

SurgeTrack™

ST080, ST120, ST160, ST240, ST300 & ST400

SYSTEM FEATURES



- Providing the highest level of protection with the lowest let-through voltage in the industry
- Fail-Safe Design
- Optional Component Level Dual Fusing
- NEMA LS1 Compliance - single pulse tested at independent 3rd party lab (NEMA LS 1, 2.2-9 and 3-9)
- Two suppression technologies: MOV and Enhanced Transient Filter
- UL 1283 Tracking Filter
- Ultra, Compact Footprint - efficiency and performance
- 30 Year Unlimited Free Replacement Warranty
- Form C dry relay contacts and audible alarm with silence button

DATASHEETS

[SurgeTrack: ST400](#)
 [SurgeTrack: ST300](#)
 [SurgeTrack: ST240](#)
 [SurgeTrack: ST160](#)
[SurgeTrack: ST120](#)
[SurgeTrack: ST080](#)

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS

Maximum Rated Surge Current:

ST080 : 80kA per phase; 40kA per mode
ST120 : 120kA per phase; 60kA per mode
ST160 : 160kA per phase; 80kA per mode
ST240 : 240kA per phase; 120kA per mode
ST300 : 300kA per phase; 150kA per mode
ST400 : 400kA per phase; 200kA per mode

Application: See product specific datasheet

Design: Optimum performing parallel hybrid with dual component level fusing

Warranty: 30-Year Unlimited Free Replacement Warranty

Safety Listing: UL 1449 2nd Edition, cUL, UL 1283 Filter

ELECTRICAL SPECIFICATIONS

Mode of Protection: All Mode. L-N, L-L, L-G, & N-G
Input Power Frequency: 40-440Hz (47-64 Hz with enhanced filter option)

Response Time: < 1 nanosecond

Standard Monitoring: Status indicator lights (one per phase & one service LED); Form C dry relay contacts for suppressor status; Audible alarm with silence button

AVAILABLE CONFIGURATIONS

Model Number	Description
TK-STxxx-1P120	120VAC, 1 ϕ 2-wire + grd
TK-STxxx-1P240	240VAC, 1 ϕ 2-wire + grd
TK-STxxx-1S240	120/240VAC, 1 ϕ SPLIT-PHASE, 3-wire + grd
TK-STxxx-3Y208	120/208VAC, 3 ϕ WYE, 4-wire + grd
TK-STxxx-3Y480	277/480VAC, 3 ϕ WYE, 4-wire + grd
TK-STxxx-3Y600	347/600VAC, 3 ϕ WYE, 4-wire + grd
TK-STxxx-3D240	120/240VAC, 3 ϕ high-leg DELTA, 4-wire + grd (B phase must be 208V)
TK-STxxx-240NN	240VAC, 3 ϕ DELTA, 3-wire + grd
TK-STxxx-380NN	380VAC, 3 ϕ DELTA, 3-wire + grd
TK-STxxx-480NN	480VAC, 3 ϕ DELTA, 3-wire + grd
TK-STxxx-600NN	600VAC, 3 ϕ DELTA, 3-wire + grd

xxx denotes surge rating per phase (080, 120, 160, 240, 300 and 400)

Short Circuit Current Rating: 200 kAIC with CLF version
 No upstream over-current protection required. (non-CLF version: 200kAIC using 60A Class J fuse)

MECHANICAL SPECIFICATIONS

Dimensions(approx.):

ST080, ST120 & ST160 : 8"H x 6"W x 6"D

ST240, ST300 & ST400 : 10"H x 8"W x 6"D

Enclosure: Steel. Weather-proof. NEMA 4.

Connection:

ST080, ST120 & ST160 :

Pre-wired with 36" of #10 AWG conductor

ST240, ST300 & ST400 :

Hardwired via internal lugs #10 AWG - #3 AWG

Mounting: Multi-point mounting feet

Operating Environment: -40° C to 70° C (-40° F to 160°

F),

5% to 95% non-condensing humidity

Weight: 12 lbs. (5.4 kg)

ST080, ST120 & ST160 : 12 lbs. (5.4 kg)

ST240, ST300 & ST400 : 24 lbs. (10.9 kg)

AVAILABLE OPTIONS

Order as a Suffix Example: TK- ST080-3Y208-FL

- Enhanced Transient Filter (ETF): add suffix "-F"
- Component Level Fusing (CLF): add suffix "-L"
- Surge Counter: add suffix "-B"
- NEMA 4X Stainless Steel Enclosure: add suffix "-XX"

Order as a Separate Item (30 Year Warranty)

- | | |
|---------------------------|--------------------------------|
| • Fused Disconnect Switch | • Non-Fused Disconnect Switch: |
| ST080, 120, & 160: | ST240, ST300 & ST400: |
| DF-200kAIC-60A-3/4 | DN-200kAIC-60A-3/4 |
| DF-200kAIC-60A-1 | DN-200kAIC-60A-1 |

EMI / RFI FILTER ATTENUATION - M IL STANDARD 220B

Frequency	Attenuation
1kHz	2 dB
10kHz	17 dB
100kHz	40 dB
1MHz	18 dB
10MHz	6 dB
100MHz	1 dB
Max. Attenuation Frequency	41 dB @ 106 kHz

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