

(F)

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### **PRD Series Power Relay**

- Contact ratings to 50A
- 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



Contact ratings (continued)

Approvals UL E22575; CSA LR15734; VDE 40020133 (available only on PRD with DC

coil and Termination code 1) Models with all screw terminals are UL Listed. Others are UL Recognized. Technical data of approved types on request.

#### **Contact Data**

Typical applications Industrial controls, lighting.

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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	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

Туре	Load	Cycles
UL 5081)		
Models with sc	rews or quick connects for main terminals	
Code Y, Ag, 1	pole	
	25A, 277VAC	100x10 <sup>3</sup>
	1HP, 120VAC	100x10 <sup>3</sup>
	2HP, 250VAC	100x10 <sup>3</sup>
	10A, 600VAC	100x10 <sup>3</sup>
	7A, 50VDC, resistive	100x10 <sup>3</sup>
Code Y, Ag, 2	pole	
	25A, 240VAC	100x10 <sup>3</sup>
	20A, 277VAC	100x10 <sup>3</sup>
	1HP, 120VAC	100x10 <sup>3</sup>
	2HP, 250VAC	100x10 <sup>3</sup>
	7A, 50VDC, resistive	100x10 <sup>3</sup>
	10A, 600VAC	100x10 <sup>3</sup>
Code G, AgCd	O, 1 pole	
	30A, 277VAC, resistive	100x10 <sup>3</sup>
	1.5HP, 120VAC	100x10 <sup>3</sup>
	2HP, 250VAC	100x10 <sup>3</sup>
	10A, 600VAC	100x10 <sup>3</sup>
Code G, AgCd	O, 2 pole	
	30A, 240VAC	100x10 <sup>3</sup>
	20A, 277VAC	100x10 <sup>3</sup>
	1.5HP, 120VAC	100x10 <sup>3</sup>
	2HP, 250VAC	100x10 <sup>3</sup>
	10A, 600VAC	100x10 <sup>3</sup>

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

Type Load	Cycles
UL 508 <sup>1)</sup>	
Models with screws or quick connects for main terminals	
Code F, AgCdO, 1 pole	00102
50A, 240VAC, general purpose <sup>2)</sup>	20x10 <sup>3</sup>
30A, 277VAC, resistive	100x10 <sup>3</sup>
1.5HP, 120VAC	100x10 <sup>3</sup>
2HP, 250VAC	100x10 <sup>3</sup>
10A, 600VAC	100x10 <sup>3</sup>
Code F, AgCdO, 2 pole	00.102
50A, 240VAC, general purpose <sup>2)</sup>	20x10 <sup>3</sup>
30A, 240VAC	100x10 <sup>3</sup>
20A, 277VAC	100x10 <sup>3</sup>
1.5HP, 120VAC	100x10 <sup>3</sup>
2HP, 250VAC	100x10 <sup>3</sup>
10A, 600VAC	100x10 <sup>3</sup>
2) In order to achieve 50A rating with contact code F, termination Code 0 of	r A is required.
Code H, Ag with magnetic blowout, 1 or 2 pole	
20A, 125VDC	100x10 <sup>3</sup>
1/3HP, 125VDC	100x10 <sup>3</sup>
Code J, AgCdO with magnetic blowout, 1 or 2 pole	
20A, 125VDC	100x10 <sup>3</sup>
1/3HP, 125VDC	100x103
Code N, W stationary with AgCdO movable, 1 or 2 pole	
25A, 250VAC	100x10 <sup>3</sup>
1HP, 125VAC	100x10 <sup>3</sup>
2HP, 250VAC	100x10 <sup>3</sup>
UL 508 <sup>1)</sup>	
Models with box lugs for main terminals	
Code P, Ag, 1 form X	
50A, 277VAC, general purpose	100x10 <sup>3</sup>
30A, 277VAC, ballast	6x10 <sup>3</sup>
15A, 277VAC, tungsten	6x10 <sup>3</sup>
102LRA, 17FLA, 240VAC	30x103
120LRA, 20FLA, 120VAC	30x103
1.5HP, 120VAC	30x10 <sup>3</sup>
3HP, 240VAC	30x10 <sup>3</sup>
Factory ratings	
Models with box lugs for main terminals	
Code R, Ag with magnetic blowout, 1 form X	
60A, 28VDC, resistive	100x10 <sup>3</sup>
30A, 125VDC	100x10 <sup>3</sup>
Mechanical endurance DC Coil, 1x10 <sup>6</sup> ops.; AC Coil 5	x10⁵ ops.

#### **Auxiliary Snap-Action Switch Contact Data**

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

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Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

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### PRD Series Power Relay (Continued)

#### **Coil Data**

Coil voltage range			6 to 110VDC			
			6 to 480VAC			
Coil insul	Coil insulation system 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 are given for coil without preenergization, at ambient temperature +23°C. Other coil voltages on request.

#### Coil versions, AC coil

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VAČ	VAČ	VAČ	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

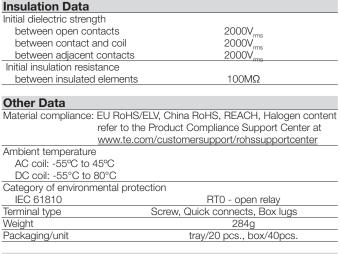
All figures are given for coil without preenergization, at ambient temperature +23°C. Other coil voltages on request.

#### Dimensions

PRD/PRDA 1, 3, 5 and 7





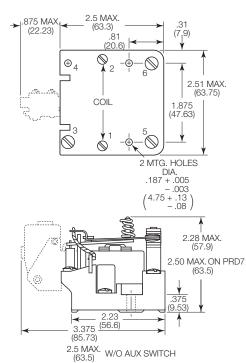


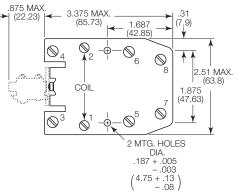
#### Accessories

Product Code	Description
35D013	Metal dust cover

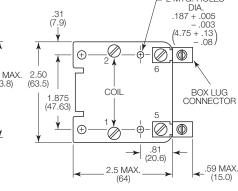




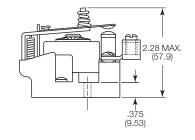




- 4.250 MAX. (76.2) (107.95) 3.375 MAX. W/O AUX SWITCH (85.73) 3.00



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2.50 MAX.

(63.5)

**♦** .375

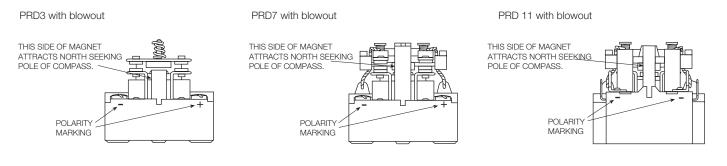
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### PRD Series Power Relay (Continued)

#### Terminal assignment for models with magnetic blowout



Product code structure	Typical product code	PRD	-7	Α	Y	0	-120
Type PRD Open relay PRDA Open relay with aux. 1 form C (CO) snap-action	n switch						
Main contact arrangement							
<b>1</b> 1 form A (1 NO) <b>3</b>	1 form X (1 NO-DM)						
	2 form A (2 NO)						
<b>7V</b> 2 form A (2 NO) with 3mm contact gap <sup>1)</sup> <b>11</b>	2 form C (2 CO)						
1) Code 7V is only available as a UL Recognized model, not UL Listed							
Coil input							
<b>A</b> AC, 50/60Hz <b>D</b> D	C						
Main contact material and type							
Y .312" (7.92mm) dia. Ag [25A max. rating]							
G .312" (7.92mm) dia. AgCdO [30A max. rating]							
F .312" (7.92mm) dia. AgCdO [50A max. rating] <sup>2)</sup>							
H Ag with magnetic blowout [20A DC max. rating]							
J AgCdO with magnetic blowout [20A DC max. rat							
N W stationary & AgCdO movable [25A max. rating	4)						
P Ag [50A max. rating] <sup>5)</sup>							
<b>R</b> Ag with magnetic blow out [50A max. rating] <sup>5</sup>							
2) Available with Main contact arrangement code 1, 5, 7 or 11 only, an	d Termination code 0 or A only.						
<ol> <li>Available with Main contact arrangement code 3, 7 or 11 only</li> <li>Available with Main contact arrangement code 1, 5, 7 or 11 only.</li> </ol>							
<ul><li>5) Available with Main contact arrangement code 1, 5, 7 or 11 only.</li></ul>	on code 1 only						
Termination							
PRD types only							
0 #8-32 screw term. for main contacts, #6-32 screw	v term for coil						
1 .250" (6.35mm) QC for main contacts and coil (N							
<b>3</b> #8-32 screw term. for main contacts, .250" (6.35r							
4 Box lug term. which accept #6 - #14 wire for mair	,						
6) Available with Main contact arrangement code 3 only, and Main con							
PRDA (with aux. switch) types only	····· · · · · · · · · · · · · · · · ·						
A #8-32 screw term. for main contacts, #6-32 screw	v term. for coil, screw term. for aux. switch						
B .250" (6.35mm) QC for main contacts, coil and au							
L Twin .250" (6.35mm) QC for main contacts, .250"							
Coil voltage							-
Coil 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			1200710	QC	1-1393128-1
PRD-5AY0-240			240VAC	Screw	1393128-7
PRD-5DF0-12		AgCdO, 50A	12VDC	Gelew	2-1423100-4
PRD-5DY0-12		Ag	12000		1-1393128-6
PRD-5DY0-12		~y	24VDC	-	1-1393128-7
	2 form A 2 NO	AgCdO, 30A	120VAC		
PRD-7AG0-120	2 form A, 2 NO		24VAC		9-1393129-5 1393130-9
PRD-7AY0-24		Ag		_	
PRD-7AY0-120			120VAC		1393130-7
PRD-7AY0-240			240VAC		1-1393130-0
PRD-7AY3-120			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		Âg	24VAC		2-1393127-9
PRD-11AY0-120		Ŭ	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-11DJ0-24			12 VDC		6-1393127-5
		Ag		_	
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		7-1393131-4
PRDA-11AYA-120					7-1393131-9

### PRD accessory

Product Code	Description	Part Number
35D013	Metal dust cover enclosure	5-1393158-2
	Conduct and a cover intervention of a cover interventinterventinterventintervention of a cover intervention of a covere	

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 LYQ20DC12

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 6-1393122-4
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 6-1617353-3
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 7-1393767-8