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TPS3 12

Type 1 / Type 2 Surge Protective Device (SPD) For Line Side or Load Side Applications

Features:

- UL 1449-4 Type 2 SPD, UL 1283 Listed, CSA 22.2 No. 269.2
- Optional UL 1449 4th Edition Listed Type 1, CSA 22.2 No. 269.1
- Type 1 / Type 2 SPD
- Mounts external to electrical distribution equipment
 - Recommended for line side or load side applications
- Large block, individually fused, thermally protected, 50 kA MOVs
- 20 kA I_n
- 200 kA SCCR (most models)
- Provides redundant replaceable module protection for low to high exposure applications
- 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 and .2
 - 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
 - Type 2 SPDs intended for Load side of Main Disconnect

- UL96A Lightning Protection Master Label compliant
- 10 year warranty

SPD Specifications

Surge Current Rating Per Phase

| Per Phase | L-N | L-G | N-G |
|-----------|--------|--------|--------|
| 100 kA | 50 kA | 50 kA | 50 kA |
| 150 kA | 100 kA | 50 kA | 50 kA |
| 200 kA | 100 kA | 100 kA | 100 kA |
| 250 kA | 150 kA | 100 kA | 100 kA |
| 300 kA | 150 kA | 150 kA | 150 kA |
| 400 kA | 200 kA | 200 kA | 200 kA |
| 500 kA | 250 kA | 250 kA | 250 kA |

- 100% monitoring (Every MOV is monitored, incl. N-G)
- Individually fused and thermally protected MOVs
- Solid state bi-directional operation
- EMI/RFI filtering: Active tracking up to -50 db from 10 kHz to 100 MHz (Type 2 option only, includes UL 1283 Listing)
- Repetitive impulse: 5,000 hits
- <1 nanosecond response time
- Relative humidity range: 0 -95% non-condensing
- Operating frequency: 47-63 Hz
- Operating temperature: -25°C (-15°F) to +60°C (140°F)

- Standard Configuration
 - Standard NEMA 1/12/3R/04 ANSI 61 steel enclosure
 - Internal rotary disconnect switch
 - Wire size: #8 AWG to 1/0
 - Standard size: 12" x 12" x 7" (305 mm x 305 mm x 178 mm)*
 - Standard weight: 20 lb. (9.07 kg)*

*Internal disconnect options and other NEMA ratings may increase enclosure size and weight

- SPD Monitoring
 - LED indicators
 - Audible alarm with silence switch and test button
 - Dry contacts
 - Surge counter

- Options
 - Internal rotary disconnect switch
 - Thru-door disconnect switch



Ordering Information

TPS3 **□** **12** **□□** **□** **X** **□2**

Voltage Code Surge Current (kA) Enclosure Options

A = 120/240V, 1Ø, 3W (Fig 1) 10 = 100 kA per phase
 B = 120/240V, 3Ø, 4W (Fig 3) 15 = 150 kA per phase
 C = 120/208V, 3Ø, 4W (Fig 2) 20 = 200 kA per phase
 D = 240V, 3Ø, 3W (Fig 4) ② 25 = 250 kA per phase
 E = 277/480V, 3Ø, 4W (Fig 2) 30 = 300 kA per phase
 F = 480V, 3Ø, 3W (Fig 4) ② 40 = 400 kA per phase
 G = 600V, 3Ø, 3W (Fig 4) ③ 50 = 500 kA per phase
 K = 380/220V, 3Ø, 4W (Fig 2)
 L = 600/347V, 3Ø, 4W (Fig 2)
 S = 400/230V, 3Ø, 4W (Fig 2)

0 = Standard NEMA 1/12/3R/4 Steel
 V = NEMA 4X non-metallic
 S = NEMA 4X stainless steel
 F = NEMA 1 flush mount
 P = NEMA 1 screwcover pullbox with extended display on 6ft cable for line side mounting in SWBD/SWGR ①

2 = Type 2 SPD (Default)
 Includes UL 1283
 EMI/RFI Filters
 0 = Type 1 SPD
 (Contact factory)

D = Internal rotary disconnect
 T = Thru-door disconnect
 0 = No disconnect switch

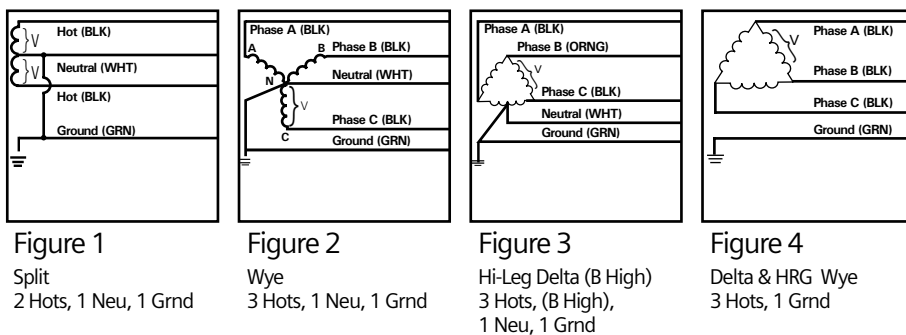
X = Surge counter (Standard)

Example: TPS3C12100XD2 = Type 2 SPD (Default) for a 208/120V application with a surge current capacity of 100kA per phase, in a standard NEMA 1/12/3R/4 enclosure with a surge counter and internal rotary disconnect option

**Available Accessories:
 Ordered Separately**
 RMSIE - Remote monitor

UL 1449 Fourth Edition - Test Data
 Voltage Protection Rating (VPR - 6 kV, 3 kA) ④

| Voltage Code | Service Voltage | L-N | L-G | N-G | L-L | I _n | SCCR | MCOV |
|--------------|--------------------------|----------|----------|------|-----------|----------------|--------|-----------|
| A | 120/240V, 1Ø, 3W (Fig 1) | 700 | 700 | 700 | 1200 | 20 kA | 100 kA | 150 |
| B | 120/240V, 3Ø, 4W (Fig 3) | 800/1200 | 700/1200 | 700 | 1200/1800 | 20 kA | 200 kA | 150 / 320 |
| C | 120/208V, 3Ø, 4W (Fig 2) | 800 | 700 | 700 | 1200 | 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 | 1200 | 2000 | 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 | 1200 | 2000 | 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 | 1200 | 2000 | 20 kA | 200 kA | 320 |



Siemens Canada Limited
 1577 North Service Road East
 Oakville, ON L6H 0H6
 888-333-3545
 info@purgethesurge.com
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Notes:

- ① For line side mounting in SWBD/SWGR
- ② Not available in 500kA
- ③ Available in 100kA, 150kA, 200kA & 250 kA only
- ④ VPR may increase when disconnect switch is added; VPR may decrease for products 400 & 500kA per phase

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