



# SIEMENS

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## TPS3 L12

True 10 Mode Protection

### 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)
- Single TPS1 style replaceable modules
- Provides 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
  - Directly connected discrete protection elements between all possible modes providing true 10 mode protection
  - Surge Current Rating Per Phase

Per Phase	L-N	L-G	L-L	N-G
150 kA	50 kA	50 kA	50 kA	50 kA
300 kA	100 kA	100 kA	100 kA	100 kA
450 kA	150 kA	150 kA	150 kA	150 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
- Less than 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
  - 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**      **L12**         **X**   

**Voltage Code**

A = 120/240V, 1Ø, 3W (Fig 1)  
 B = 120/240V, 3Ø, 4W (Fig 3)  
 C = 120/208V, 3Ø, 4W (Fig 2)  
 E = 277/480V, 3Ø, 4W (Fig 2)  
 K = 380/220V, 3Ø, 4W (Fig 2)  
 S = 400/230V, 3Ø, 4W (Fig 2)

**Surge Current (kA)**

15 = 150 kA per phase  
 30 = 300 kA per phase  
 45 = 450 kA per phase

**Enclosure**

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/SWGR❶

**Options**

-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

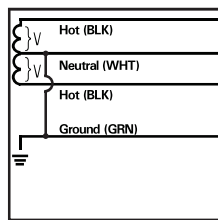
X = Surge counter (Standard)

Example: TPS3CL12150XD2 = 10 Mode, Type 2 SPD (Default) for a 208/120V application with a surge current capacity of 150kA per phase, in a standard NEMA 1/12/3R/4 enclosure with a surge counter and internal rotary disconnect option

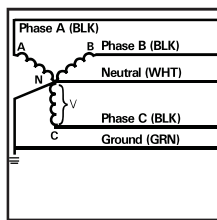
**Available Accessories:  
 Ordered Separately**  
 RMSIE - Remote monitor

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

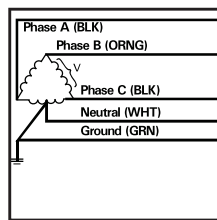
Voltage Code	Service Voltage	L-N	L-G	N-G	L-L	I <sub>n</sub>	SCCR	MCOV
A	120/240V, 1Ø, 3W (Fig 1)	700	700	700	1000	20 kA	100 kA	150
B	120/240V, 3Ø, 4W (Fig 3)	700/1500	700/1200	700	1000/1800	20 kA	200 kA	150 / 320
C	120/208V, 3Ø, 4W (Fig 2)	700	700	700	1000	20 kA	200 kA	150
E	277/480V, 3Ø, 4W (Fig 2)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

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Order No. RPFL-S3L12-0120

Printed in USA

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#### Notes:

- ❶ For line side mounting in SWBD/SWGR
- ❷ VPR may decrease for 450kA per phase