

# 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 4th Edition Listed Type 1, CSA 22.2 No. 269.1
- Type 1 SPD
- 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, 50 kA MOVs
- 20 kA  $I_n$
- 200 kA SCCR (most models)
- Designed, manufactured and tested consistent with:
  - ANSI/IEEE C62.41.1-2002, C62.41.2-2002, C62.45-2002, C62.62-2010, C62.72-2016 & CSA C22.2 No. 269.1
  - 1992/2000 NEMA LS-1
  - NEC Article 285
  - IEC 61643, CE
- All UL required OCP & safety coordination included
  - Type 1 SPDs intended for Line or Load side of Main Disconnect
- 10 year warranty
- UL96A Lightning Protection Master Label compliant

### SPD Specifications

- Surge Current Rating Per Phase
 

Per Phase	L-N	L-G	N-G
100 kA	50 kA	50 kA	50 kA
  - Protection modes on L-N, L-G, L-L, N-G
  - 100% monitoring (Every MOV is monitored, incl. N-G)
  - Individually fused and thermally protected MOVs
  - Solid state bi-directional operation
  - Repetitive impulse: 5,000 hits
  - <1 nanosecond response time
  - Relative humidity range: 0-95% non-condensing
  - Operating frequency: 47-63 Hz
  - Operating temperature: -40°C (-40°F) to +85°C (185°F)
- Standard Configuration
    - Standard NEMA 4X polycarbonate enclosure (UL 746C (f1), UL 94-5VA)
    - Wire size: Prewired with 3' (91.4 cm) of #10 AWG
    - Standard size: 8.3" x 3.6" x 3.0" (211 mm x 91 mm x 77 mm)
    - Standard weight: 3 lb. (1.4 kg)
  - SPD Monitoring
    - LED indicators
    - Optional dry contact & audible alarm



## Ordering Information

# TPS3



Voltage Code

# 09



Surge Current (kA)

10 = 100 kA per phase



Options

- 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)
- S = 400/230V, 3Ø, 4W (Fig 2)

0 = Default  
E = Extended indicator light

0 = Default  
I = Internal mounting in P1, P2 panels

D = Dry contact & audible alarm  
0 = No Dry contact & audible alarm

Example: TPS3C0910D00 = Type 1 SPD for a 208/120V panelboard with a surge current capacity of 100 kA per phase with standard NEMA 4X enclosure, dry contacts and audible alarm option.

Available for field retrofit in P1 panels

### Available Accessories: Ordered Separately

- RMSIE = Remote monitor
- XMFMKIT = Flush mount plate
- TPS9IKITP1 = Mounting bracket for installation in P1 panels
- TPS9IKITP2 = Mounting bracket for installation in P2 panels (factory install only)

### UL 1449 Fourth Edition - Test Data Voltage Protection Rating (VPR - 6 kV, 3 kA)

Voltage Code	Service Voltage	L-N	L-G	N-G	L-L	I <sub>n</sub>	SCCR	MCOV
A	120/240V, 1Ø, 3W (Fig 1)	600	700	600	1000	20 kA	100 kA	150
B	120/240V, 3Ø, 4W (Fig 3)	600/1200	700 /1200	600	1000/1000	20 kA	200 kA	150/320
C	120/208V, 3Ø, 4W (Fig 2)	600	700	600	1000	20 kA	200 kA	150
D	240V, 3Ø, 3W (Fig 4)	—	1200	—	1200	20 kA	200 kA	320
E	277/480V, 3Ø, 4W (Fig 2)	1200	1200	1000	1800	20 kA	200 kA	320
F	480V, 3Ø, 3W (Fig 4)	—	1800	—	1800	20 kA	200 kA	552
G	600V, 3Ø, 3W (Fig 4)	—	2500	—	2500	20 kA	200 kA	690
K	380/220V, 3Ø, 4W (Fig 2)	1200	1200	1000	1800	20 kA	200 kA	320
L	600/347V, 3Ø, 4W (Fig 2)	1500	1500	1500	2500	20 kA	200 kA	420
S	400/230V, 3Ø, 4W (Fig 2)	1200	1200	1000	1800	20 kA	200 kA	320

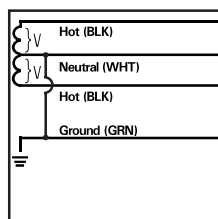


Figure 1

Split  
2 Hots, 1 Neu, 1 Grnd

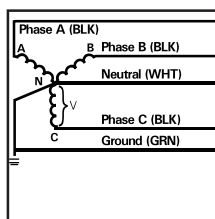


Figure 2

Wye  
3 Hots, 1 Neu, 1 Grnd

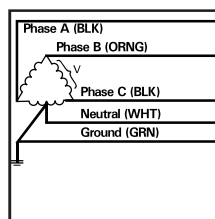


Figure 3

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

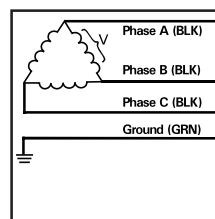


Figure 4

Delta & HRG Wye  
3 Hots, 1 Grnd

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Order No. RPFL-S309C-0120  
Printed in USA

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### Notes:

- ❶ Requires TPS9IKITP1 or TPS9IKITP2 mounting bracket accessory, see available Accessories. Prewired cables are extended from 3 feet to 6 feet.