FOR EXTERNAL MOUNTING

TPS4 12/L12 Surge Protection Devices

siemens.ca/powerdistribution

Product specifications

General specifications	
Maximum surge current rating range	Standard - 100kA to 500kA per phase 10 Mode - 150kA to 750kA per phase
UL Type designation	SPD Type 1 and 2
UL 1449 & CSA C22.2 No. 269 I-nominal rating	20kA
UL 1449 & CSA C22.2 No. 269 short circuit current rating	200kA
Repetitive impulse	5,000 hits
Response time	< 1/2 ns

Physical specifications	
Humidity range	0-95% non-condensing
Operating frequency	47-63Hz
Operating temperature	-25°C to +60°C
Dimensions in inches (mm)	12" (305) x 12" (305) x 8.5" (216)
Weight	16.5 lbs (7484 g)
Typical connection	#8 AWG up to 1/0 AWG via the disconnect
Enclsoure	NEMA 4 Metallic (other available)

Diagnostic monitoring specifications
Green LEDs per phase
Red service LED
Audible alarm with silence switch
Form C dry contact, 240V, 5A
Event counter with time and date stamp

Design specifications
Stacked distribution grade MOV design
Integrated optimized thermal protection
External parallel connected for mounting next to electrical gear
Designed for high energy handling in up to Category C locations
Flush kits available as accessory

SIEMENS

Model Number Catalog Logic

TPS4 12 SPD for External Mounting
General Suppressor Series

Catalog Number TPS4 □ 12 □□ □ X □□

Voltage Code

A = 240/120V ,1Ø, 3W (Figure 1)**
B = 240/120V, 3Ø, 4W (Figure 3)
C = 208/120V, 3Ø, 4W (Figure 2)
W= 220/127V, 3Ø, 4W (Figure 2)
D = 240V, 3Ø, 3W (Figure 4)
E = 480/277V, 3Ø, 4W (Figure 2)
F = 480V, 3Ø, 3W (Figure 4)
G = 600V, 3Ø, 3W (Figure 4)*
K = 380/220V, 3Ø, 4W (Figure 2)
L = 600/347V, 3Ø, 4W (Figure 2)
S = 400/230V, 3Ø, 4W (Figure 2)
T = 415/240V, 3Ø, 4W (Figure 2)

Surge Current Rating

10 = 100kA per phase
15 = 150kA per phase
20 = 200kA per phase
25 = 250kA per phase
30 = 300kA per phase
40 = 400kA per phase
50 = 500kA per phase

Options (1 Alpha numeric Character)

0 = Standard NEMA 4 Metallic
S = NEMA 4X Stainless Steel
V = NEMA 4X non-metallic

X = Surge Counter (Standard)

D = Intregral Disconnect (Default)
T = Thru-door disconnect

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

Example: TPS4C12200XD2 =

SPD for a 208/120V with a surge current capacity of 200kA per phase and a surge counter and integral disconnect.

**Not avilable in 300, 400 or 500kA versions*
***Can also be used on 208Y/120V, 1Ø, 3W System.*

TPS4 L12 10 Mode SPD External Mounting
General Suppressor Series

Catalog Number TPS4 □ L12 □□ □ X □□

Voltage Code

A = 240/120V ,1Ø, 3W (Figure 1)**
B = 240/120V, 3Ø, 4W (Figure 3)
C = 208/120V, 3Ø, 4W (Figure 2)
W = 220/127V, 3Ø, 4W (Figure 2)
E = 480/277V, 3Ø, 4W (Figure 2)
K = 380/220V, 3Ø, 4W (Figure 2)
L = 600/347V, 3Ø, 4W (Figure 2)*
S = 400/230V, 3Ø, 4W (Figure 2)
T = 415/240V, 3Ø, 4W (Figure 2)

Surge Current Rating

15 = 150kA per phase
30 = 300kA per phase
45 = 450kA per phase
55 = 550kA per phase
75 = 750kA per phase

Options (1 Alpha numeric Character)

0 = Standard NEMA 4 Metallic
S = NEMA 4X Stainless Steel
V = NEMA 4X non-metallic

X = Surge Counter (Standard)

D = Intregral Disconnect (Default)
T = Thru-door disconnect

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

Example: TPS4CL12300XT2 =

SPD for a 208/120V panelboard with a surge current capacity of 300kA per phase and a surge counter and thru-door disconnect.

**Not available in 450, 550 or 750kA versions*
***Can also be used on 208Y/120V, 1Ø, 3W System.*

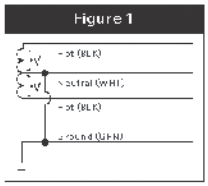


Figure 1: SPLIT
2 Hots, 1 Neu, 1 Grnd

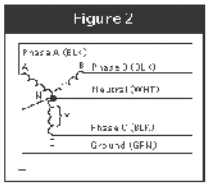


Figure 2: WYE
3 Hots, 1 Neu, 1 Grnd

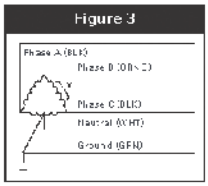


Figure 3: HI-LEG DELTA (B High)
3 Hots, (B HIGH), 1 Neu, 1 Grnd

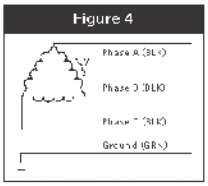


Figure 4: DELTA & HRG WYE
3 Hots, 1 Grnd

Voltage Code	System Voltage	L-N	L-G	L-L	N-G	MCOV
A	120/240V, 1Ø, 3W*	800	700	1200	700	180
B	240/120V, 3Ø, 4W	800/1000	700/900	1200	700	150/275
C	208Y/120V, 3Ø, 4W	700	700	1200	700	150
W	220/127V, 3Ø, 4W	800	700	1200	700	180
D	240V, 3Ø, 3W	–	900	1000	–	275
E	480Y/277V, 3Ø, 4W	1200	1200	2000	1200	350
F	480V, 3Ø, 3W	–	1800	1800	–	550
G	600V, 3Ø, 3W	–	2000	2000	–	680
K	380Y/220V, 3Ø, 4W	1200	1200	2000	1200	320
L	600Y/347V, 3Ø, 4W	1500	1500	2500	1500	440
S	400Y/230V, 3Ø, 4W	1200	1200	2000	1200	320
T	415Y/240V, 3Ø, 4W	1200	1200	2000	1200	320

Modes of Protection

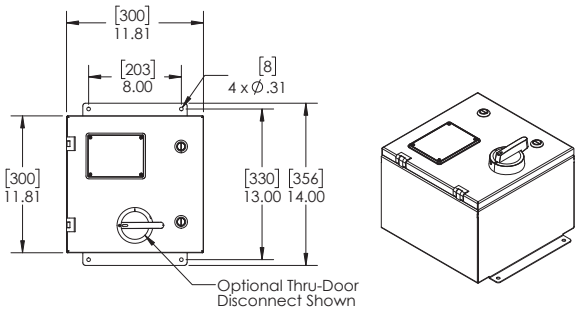
Standard TPS4 12	True 10-Mode (or discrete 10-mode) TPS4 L12*
• Includes 7 discrete modes of protection (L-N x3, L-G x3, N-G) and 3 indirect modes (L-L through N or G) • For WYE and Hi-leg delta systems only • Delta systems do not have as many possible modes	• Includes directly connected discrete protection elements between all possible modes providing true 10 mode protection. • MOVs are placed directly in the L-L mode as well as all other modes. • This full 10-mode protection is only achievable in Wye configurations (For 120/240 single phase TPS4 L12 provides all modes with 6-mode protection)
Discrete protection - There are directly connected MOVs in that mode of protection	
Indirect protection - Protection through 2 MOVs (L-N-L or L-G-L)	

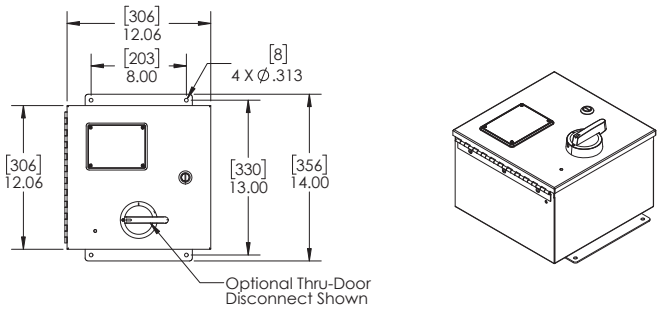
** L12 surge protection devices are priced higher.*

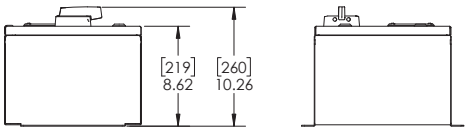
Standards compliance and certifications

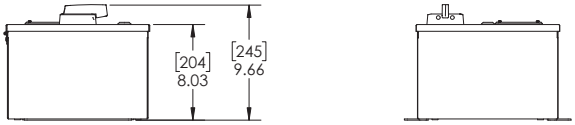
UL 1449 5th Edition, cUL, UL1283, UL 96A Compliant, CSA C22.2 No 269.1 & .2, ANSI/IEEE C62.41.1-2002, C62.41.2-2002, C62.45-2002, NEC Article 285
ISO 9001: 2014 Quality Management System, ISO 17025:2007 Laboratory Certification (UL DAP Program), 100% Quality Tested prior to shipping
10-yr product warranty

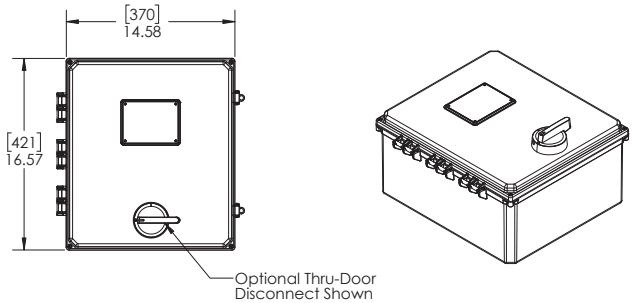
Product Diagram [in millimeters] and inches

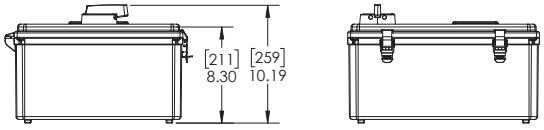












Published by
Siemens Canada 2024

Siemens Canada Limited
Electrical Products
1577 North Service Road East
Oakville, ON L6H 0H6

Customer Interaction Centre
Tel: 1 (888) 303-3353
cic.ca@siemens.com

Printed in Canada
Order No. SIEPC-D19-CAEN

siemens.ca/powerdistribution