Surge Protection Devices
SPD2 3P+0 SERIES

Class II/Type 2/Type 1 CA Pluggable Multi-Pole

Description
Surge protection devices (SPDs) provide equipment protection from transient overvoltage events lasting micro-seconds. By limiting the overvoltage to the equipment during these events, costly damage and downtime can be mitigated.

The surge protection devices for the 3+0 configuration are available for 120 V to 600 V nominal voltage sub-distribution board applications.

Features & Benefits

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability to clamp and withstand high-energy transients</td>
<td>Ensures low-residual voltage during high-energy surge events and higher nominal discharge current to prevent disruption, downtime, and degradation or damage to equipment</td>
</tr>
<tr>
<td>UL Recognized and VDE-IEC compliant in single part number</td>
<td>One component can be utilized globally, reducing inventory needs and simplifying allocation of parts</td>
</tr>
<tr>
<td>Interlocking tab mechanism</td>
<td>Secures module to withstand vibration</td>
</tr>
<tr>
<td>No additional overcurrent protection devices required in UL applications</td>
<td>Reduces the number of components and costs required for protection</td>
</tr>
<tr>
<td>Compact footprint</td>
<td>Increases panel design flexibility</td>
</tr>
<tr>
<td>Visual life indicator</td>
<td>Quick visual determines module replacement status to avoid loss of protection</td>
</tr>
<tr>
<td>Pluggable modules</td>
<td>Fast and simple to replace, minimizing maintenance and downtime. No tools required</td>
</tr>
<tr>
<td>Thermal protection</td>
<td>Eliminates catastrophic failure</td>
</tr>
<tr>
<td>IP20 protection rating</td>
<td>Finger-safe design increases worker protection</td>
</tr>
</tbody>
</table>

Module & Base Ordering Information

<table>
<thead>
<tr>
<th>Ordering Number</th>
<th>IEC Electrical</th>
<th>UL Electrical</th>
<th>Single Unit Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal AC Voltage (50/60Hz) (Uo/U)</td>
<td>Maximum Continuous Operating AC Voltage (Uc)</td>
<td>Nominal Discharge Current (8/20 µs) (In)</td>
</tr>
<tr>
<td>SPD2-150-3P0-R</td>
<td>120 V</td>
<td>150 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-300-3P0-R</td>
<td>240 V</td>
<td>300 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-350-3P0-R</td>
<td>277 V</td>
<td>350 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-480-3P0-R</td>
<td>400 V</td>
<td>480 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-650-3P0-R*</td>
<td>480 V</td>
<td>550 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-750-3P0-R</td>
<td>600 V</td>
<td>750 V</td>
<td>20 kA</td>
</tr>
</tbody>
</table>

Legend
L Line
N Neutral
⊕ Protective Earth

RC Remote Contacts
TD Thermal Disconnection

Visual Life Indicator
Surge Protection Devices
SPD2 3P+0 SERIES

Module & Base Part Numbering System

SPD2 VVV XPZ R

Optional Remote Contact

Series

Maximum Continuous Operating AC Voltage

Neutral (1=yes or 0=no)

Number of Poles

Module Only Part Numbering System

SPD2 VVV M

Module Only

Maximum Continuous Operating AC Voltage

Replacement Module Ordering Information

<table>
<thead>
<tr>
<th>Ordering Number</th>
<th>IEC Electrical</th>
<th>UL Electrical</th>
<th>Single Unit Weight</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Nominal AC Voltage</td>
<td>Maximum Continuous Operating AC Voltage</td>
<td>Nominal Discharge Current (8/20 µs) (I_n)</td>
</tr>
<tr>
<td>SPD2-150-M</td>
<td>120 V</td>
<td>150 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-150-M</td>
<td>120 V</td>
<td>150 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-200-M</td>
<td>240 V</td>
<td>300 V</td>
<td>20 kA</td>
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<tr>
<td>SPD2-200-M</td>
<td>240 V</td>
<td>300 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-250-M</td>
<td>240 V</td>
<td>300 V</td>
<td>20 kA</td>
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<tr>
<td>SPD2-250-M</td>
<td>240 V</td>
<td>300 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-300-M</td>
<td>400 V</td>
<td>480 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-300-M</td>
<td>400 V</td>
<td>480 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-350-M</td>
<td>480 V</td>
<td>550 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-350-M</td>
<td>480 V</td>
<td>550 V</td>
<td>20 kA</td>
</tr>
<tr>
<td>SPD2-400-M</td>
<td>600 V</td>
<td>750 V</td>
<td>20 kA</td>
</tr>
</tbody>
</table>

Specifications

Network Systems
IT, TT, TN-S
Mode of Protection
L-N, N-PE
Nominal Discharge Current
(8/20 µs) (I_n) 20 kA
Maximum Discharge Current
(8/20 µs) (I_max) Up to 50 kA
Protective Elements
High Energy MOV
Response Time
(L-N / N-PE) t_A < 25 ns
Back-Up Fuse (max) 315 A / 250 A Gg
Number of Ports 1

Mechanical & Environmental
Operating Temperature Range (T_a) -40 °C to +80 °C (-40 °F to +185 °F)
Permissible Operating Humidity (RH) 5% to 95%
Altitude (max) 4,000 m (13,123 ft)
Terminal Screw Torque (max) 4.5 Nm (13,123 ft)
Conductor Cross Section (max) 35 mm² (2 AWG) (Solid, Stranded)/25 mm² (4 AWG) (Flexible)
Mounting 35 mm DIN Rail, EN60715
Degree of Protection IP20 (built-in)

Housing Material
Thermoplastic: Extinguishing Degree
UL 94 V-0
Thermal Protection
Yes
Operating State/Fault Indication
Green Flag/No Green Flag
Remote Contact Switching Capacity
AC: 250 V/1 A, 125 V/1 A;
DC: 48 V/0.5 A, 24 V/0.5 A, 12 V/0.5 A
Remote Contact Conductor Cross Section (max) 1.5 mm² (16 AWG) (Solid)
Standards Passed*
IEC 61643-11:2011
EN 61643-11:2012
UL 1449, 4th edition; E320116

Product Dimensions
3TE Module and Base
H 90.0 mm (3.54”); W 54.0 mm (2.13”);
D 70.0 mm (2.76”)
1TE Replacement Module
H 45.0 mm (1.77”); W 18.0 mm (0.71”);
D 57.2mm (2.25”)

Package Dimensions
3TE Module and Base
H 102.0 mm (4.01”); W 64.0 mm (2.52”);
D 110.0 mm (4.33”)
1TE Replacement Module
H 102.0 mm (4.01”); W 28.0 mm (1.10”);
D 110.0 mm (4.33”)

*SPD2-550-3P0-R and SPD2-550-M are UL Listed only

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