

**DC Modular Multi-pole SPD**  
**ProTec DMDR 20 Series**  
**Class III • Type 3**



Location of Use: Sub-distribution Boards  
 Network Systems: TN-S  
 Mode of Protection: L-PE, N-PE, L-N  
 Surge Ratings:  $U_{oc}/I_{cw} =$  up to 6kV/3kA  
 $I_{max} =$  up to 4kA (8/20  $\mu$ s)  
 IEC/EN Category: Class III / Type 3  
 Protective Elements: High Energy MOV and GDT  
 Housing: Modular Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012

**Technical Data**

**ProTec DMDR 20/xxx**

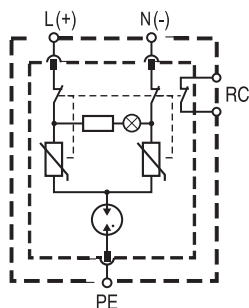
		24	48	60	120	
<b>Electrical</b>						
Nominal AC/DC Voltage	$U_o$	17V/24V	34V/48V	43V/60V	85V/120V	
Maximum Continuous Operating Voltage (AC/DC)	$U_c$	24V/34V	48V/60V	60V/75V	120V/150V	
Open Circuit Voltage of the Combination Wave Generator (1.2/50 $\mu$ s)	$U_{oc}$	2.4kV	2.4kV	6kV	6kV	
Short Circuit Current of the Combination Wave Generator (8/20 $\mu$ s)	$I_{cw}$	1.2kA	1.2kA	3kA	3kA	
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$	2kA	2kA	4kA	4kA	
Voltage Protection Level	(L-N)	$U_p$	< 250V	< 500V	< 600V	< 1100V
	(L-PE)/(N-PE)		< 700V	< 800V	< 850V	< 1200V
Response Time of Overvoltage Protection	(L-N)	$t_A$		< 25 ns		
	(L-PE)/(N-PE)			< 100 ns		
Back-Up Fuse (if mains > 32A)				32A gG		
Short-Circuit Current Rating (AC)	$I_{SCCR}$		2kA			
TOV Withstand 5s (AC)	$U_T$	115V	148V	163V	225V	
Number of Ports				1		
<b>Mechanical &amp; Environmental</b>						
Temperature Range	$T_a$		-40 °C to +85 °C			
Permissible Humidity	RH		5%...95%			
Terminal Screw Torque	$M_{max}$		0.5Nm			
Conductor Cross Section			Multi-strand to 6mm <sup>2</sup>			
Mounting			35mm DIN Rail, EN 60715			
Degree Of Protection			IP 20			
Housing Material			Thermoplastic: Extinguishing Degree UL 94 V-0			
Thermal Protection			Yes			
Operating Status Indication			Green LED			
<b>Order Information</b>						
Order Code		24	48	60	120	
PROTEC DMDR 20/xxx		510 783	510 833	510 834	510 835	
Module PROTEC DMDR 20/xxx		510 784	510 836	510 837	510 838	

## ProTec DMDR 20 Series

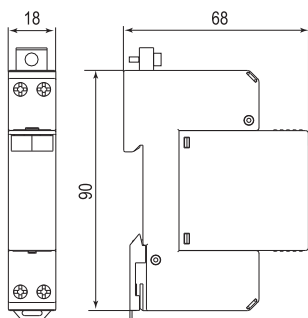
### Internal Configuration

#### Legend

- L Line
- N Neutral
- PE Protective Earth
- RC Remote Contacts Optional



### Dimensions & Packaging [mm]

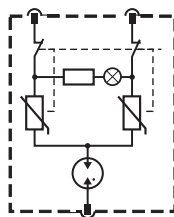


#### Dimensions & Packaging

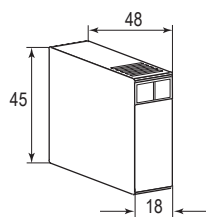
ProTec DMDR 20/xxx	24	48	60	120
Single Unit Weight	96 g	96 g	96 g	96 g
Single Unit DIN 43880 Dimension	1 TE			
Packaging Dimensions (H x W x L)	110 x 77 x 24 mm			
Minimum Order Quantity	12 Units			

### Module Internal Configuration

#### Module ProTec DMDR 20/xxx



### Dimensions & Packaging [mm]



#### Dimensions & Packaging

Module ProTec DMDR 20/xxx	24	48	60	120
Single Unit Weight	32 g	32 g	32 g	32 g
Single Unit DIN 43880 Dimension	1 TE			
Packaging Dimensions (H x W x L)	98 x 77 x 110 mm			
Minimum Order Quantity	12 Units			