

# TPS3 11

## Type 1 Surge Protective Device (SPD) Mounts External to Electrical Distribution Equipment

### Features:

- UL 1449 3rd Edition – 2009, cUL
- UL 1283
- Type 1 SPD (Type 2 cUL)
- Mounts external to electrical distribution equipment
- Large block, individually fused, thermally protected, 50kA MOV's
- 20kA  $I_n$  (most models)
- 200kA SCCR (most models)
- All UL-required OCP & safety coordination included
- UL96A Lightning Protection Master Label compliant (@20kA In)

### ■ SPD Specifications

- Surge Current Rating Per Phase

Per Phase	L-N	L-G	N-G
100kA	50kA	50kA	50kA
150kA	100kA	50kA	50kA
200kA	100kA	100kA	100kA

- 100% monitoring – Every MOV is monitored, incl. N-G
- Individually fused and thermally protected MOV's
- Solid state bi-directional operation
- EMI/RFI filtering: Active tracking up to -50db from 10kHz to 100MHz
- Repetitive impulse: 5,000 hits
- Less than 1 nanosecond response time
- Relative humidity range: 0 -95% non-condensing
- Operating frequency: 47-63Hz
- Operating temperature: -25°C (-15°F) to +60°C (140°F)

### ■ Standard Configuration

- Standard NEMA 4X polycarbonate enclosure (UL 746C (f1), UL 94-5VA)
- Wire size: #8 AWG to #10 AWG
- Standard size: 6" x 6" x 4" (152mm x 152mm x 102mm)
- Standard weight: 5 lbs. (2.27kg)



UL 1449 3rd Edition SPD

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- SPD Features
  - UL 1449 3rd Edition effective September 2009
  - Designed, manufactured and tested consistent with:
    - ANSI/IEEE C62.41.1-2002, c62.41.2-2002, C62.45-2002,
    - 1992/2000 NEMA LS-1
    - NEC Article 285
    - IEC 61643, CE

- SPD Features
  - Large block, individually fused, thermally protected, 50kA MOV's
  - 10 year warranty
- SPD Monitoring
  - LED indicators
- Available Options
  - Dry contacts & audible alarm

- Key Bid Specifications
  - UL 1449 3rd Edition – 2009, cUL
  - UL 1283
  - Type 1 SPD<sup>①</sup>
  - Protection modes on L-N, L-G, L-L, N-G
  - I<sub>n</sub> Rating – 20kA
  - Short Circuit Current Rating – 200kA
  - Surge Current Rating
 

Per Phase =	L-N	+	L-G
	100kA		50kA
			50kA

Ordering Information

Catalog #

TPS3    11         

<p><u>Voltage Code</u></p> <p>A = 120/240V, 1Ø, 3W (Fig 1)          B = 120/240V, 3Ø, 4W (Fig 3)          C = 120/208V, 3Ø, 4W (Fig 2)          D = 240V, 3Ø, 3W (Fig 4)          E = 277/480V, 3Ø, 4W (Fig 2)          F = 480V, 3Ø, 3W (Fig 4)          G = 600V, 3Ø, 3W (Fig 4)<sup>②</sup>          K = 380/220V, 3Ø, 4W (Fig 2)          L = 600/347V, 3Ø, 4W (Fig 2)          S = 400/230V, 3Ø, 4W (Fig 2)</p>	<p><u>Surge Current (kA)</u></p> <p>10 = 100kA per phase          15 = 150kA per phase          20 = 200kA per phase</p> <p>- Example: TPS3C1110D = Type 1 SPD for a 208/120V application with a surge current capacity of 100kA per phase, in a standard NEMA 4X enclosure with dry contacts and audible alarm option</p> <p>- When an option is not selected, include a zero (0) in the field</p> <p><u>Available Accessories: Ordered Separately</u></p> <ul style="list-style-type: none"> <li>- RMSIE - Remote monitor</li> <li>- KITFMXF = Flush mount plate</li> </ul>	<p><u>Options</u></p> <p>D = Dry contacts &amp; audible alarm</p>
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UL 1449 3rd Edition - 2009 Test Data Summary									
Voltage Protection Rating (VPR - 6kV, 3kA)									
Voltage Code	Service Voltage	L-N	L-G	N-G	L-L	Type <sup>①</sup>	In	SCCR	MCOV
A	120/240V, 1Ø, 3W (Fig 1)	700	700	600	1000	Type 1	20kA	100kA	150
B	120/240V, 3Ø, 4W (Fig 3)	700 / 1200	700 / 1200	600	1000	Type 1	20kA	200kA	150 / 320
C	120/208V, 3Ø, 4W (Fig 2)	700	700	600	1000	Type 1	20kA	200kA	150
D	240V, 3Ø, 3W (Fig 4)		1200		2000	Type 1	20kA	200kA	320
E	277/480V, 3Ø, 4W (Fig 2)	1200	1200	1200	2000	Type 1	20kA	200kA	320
F	480V, 3Ø, 3W (Fig 4)		1800		2000	Type 1	10kA	200kA	552
G	600V, 3Ø, 3W (Fig 4)		2500		2500	Type 1	10kA	200kA	690
K	380/220V, 3Ø, 4W (Fig 2)	1200	1200	1200	2000	Type 1	20kA	200kA	320
L	600/347V, 3Ø, 4W (Fig 2)	1500	1500	1500	2500	Type 1	10kA	200kA	420
S	400/230V, 3Ø, 4W (Fig 2)	1200	1200	1200	2000	Type 1	20kA	200kA	320

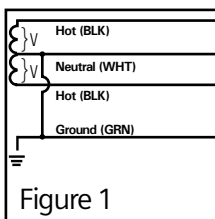


Figure 1  
Split  
2 Hots, 1 Neu, 1 Grnd

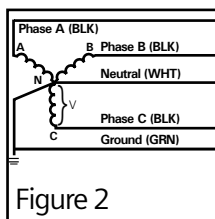


Figure 2  
Wye  
3 Hots, 1 Neu, 1 Grnd

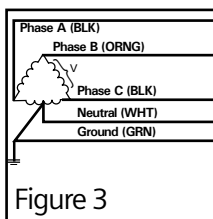


Figure 3  
Hi-Leg Delta (B High)  
3 Hots, (B High),  
1 Neu, 1 Grnd

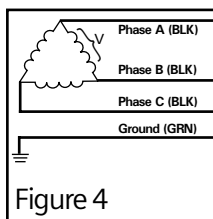


Figure 4  
Delta & HRG Wye  
3 Hots, 1 Grnd

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Notes:

- ① Type 2 cUL
- ② Available in 100kA per phase only