

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**

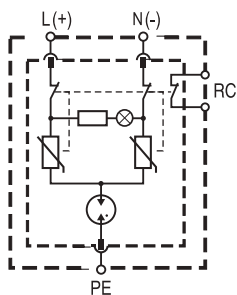
		24	48	60	120
<b>Electrical</b>					
Nominal AC/DC Voltage	$U_o$	17V/24V	34V/48V	43V/60V	85V/120V
Maximum Continuous Operating Voltage (AC/DC)	$U_c$	24V/34V	48V/60V	60V/75V	120V/150V
Open Circuit Voltage of the Combination Wave Generator (1.2/50 $\mu$ s)	$U_{oc}$	2.4kV	2.4kV	6kV	6kV
Short Circuit Current 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 °F to +185 °F [-40 °C to +85 °C]			
Permissible Humidity	RH	5%...95%			
Terminal Screw Torque	$M_{max}$	0.5Nm			
Conductor Cross Section		10 AWG (Solid, Stranded) / 12 AWG (Flexible)			
		6 mm <sup>2</sup> (Solid, Stranded) / 4 mm <sup>2</sup> (Flexible)			
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

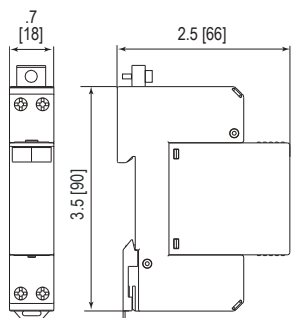
### Internal Configuration

#### Legend

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



### Dimensions & Packaging [mm]

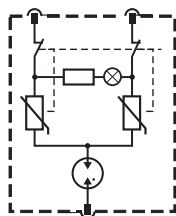


#### Dimensions & Packaging

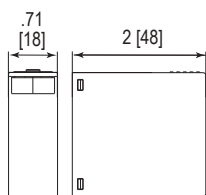
ProTec DMDR 20/xxx	24	48	60	120
Single Unit Weight pounds [grams]			.211 [96]	
Single Unit DIN 43880 Dimension	1 TE			
Packaging Dimensions (H x W x L)	4.2 x 3 x .9" [109 x 77 x 24 mm]			
Minimum Order Quantity	12 Units			

### 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 pounds [grams]			.070 [32]	
Single Unit DIN 43880 Dimension	1 TE			
Packaging Dimensions (H x W x L)	3.8 x 3 x 4.3" [98 x 77 x 110 mm]			
Minimum Order Quantity	12 Units			

inches  
[mm]

Information contained in this document is subject to change at any time without notice.

