

## **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

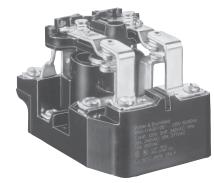
Typical applications Industrial controls, lighting.

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);
G	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	75m $Ω$ max.
Initial voltage drop	75mV
Frequency of operation	7200 ops/hr
Operate/releases time max.	40/20ms
Bounce time max.	10ms

Contact ratings		
Type	Load	Cycles
UL 508 <sup>1)</sup>		
Models with screw	s 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, AgCdO,	•	
	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, AgCdO, 2		
	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>

Any PRD relay deviating electrically or physically from the standard models in the table is not UL or CSA listed. All horsepower ratings are for single phase motors..









Contact rat	tings (continued)	
Туре	Load	Cycles
UL 508 <sup>1)</sup>		
	crews or quick connects for main terminals	
Code F, AgCd	O, 1 pole	
	50A, 240VAC, general purpose <sup>2)</sup>	20x10
	30A, 277VAC, resistive	100x10
	1.5HP, 120VAC	100x10
	2HP, 250VAC	100x10
	10A, 600VAC	100x10
Code F, AgCd	O, 2 pole	
	50A, 240VAC, general purpose <sup>2)</sup>	20x10
	30A, 240VAC	100x10
	20A. 277VAC	100x10
	1.5HP, 120VAC	100x10
	2HP, 250VAC	100x10
	10A, 600VAC	100x10
2) In order to achi	ieve 50A rating with contact code F, termination Code C	
_,	· · · · · · · · · · · · · · · · · · ·	
Code H. Aa wi	ith magnetic blowout, 1 or 2 pole	
	20A, 125VDC	100x10
	1/3HP, 125VDC	100x10
Code J. AaCd	O with magnetic blowout, 1 or 2 pole	
	20A, 125VDC	100x10
	1/3HP, 125VDC	100x10
Code N. W sta	ationary with AgCdO movable, 1 or 2 pole	
	25A, 250VAC	100x10
	1HP, 125VAC	100x10
	2HP, 250VAC	100x10
UL 5081)	2111,2000710	100/10
	ox lugs for main terminals	
Code P. Ag. 1		
00001,719,1	50A, 277VAC, general purpose	100x10
	30A, 277VAC, ballast	6x10
	15A, 277VAC, tungsten	6x10
	102LRA, 17FLA, 240VAC	30x10
	120LRA, 171 LA, 240VAC	30x10
	1.5HP, 120VAC	30x10
	3HP, 240VAC	
Footom, vetic		30x10
Factory rating		
	ox lugs for main terminals	
Code K, Ag Wi	ith magnetic blowout, 1 form X	100 10
	60A, 28VDC, resistive	100x10
	30A, 125VDC	100x10
Mechanical en	durance DC Coil, 1x10 <sup>6</sup> ops.; AC Coil	1.5x10 <sup>5</sup> ons
TTIOGRAFIICAI GIT	20 0011, 1×10 0p3., A0 001	CA10 0ps.

Auxiliary Snap-Action Switch Contact Data
Contact arrangement 1 form C (CO)
Rating 5A, 120VAC, 60Hz., 25°C
Contact material Ag



### PRD Series Power Relay (Continued)

Coil Data							
Coil volta	ige range		6	to 110VDC			
			6	6 to 480VAC			
Coil insul	ation 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 call without propergization, at ambient temporature, 122°C							

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

#### Coil versions, AC coil

Coil	Dotod	Onoroto	Dalassa	Call	Dotad asil
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VAC	VAC	VAC	$\Omega \pm 15\%$	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.

Insulation Data	
Initial dielectric strength	
between open contacts	2000V <sub>rms</sub>
between contact and coil	2000V <sub>rms</sub>
between adjacent contacts	2000V <sub>rms</sub>
Initial insulation resistance	****
between insulated elements	100ΜΩ

### **Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to 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

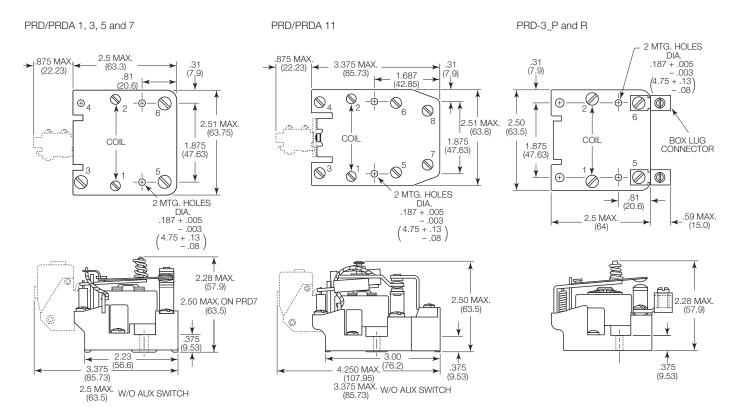
Category of environmental protection

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

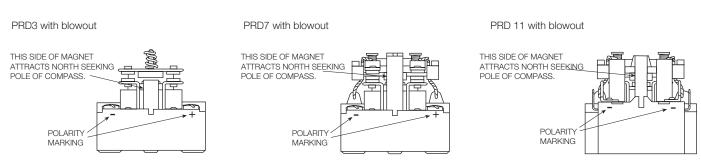
#### **Dimensions**

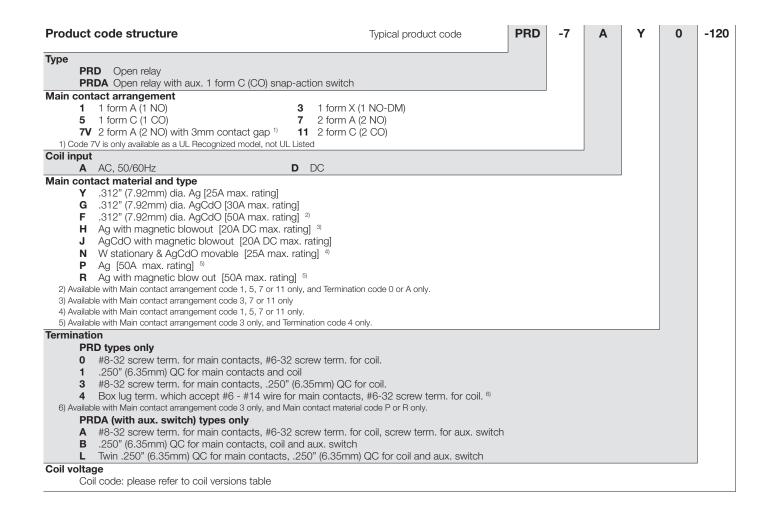




### PRD Series Power Relay (Continued)

### Terminal assignment for models with magnetic blowout





Catalog and product data is subject to the

terms of the disclaimer and all chapters of

the 'Definitions' section, available at

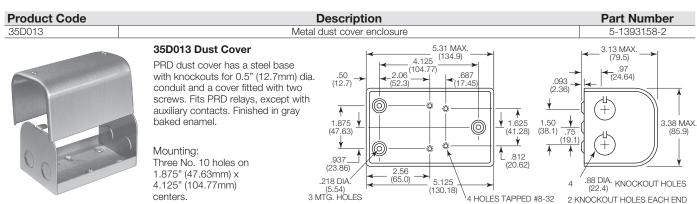
http://relays.te.com/definitions



# 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		Aq	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				QC	1-1393128-1
PRD-5AY0-240			240VAC	Screw	1393128-7
PRD-5DF0-12		AgCdO, 50A	12VDC		2-1423100-4
PRD-5DY0-12		Ag			1-1393128-6
PRD-5DY0-24		9	24VDC		1-1393128-7
PRD-7AG0-120	2 form A, 2 NO	AgCdO, 30A	120VAC		9-1393129-5
PRD-7AY0-24	2 1011171, 2 140	Ag	24VAC		1393130-9
PRD-7AY0-120		7.9	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	Jorew	2-1393130-1
PRD-7DY0-12		Ag, mag blowdut Ag	12VDC		2-1393130-8
PRD-7DY0-24		Ag	24VDC		2-1393130-9
PRD-11AF0-240	2 form C, 2 CO	AgCdO, 50A	240VAC		3-1423100-0
PRD-11AG0-24	2 101111 0, 2 00	AgCdO, 30A	24VAC		1-1393127-1
PRD-11AG0-24		Agodo, soa	120VAC	_	1393127-1
PRD-11AG0-120			240VAC		1-1393127-2
PRD-11AH0-120		Ag, mag blowout	120VAC		1-1393127-2
PRD-11AH0-120		Ag, mag blowout Ag	24VAC		2-1393127-9
PRD-11AY0-24		Ag	120VAC		2-1393127-9
			240VAC		3-1393127-0
PRD-11AY0-240 PRD-11AY0-480			480VAC		
		A=C= O FOA	12VDC		3-1393127-1
PRD-11DF0-12		AgCdO, 50A			2-1423100-2
PRD-11DF0-110		A O -1 O - O O A	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		7-1393131-4
PRDA-11AYA-120					7-1393131-9

### PRD accessory



Note: Additional unused holes may be present in dust cover base.