

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 TG150 Model Numbers

TG150-120/208-3GY	TG150-120/240-2G
TG150-220/380-3GY	TG150-120/240-3GHD
TG150-277/480-3GY	TG150-240-3DG
TG150-347/600-3GY	TG150-480-3DG

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
120/240 120/208	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
277/480	L-L	375 / 475	775 / 850	975 / 1200	700/700
	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.

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	150,000 amps	5,500 impulses
Line-to-Ground	150,000 amps	5,500 impulses
Neutral-to-Ground	150,000 amps	5,500 impulses
Line-to-Line	150,000 amps	5,500 impulses
Per Phase	300,000 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.



Fiberglass reinforced polyester enclosure



Metal enclosure