### TITAN® 500M



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# 500,000 AMP PANEL PROTECTION

EFI Electronics Titan 500M delivers specification grade performance for service entrance or critical branch panel applications. This multi-phase protection system provides protection for all critical modes in a durable package. The high performance of the Titan 500M allows protection in the worst environments.

Compliant with UL 1449-4.



#### **APPLICATIONS**

The Titan 500M provides superior design, safety, and service life for a wide variety of commercial, industrial or institutional applications. The Titan 500M offers unsurpassed performance and protection for demanding service entrance applications or as part of a complete suppression network. The robust modular construction minimizes possible down time and reduces maintenance costs. The 500M features redundant diagnostic system alerts to ensure uninterrupted protection against harmful transients.

#### SUPERIOR PERFORMANCE

The Titan 500M utilizes 34 mm MOVs in a high-energy suppression circuit which provides 500,000 peak amps of surge current rating per phase. The 500M utilizes a Sine Wave Tracker suppression circuit for wye configurations which not only provides transient protection but also up to -30 dB noise filtration.

The EFI Electronics Titan 500M provides reliable operation by incorporating EFI's latest improvements. Each surge suppression mode is individually fused and the product is contained in a NEMA 3R/12 metallic housing for maximum performance. The Titan 500M has been tested and is UL and cUL listed.

#### **EASY INSTALLATION**

The Titan 500M mounts adjacent to the panel through a conduit connection and as close to the circuit breaker as possible to reduce lead lengths and improve protection.

FEATURES	ADVANTAGES	BENEFITS
NEMA 3R/12 ENCLOSURE	Allows installation in outdoor applications	Provides protection to vulnerable equipment powered from weather exposed panels
500,000 AMP CAPACITY	Provides longer service life and protection against high-energy lightning strikes	Keeps valuable electronics safe even in the worst electrical conditions
SINE WAVE TRACKER CIRCUITRY	Increased transient suppression	Improves protection to the equipment
ADVANCED DIAGNOSTICS	Allows for online testing of the suppressors functionality	Allows immediate response if suppressor is damaged
SUPPRESSION STATUS ALARMS	Provides immediate alarm if suppression is ever damaged	Warns if operating with reduced or without protection
THERMAL FUSE	Thermal fuse capable of extreme surge currents	Provides reliable operation and prevents dangerous thermal run-a-way if MOV's are damaged

### TITAN® 500M Product Specifications



#### **PERFORMANCE**

500 kA/phase Surge Current Rating Short Circuit Current Rating 200 kA Up to -30 dB EMI/RFI Noise Rejection

(wye units)

Sine Wave Tracking Circuit Yes 200 KAIC Fusing

#### **MECHANICAL DESCRIPTION**

**Dimensions** See images Housing Ratings **NEMA 3R/12** 

Weight

w/o disconnect 38.7 lbs (17.6 kg) w/ disconnect 50.6 lbs (23 kg)

#### MECHANICAL DESCRIPTION (CONT'D)

**Connection Terminals** #10 - #2 AWG **Terminals** Mounting Method Parallel Thermal Fusing Yes Operating Frequency 50/60 Hz Circuit Type Parallel Storage Temperature -40° to +149° F  $(-40^{\circ} \text{ to } +65^{\circ} \text{ C})$ 

Operating Temperature -40° to +149° F (-40° to +65° C)

Operating Altitude Sea Level to 12,000 feet (3,658 m.)

#### WARRANTY

10 years on Product

#### **DIAGNOSTICS**

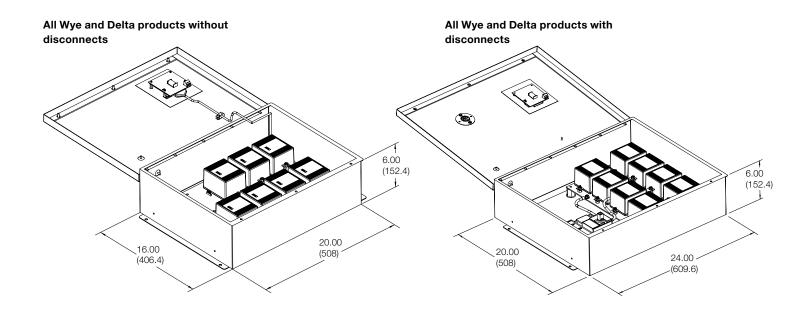
Standard Push to test Diagnostic Switches, Red & Green Status LED's per Phase (Internal redundant Status LED's per Phase will be Blue for Delta configurations & Green for Wye and Split Phase configurations), Module Status LED's per Mode, Dry Contacts, Audible Alarm with Disable Switch, Surge Counter

Integral Disconnect, Flush Optional Mount, (for panel size 16"x 20"x 6" only), Remote

Monitor

#### SAFETY AND PERFORMANCE

UL1449-4 Edition requirements, cUL. UL 1283 (wye products only), CSA C22.2 No.8- M1986, IEEE C62.41.1-2002, C62.41.2-2002, C62.45-2002



## TITAN® 500M Product Specifications



TITAN 500M SYSTEM DESCRIPTION					UL 1449 -4 EDITION			
500kA/Phase	Service Voltage	Configuration	Model Number	мсоу	L-N	L-G	N-G	L-L
	120/240 wye (Single Phase)	1Ph. Wye 3-wire +G	500M120/240Y	150	400	400	400	800
	120/208 wye	3Ph. Wye 4-wire +G	500M120/208Y	150	400	400	400	800
	220/380 wye	3Ph. Wye 4-wire +G	500M220/380Y	320	800	800	800	1500
	230/400 wye	3Ph. Wye 4-wire +G	500M230/400Y	320	800	800	800	1500
	240/120 delta split phase	3Ph. Delta 4-wire +G 'High Leg'	500M240/120SP	275/150	800/400	800/400	400	1500/800
	277/480 wye	3Ph. Wye 4-wire +G	500M277/480Y	320	800	800	800	1500
	347/600 wye	3Ph. Wye 4-wire +G	500M347/600Y	420	1200	1200	1200	2000

NOTE: 500M units come standard with Surge Counter

When ordering Disconnect Option, add suffix -D to the Model Number. (Ex. 500M120/240Y-D)