

# TPS3 15

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

### Features:

- UL 1449 3rd Edition – 2009, cUL
- Type 1 SPD (Type 2 cUL)
- Mounts external to electrical distribution equipment
  - Recommended for line side or load side applications
- When "P" option is selected, TPS3 15, Type 1 SPD mounts internal to: SMP, FCI, FCII switchboards, Type WL low voltage switchgear and TIASTAR motor control centres
- Large block, individually fused, thermally protected, 50 kA MOVs
- 20 kA  $I_n$  (most models)
- 200 kA SCCR (most models)
- Provides redundant replaceable module protection for low to high exposure applications
- All UL-required OCP & safety coordination included
- UL96A Lightning Protection Master Label compliant (@ 20 kA  $I_n$ )

### SPD Specifications

- Surge Current Rating Per Phase
- | Per Phase | L-N    | L-G    | N-G    |
|-----------|--------|--------|--------|
| 600 kA    | 300 kA | 300 kA | 300 kA |
| 800 kA    | 400 kA | 400 kA | 400 kA |
| 1000 kA   | 500 kA | 500 kA | 500 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
  - 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
- Internal rotary disconnect switch
- Wire size: #8 AWG to 1/0
- Standard size: 20" x 20" x 7" (508 mm x 508 mm x 178 mm) \*
- Standard weight: 64 lbs. (29 kg) \*

\*Other NEMA ratings may increase enclosure size and weight



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
  - Large block, individually fused, thermally protected, 50 kA MOVs
  - Internal rotary disconnect switch
  - 10 year warranty

- SPD Monitoring
  - LED indicators
  - Audible alarm with silence switch and test button
  - Dry contacts
- Available Options
  - Surge counter
  - Thru-door disconnect switch
  - NEMA 4X non-metallic enclosure
  - NEMA 4X stainless steel enclosure
  - Flush mount enclosure
  - NEMA 1 enclosure with extended display❷

- Available Accessories
  - RMSIE = Remote monitor
- Key Bid Specifications
  - UL 1449 3rd Edition – 2009, cUL
  - Type 2 SPD❶
  - Protection modes on L-N, L-G, L-L, N-G
  - I<sub>n</sub> Rating – 20 kA
  - Short Circuit Current Rating – 200 kA
  - Surge Current Rating
 

Per Phase =	L-N	+	L-G
600 kA	300 kA		300 kA

Ordering Information

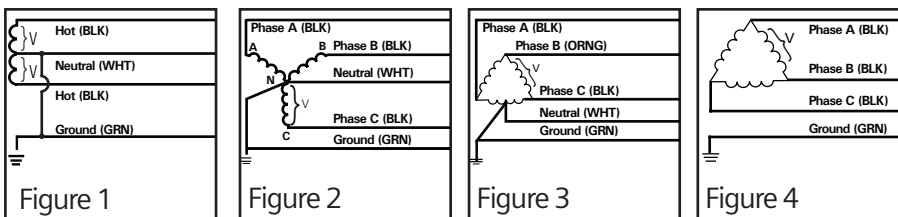
Catalogue # **TPS3**    **15**             **2**

Voltage Code	Surge Current (kA)	Enclosure	Options
A = 120/240V, 1Ø, 3W (Fig 1)	40 = 400 kA per phase❸	0 = Standard NEMA 1/12/3R/4 steel	T = Thru-door disconnect
B = 120/240V, 3Ø, 4W (Fig 3)	50 = 500 kA per phase❸	V = NEMA 4X Non-metallic	X = Surge counter
C = 120/208V, 3Ø, 4W (Fig 2)	60 = 600 kA per phase	S = NEMA 4X Stainless steel	
D = 240V, 3Ø, 3W (Fig 4)❹	80 = 800 kA per phase	F = NEMA 1 Flush mount	
E = 277/480V, 3Ø, 4W (Fig 2)	1K = 1000 kA per phase	P = NEMA 1 Screwcover pullbox with extended display on 5ft cable for line side mounting in SWBD/SWGR	
F = 480V, 3Ø, 3W (Fig 4)❹			
G = 600V, 3Ø, 3W (Fig 4)❺			
K = 380/220V, 3Ø, 4W (Fig 2)			
L = 600/347V, 3Ø, 4W (Fig 2)			
S = 400/230V, 3Ø, 4W (Fig 2)			

- Example: TPS3C1560SX02 = Type 2 SPD for a 208/120V application with a surge current capacity of 600 kA per phase, in a NEMA 4X stainless steel enclosure with a surge counter option and standard disconnect switch

- When an option is not selected, include a zero (0) in the field

UL 1449 3rd Edition - 2009 Test Data Summary									
Voltage Protection Rating (VPR - 6kV, 3 kA)									
Voltage Code	Service Voltage	L-N	L-G	N-G	L-L	TYPE❶	I <sub>n</sub>	SCCR	MCOV
A	120/240V, 1Ø, 3W (Fig 1)	600	600	700	1000	Type 2	20 kA	200 kA	150
B	120/240V, 3Ø, 4W (Fig 3)	600 / 1000	600 / 1000	700	1000	Type 2	20 kA	200 kA	150 / 320
C	120/208V, 3Ø, 4W (Fig 2)	600	600	700	1000	Type 2	20 kA	200 kA	150
D	240V, 3Ø, 3W (Fig 4)		1000		1800	Type 2	20 kA	200 kA	320
E	277/480V, 3Ø, 4W (Fig 2)	1100	1000	1000	1800	Type 2	20 kA	200 kA	320
F	480V, 3Ø, 3W (Fig 4)		1800		1800	Type 2	20 kA	200 kA	550
G	600V, 3Ø, 3W (Fig 4)		2500		2500	Type 2	20 kA	200 kA	690
K	380/220V, 3Ø, 4W (Fig 2)	1100	1000	1000	1800	Type 2	20 kA	200 kA	320
L	600/347V, 3Ø, 4W (Fig 2)	1500	1500	1500	2500	Type 2	20 kA	200 kA	420
S	400/230V, 3Ø, 4W (Fig 2)	1100	1000	1000	1800	Type 2	20 kA	200 kA	320



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www.siemens.ca/surge  
www.siemens.ca

Notes:

- ❶ Type 1 UL
- ❷ For line side mounting in SWBD/SWGR
- ❸ Available in G voltage code only
- ❹ Available in 600 kA & 800 kA only
- ❺ Available in 400 kA & 500 kA only