



SE

The Titan SE panel protection system is a high-performance surge protection device (SPD) designed to provide protection for service entrances or panels. Series (Kelvin) connections are for applications up to 175 Amps. See NATIONAL ELECTRIC CODE tables 310-16 and 310-18 for wire types.

Warning: Risk of electric shock. Disconnect power before servicing. Service by qualified personnel only.

1 Installation should be accomplished by a licensed electrician. Verify line voltage by measuring L-N and L-L in your system. Confirm that the Titan SE surge protector is rated for your system by comparing it to the table shown below. The maximum continuous line voltage specifications must not be exceeded. Perform the installation with the power off.

2 Mount Securely. Mount immediately adjacent to the panel board or load being protected. Wire length should not exceed 18".

3 Connect Proper Ground. The Titan SE housing must be grounded via the conduit or by pulling a ground conductor to the ground lug inside the housing. For isolated grounding systems, the earth ground wire should attach to the chassis ground. The isolated ground wire should connect to the ground bus bar.

4 Connect Neutral Conductor. If applicable, measure and trim the neutral

conductor to be as straight and short as possible. Connect the neutral conductor from the neutral bar in the panel of the load to the neutral lug on the Titan SE module.

5 Connect Leads. With the electrical POWER OFF, measure and trim phase conductors (up to 2/0 AWG) as straight and short as possible. Connect phase conductors from a properly rated overcurrent protective device. Twist the phase conductors 1/2 turn for every 12 inches of conductor length.

6 Activate Unit. When power is applied, three individual diagnostic lights will indicate that each phase is protected. If lights do not illuminate, recheck the phase, neutral and ground connections, and fuses.

7 Remote Monitoring. Form C Dry Contacts (NO,NC) are located on the diagnostic board.

8 Problem Diagnosis. Other questions and problems should be directed to EFL Technical Services at (800) 877-1174.

9 Optional Surge Counter. The surge

counter monitors both L-N and L-G transients. To reset the counter, push the red reset button.

10 Optional Audible Alarm. To disable, push the button next to the alarm. The alarm button will not be illuminated, but one of the phase LED's will be lit red.

11 Online Diagnostic Test. To test the integrity of the diagnostics, push the button below the LED's. If the green light goes out and the red light illuminates, then the unit's diagnostics are functioning properly.

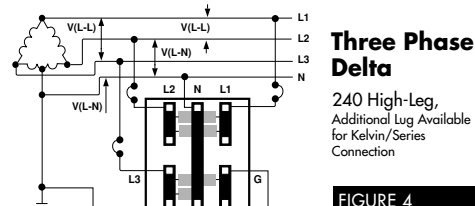
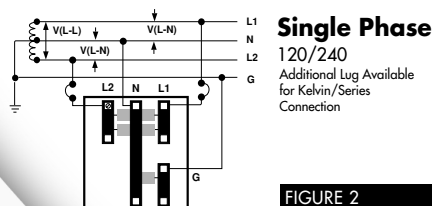
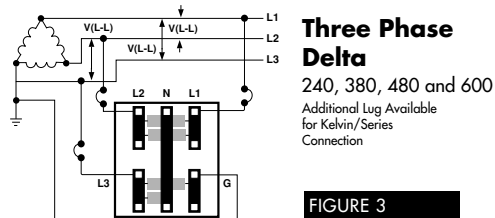
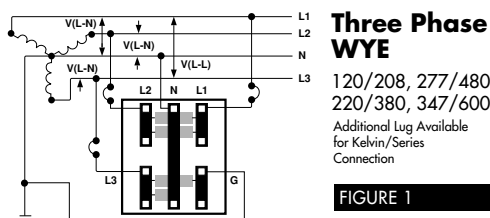
12 Optional Fused Disconnect Switch. Connect the three phase conductors into the top lugs of the disconnect switch marked: Phase A, Phase B, and Phase C. Use of the fused disconnect limits the load capability to 60 AMPS.

13 Suitable for use on a circuit capable of delivering not more than 200 kA rms Symmetrical Amperes, 600 V maximum.

SE SYSTEM DESCRIPTION

System Description	Figure Reference	Measured Line Voltage (Max Continuous Voltage)		Panel Conductors						L-N Suppression	L-G Suppression	N-G Suppression
		(L-N)	(L-L)	L1	L2	L3	N	G				
SE (LA-SE) 120/208 VAC 3Ø, Wye	1	150	300	●	●	●	●	●	●	YES	YES	YES
SE (LA-SE) 120/240 VAC 1Ø, Wye	2	150	300	●	●		●	●	●	YES	YES	YES
SE (LA-SE) 220/380 VAC 3Ø, Wye	1	320	640	●	●	●	●	●	●	YES	YES	YES
SE (LA-SE) 240 VAC 3Ø, Delta	3	N/A	300	●	●	●		●	●	YES	YES	NO
SE (LA-SE) 277/480 VAC 3Ø, Wye	1	320	640	●	●	●	●	●	●	YES	YES	YES
SE (LA-SE) 347/600 VAC 3Ø, Wye	1	390	780	●	●	●	●	●	●	YES	YES	YES
SE (LA-SE) 380 VAC 3Ø, Delta	3	N/A	500	●	●	●	●	●	●	YES	YES	NO
SE (LA-SE) 480 VAC 3Ø, Delta	3	N/A	640	●	●	●	●	●	●	YES	YES	NO
SE (LA-SE) 600 VAC 3Ø, Delta	3	N/A	780	●	●	●	●	●	●	YES	YES	NO

Electrical Requirements: The Titan SE terminals accept up to #2/0 AWG conductors. Optional fused disconnect terminals accept up to # 4 AWG connectors. Maintain protection of conductors used in installation according to National Electrical Code (e.g., 30-Amp circuit breaker for #10 AWG conductors).





10 YEAR LIMITED WARRANTY

EFI Electronics will, at its option, repair or replace any EFI Electronics product that is defective or is damaged by an electrical surge (including those caused by lightning) for a period of ten (10) years from date of purchase.

The above coverage applies to the original end user purchaser only and is the exclusive remedy under this warranty, whether based on contract, tort, including negligence, or otherwise. Claims must be made within 30 days of damage. This warranty does not cover damage associated with sustained overvoltages, vandalism, theft, normal wear and tear, obsolescence, abuse, nonauthorized modification or alteration, misuse, improper installation or catastrophic events. Except as expressly provided by this warranty, EFI Electronics disclaims liability for any incidental, indirect, special or consequential damages arising out of the sale or use of any EFI Electronics product (including without limitation lost business profits, loss of data and all freight, mileage, travel time and insurance charges associated with warranty coverage claims). Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state. This warranty is valid in the United States and Canada only.

Claim Procedure:

- 1** Contact EFI Electronics at the number below to obtain a return authorization number.
- 2** Return EFI Electronics device to EFI Electronics Inc, freight prepaid.
- 3** EFI Electronics returns working device, freight prepaid.

Caution: Effective surge suppression requires correct wiring.

Warranty Assistance: Call 1-800-877-1174



WC#EF07B