

# **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



el	Load	Cycle
508 <sup>1)</sup>		- 1
dels with screws o	r quick connects for main terminals	
de F, AgCdO, 1 po	le	
:	50A, 240VAC, general purpose <sup>2)</sup>	20x1
:	30A, 277VAC, resistive	100x1
	1.5HP, 120VAC	100x1
:	2HP, 250VAC	100x1
	10A, 600VAC	100x1
de F, AgCdO, 2 po		
	50A, 240VAC, general purpose <sup>2)</sup>	20x1
	30A, 240VAC	100x1
	20A, 277VAC	100x1
	1.5HP, 120VAC	100x1
	2HP, 250VAC	100x1
	10A, 600VAC	100x1
order to achieve 50A	rating with Contact Code F, Termination Code	U or A is require
de H. Aa with maa	netic blowout, 1 or 2 pole	
	20A, 125VDC	100x1
	1/3HP, 125VDC	100x1
	magnetic blowout, 1 or 2 pole	
	20A, 125VDC	100x1
	1/3HP, 125VDC	100x1
de N, W stationary	with AgCdO movable, 1 or 2 pole	
	25A, 250VAC	100x1
	1HP, 125VAC	100x1
	2HP, 250VAC	100x1
508 <sup>1)</sup>		
dels with box lugs	for main terminals	
de P, Ag, 1 form X	50A, 277VAC, general purpose	100x1
	30A, 277VAC, general purpose 30A, 277VAC, ballast	6x1
	15A, 277VAC, ballast 15A, 277VAC, tungsten	6x1
	102LRA, 17FLA, 240VAC	30x1
	120LRA, 20FLA, 120VAC	30x1
	1.5HP, 120VAC	30x1
	3HP, 240VAC	30x1
tory ratings		00/1
dels with box lugs	for main terminals	
de R, Ag with mag	netic blowout, 1 form X	
	28VDC, resistive	100x1
	125VDC	100x1
chanical endurance	e DC Coil 1x10 <sup>6</sup> ops · AC Coi	5x10 <sup>5</sup> ops
60A,	28VDC, resistive 125VDC	100

### **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 <sup>1)</sup>		
Models with scre	ws or quick connects for main terminals	
Code Y, Ag, 1 po	le	
	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 po	le	
	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,		
	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>
1) Any PRD relay de	eviating electrically or physically from the standard	models 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 00					
Coil voltage range		6	to 110VDC		
			6 to 480VAC		
Coil insulation system according UL Class B				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	ara giyan far agil	without proparai	ration at ambi	ant tomporature	

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
	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 <sub>rms</sub>
between contact and coil	2000V <sub>rms</sub>
between adjacent contacts	2000V <sub>rms</sub>
Initial insulation resistance	
between insulated elements	100MΩ

#### **Other Data**

e iller Bata				
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	RT0 - 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











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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	Υ	0	-120
Type PRD Open relay		]					
<b>PRDA</b> Open relay with aux. 1 form C (CO) snap-action	switch						
Main contact arrangement							
	form X (1 NO-DM)						
	form A (2 NO)						
<b>7V</b> 2 form A (2 NO) with 3mm contact gap <sup>1)</sup> <b>11</b> 2 1) Code 7V is only available as a UL Recognized model, not UL Listed	form C (2 CO)						
Coil input				J			
<b>A</b> AC, 50/60Hz <b>D</b> DC							
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] 2)							
H Ag with magnetic blowout [20A DC max. rating] <sup>3)</sup>							
J AgCdO with magnetic blowout [20A DC max. rating	al						
N W stationary & AgCdO movable [25A max. rating] 4	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 (step 2 above) 1, 5, 7 or		or A only.					
<ol> <li>Available with Main contact arrangement code (step 2 above) 3, 7 or 1</li> <li>Available with Main contact arrangement code (step 2 above) 1, 5, 7 or</li> </ol>							
<ul> <li>4) Available with Main contact arrangement code (step 2 above) 1, 5, 7 of</li> <li>5) Available with Main contact arrangement code (step 2 above) 3 only, at</li> </ul>	-						
Termination	na termination code (step 5 below) 4 only.						
PRD types only							
0 #8-32 screw term. for main contacts, #6-32 screw t	erm for coil						
1 .250" (6.35mm) QC for main contacts and coil							
<b>3</b> #8-32 screw term. for main contacts, .250" (6.35mr	n) QC for coil.						
4 Box lug term. which accept #6 - #14 wire for main c	/						
6) Available with Main contact arrangement code (step 2 above) 3 only, a	nd Main contact material code (step 4 above) P o	r R only.					
PRDA (with aux. switch) types only							
A #8-32 screw term. for main contacts, #6-32 screw t							
<b>B</b> .250" (6.35mm) QC for main contacts, coil and aux.							
L Twin .250" (6.35mm) QC for main contacts, .250" (6	3.35mm) QC for coil and aux. switch						
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		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			1201/10	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			24VDC	-	1-1393128-7
PRD-7AG0-120	2 form A, 2 NO	AgCdO, 30A	120VAC	-	9-1393129-5
PRD-7AG0-120	2 10111 A, 2 NO		24VAC	-	1393130-9
		Ag		_	
PRD-7AY0-120			120VAC	_	1393130-7
PRD-7AY0-240			240VAC	2 (22	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		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		3, 13 1 1 1	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		, '9	24 VDC		6-1393127-2
PRD-11DY0-48			48 VAC		6-1393127-3
PRD-11DY0-110			110 VDC		6-1393127-0
		AgCdO 20A	120 VAC		
PRDA-11AGA-120		AgCdO, 30A	120 VAC		7-1393131-4
PRDA-11AYA-120					7-1393131-9

### PRD accessory

Product Code	Description		Part Number
35D013	M	Metal dust cover enclosure	
	<ul> <li><b>35D013 Dust Cover</b></li> <li>PRD dust cover has a steel base with knockouts for 0.5" (12.7mm) i conduit and a cover fitted with two screws. Fits PRD relays, except wi auxiliary contacts. Finished in gray baked enamel.</li> <li>Mounting: Three No. 10 holes on 1.875" (47.63mm) x 4.125" (104.77mm) centers.</li> </ul>	(12.7) + (52.3) + (17.45) + (2.36) + (17.45) + (2.36) + (17.45) + (2.36)	3.13 MAX. (79.5) (79.5) (24.64) (79.5) (24.64) (85.9) (85.9) (85.9) (85.9) (85.9) (85.9) (85.9) (85.9) (85.9) (85.9) (85.9)

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