

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 In)
-
- SPD Specifications
 - Surge Current Rating Per Phase

Per Phase	L-N/L-G
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)
 - 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

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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 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 SPD
- Protection modes on L-N/L-G, L-L
- I_n 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: Must be 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	L-L	Type*	I_n	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

* Type 2 cUL

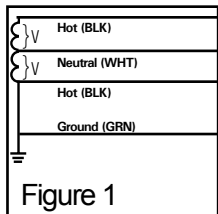


Figure 1

Split
2 Hots, 1 Neu, 1 Grnd

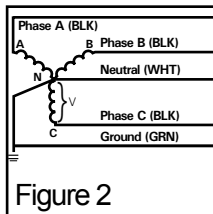


Figure 2

Wye
3 Hots, 1 Neu, 1 Grnd

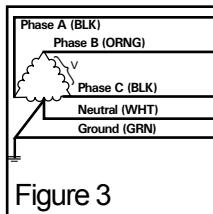


Figure 3

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

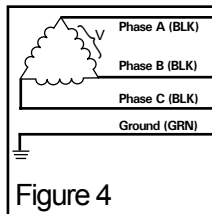


Figure 4

Delta & HRG Wye
3 Hots, 1 Grnd

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RPFL-IADT1-0809 (New)

www.usa.siemens.com/spd

TPS3 09

Type 1 Surge Protective Device (SPD)

Mounts External to Electrical Distribution Equipment or Internal to P1, P2 Lighting Panelboards, P3 Power Panelboards and Busway Systems

Features:

- UL 1449 3rd Edition – 2009, cUL
- Type 1 SPD (Type 2 cUL)
- Mounts external to electrical distribution equipment
 - Weatherproof hub included
- Mounts internal to P1 panelboards & busway
 - P1 - Field retrofit or factory install
 - P2 and P3 - Factory install only
 - Consult factory for field retrofit*
- 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

 - 100% monitoring – Every MOV is monitored, incl. N-G
 - 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)
- 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: 8" x 3" x 3" (203mm x 76mm x 76mm)
 - Standard weight: 3 lbs. (1.4 kg)



UL 1449 3rd Edition SPD

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