



Product Specification

Tranquell A-Series Integrally Mounted Surge Protective Device (SPD)

Enhanced Thermal Protection (ETP) Series

Medium Exposure - Rated 65kA to 100kA Per Mode

STANDARDS

UL 1449 3rd Edition

UL 1283

UL 96A

CSA C22.2 (cUL)

ANSI/IEEE C62.41.1-2002, C62.41.2-2002,
C62.45 - 2002

IEEE 1100-2005

IEEE C62.62

IEEE C62.72

NEMA LS-1 - 1992 (R2000)

MIL-STD-220B

ANSI/NFPA70, NEC (Article 285)

ELECTRICAL

Maximum Surge Current

The maximum surge current rating based on the 8/20 μ s test waveform is as follows. The rating is based on testing of a **complete** SPD unit and all components that make up the SPD system are expressed per **mode**.

Part Number	Mode L-L	Mode L-N	Mode N-G	Mode L-G	Phase (L-N + L-G)
TPMExxxx06*	65kA	65kA	65kA	65kA	130kA
TPMExxxx08*	80kA	80kA	80kA	80kA	160kA
TPMExxxx10*	100kA	100kA	100kA	100kA	200kA

* See Model Number Suffix Descriptions Table

Maximum Continuous Operating Voltage (MCOV)

115% of nominal system voltage or greater (depending on model voltage type). 125% on 120 volts models.

Minimum Repetitive Surge Current Capacity

The Tranquell ME 65kA - 100kA rated device is capable of surviving the following impulses, at one-minute intervals, without failure and with less than 10% change in protective characteristics.

IEEE C62.41 Category C3 (High) Exposure Level, 10kA / 8x20 μ s:

5,000 impulses

UL 1449 Nominal Discharge Current Rating (In)

20kA - Rated for use on UL 96A Lightning Protection Systems

UL Witness Fault Current Withstand (NEC SCCR) Rating:

100,000A

SPD Type / Recommended Locations

Service Entrance Equipment, Primary Distribution Equipment, Secondary Distribution Equipment, Lighting Panels

- Rated for UL and NEC 2008 Type 1 and Type 2 Installation Locations

UL-1449, 3rd Edition Voltage Protection Rating (VPR)

UL 1449 3rd Edition Voltage Protection Ratings (VPR)				
Model Voltage Type	L-N	L-G	N-G	L-L
TPME120S	700	600	600	1200
TPME120Y	700	600	600	1200
TPME220Y	1200	1000	1000	2000
TPME240D	n/a	900	n/a	1800
TPME240H	700 / 1200HL	600 / 1000HL	600	1200 / 1900HL
TPME240Y	1200	1000	1000	2000
TPME277Y	1200	1000	1000	2000
TPME347Y	1500	1500	1500	3000
TPME480D	n/a	1500	n/a	3000

UL-1449, 2nd Edition Suppression Voltage Rating (SVR)*

UL 1449 2nd Edition Suppressed Voltage Ratings (SVR)				
Model Voltage Type	L-N	L-G	N-G	L-L
TPME120S	500	500	500	700
TPME120Y	500	500	500	700
TPME220Y	800	800	800	1500
TPME240D	n/a	800	n/a	1500
TPME240H	500 / 700HL	500 / 700HL	500	900
TPME240Y	800	800	800	1500
TPME277Y	800	800	800	1500
TPME347Y	1200	1000	1000	2000
TPME480D	n/a	1500	n/a	3000

*SVR ratings are no longer assigned by UL and are provided for reference purposes only.

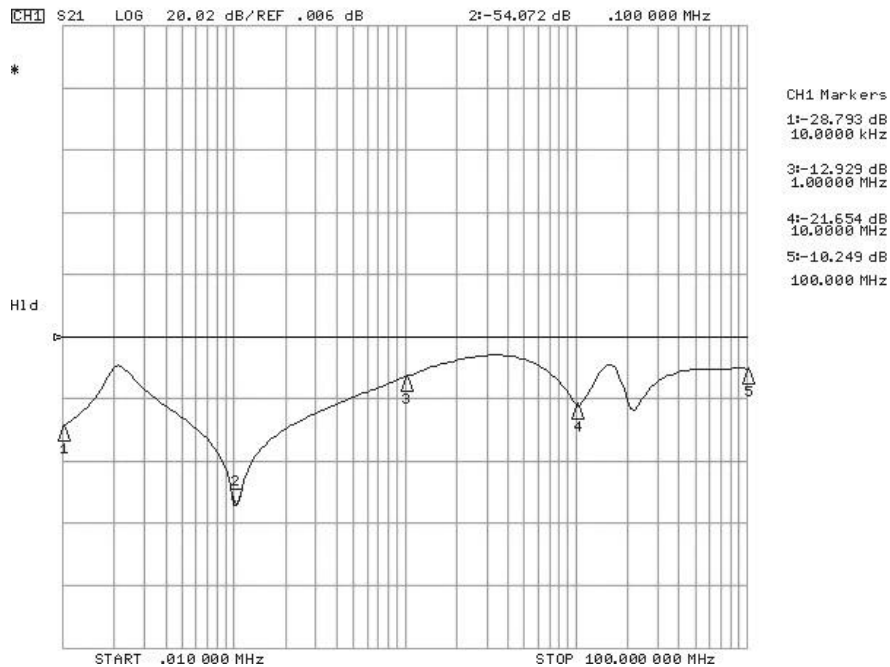
VPR ratings now supersede SVR ratings per UL 1449 3rd Edition Standard, effective Sept. 29, 2009.

IEEE C62.41 Clamping Voltages

Model Type	Cat. B Ringwave 100kHz / 500A				Cat. B/C Low Combination Wave 8x20us 6kV / 3kA				Cat. C High Combination Wave 8x20us 10kV / 10kA			
	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L
TPME120S	441	443	440	719	507	440	444	779	673	547	564	883
TPME120Y	441	443	440	719	507	440	444	779	673	547	564	883
TPME220Y	727	800	792	1340	920	853	850	1543	993	937	1000	1667
TPME240D	n/a	733	n/a	1207	n/a	720	n/a	1413	n/a	840	n/a	1547
TPME240H	437	438	440	789	496	436	444	958	670	548	564	1093
TPME240Y	727	800	792	1340	920	853	850	1543	993	937	1000	1667
TPME277Y	727	800	792	1340	920	853	850	1543	993	937	1000	1667
TPME347Y	832	967	970	1657	1120	1067	1070	1977	1420	1180	1180	2067
TPME480D	n/a	1177	n/a	1643	n/a	1380	n/a	2607	n/a	1547	n/a	2880

EMI -RFI Filtering / Noise Attenuation / Sinewave Tracking

The EMI-RFI noise rejection or attenuation value is measured in accordance with the procedures outlined in NEMA LS 1-1992/MIL -STD-220B. Noise Filter Capability: -50db minimum @ 100kHz.



Fusing

Individually fused Thermally Protected MOV Technology.

Monitoring Features

The SPD is monitored with a green indicating light per each phase, and red service light.
Audible alarm with silencer & test switch
Contacts for remote monitoring (2 amp, 125VAC)-(1 AMP, 30 VDC)
Optional 6 Digit LCD re-settable surge event counter

Connection

Direct Bus Connection. Solid Copper Bus Conductors.

Model Number Suffix Descriptions

P/N Suffix	Description	Mounting	UL Type
AS	Full Equipped With All Monitoring and Filter Options	Factory Installed in GE A-Series Panels	Type 2
ASNF	All Monitoring Features/No Filtering	Factory Installed in GE A-Series Panels	Type 2
ASNC	No Surge Counter or Filtering	Factory Installed in GE A-Series Panels	Type 2
AST1	Full Equipped With All Monitoring and Filter Options	Factory Installed in GE A-Series Panels	Type 1

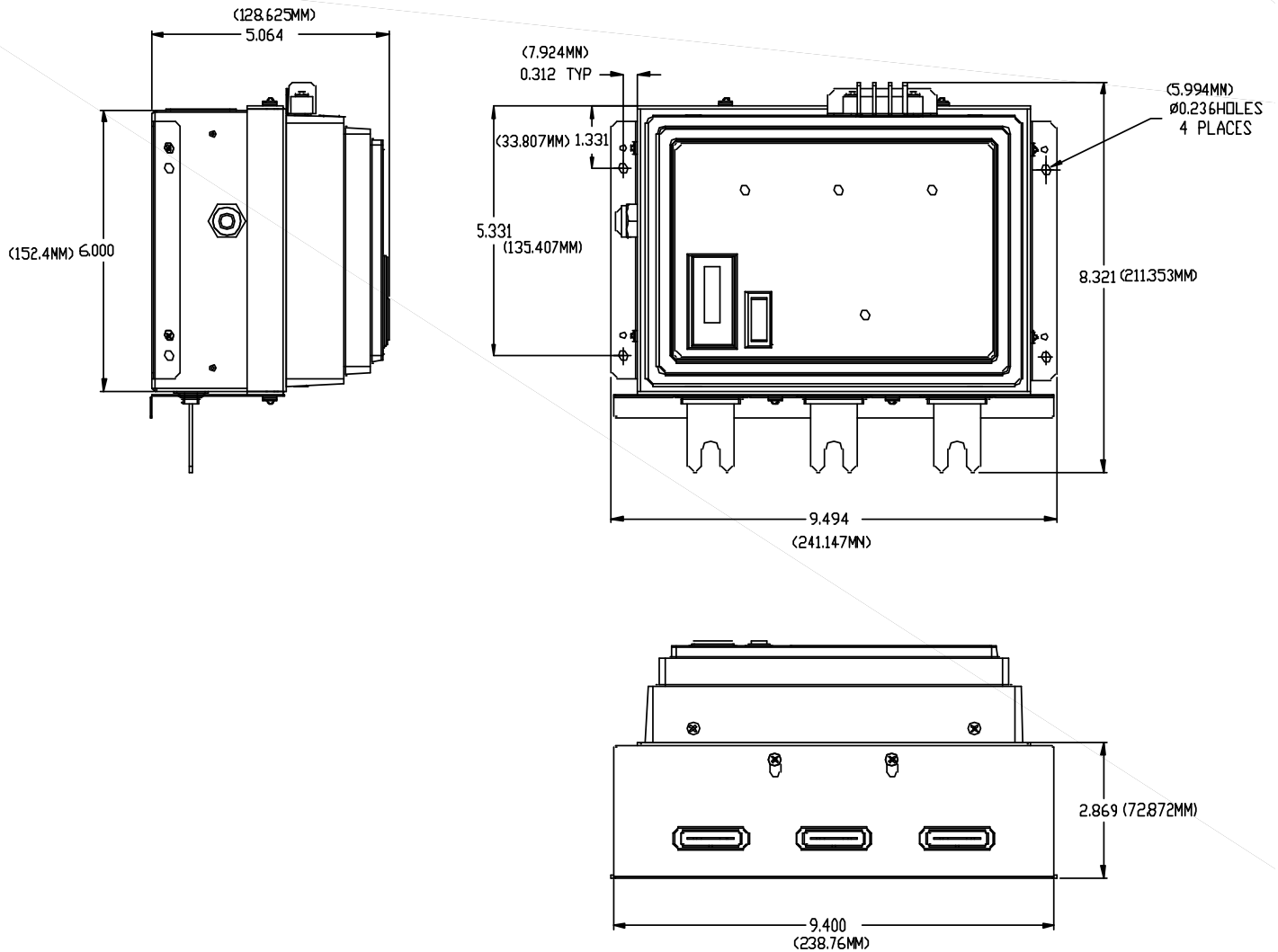
Environmental and External Conditions

Temperature	-40°F (-40°C) to +149°F (+65°C)	Operating Altitude	0 - 12,000 ft (3.66 km)
Surface Temperature	Less than 131°F (55°C)	Humidity	0 -95% RH
Noise	No Audible Noise	Frequency	50/60 Hz

Warranty

Standard GE Terms and Conditions cover the GE SPD for a period of 5 years.

DIMENSIONS



GE Digital Energy – Power Quality
 830 W 40th Street, Chicago, IL 60609 USA
 800 637 1738 www.gepowerquality.com
 Information subject to change without notice.
 Please verify all details with GE.

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