

Modular Multi-pole SPD  
**ProTec DMG(R) 20 (2+0)**  
 Class III • Type 3



Location of Use: Sub-distribution Boards  
 Network Systems: TN-S  
 Mode of Protection: L - PE, N - PE  
 Surge Ratings:  $U_{oc}/I_{cw} = 10\text{ kV}/5\text{ kA}$   
 $I_{max} = 10\text{ kA (8/20}\mu\text{s)}$   
 IEC/EN Category: Class III/Type 3  
 Protective Elements: MOV and GDT  
 Housing: Modular Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012

**Technical Data**

**ProTec DMG(R) 20/xxx (2+0)**

**320**

**Electrical**

|  |            |          |
|--|------------|----------|
| Nominal AC Voltage (50/60 Hz)  | $U_o$      | 230V     |
| Maximum Continuous Operating Voltage (AC)                                      | $U_c$      | 320V     |
| Open Circuit Voltage of the Combination Wave Generator (1.2/50 $\mu\text{s}$ ) | $U_{oc}$   | 10 kV    |
| Short Circuit Current of Combination Wave Generator (8/20 $\mu\text{s}$ )      | $I_{cw}$   | 5 kA     |
| Maximum Discharge Current (8/20 $\mu\text{s}$ )                                | $I_{max}$  | 10 kA    |
| Voltage Protection Level   | $U_p$      | < 1.6 kV |
| Response Time  | $t_A$      | < 100 ns |
| Back-Up Fuse (if mains > 63 A)   |            | 63 A gG  |
| Short-Circuit Current Rating (AC)  | $I_{SCCR}$ | 10 kA    |
| TOV Withstand 5s   | $U_T$      | 337V     |
| Number of Ports  |            | 1        |

**Mechanical & Environmental**

|                                 |                  |  |
|---------------------------------|------------------|--|
| Temperature Range               | $T_a$            | -40 °F to +185 °F [-40 °C to +85 °C]   |
| Permissible Humidity            | RH               | 5%...95%   |
| Terminal Screw Torque           | (L, N) $M_{max}$ | 4.4 lbf-in [0.5 Nm]  |
| Terminal Screw Torque           | (PE) $M_{max}$   | 26.5 lbf-in [3.0 Nm]   |
| Conductor Cross Section         | (L, N)           | 10 AWG (Solid, Stranded) / 12 AWG (Flexible)<br>6 mm <sup>2</sup> (Solid, Stranded) / 4 mm <sup>2</sup> (Flexible) |
| Conductor Cross Section         | (PE)             | 2 AWG (Solid, Stranded) / 4 AWG (Flexible)<br>35 mm <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (Flexible) |
| Mounting                        |                  | 35 mm DIN Rail, EN 60715   |
| Degree of Protection            |                  | IP 20  |
| Housing Material                |                  | Thermoplastic: Extinguishing Degree UL 94 V-0  |
| Thermal Protection              |                  | Yes  |
| Fault Indication                |                  | Red Flag   |
| Remote Contacts (RC)            |                  | Optional   |
| RC Switching Capacity           |                  | AC: 250V/0.5A; 125V/3A   |
| RC Terminal Cross Section (max) |                  | 1.5mm <sup>2</sup> (Solid) / 16 AWG (Solid)  |
| RC Terminal Screw Torque        |                  | 2.2 lbf-in [0.25 Nm]   |

**Order Information**

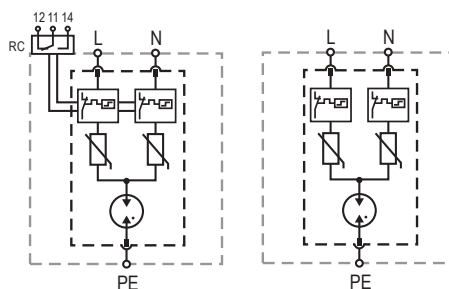
|   |            |
|---|------------|
| <b>Order Code</b>                               | <b>320</b> |
| ProTec DMG 20/xxx (2+0)                         | 508.369    |
| ProTec DMGR 20/xxx (2+0) (with remote contacts) | 508.370    |
| Module ProTec DMG(R) 20/xxx                     | 508.371    |

## ProTec DMG(R) 20 (2+0)

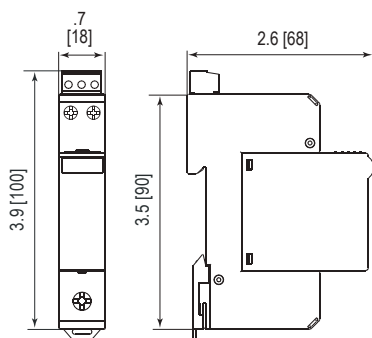
### Internal Configuration

#### Legend

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



### Dimensions & Packaging [mm]

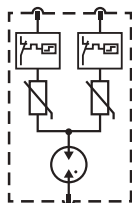


#### Dimensions & Packaging

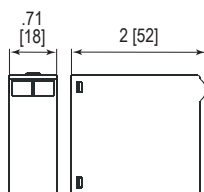
| <b>ProTec DMG 20/xxx (2+0)</b>   |                | <b>320</b>                       |
|----------------------------------|----------------|----------------------------------|
| Single Unit Weight               | pounds [grams] | 0.260 [118]                      |
| Single Unit DIN 43880 Dimension  |                | 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                         |
| <b>ProTec DMGR 20/xxx (2+0)</b>  |                | <b>320</b>                       |
| Single Unit Weight               | pounds [grams] | 0.271 [123]                      |
| 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 DMG(R) 20/xxx



### Dimensions & Packaging [mm]



#### Dimensions & Packaging

| <b>Module ProTec DMG(R) 20/xxx</b> |                | <b>320</b>                        |
|------------------------------------|----------------|-----------------------------------|
| Single Unit Weight                 | pounds [grams] | 0.112 [51]                        |
| 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.

