

# TPS3 03

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

### Features:

- UL 1449 3rd Edition – 2009, cUL
- Type 1 SPD (Type 1 cUL)
- Mounts external to electrical distribution equipment
  - Recommended for Line Side or Load Side Applications
- Bracket included for multiple mounting options
- 20kA  $I_n$  (most models)
- 200kA SCCR (most models)
- All UL-required OCP & safety coordination included
- UL96A Lightning Protection Master Label compliant (@20kA  $I_n$ )



- SPD Specifications
    - Surge Current Rating Per Phase
  - Per Phase      L-N (L-G: Delta)
  - 50kA            50kA
  - 100% monitoring – Every MOV is monitored
  - Individually fused and thermally protected MOV's
  - Solid state bi-directional operation
  - 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)
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- Standard Configuration
    - Standard NEMA 4X polycarbonate enclosure (UL 746C (f1), UL 94-5VA)
    - Wire size: Prewired with 3' (91.4cm) of #10 AWG
    - Standard size: 3.25" x 3.25" x 3.3" (82.6mm x 82.6mm x 83.8mm)
    - Standard weight: 2 lbs. (0.9 kg)



UL 1449 3rd Edition SPD

**SIEMENS**

- 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 34mm square MOV's
  - 2 year warranty
- SPD Monitoring
  - LED indicators
- Available Options
  - Dry contacts & audible alarm

- Key Bid Specifications
  - UL 1449 3rd Edition – 2009, cUL
  - Type 1 SPD①
  - Protection modes on L-N/L-G, L-L
  - $I_{in}$  Rating – 20kA
  - Short Circuit Current Rating – 200kA
  - Surge Current Rating – 50kA per phase

## Ordering Information

Catalog #

TPS3 03

### Voltage Code

- 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)
- K = 380/220V, 3Ø, 4W (Fig 2)
- L = 600/347V, 3Ø, 4W (Fig 2)

### Surge Current (kA)

- 05 = 50kA per phase

### Options

- D = Dry contact & audible alarm

- Example: TPS3C0305D = Type 1 SPD for a 208/120V application with a surge current capacity of 50kA per phase, in a standard NEMA 4X enclosure with dry contacts and audible alarm option
- When an option is not selected, include a zero (0) in the field

### Available Accessories: Ordered Separately

- RMSIE - Remote monitor

## UL 1449 3rd Edition - 2009 Test Data Summary

### Voltage Protection Rating (VPR - 6kV, 3kA)

Voltage Code	Service Voltage	L-N (L-G: Delta)	L-L	Type ①	$I_{in}$	SCCR	MCOV
A	120/240V, 1Ø, 3W (Fig 1)	600	1000	Type 1	20kA	100kA	150
B	120/240V, 3Ø, 4W (Fig 3)	600 / 1200	1000 / 1500	Type 1	20kA	200kA	150 / 320
C	120/208V, 3Ø, 4W (Fig 2)	600	1000	Type 1	20kA	200kA	150
D	240V, 3Ø, 3W (Fig 4)	1200	1500	Type 1	20kA	200kA	320
E	277/480V, 3Ø, 4W (Fig 2)	1200	2000	Type 1	20kA	200kA	320
F	480V, 3Ø, 3W (Fig 4)	1800	3000	Type 1	10kA	200kA	552
G	600V, 3Ø, 3W (Fig 4)	2500	2500	Type 1	20kA	200kA	690
K	380/220V, 3Ø, 4W (Fig 2)	1200	2000	Type 1	20kA	200kA	320
L	600/347V, 3Ø, 4W (Fig 2)	1500	2500	Type 1	20kA	200kA	420

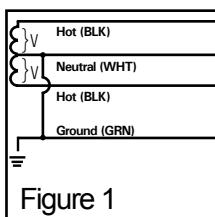


Figure 1

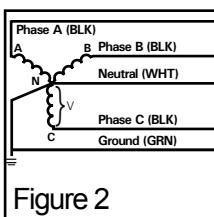


Figure 2

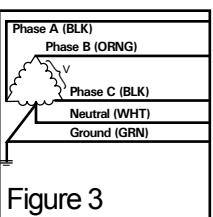


Figure 3

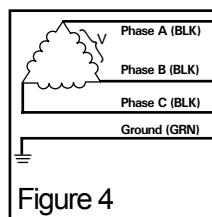


Figure 4

Split  
2 Hots, 1 Neu, 1 Grnd

Wye  
3 Hots, 1 Neu, 1 Grnd

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

Delta & HRG Wye  
3 Hots, 1 Grnd

## Notes:

① Type 2 cUL

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