

# Power Relays

## Features

- High power contacts capable of switching up to 40A
- Open construction
- SPDT, DPST and DPDT models
- Riveted construction for high reliability
- Maximum contact voltage up to 600V

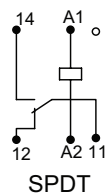


**AD-PR40-1C-12D**

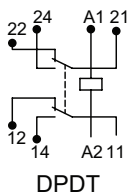
| Power Relays                    |         |                     |              |               |                |
|---------------------------------|---------|---------------------|--------------|---------------|----------------|
| Part Number                     | Price   | Drawing Links       | Coil Voltage | Configuration | Contact Rating |
| <a href="#">AD-PR40-1C-12D</a>  | \$17.00 | <a href="#">PDF</a> | 12VDC        | SPDT          | 40A            |
| <a href="#">AD-PR40-1C-24D</a>  | \$18.00 | <a href="#">PDF</a> | 24VDC        |               |                |
| <a href="#">AD-PR40-1C-24A</a>  | \$21.50 | <a href="#">PDF</a> | 24VAC        |               |                |
| <a href="#">AD-PR40-1C-120A</a> | \$18.50 | <a href="#">PDF</a> | 120VAC       |               |                |
| <a href="#">AD-PR40-1C-240A</a> | \$22.00 | <a href="#">PDF</a> | 240VAC       |               |                |
| <a href="#">AD-PR40-2A-12D</a>  | \$21.00 | <a href="#">PDF</a> | 12VDC        | DPST          |                |
| <a href="#">AD-PR40-2A-24D</a>  | \$21.00 | <a href="#">PDF</a> | 24VDC        |               |                |
| <a href="#">AD-PR40-2A-24A</a>  | \$20.00 | <a href="#">PDF</a> | 24VAC        |               |                |
| <a href="#">AD-PR40-2A-120A</a> | \$20.00 | <a href="#">PDF</a> | 120VAC       |               |                |
| <a href="#">AD-PR40-2A-240A</a> | \$21.00 | <a href="#">PDF</a> | 240VAC       |               |                |
| <a href="#">AD-PR40-2C-12D</a>  | \$22.50 | <a href="#">PDF</a> | 12VDC        | DPDT          |                |
| <a href="#">AD-PR40-2C-24D</a>  | \$23.00 | <a href="#">PDF</a> | 24VDC        |               |                |
| <a href="#">AD-PR40-2C-24A</a>  | \$23.00 | <a href="#">PDF</a> | 24VAC        |               |                |
| <a href="#">AD-PR40-2C-120A</a> | \$23.00 | <a href="#">PDF</a> | 120VAC       |               |                |
| <a href="#">AD-PR40-2C-240A</a> | \$23.00 | <a href="#">PDF</a> | 240VAC       |               |                |

## Wiring Diagrams

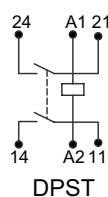
**AD-PR40-1C-xxxx**



**AD-PR40-2C-xxxx**



**AD-PR40-2A-xxxx**



# Power Relays Specifications

| Power Relays Specifications             |                                                                                                                                                                                                                               |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|
| Part Numbers                            | <a href="#">AD-PR40-1C-12D</a>                                                                                                                                                                                                | <a href="#">AD-PR40-1C-24D</a> | <a href="#">AD-PR40-1C-24A</a> | <a href="#">AD-PR40-1C-120A</a> | <a href="#">AD-PR40-1C-240A</a> | <a href="#">AD-PR40-2A-12D</a> | <a href="#">AD-PR40-2A-24D</a> | <a href="#">AD-PR40-2A-24A</a> | <a href="#">AD-PR40-2A-120A</a> | <a href="#">AD-PR40-2A-240A</a> | <a href="#">AD-PR40-2C-12D</a> | <a href="#">AD-PR40-2C-24D</a> | <a href="#">AD-PR40-2C-24A</a> | <a href="#">AD-PR40-2C-120A</a> | <a href="#">AD-PR40-2C-240A</a> |
| General Specifications                  |                                                                                                                                                                                                                               |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Service Life                            | Mechanical: 1 million operations AC and DC                                                                                                                                                                                    |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
|                                         | Electrical (resistive): 50,000 operations @ 300VAC;100,000 @ 28VDC                                                                                                                                                            |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Operating Temperature                   | -55 to 55°C [-67 to 131°F]                                                                                                                                                                                                    |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Response Time                           | 30ms                                                                                                                                                                                                                          |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Weight                                  | 227g [ 8oz] to 312g [11oz]                                                                                                                                                                                                    |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Environmental Protection                | Not applicable to open relays                                                                                                                                                                                                 |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Pilot Duty                              | A600                                                                                                                                                                                                                          |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Terminal Wire                           | Max 10AWG                                                                                                                                                                                                                     |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Terminal Torque                         | 11 to 15 in-lb [1.2 to 1.7 N·m]                                                                                                                                                                                               |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Agency Approvals and Standards          | UL Recognized E191059, CE Certified (9667186-9811), CSA Certified 244610, RoHS                                                                                                                                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Coil Specifications                     |                                                                                                                                                                                                                               |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Coil Input Voltage                      | 12VDC                                                                                                                                                                                                                         | 24VDC                          | 24VAC<br>50/60<br>Hz           | 120VAC<br>50/60<br>Hz           | 240VAC<br>50/60<br>Hz           | 12VDC                          | 24VDC                          | 24VAC<br>50/60<br>Hz           | 120VAC<br>50/60<br>Hz           | 240VAC<br>50/60<br>Hz           | 12VDC                          | 24VDC                          | 24VAC<br>50/60<br>Hz           | 120VAC<br>50/60<br>Hz           | 240VAC<br>50/60<br>Hz           |
| Coil Resistance                         | 70Ω                                                                                                                                                                                                                           | 290Ω                           | 12Ω                            | 290Ω                            | 1.2 kΩ                          | 70Ω                            | 290Ω                           | 12Ω                            | 290Ω                            | 1.2 kΩ                          | 70Ω                            | 290Ω                           | 12Ω                            | 290Ω                            | 1.2 kΩ                          |
| Power Consumption                       | 10VA (AC) , 4.0 W DC                                                                                                                                                                                                          |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Dropout Voltage<br>(% of rated voltage) | Min. 10%                                                                                                                                                                                                                      |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Pull-in Voltage                         | Max. 85% of nominal voltage or less AC, Max. 80% of nominal voltage or less DC                                                                                                                                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Max. Voltage<br>(Continuous Voltage)    | 110% of the rated coil voltage                                                                                                                                                                                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Contact Specifications                  |                                                                                                                                                                                                                               |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Contact Type                            | SPDT                                                                                                                                                                                                                          |                                |                                |                                 |                                 | DPST (N.O.)                    |                                |                                |                                 |                                 | DPDT                           |                                |                                |                                 |                                 |
| Contact Material                        | Silver Alloy, gold flashed                                                                                                                                                                                                    |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Contact Rating                          | 40A, 300 VAC (resistive load)<br>40A, 28 VDC (resistive load)<br>5A, 480 VAC (resistive load)<br>5A, 600 VAC (resistive load)<br>15A, 120 VAC (tungsten filament)<br>2hp each pole 120-600 VAC<br>2hp sw. 2 poles 120-600 VAC |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Minimum Switching Requirement           | 1A @ 5VAC/VDC                                                                                                                                                                                                                 |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Maximum Switching Voltage               | 600V                                                                                                                                                                                                                          |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |
| Dielectric Strength Between Contacts    | Between coil and contact: 2200V ; Between poles: 2200V ; Between open contacts: 1500V                                                                                                                                         |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |                                |                                |                                |                                 |                                 |