

PRD withdrawable surge arresters allow quick replacement of damaged cartridges. Type 2 surge arresters are tested with a 8/20 μ s current wave. Type 3 surge arresters are tested with a 12/50 μ s and 8/20 μ s combined wave.

Each surge arrester in the range has a specific application:

■ **incoming protection (type 2):**

- the PRD65(r) is recommended for a very high risk level (strongly exposed site)
- the PRD40(r) is recommended for a high risk level
- the PRD20(r) is recommended for a medium risk level

■ **secondary protection (type 2 or 3):**

- the PRD8(r) ensures secondary protection of loads to be protected and is placed in cascade with the incoming surge arresters. This surge arrester is required close to the loads to be protected when they are at a distance of more than 30 m from the incoming surge arrester.

The withdrawable surge arresters with "r" indication have remote transfer of the information: "cartridge to be replaced".



1P+N.

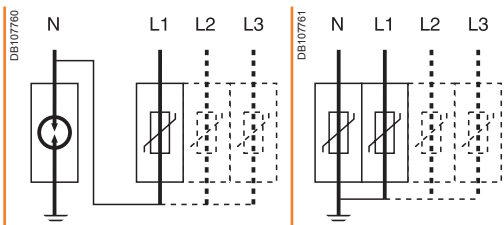


3P+N.



Cartridge.

Rated discharge current (Imax)	Type of protection	
	Incoming	Secondary (type 2 or 3)
65 kA		
Very high risk level (strongly exposed site)	PRD65	
40 kA		
High risk level	PRD40	
20 kA		
Medium risk level	PRD20	
8 kA		
		PRD8



Network		Earthing system				Transfer	Surge arrester name	Associated protection device	
1P+N	3P+N	1P	2P	3P	4P				
		16555				IT	■	PRD65r 1P IT	50 A C curve
		16556				TT & TN	■	PRD65r 1P	
16557						TT & TN-S	■	PRD65r 1P+N	
			16442			TN	■	PRD65r 2P	
				16558		IT	■	PRD65r 3P IT	
				16443		TN-C	■	PRD65r 3P	
	16559					TT & TN-S	■	PRD65r 3P+N	
					16659	TN-S	■	PRD65r 4P	
		16561				TT & TN	■	PRD40r 1P	40 A C curve
		16566				TT & TN		PRD40 1P	
16562						TT & TN-S	■	PRD40r 1P+N	
16567						TT & TN-S		PRD40 1P+N	
			16444			TN	■	PRD40r 2P	
			16667			TN		PRD40 2P	
				16445		TN-C	■	PRD40r 3P	
				16568		TN-C		PRD40 3P	
				16563		IT	■	PRD40r 3P IT	
	16564					TT & TN-S	■	PRD40r 3P+N	
	16569					TT & TN-S		PRD40 3P+N	
					16597	IT	■	PRD40r 4P IT	
					16664	TN	■	PRD40r 4P	
					16669	TNS		PRD40 4P	
		16571				TT & TN		PRD20 1P	25 A C curve
16672						TT & TN-S	■	PRD20r 1P+N	
16572						TT & TN-S		PRD20 1P+N	
			16446			TN		PRD20 2P	
				16447		TN-C		PRD20 3P	
				16573		IT	■	PRD20r 3P IT	
	16674					TT & TN-S	■	PRD20r 3P+N	
	16574					TT & TN-S		PRD20 3P+N	
					16599	IT	■	PRD20r 4P IT	
					16673	TN-S		PRD20 4P	
		16576				TT & TN		PRD8 1P	20 A C curve
16677						TT & TN-S	■	PRD8r 1P+N	
16577						TT & TN-S		PRD8 1P+N	
			16448			TN		PRD8 2P	
				16449		TN-C		PRD8 3P	
				16578		IT	■	PRD8r 3P IT	
	16679					TT & TN-S	■	PRD8r 3P+N	
	16579					TT & TN-S		PRD8 3P+N	
					16678	IT	■	PRD8r 4P IT	
					16680	TN-S		PRD8 4P	

Technical data

Surge arrester name	Nbr of poles	Width in mod. of 9 mm	I _{max} - (kA) Maximum current discharge	I _n - (kA) Nominal discharge current	Up - (kV) Voltage protection level			Un - (V) Rated voltage network	Uc - (V) Maximum continuous operating voltage			Cat. no.				
					CM		DM		L/≠	N/≠	L/N		L/≠	N/≠	L/N	
					L/≠	N/≠	L/N									
PRD65																
PRD65r 1P IT	1P	2	65	20	≤ 2	-	-	230	440	-	-	16555				
PRD65r 1P	1P	4			≤ 1.5	-	-		340	-	-	16556				
PRD65r 1P+N	1P+N				-	≤ 1.5	≤ 1.5		-	-	260	340	16557			
PRD65r 2P	2P	≤ 1.5			≤ 1.5	-	340		340	-	16442					
PRD65r 3P IT	3P	6			≤ 2	-	-	230/400	440	-	-	16558				
PRD65r 3P	3P	≤ 1.5			-	-	340		-	-	16443					
PRD65r 3P+N	3P+N	8			-	≤ 1.5	≤ 1.5		-	260	340	16559				
PRD65r 4P	4P				≤ 1.5	≤ 1.5	-		340	340	-	16659				
PRD40																
PRD40r 1P	1P	2	40	15	≤ 1.4	-	-	230	340	-	-	16561				
PRD40 1P	1P	4			≤ 1.4	-	-		340	-	-	16566				
PRD40r 1P+N	1P+N				-	≤ 1.4	≤ 1.4		-	260	340	16562				
PRD40 1P+N	1P+N	-			≤ 1.4	≤ 1.4	-		260	340	16567					
PRD40r 2P	2P	6			≤ 1.4	≤ 1.4	-	230/400	340	340	-	16444				
PRD40 2P	2P				≤ 1.4	≤ 1.4	-		340	340	-	16667				
PRD40r 3P	3P				≤ 1.4	-	-		340	-	-	16445				
PRD40 3P	3P				≤ 1.4	-	-		340	-	-	16568				
PRD40r 3P IT	3P	8			≤ 2	-	-	230/400	460	-	-	16563				
PRD40r 3P+N	3P+N				-	≤ 1.4	≤ 1.4		-	260	340	16564				
PRD40 3P+N	3P+N				-	≤ 1.4	≤ 1.4		-	260	340	16569				
PRD40r 4P IT	4P				≤ 2	≤ 2	-		460	460	-	16597				
PRD40r 4P	4P	4	≤ 1.4	≤ 1.4	-	230/400	340	340	-	16664						
PRD40 4P	4P		≤ 1.4	≤ 1.4	-		340	340	-	16669						
PRD20																
PRD20 1P	1P	2	20	5	≤ 1.1	-	-	230	340	-	-	16571				
PRD20r 1P+N	1P+N	4			-	≤ 1.4	≤ 1.1		-	260	340	16672				
PRD20 1P+N	1P+N				-	≤ 1.4	≤ 1.1		-	260	340	16572				
PRD20 2P	2P	≤ 1.1			≤ 1.1	-	340		340	-	16446					
PRD20 3P	3P	6			≤ 1.1	-	-	230/400	340	-	-	16447				
PRD20r 3P IT	3P	≤ 1.6			-	-	460		-	-	16573					
PRD20r 3P+N	3P+N	8			-	≤ 1.4	≤ 1.1		-	260	340	16674				
PRD20 3P+N	3P+N				-	≤ 1.4	≤ 1.1		-	260	340	16574				
PRD20r 4P IT	4P	4			≤ 1.6	≤ 1.6	-	230/400	460	460	-	16599				
PRD20 4P	4P				≤ 1.1	≤ 1.1	-		340	340	-	16673				
PRD8⁽¹⁾																
Type 2 / Type 3																
PRD8 1P	1P	2	8	2.5	≤ 1 / ≤ 1	-	-	230	340	-	-	16576				
PRD8r 1P+N	1P+N	4			-	≤ 1.4 / ≤ 1	≤ 1 / ≤ 1.1		-	260	340	16677				
PRD8 1P+N	1P+N				-	≤ 1.4 / ≤ 1	≤ 1 / ≤ 1.1		-	260	340	16577				
PRD8 2P	2P	≤ 1 / ≤ 1			≤ 1 / ≤ 1	-	340		340	-	16448					
PRD8 3P	3P	6			≤ 1 / ≤ 1	-	-	230/400	340	-	-	16449				
PRD8r 3P IT	3P	≤ 1.4 / ≤ 1.6			-	-	460		-	-	16578					
PRD8r 3P+N	3P+N	8			-	≤ 1.4 / ≤ 1	≤ 1 / ≤ 1.1		-	260	340	16679				
PRD8 3P+N	3P+N				-	≤ 1.4 / ≤ 1	≤ 1 / ≤ 1.1		-	260	340	16579				
PRD8r 4P IT	4P	4			≤ 1.4 / ≤ 1.6	≤ 1.4 / ≤ 1.6	-	230/400	460	460	-	16678				
PRD8 4P	4P				≤ 1 / ≤ 1	≤ 1 / ≤ 1	-		340	340	-	16680				

CM: common mode (phase to earth and neutral to earth).

DM: differential mode (phase to neutral).

(1) U_{oc}: combined waveform voltage: 10 kV.

Spare cartridges

Type	Spare cartridges for	Cat. no	Operating frequency	50/60 Hz
C 65-440	PRD65r IT	16580	Operating voltage	230/400 V AC
C 65-340	PRD65r	16681	I _c permanent operating current	< 1 mA
C 40-460	PRD40r IT	16684	Response time	< 25 ns
C 40-340	PRD40, PRD40r	16685	End of life indication:	White in operation
C 20-460	PRD20r IT	16686	by green/red mechanical indicator	Red at end of life
C 20-340	PRD20, PRD20r	16687	End of life remote indication	by contact NO, NC 250 V / 0.25 A
C 8-460	PRD8r IT	16688	Type of connection terminals	tunnel terminals, 2.5 to 35 mm ²
C 8-340	PRD8, PRD8r	16689	Operating temperature	-25 °C to +60 °C
C neutral	All products	16691	Standards	IEC 61643-1 [T2] and EN 61643-11 Type 2