



TITAN SE

Service Entrance Protection

Titan™ Service Entrance panels can be configured to meet special requirements for each installation. Design engineers can specify individual options and features for each project such as; system voltage, peak surge current capability, housing type, integral fused disconnect, etc.



Protection

The Titan SE multi-phase suppressor provide state of the art protection for industrial, medical and commercial applications. The Titan SE's peak surge current capability can be specified from 240,000 amps up to 600,000 amps per phase.

Performance

The EFI Electronics Titan SE utilizes a hybrid Sine Wave Tracker™ suppression circuit in bolt on replaceable modules. Modules bolt onto tin plated copper bus bars to ensure the lowest possible impedance to ground. The Titan SE provides transient protection and up to 54 dB noise filtration. Additionally, the Titan SE panels have passed a pulse life test of 5,000 ANSI category C-3 surges without clamping drift.

Applications

Designed and manufactured for installations on main service panels the Titan SE can also be installed inside of switch gear or motor control centers. The Titan SE can be installed in series for sensitive loads up to 175 amps. Titan SE's provide the ultimate protection as the service entrance protector in a cascaded filter suppression network.

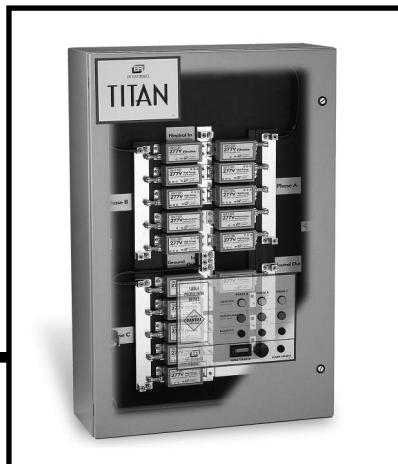
FEATURES	ADVANTAGES	BENEFITS
<p>Online diagnostic test switches</p> <p>LED, Audible alarm and NO/NC dry contacts status indicators</p> <p>240,000 to 600,000 peak amp surge current capacity.</p> <p>Sine Wave Tracker circuitry</p>	<p>Unit can be tested without disabling protection during test conditions.</p> <p>Provides additional indication of the suppression status.</p> <p>Protects against high energy lightning strikes.</p> <p>Provides a tight clamping window above and below the AC sine wave.</p>	<p>Allows building maintenance personnel to perform regular inspections of suppressor status.</p> <p>Allows the building engineer to remotely monitor SPD status.</p> <p>Customer assurance that even a direct lightning strike will not disable sensitive electronic equipment.</p> <p>Customer assurance of superior transient protection.</p>

TITAN SE

Product Specifications

Titan SE Technical Specifications

Surge Current Rating	240,000–480,000 Amps/phase (L-N + L-G) 120,000–240,000 Amps (N-G)
Modes of protection	L-N, L-G, N-G, L-L
Clamping voltage	120/208 Volt: 330 Volts
UL 1449, Second Edition	277/480 Volt: 800 Volts, 347/600 Volt: 1,000 Volts
cUL	
Protection	Circuitry Parallel, Sine wave tracking
Remote Monitoring	Form C dry contacts (NO/NC)
Diagnostics (Standard)	Dual Diagnostics
Housing	Green–Protection working Red–Suppression failure
Module	Illuminated–Protection working Unlit–Suppression damaged
EMI/RFI Noise Rejection	Up to 54 dB UL 1283 (100kHz-100MHz)
Fusing (Standard)	200,000 AIC
Connection Means	Lugs #10– #2/0, 2 per phase
Enclosure Size	20" x 24" x 8" 24" x 24" x 8" 30" x 24" x 8" 36" x 24" x 8"
Enclosure Rating (Std.)	NEMA 4/12
Warranty	10-years full replacement
Pulse Life	5,000 Cat. C3 surges without clamping drift
Voltages Available	All Standard Voltages
Frequency Range	50, 60, 400 Hz
Response Time	<1 nanosecond
Weight	Consult factory
Operating/Storage Temp.	-14°–140°F/-40°–185°F
Altitude	Sea level to 12,000 feet



Available Options

Voltage

- 120/240 Single-Ø, 3-wire plus ground
- 120/208 Three-Ø Wye, 4-wire +ground
- 240/120 Three-Ø Delta, 4-wire +ground
- 220/380 Three-Ø Wye, 4-wire +ground
- 277/480 Three-Ø Wye, 4-wire +ground
- 347/600 Three-Ø Wye, 4-wire +ground
- 240 Three-Ø Delta, 3-wire +ground
- 380 Three-Ø Delta, 3-wire +ground
- 480 Three-Ø Delta, 3-wire +ground
- 600 Three-Ø, Delta, 3-wire +ground

Surge Current Rating Per Phase

240,000 Amps/Phase

- L-G (2 modules)
- L-N (2 modules)
- L-N & L-G (1 module each standard)

360,000 Amps/Phase

- L-G (3 modules)
- L-N (3 modules)
- L-N (2 modules) & L-G (1 module standard)
- L-N (1 module) & L-G (2 modules)

480,000 Amps/Phase

- L-G (4 modules)
- L-N (4 modules)
- L-N & L-G (2 modules each standard)
- L-N (3 modules) & L-G (1 module)
- L-N (1 module) & L-G (3 modules)

600,000 Amps/Phase

- L-G (5 modules)
- L-N (5 modules)
- L-N (3 modules) & L-G (2 module)
- L-N (2 modules) & L-G (3 module)
- L-N (1 module) & L-G (4 modules)
- L-N (4 module) & L-G (1 modules)

Surge Current Rating N-G

- 120,000 Amps
- 240,000 Amps

Enclosure

- NEMA 4/12(Standard)
- NEMA 3R
- NEMA 4X (Stainless Steel)
- Flush collar
- Without enclosure (UL Recognized)
- Other (Specify)

Special Features

(Choose as many features as desired)

- Surge Counter
- Audible Alarm
- Internal Disconnect
- Expanded EMI/RFI filtering (Above 50 dB)
- All NEMA ratings
(enclosure rating. Consult factory)
- Other (Specify)

Titan and SineWave Tracker are trademarks of EFI Electronics Corporation

