

## ADVANCED ELECTRICAL TRANSIENT PROTECTION FOR MEDIUM EXPOSURE APPLICATIONS

### Features and benefits

- Failure-Free ISB eliminates PCB trace failures, provides precise current sharing
- All-copper, tin-plated bus provides minimum impedance, eliminates wire bends
- All MOVs are fused to ensure ongoing performance
- Safety interlocked entry door for added safety (only with disconnect)
- “All modes protection” safeguards all electrical modes (L-N, L-G, L-L, N-G)
- Direct bus connection minimizes installation impedances; provides 200 kAIC fault current protection
- Seven-Year Product Warranty (MasterPLAN selenium-enhanced 10-Year Warranty available when simultaneously installed with Current Technology® SElect® SEL300 or SEL250 units)

### Applications

- Large distribution panels
- Service entrance distribution panelboards
- Heavy equipment (UPS, elevators, etc.) located near unprotected service entrance
- Panels feeding variable speed drives
- Non-service entrance motor control centers utilizing drives, PLCs, soft-start starters, electronic starters, electronic control systems and electronic monitoring

#### Standard TG125 Model Numbers

TG125-120/208-3GY	TG125-120/240-2G
TG125-220/380-3GY	TG125-120/240-3GHD
TG125-277/480-3GY	TG125-240-3DG
TG125-347/600-3GY	TG125-480-3DG

#### Maximum Continuous Operating Voltage (MCOV)

Voltage	MCOV	Voltage	MCOV
120V	150V	347V	420V
220V	275V	480V	640V
277V	320V	600V	840V

#### Typical Clamping Voltage Data

System Voltage	Mode	B3 Ringwave	B3/C1 Comb. Wave	C3 Comb. Wave	UL 1449 Second Edition
120/240	L-N	325 / 350	425 / 450	625 / 725	400/400
	L-G	400 / 450	425 / 475	625 / 750	500/500
	N-G	375 / 375	475 / 475	750 / 750	400/500
	L-L	375 / 475	775 / 850	975 / 1200	700/700
277/480	L-N	525 / 550	875 / 925	1150 / 1200	900/900
	L-G	850 / 875	850 / 875	1075 / 1175	1000/1000
	N-G	700 / 725	900 / 900	1200 / 1200	800/800
	L-L	675 / 725	1675 / 1725	1950 / 2175	1800/1500

All Current Technology suppression filter systems clamping voltages are in compliance with test and evaluation procedures outlined in NEMA LS 1-1992, paragraphs 2.210 and 3.10. Values following slash (/) indicate typical clamping voltage data for models with integral disconnect option.



Fiberglass reinforced polyester enclosure



Metal enclosure

#### Filtering Attenuation Frequencies

50KHz	100KHz	500KHz	1MHz	5MHz	10MHz	50MHz	100MHz
50dB	44dB	34dB	33dB	34dB	36dB	47dB	53dB

#### Single/Repetitive Surge Current Capacities

Protection mode	Single pulse surge current capacity/mode	Repetitive surge current capacity/mode
Line-to-Neutral	125,000 amps	5,000 impulses
Line-to-Ground	125,000 amps	5,000 impulses
Neutral-to-Ground	125,000 amps	5,000 impulses
Line-to-Line	125,000 amps	5,000 impulses
Per Phase	250,000 amps	N/A

In compliance with NEMA LS 1-1992, TransGuard suppression filter systems are single pulse surge current tested in all modes at rated currents of the product by an industry-recognized independent test laboratory. Single pulse surge current capacities of 200,000 amps or less are established by single-unit testing of all components within each mode. Per ANSI/IEEE C62.41-1991 and ANSI/IEEE C62.45-1992, TransGuard suppression filter systems are repetitive surge current capacity tested per mode utilizing a 1.2 x 50µsec 20KV open circuit voltage, 8 x 20µsec 10 kA short circuit current Category C3 bi-wave at one minute intervals without suffering either performance degradation or more than 10% deviation of clamping voltage at a specified surge current.

#### Options (see page 5 for details)

Primary Monitoring — L1	Integral Disconnect —DM (requires metal enclosure)
Advanced Monitoring — L2	DTS-2 Diagnostic Test Set — DTS
MasterMIND Diagnostic Monitoring — L3	MasterTEST Hand-Held Tester — MT
NEMA 4/12 Metal Enclosure — M	Stainless Steel Enclosure —SS

#### Mechanical Specifications

##### Dimensions:

Fiberglass reinforced polyester:  
17.5"H x 15.5"W x 7"D  
Metal: 20"H x 16"W x 9.5"D

##### Weight:

Fiberglass reinforced polyester: 40 lbs.  
Metal: 59 lbs.

Enclosure type/mount: NEMA 4/12 surface

Operating environment: -40°C to +60°C

5% - 95% non-condensing humidity

#### Electrical Specifications

Connection method: Parallel

Protection Modes: L-N, L-G, N-G, L-L  
UL Listings: 1449-Second Edition  
1283

UL-Recognized fusing

**Contact factory for open-frame product specifications.**