1.2                       |                  |                 |                 |
| 24               | 26.4  | 650                     | 400   | 360   | 18                        | 2.4                       |                  |                 |                 |
| 36               | 39.6  | 1500                    | 900   | 865   | 27                        | 3.6                       |                  |                 |                 |
| 48               | 52.8  | 2600                    | 1600  | 1540  | 36                        | 4.8                       |                  |                 |                 |
| 110              | 121.0 | 11000                   | 8400  | 6800  | 82.5                      | 11.0                      |                  |                 |                 |
| 220              | 242.0 | 53778                   | 34571 | 32267 | 165.0                     | 22.0                      |                  |                 |                 |

**AC COIL DATA**

| Coil Voltage VAC |       | Coil Resistance Ω ± 10% |       |       | Pick Up Voltage VDC (max) | Release Voltage VDC (min) | Coil Power W      | Operate Time ms | Release Time ms |
|------------------|-------|-------------------------|-------|-------|---------------------------|---------------------------|-------------------|-----------------|-----------------|
| Rated            | Max.  | 1.2VA                   | 2.0VA | 2.5VA | 80% of rated voltage      | 30% of rated voltage      |                   |                 |                 |
| 6                | 6.6   | 11.5                    | N/A   | N/A   | 4.8                       | 1.8                       | 1.2<br>2.0<br>2.5 | 25              | 25              |
| 12               | 13.2  | 46                      | 25.5  | 20    | 9.6                       | 3.6                       |                   |                 |                 |
| 24               | 26.4  | 184                     | 102   | 80    | 19.2                      | 7.2                       |                   |                 |                 |
| 36               | 39.6  | 370                     | 230   | 180   | 28.8                      | 10.8                      |                   |                 |                 |
| 48               | 52.8  | 735                     | 410   | 320   | 38.4                      | 14.4                      |                   |                 |                 |
| 110              | 121.0 | 3900                    | 2300  | 1680  | 88.0                      | 33.0                      |                   |                 |                 |
| 120              | 132.0 | 4550                    | 2530  | 1990  | 96.0                      | 36.0                      |                   |                 |                 |
| 220              | 242.0 | 14400                   | 8600  | 3700  | 176.0                     | 66.0                      |                   |                 |                 |
| 240              | 312.0 | 19000                   | 10555 | 8280  | 192.0                     | 72.0                      |                   |                 |                 |

## GENERAL DATA

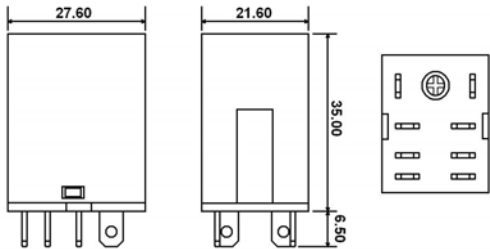
|                                      |  |
|--------------------------------------|--|
| Electrical Life @ rated load         | 100K cycles, typical   |
| Mechanical Life                      | 20M cycles ( 1 & 2 Pole), typical<br>10M cycles ( 3 & 4 Pole), typical |
| Insulation Resistance                | 100MΩ min @ 500VDC   |
| Dielectric Strength, Coil to Contact | 1500V rms min. @ sea level   |
| Contact to Contact                   | 1500V rms min. @ sea level   |
| Shock Resistance                     | 100m/s <sup>2</sup> for 11ms   |
| Vibration Resistance                 | 1.27mm double amplitude 10-40Hz  |
| Terminal (Copper Alloy) Strength     | 10N  |
| Operating Temperature                | -40 °C to + 85 °C  |
| Storage Temperature                  | -40 °C to + 155 °C   |
| Solderability                        | 230 °C ± 2 °C for 10 ± 0.5s  |
| Weight                               | 2C: 40g; 3C: 50g; 4C: 60g  |

## ORDERING INFORMATION

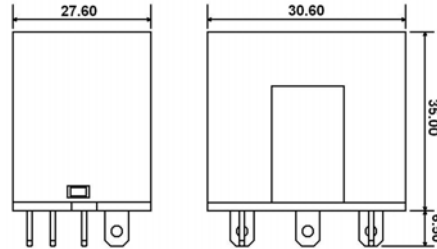
|   |       |    |   |       |     |
|---|-------|----|---|-------|-----|
| <b>1. Series:</b><br>WJ151  | WJ151 | 2C | T | 12VDC | 1.4 |
| <b>2. Contact Arrangement:</b><br>1A, 1B, 1C<br>2A, 2B, 2C<br>3A, 3B, 3C<br>4A, 4B, 4C  |       |    |   |       |     |
| <b>3. Termination:</b><br>T = Solder lugs / Plug-in<br>F = Solder lugs / Plug-in with Flange<br>P = PCB terminals   |       |    |   |       |     |
| <b>4. Coil Voltage:</b><br>6VDC / 6VAC<br>12VDC / 12VAC<br>24VDC / 24VAC<br>36VDC / 36VAC<br>48VDC / 48VAC<br>110VDC / 110VAC<br>120VAC<br>220VAC<br>240VAC   |       |    |   |       |     |
| <b>5. Coil Power:</b><br>.9 = 0.9W (DC coil for use with 1 and 2 pole models only)<br>1.4 = 1.4W (DC coil for use with 3 pole models only)<br>1.5 = 1.5W (DC coil for use with 4 pole models only)<br>1.2 = 1.2VA (AC coil for use with 1 and 2 pole models only)<br>2.0 = 2.0VA (AC coil for use with 3 pole models only)<br>2.5 = 2.5VA (AC coil for use with 4 pole models only) |       |    |   |       |     |
| <b>6. Optional LED:</b><br>Blank = No Indicator LED<br>D = With indicator LED   |       |    |   |       |     |
| <b>7. Sealed Option:</b><br>Blank = Dust Cover (standard)<br>S = Sealed   |       |    |   |       |     |
| <b>8. Gold Option:</b><br>Blank = Standard contacts<br>R = Gold flash over standard contacts  |       |    |   |       |     |
| <b>9. Push to Test Option:</b><br>Blank = Without push to test button<br>T = With push to test button   |       |    |   |       |     |

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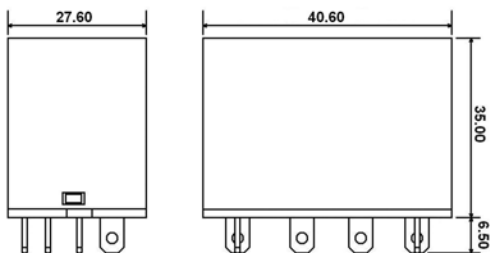
## DIMENSIONS (Units = mm)



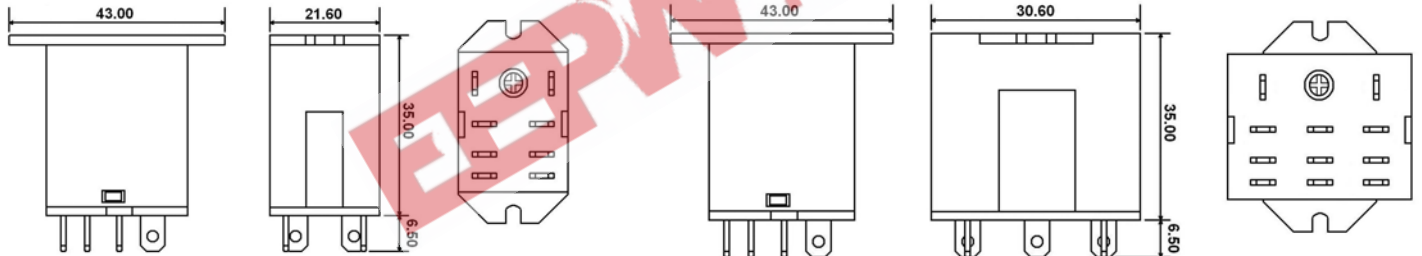
**1 & 2 POLE**



**3 POLE**

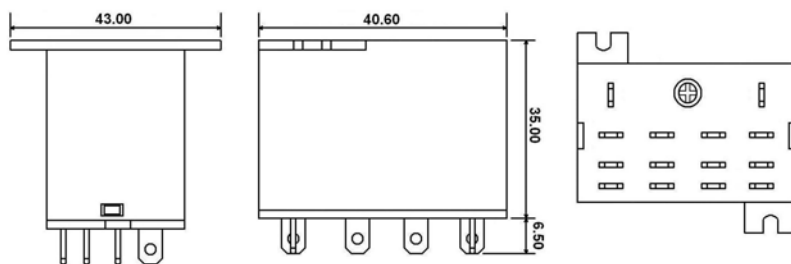


**4 POLE**

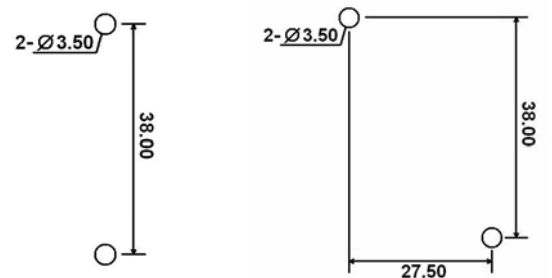


**1 & 2 POLE WITH FLANGE**

**3 POLE WITH FLANGE**

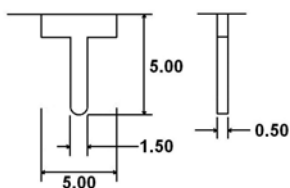


**4 POLE WITH FLANGE**

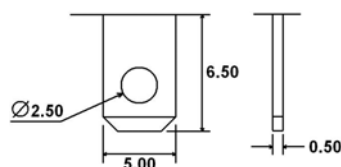


**FLANGE MOUNT LAYOUTS**

## TERMINATION OPTIONS



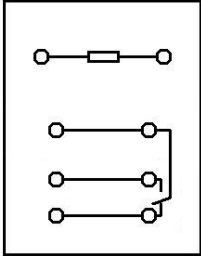
**PC PINS**



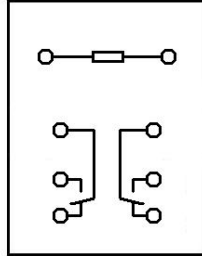
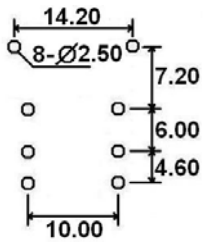
**SOLDER TABS**

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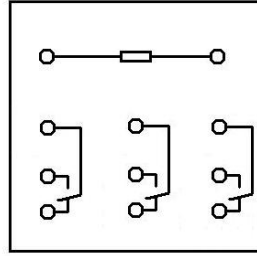
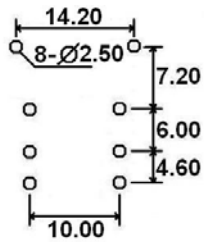
**SCHEMATICS & PC LAYOUTS (BOTTOM VIEWS)**



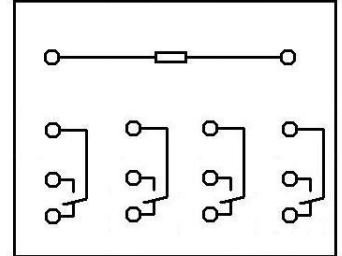
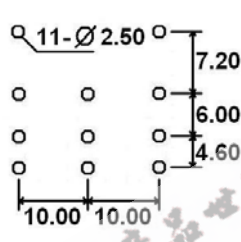
**1C**



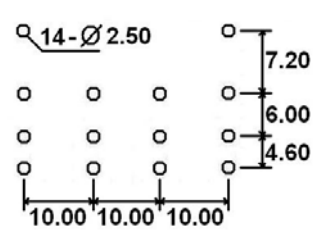
**2C**



**3C**



**4C**



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