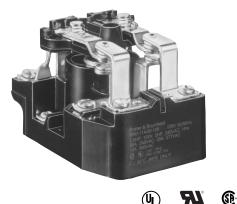


PRD Series Power Relay

- Contact ratings to 50 amps
- Magnetic blowouts available for switching DC loads
- Contact arrangement up to 2 form C (2C0)
- 1 Form C auxiliary switch available
- UL class B insulation



| Туре | Load | Cycle |
|------------------------|--|-------------------|
| UL 508 ¹⁾ | | |
| Models with scre | ws or quick connects for main terminals | |
| Code F, AgCdO, | | |
| - | 50A, 240VAC, general purpose ²⁾ | 20x1 |
| | 30A, 277VAC, resistive | 100x1 |
| | 1.5HP, 120VAC | 100x1 |
| | 2HP, 250VAC | 100x1 |
| | 10A, 600VAC | 100x1 |
| Code F, AgCdO, | 2 pole | |
| | 50A, 240VAC, general purpose ²⁾ | 20x1 |
| | 30A, 240VAC | 100x1 |
| | 20A, 277VAC | 100x1 |
| | 1.5HP, 120VAC | 100x1 |
| | 2HP, 250VAC | 100x1 |
| | 10A, 600VAC | 100x1 |
| 2) In order to achieve | e 50A rating with Contact Code F, Termination Code C |) or A is require |
| Code H, Ag with | magnetic blowout, 1 or 2 pole | |
| | 20A, 125VDC | 100x1 |
| | 1/3HP, 125VDC | 100x1 |
| Code J, AgCdO v | with magnetic blowout, 1 or 2 pole | |
| | 20A, 125VDC | 100x1 |
| | 1/3HP, 125VDC | 100x1 |
| Code N, W statio | nary with AgCdO movable, 1 or 2 pole | |
| | 25A, 250VAC | 100x1 |
| | 1HP, 125VAC | 100x1 |
| | 2HP, 250VAC | 100x1 |
| UL 508 ¹⁾ | | |
| Code P, Ag, 1 for | lugs for main terminals m X | |
| Couci, Ag, 110 | 50A, 277VAC, general purpose | 100x1 |
| | 30A, 277VAC, ballast | 6x1 |
| | 15A, 277VAC, tungsten | 6x1 |
| | 102LRA, 17FLA, 240VAC | 30x1 |
| | 120LRA, 20FLA, 120VAC | 30x1 |
| | 1.5HP, 120VAC | 30x1 |
| | 3HP, 240VAC | 30x1 |
| Factory ratings | - , | |
| | lugs for main terminals | |
| | magnetic blowout, 1 form X | |
| | 60A, 28VDC, resistive | 100x1 |
| | 30A, 125VDC | 100x1 |
| Mechanical endu | rance DC Coil, 1x10 ⁶ ops.; AC Coil | 5v105 one |

Auxiliary Snap-Action Switch Contact Data

| Contact arrangement | 1 Form C (CO) | |
|---------------------|--------------------------|--|
| Rating | 5A, 120VAC, 60 Hz., 25°C | |
| Contact material | Ag | |

Typical applications Industrial controls, lighting

Approvals

UL E22575; CSA LR15734; VDE Reg.Nr.C144 Models with all screw terminals are UL Listed. Others are UL Recognized. Technical data of approved types on request

Contact Data

| Contact arrangement | 1 and 2 Form A (NO); 1 and 2 Form C (CO); |
|-------------------------------|---|
| | 1 Form X (NO-DM) |
| Rated voltage | 600VAC,125VDC |
| Rated current | 50A |
| Contact material | Ag, AgCdO, W |
| Min. recommended contact load | d 1A, 12VDC or 12VAC |
| Initial contact resistance | 75mΩ Max |
| Initial voltage drop | 75mV |
| Frequency of operation | 7200 ops/hr |
| Operate/releases time max. | 40/20ms |
| Bounce time max. | 10ms |
| | |

Contact ratings

| Туре | Load | Cycles |
|----------------------|--|----------------------|
| UL 508 ¹⁾ | | |
| Models with screv | vs or quick connects for main terminals | |
| Code Y, Ag, 1 pole | e | |
| | 25A, 277VAC | 100x10 ³ |
| | 1HP, 120VAC | 100x10 ³ |
| | 2HP, 250VAC | 100x10 ³ |
| | 10A, 600VAC | 100x10 ³ |
| | 7A, 50VDC, resistive | 100x10 ³ |
| Code Y, Ag, 2 pole | e | |
| | 25A, 240VAC | 100x10 ³ |
| | 20A, 277VAC | 100x10 ³ |
| | 1HP, 120VAC | 100x10 ³ |
| | 2HP, 250VAC | 100x10 ³ |
| | 7A, 50VDC, resistive | 100x10 ³ |
| | 10A, 600VAC | 100x10 ³ |
| Code G, AgCdO, | 1 pole | |
| | 30A, 277VAC, resistive | 100x10 ³ |
| | 1.5HP, 120VAC | 100x10 ³ |
| | 2HP, 250VAC | 100x10 ³ |
| | 10A, 600VAC | 100x10 ³ |
| Code G, AgCdO, | 2 pole | |
| | 30A, 240VAC | 100x10 ³ |
| | 20A, 277VAC | 100x10 ³ |
| | 1.5HP, 120VAC | 100x10 ³ |
| | 2HP, 250VAC | 100x10 ³ |
| | 10A, 600VAC | 100x10 ³ |
| 1) Any PRD relay dev | iating electrically or physically from the standard mo | dels in the table is |

not UL or CSA listed. All horsepower ratings are for single phase motors..

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PRD Series Power Relay (Continued)

| Coil | Data |
|------|------|
| | |

| 0011 Du | | | | | |
|-------------------------------------|--------------------|-------------------|-----------------|-------------------|------------|
| Coil voltage range | | 6 | to 110VDC | | |
| | | | 6 | to 480VAC | |
| Coil insulation system according UL | | according UL | | Class B | |
| Coil vers | sions, DC co | il | | | |
| Coil | Rated | Operate | Release | Coil | Rated coil |
| code | voltage | voltage | voltage | resistance | power |
| | VDC | VDC | VDC | Ω±10% | W |
| 6 | 6 | 4.5 | 0.6 | 18 | 2 |
| 12 | 12 | 9 | 1.2 | 71 | 2 |
| 24 | 24 | 18 | 2.4 | 288 | 2 |
| 48 | 48 | 36 | 4.8 | 1150 | 2 |
| 110 | 110 | 82.5 | 11 | 6050 | 2 |
| All figures a | are given for coil | without preenergi | zation, at ambi | ent temperature - | +23°C. |

All figures are given for coil without preenergization, at a Other coil voltages on request.

Coil versions, AC coil

| | | •• | | | |
|------|---------|---------|---------|------------|------------|
| Coil | Rated | Operate | Release | Coil | Rated coil |
| code | voltage | voltage | voltage | resistance | power |
| | VAC | VAC | VAC | Ω±15% | VA |
| 6 | 6 | 5.1 | 0.6 | 0.86 | 9.8 |
| 12 | 12 | 10.2 | 1.2 | 3.2 | 9.8 |
| 24 | 24 | 20.4 | 2.4 | 12 | 9.8 |
| 120 | 120 | 102 | 12 | 290 | 9.8 |
| 240 | 240 | 204 | 24 | 1200 | 9.8 |
| 480 | 480 | 408 | 48 | 4500 | 9.8 |

All figures are given for coil without preenergization, at ambient temperature +23°C. Other coil voltages on request.

Dimensions

PRD/PRDA 1, 3, 5 and 7

PRD/PRDA 11

| Insulation Data | |
|-------------------------------|----------------------|
| Initial dielectric strength | |
| between open contacts | 2000V _{rms} |
| between contact and coil | 2000V _{rms} |
| between adjacent contacts | 2000V _{rms} |
| Initial insulation resistance | |
| between insulated elements | 100MΩ |

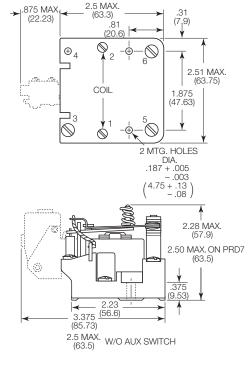
Other Data

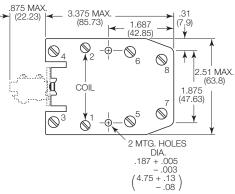
| e iller Bulu | |
|-------------------------------|---|
| Material compliance: EU RoH | S/ELV, China RoHS, REACH, Halogen content |
| refer to t | the Product Compliance Support Center at |
| www.te. | .com/customersupport/rohssupportcenter |
| Ambient temperature | |
| AC coil: -55°C to 45°C | |
| DC coil: -55°C to 80°C | |
| Category of environmental pro | otection |
| IEC 61810 | RTO - open relay |
| Terminal type | Screw, Quick connects, Box lugs |
| Weight | 284g |
| Packaging/unit | tray/20 pcs., box/40pcs. |
| | |

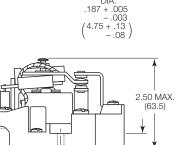
Accessories

| Product Code | Description |
|--------------|------------------|
| 35D013 | Metal dust cover |

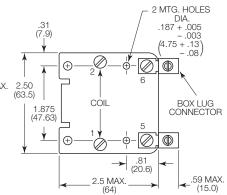
PRD-3_P and R

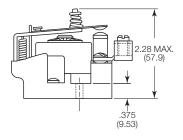






4.250 MAX. (76.2) (107.95) 3.375 MAX. W/O AUX SWITCH (85.73)





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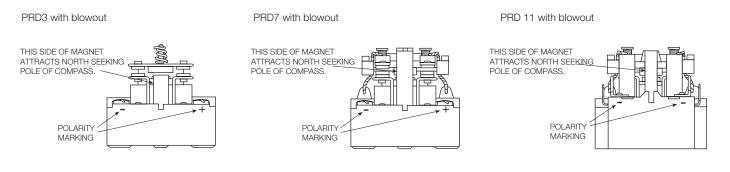
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PRD Series Power Relay (Continued)

Terminal assignment for models with magnetic blowout



| Product | code structure | Typical product code | PRD | -7 | Α | Y | 0 | -120 |
|---|--|---|------------|----|---|---|---|------|
| | D Open relay DA Open relay with aux. 1 form C (CO) snap-ac | tion switch | _ | | | | | |
| Main cont 1 5 7V 1) Code 7 Coil input A | act arrangement 1 form A (1 NO) 3 1 form C (1 CO) 7 2 form A (2 NO) with 3mm contact gap ¹⁾ 1 V is only available as a UL Recognized model, not UL List AC, 50/60Hz D | 1 form X (1 NO-DM) 2 form A (2 NO) 1 2 form C (2 CO) | | | | | | |
| Y G F H J N P R (2) Availab (3) Availab (4) Availab | tact material and type .312" (7.92mm) dia. Ag [25A max. rating] .312" (7.92mm) dia. AgCdO [30A max. rating] .312" (7.92mm) dia. AgCdO [50A max. rating] Ag with magnetic blowout [20A DC max. rating AgCdO with magnetic blowout [20A DC max. rating AgCdO with magnetic blowout [20A DC max. rating Ag [50A max. rating] ⁵⁾ Ag with magnetic blow out [50A max. rating] ble with Main contact arrangement code (step 2 above) 1, 8 le with Main contact arrangement code (step 2 above) 1, 8 el with Main contact | g] ³⁾ rating] ing] ⁴⁾ 5) 5, 7 or 11 only, and Termination code (step 5 below) 0 o 7 or 11 only 5, 7 or 11 only. | or A only. | | | | | |
| Terminatio PR 0 1 3 4 6) Availab PR A | D types only #8-32 screw term. for main contacts, #6-32 sc .250" (6.35mm) QC for main contacts and coil #8-32 screw term. for main contacts, .250" (6.3 Box lug term. which accept #6 - #14 wire for m le with Main contact arrangement code (step 2 above) 3 o DA (with aux. switch) types only #8-32 screw term. for main contacts, #6-32 sc .250" (6.35mm) QC for main contacts, .250" | rew term. for coil. 35mm) QC for coil. nain contacts, #6-32 screw term. for coil. ⁶⁾ nly, and Main contact material code (step 4 above) P o rew term. for coil, screw term. for aux. switch aux. switch | or R only. | | | |] | |
| | il code: please refer to coil versions table | | | | | | | |

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PRD Series Power Relay (Continued)

| Product Code | Arrangement | Material | Coil | Terminals | Part Number |
|----------------------------------|-------------------|---------------------|---------|------------|-------------|
| PRD-3AY0-120 | 1 form X, 1 NO-DM | Ag | 120VAC | Screw | 7-1393127-9 |
| PRD-3AG0-120 | | AgCdO, 30A | | | 6-1393127-9 |
| PRD-3AJ0-120 | | AgCdO, mag blowout | | | 7-1393127-4 |
| PRD-3AJ3-24 | | | 24VAC | Screw / QC | 7-1393127-5 |
| PRD-3DH0-24 | | Ag, mag blowout | 24VDC | Screw | 8-1393127-6 |
| PRD-3DY0-12 | | Ag | 12VDC | | 9-1393127-5 |
| PRD-3DY0-24 | | | 24VDC | - | 9-1393127-6 |
| PRD-3DY0-110 | | | 110VDC | | 9-1393127-4 |
| PRD-5AY0-24 | 1 form C, 1 CO | | 24VAC | - | 1393128-6 |
| PRD-5AY0-120 | | | 120VAC | _ | 1393128-5 |
| PRD-5AY1-120 | | | 120010 | QC | 1-1393128-1 |
| PRD-5AY0-240 | | | 240VAC | Screw | 1393128-7 |
| PRD-5DF0-12 | | AgCdO, 50A | 12VDC | 001000 | 2-1423100-4 |
| PRD-5DY0-12 | | Aq | 12100 | | 1-1393128-6 |
| PRD-5DY0-24 | | ~g | 24VDC | | 1-1393128-7 |
| PRD-7AG0-120 | 2 form A, 2 NO | AgCdO, 30A | 120VAC | | 9-1393129-5 |
| PRD-7AG0-120 PRD-7AY0-24 | 2 10111 A, 2 110 | Agodo, sua | 24VAC | - | 1393130-9 |
| PRD-7AY0-24 | | Ag | 120VAC | - | 1393130-9 |
| | | | 240VAC | _ | 1-1393130-0 |
| PRD-7AY0-240 | | | | 0 | |
| PRD-7AY3-120 | | A = Q = QQ = Q = A | 120VAC | Screw / QC | 1-1393130-2 |
| PRD-7DG0-24 | | AgCdO, 30A | 24VDC | Screw | 1-1393130-6 |
| PRD-7DH0-48 | | Ag, mag blowout | 48VAC | _ | 2-1393130-1 |
| PRD-7DY0-12 | | Ag | 12VDC | _ | 2-1393130-8 |
| PRD-7DY0-24 | | | 24VDC | _ | 2-1393130-9 |
| PRD-11AF0-240 | 2 form C, 2 CO | AgCdO, 50A | 240VAC | | 3-1423100-0 |
| PRD-11AG0-24 | | AgCdO, 30A | 24VAC | | 1-1393127-1 |
| PRD-11AG0-120 | | | 120VAC | | 1393127-9 |
| PRD-11AG0-240 | | | 240VAC | | 1-1393127-2 |
| PRD-11AH0-120 | | Ag, mag blowout | 120VAC | | 1-1393127-6 |
| PRD-11AY0-24 | | Ag | 24VAC | | 2-1393127-9 |
| PRD-11AY0-120 | | | 120VAC | | 2-1393127-6 |
| PRD-11AY0-240 | | | 240VAC | | 3-1393127-0 |
| PRD-11AY0-480 | | | 480VAC | | 3-1393127-1 |
| PRD-11DF0-12 | | AgCdO, 50A | 12VDC | | 2-1423100-2 |
| PRD-11DF0-110 | | | 110VDC | | 2-1423100-9 |
| PRD-11DG0-12 | | AgCdO, 30A | 12VDC | | 3-1393127-5 |
| PRD-11DG0-24 | | | 24VDC | | 3-1393127-8 |
| PRD-11DH0-12 | | Ag, mag blowout | 12VDC | | 4-1393127-7 |
| PRD-11DH0-24 | | | 24VDC | | 4-1393127-9 |
| PRD-11DH0-48 | | | 48VDC | | 5-1393127-0 |
| PRD-11DH0-110 | | | 110 VDC | | 4-1393127-6 |
| PRD-11DJ0-24 | | AgCdO, mag blowout | 24 VDC | | 5-1393127-5 |
| PRD-11DY0-12 | | Ag | 12 VDC | | 6-1393127-1 |
| PRD-11DY0-24 | | | 24 VDC | | 6-1393127-2 |
| PRD-11DY0-48 | | | 48 VAC | | 6-1393127-3 |
| PRD-11DY0-110 | | | 110 VDC | | 6-1393127-0 |
| PRDA-11AGA-120 | | AgCdO, 30A | 120 VAC | | 7-1393127-0 |
| PRDA-11AGA-120 PRDA-11AYA-120 | | Ayouo, sua | 120 VAG | | 7-1393131-9 |
| -nda-liata-izu | | | | | 1-1090101-9 |

PRD accessory

| Product Code | | Description | Part Number |
|--------------|--|---|-------------|
| 35D013 | Metal dust cover enclosure | | 5-1393158-2 |
| | 35D013 Dust Cover PRD dust cover has a steel base with knockouts for 0.5" (12.7mm) d conduit and a cover fitted with two screws. Fits PRD relays, except wit auxiliary contacts. Finished in gray baked enamel. Mounting: Three No. 10 holes on 1.875" (47.63mm) x 4.125" (104.77mm) centers. | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | |

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