

# TITAN<sup>®</sup> 320P 320,000 Amp Panel Protection

EFI Electronics Titan 320P 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 and safe package. The high performance of the Titan 320P allows protection in the worst environments.



#### APPLICATIONS

The Titan 320P is a versatile and compact surge protection device designed to provide high quality protection for a wide variety of commercial, industrial or institutional applications. The Titan 320P is excellent as a stand alone service entrance protector or in a suppression network. It's revolutionary design incorporates bus bar construction with bolt-down modules for improved performance and ease of maintenance. And with the addition of fault current fusing, the Titan 320P is able to survive abuse that would destroy a lower class suppression device.

#### SUPERIOR PERFORMANCE

The Titan 320P utilizes a high energy suppression circuit which provides 320,000 peak amps of surge current rating per phase along with EFI Electronics sine wave tracking circuitry to provide up to -30 dB of noise attenuation. The bus bar construction and bolt down modules reduce the impedance in the system to allow the Titan 320P to deliver maximum protection.

#### SAFETY

The Titan 320P is engineered to be the industries safest surge protection device with unique fusing technology designed for these high energy surge products.

#### EASY INSTALLATION

The Titan 320P mounts adjacent to the panel through a conduit connection. The Titan 320P can be mounted adjacent to the circuit breaker to be used in order to reduce lead lengths and improve protection.

| FEATURES                     | ADVANTAGES   | BENEFITS   |
|------------------------------|--|--|
| NEMA 12 Enclosure            | Allows installation in outdoor applications                      | Provides protection to vulnerable equipment powered from weather exposed panels                |
| 320,000 Peak Amp Capacity    | Provides protection against high energy nearby lightning strikes | Keeps valuable electronics safe even in the worst electrical conditions                        |
| Sine Wave Tracker™ Circuitry | Suppresses transients closer to the sine wave                    | Improves protection to the equipment   |
| Advanced Diagnostics         | Allows for online testing of the suppressors functionality       | Allows immediate response if suppressor is damaged   |
| Suppression Status Alarm     | Provides immediate alarm if suppression is ever damaged          | Prevents operating without protection  |
| LightningTemp® Fuse          | Thermal fuse capable of extreme surge currents                   | Provides reliable operation and prevents dangerous thermal<br>run-a-way when MOV's are damaged |

## Titan 320P Product Specifications

#### MODELS AVAILABLE

| T320P120/240Y, T320P120/208Y, T320P240D,     |
|--|
| T320P240/120D, T320P220/380Y, T320P277/480Y, |
| T320P480D, T320P347/600Y, T320P600D          |

#### PERFORMANCE

| Max Surge Current            | 320 kA/phase, L-N 160 kA, L-G 160 kA, N-G 160 kA |
|------------------------------|--|
| Short Circuit Current Rating | 200 kA, 600 V Maximum                            |
| EMI/RFI Noise Rejection      | Up to -30 dB                                     |
| Sine Wave Tracking           | Yes  |
| Fault Current Fusing         | 200 kAIC   |

#### MECHANICAL DESCRIPTION

| Dimensions            | See image   |
|-----------------------|---|
| Housing Ratings       | NEMA 12   |
| Product Weight        | 30 lb   |
| Connection Method     | #2 AWG Terminals  |
| Mounting Method       | Parallel, Series/Kelvin   |
| Thermal Fusing        | Yes, LightningTemp® Fuse  |
| Operating Frequency   | 50/60/400 Hz  |
| Circuit Type          | Parallel Hybrid   |
| Storage Temperature   | $-40^{\circ}$ to $+160^{\circ}$ F ( $-40^{\circ}$ to $+70^{\circ}$ C) |
| Operating Temperature | -40° to +140° F (-40° to +60° C)                                      |
| Operating Altitude    | Sea Level to 12,000 feet (3,658 Meters)                               |

#### DIAGNOSTICS

Standard

Optional

| Push to test Diagnostic Switches, Red & Green Status |
|--|
| LED's per Phase,                                     |
| Dry Contacts, Audible Alarm                          |
| Surge Counter, Fused Safety Disconnect Switch        |

### SAFETY APPROVALS

**™** 1449 2nd Edition

#### WARRANTY

Product

10 years

#### TITAN 320P SYSTEM DESCRIPTION

| Model          | Configuration             | MCOV    | UL 1449 2-nd Ed |         |     | ANSI C 62.41 Clamping Voltage |         |         |         |
|----------------|---------------------------|---------|-----------------|---------|-----|-------------------------------|---------|---------|---------|
|                |                           |         | L-N             | L-G     | N-G | L-L                           | Cat A   | Cat B3  | Cat C1  |
| T320P 120/240Y | 1 Phase Wye, 3-wire + G   | 150     | 400             | 400     | 400 | 700                           | 330     | 380     | 412     |
| T320P 120/208Y | 3 Phase Wye, 4-wire + G   | 150     | 400             | 400     | 400 | 700                           | 330     | 380     | 412     |
| TT320P 240D    | 3 Phase Delta, 3-wire + G | 300     | N/A             | N/A     | N/A | 700                           | 608     | 720     | 800     |
| T320P 240/120D | 3 Phase Delta, 4-wire + G | 250/150 | 600/400         | 600/400 | 400 | 1200/700                      | 330/504 | 382/600 | 412/652 |
| T320P 220/380Y | 3 Phase Wye, 4-wire + G   | 320     | 800             | 800     | 700 | 1500                          | 580     | 684     | 772     |
| T320P 277/480Y | 3 Phase Wye, 4-wire + G   | 320     | 800             | 800     | 700 | 1500                          | 580     | 684     | 772     |
| T320P 480D     | 3 Phase Delta, 3-wire + G | 640     | N/A             | N/A     | N/A | 1500                          | 728     | 1168    | 1520    |
| T320P 347/600Y | 3 Phase Wye, 4-wire + G   | 390     | 800             | 800     | 800 | 2000                          | 576     | 776     | 612     |
| T320P 600D     | 3 Phase Delta, 3-wire + G | 780     | N/A             | N/A     | N/A | 2000                          | 908     | 1318    | 1741    |



efinet.com

320P

23.0 [584]

23.0 [584]

16.0 [406]

16.0

6.0 [152]

320P w/Disconnect

6.0 [152]

Dimensions: in. [mm]