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*General Purpose Plug-In Relay*

## Selection Guide

### General Purpose Relay Selection Characteristics

- Current Rating: 1A – 30A
- Contact Arrangement: SPDT, DPDT, 3PDT, 4PDT, etc.
- Coil Voltage: 6V – 240V AC/ 6V – 110V DC
- Mounting Options: Socket, Flange, DIN Rail, Panel
- Specifications: CSA, CE, IEC, NEMA, UL, etc.
- Other: Physical Dimensions, Maximum Voltage, Mechanical/Electrical Life, etc.

**Table 3-17. General Purpose Plug-In Relays Selection Guide**

| **Relay Series** | | | |
|---|---|---|---|
| | **D2PF/D2PR** | **D3PF/D3PR** | **D4PR** |
| **Approvals** | | | |
| **Features** | Polycarbonate Cover | Polycarbonate Cover | Polycarbonate Cover |
| | Indicator Lamp and Pushbutton Available | Indicator Lamp and Pushbutton Available | Indicator Lamp Available |
| | Panel, DIN and Flange Mounting | Panel and DIN Mounting | Panel and DIN Mounting |
| | Latching | 8 or 11 Pin Octal Plug-In | Socket Has Built-In Hold Down Spring |
| | | Latching (D3PR version) | |

**Contact Data**

| Configuration | **DPDT** | **DPDT Latching** | **4PDT** | **SPDT** | **DPDT** | **3PDT** | **SPDT** | **DPDT** |
|---|---|---|---|---|---|---|---|---|
| Max. Allowable Load | D2PF: 10A at 120V AC<br>D2PR: 5A at 240V AC | 3A at 220V AC | 3A at 240V AC | 12A at 120V AC | 12A at 120V AC | 10A at 240V AC | 10A at 250V AC | 5A at 240V AC |
| Material | Ag (Au Flashed) | | | AgCdO (Au Flashed) | | | AgCdO | |
| Resistance | 50 Milliohms (Initial) | | | 50 Milliohms (Initial) | | | 100 Milliohms (Initial) | |
| Dielectric Strength | 1500V | | | 1500V | | | 5000V | |

**Coil Data**

| | | | |
|---|---|---|---|
| AC | 6 – 240V AC | 24 – 240V AC (D3PF) / 6 – 240V AC (D3PR) | 6 – 240V AC |
| DC | 6 – 110V DC | 12 – 110V DC (D3PF) / 6 – 110V DC (D3PR) | 6 – 110V DC |
| Power<br>VA (V AC)<br>Watts (V DC) | <br>1.2 VA<br>1.1 Watts | <br>2.75 VA<br>1.2 Watts | <br>0.9 VA<br>0.5 Watts |

**General Data**

| | | | |
|---|---|---|---|
| Ambient Temperature<br>Operational<br>Storage | <br>-40 – 158°F (-40° – 70°C)<br>-40 – 221°F (-40° – 105°C) | <br>-49 – 131°F (-45° – 55°C)<br>-40 – 221°F (-40° – 105°C) | <br>-40 – 158°F (-40° – 70°C)<br>-40 – 158°F (-40° – 70°C) |
| Maximum Pick-Up | 20 / 25 Milliseconds | 15 Milliseconds | 15 Milliseconds |
| Maximum Release | 20 / 25 Milliseconds | 10 Milliseconds | 10 (AC)/5 (DC) Milliseconds |
| Life<br>Mechanical Operations<br>Electrical Operations | <br>10 Million<br>200,000 | <br>5 Million (D3PF) / 10 Million (D3PR)<br>200,000 (D3PF) / 100,000 (D3PR) | <br>10 Million<br>100,000 |
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**Table 3-17. General Purpose Plug-In Relays Selection Guide (Continued)**

| Relay Series | | | | |
|---|---|---|---|---|
| | **D5PF/D5PR** | **D7PF/D7PR** | **D8PR** | **D9PR** |
| **Approvals** | c UL us, CE, CSA | c UL us, CE, CSA | UL, CE, CSA | UL, CSA |
| **Features** | Polycarbonate Cover | Polycarbonate Cover | Dust Cover | Dust Cover |
| | Indicator Lamp and Pushbutton Available | Indicator Lamp and Pushbutton Available | Panel, DIN and Flange Mounting | Pushbutton Available |
| | Panel, DIN and PC Board Mounting | Panel, DIN and Flange Mounting | Quick-Connect and Screw Terminals | Panel Mounting |
| | | | | Screw Terminals |

**Contact Data**

| Configuration | **SPDT** | **DPDT** | **3PDT** | **SPDT** | **DPDT** | **3PDT** | **4PDT** | **SPST-NO** | **DPST-NO** | **4PST** | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | **NO** | **NC** |
| Max. Allowable Load | 15A at 240V AC | 15A at 240V AC | 15A at 240V AC | 20A at 277V AC | 15A at 120V AC | 15A at 120V AC | 15A at 120V AC | 30A at 220V AC | 25A at 220V AC | 25A at 220V AC | 8A at 220V AC |
| Material | AgCdO (Au Flashed) | | | AgCdO | | | | AgCdO | | AgCdO | |
| Resistance | 50 Milliohms (Initial) | | | 50 Milliohms (Initial) | | | | 50 Milliohms (Initial) | | 50 Milliohms (Initial) | |
| Dielectric Strength | 1500V (D5PF) / 2000V (D5PR) | | | 1000V(D7PF1, D7PF2, D7PF3) / 1500V | | | | 4000V | | 4000V | |

**Coil Data**

| | | | | |
|---|---|---|---|---|
| AC | 24 – 110V AC (D5PF)<br>6 – 240V AC (D5PR) | 6 – 240V AC | 6 – 240V AC | 24 – 240V AC |
| DC | 24 – 110V DC (D5PF)<br>6 – 110V DC (D5PR) | 6 – 110V DC | 12 – 24V DC | 12 – 110V DC |
| Power<br>VA (V AC)<br>Watts (V DC) | 2.75 VA<br>1.2 Watts | 3.0 VA (D7PF3, D7PF4) / 2.55 VA<br>2.3 Watts (D7PF1, D7PF2, D7PF4);<br>3.4 Watts (D7PF3) / 1.5 Watts | 2.5 VA<br>1.9 Watts | 2.6 VA<br>2.0 Watts |

**General Data**

| | | | | |
|---|---|---|---|---|
| Ambient Temperature<br>Operational<br>Storage | -22 – 122°F (-30° – 50°C)<br>-22 – 212°F (-30° – 100°C) | -40 – 158°F (-40° – 70°C)<br>-40 – 212°F (-40° – 100°C) | -4 – 185°F (-20° – 85°C)<br>-4 – 185°F (-20° – 85°C) | -13 – 140°F (-25° – 60°C)<br>-13 – 140°F (-25° – 60°C) |
| Maximum Pick-Up | 24 Milliseconds | 20 Milliseconds (D7PF1, D7PF4)<br>25 Milliseconds (All Others) | 30 Milliseconds | 50 Milliseconds |
| Maximum Release | 26 Milliseconds | 20 Milliseconds / 25 Milliseconds | 30 Milliseconds | 50 Milliseconds |
| Life<br>Mechanical Operations<br>Electrical Operations | 5 Million<br>200,000 (D5PF) / 100,000 (D5PR) | 10 Million<br>100,000 (D7PR3, D7PR4, D7PF1)<br>150,000 (D7PF3, D7PF4)<br>200,000 (D7PF2, D7PR1, D7PR2) | 5 Million<br>100,000 | 1 Million<br>100,000 |
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