



Performance Specifications

Surge Capacities (L-N, L-G, N-G, L-L)

300kA Per Phase

400kA Per Phase

500kA Per Phase

- UL 1449 Fourth Edition Listed Type 1, CSA 22.2 No. 269.1
- Optional UL 1449-4 Type 2 SPD, UL 1283 Listed, CSA 22.2 No. 269.2
- UL 1449-4 tested Inominal: 20kA
- UL 1449-4 tested SCCR: 200kA & 100kA
- UL 1449-4 Voltage Protection Ratings (VPRs):
 - 208Y/120V: as low as 600V
 - 480Y/277V: as low as 1000V
- Less than 1 nanosecond response time
- Repetitive Impulse: 5,000 hits
- AC Sinewave Tracking Filter with EMI/RFI Filtering up to -50dB from 10kHz to 100MHz (Type 2 option only, incl. UL 1283 Listing)

Diagnostic Monitoring

- 100% monitoring – Every MOV is monitored, incl. N-G
- Green LED Status indicator per phase
- Red LED service indicator
- Audible Alarm with Silence Switch
- Test Function: toggles Red Service LED, Audible Alarm & Dry Contact (if equipped)
- N-G overvoltage detection
- Phase Loss monitoring (toggles LED & dry contacts)
- Electrically isolated circuitry ensures surges do not damage diagnostics
- Two sets of Form C dry contacts, 24V, 2A
- Surge Counter, six-digit LCD, with test function, reset & no-maintenance Eprom memory

Features:

- **UL 1449 Fourth Edition Listed**
- **300kA – 500kA per phase ratings**
- **All UL required OCP & Safety Coordination included inside**
 - Type 1 SPDs intended for Line or Load Side of Main Disconnect
 - Type 2 SPDs intended for Load Side of Main Disconnect
- **20kA Inominal**
- **200kA SCCRs (most models)**
- **UL 96A Lightning Protection Master Label compliant**
- **Voltage Specific Design – Highly configurable**
- **All MOV suppression elements monitored**
- **All Modes of Protection**
- **Optional Rotary Disconnect Switch**

Design Features

- Designed, Manufactured & Tested consistent with:
 - ANSI/IEEE C62.41.1-2002, C62.41.2-2002, C62.45-2002, C62.62-2010, C62.72-2016, IEEE SA 1100-2005 (Emerald Book)
 - NEC® Article 285
 - NEC® Articles 620.51(E), 645.18, 670.6, 695.15, 700.8 and 708 requiring SPDs
 - Complies with UL 96A 12th Edition master label requirements for lightning protection systems and NFPA 780 Lightning Protection
- High Energy Parallel Design for Category C3 & C-High applications
- For External Mounting next to Switchgear, Motor Controls Centers or Panelboards
- Individually Fused & Thermally Protected MOVs
- Large-Block, 34mm square, 50kA MOVs
- Replaceable Module Construction
- Solid State Bidirectional Operation

Physical Specifications

- Relative Humidity Range: 0 - 95% non-condensing
- Operating Frequency: 47-63Hz
- Operating Temperature: -25°C (-15°F) to +60°C (140°F)
- Weight: 24 lbs (11 kg)
- Standard NEMA 1/12/3R/4 enclosure
- Standard size: 12" x 12" x 7" (305mm x 305mm x 177mm)
- Lug size: #2 - #10 AWG (with optional disconnect switch: #8 - #1/0)
- Typical connection: #6 AWG and 60A breaker

Quality, Standards & Validation

- Type 1: UL 1449 Fourth Edition, CSA 22.2 No. 269.1
- Type 2 (Opt.): UL 1449 Fourth Edition, CSA No. 269.2, UL 1283
- UL file: VZCA.E321351 at www.UL.com
- RoHS-compliant
- IEC 61643, CE
- 10 year warranty (longer optional)
- Burn-In tested prior to shipment
- ISO 9001:2008 Quality Management System
- ISO 17025:2005 Laboratory Qualification



TEXAS Model Number Configurator & Options

TE	XAS	X	M
Voltage Code for Electrical System	Surge Current Rating	Options	
<p>Common North American Systems:</p> <p>01 = 240/120V Split Phase - 1Ø 3W+Grnd (Fig 1) 02 = 208Y/120V Wye - 3Ø 4W+Grnd (Fig 2) 03 = 240Y/120V High Leg Delta (B High) (Fig 3) 04 = 480Y/277V Wye - 3Ø 4W+Grnd (Fig 2) 05 = 480V Delta - 3Ø 3W+Grnd (Fig 4) & HRG Wye (450kA replaces 400kA or 500kA)</p> <p>Other Available Systems - Confirmation encouraged:</p> <p>06 = 240V Delta - 3Ø 3W+Grnd (Fig 4) 07 = 380Y/220V Wye - 3Ø 4W+Grnd (Fig 2) 12 = 240V Single Phase (Fig 5) 21 = 220Y/127V Wye - 3Ø 4W+Grnd (Fig 2)</p>	<p>30 = 300kA/Phase 40 = 400kA/Phase 50 = 500kA/Phase</p>	<p>D = Rotary Disconnect Switch, UL98 2 = Type 2 SPD, incl. UL 1283 EMI/RFI Filters</p>	
	Enclosure Rating	Monitoring	
	<p>E1 = NEMA 1/12/3R/4 (size: 12" x 12" x 7") 4X = NEMA 4X Non-Metallic (size: 14" x 12" x 6") (polycarbonate, display inside clear front door) 4S = NEMA 4X Stainless Steel (size: 12" x 12" x 6")</p>	<p>X = Surge Counter, six-digit LCD counter includes maintenance-free Eprom memory backup</p>	

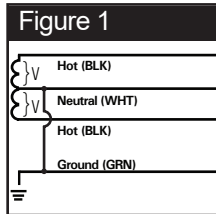


Figure 1
SPLIT
2 Hots, 1 Neu, 1 Grnd

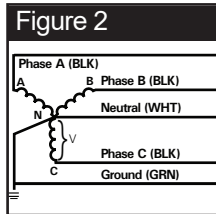


Figure 2
WYE
3 Hots, 1 Neu, 1 Grnd

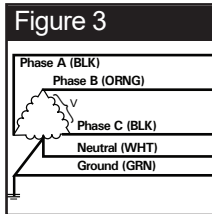


Figure 3
HI-LEG DELTA (B High)
3 Hots, (B HIGH),
1 Neu, 1 Grnd

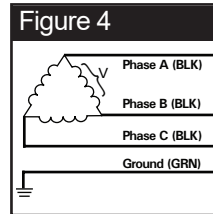


Figure 4
DELTA & HRG WYE
3 Hots, 1 Grnd

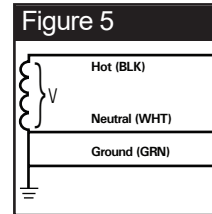


Figure 5
SINGLE POLE
1 Hot, 1 Neu, 1 Grnd

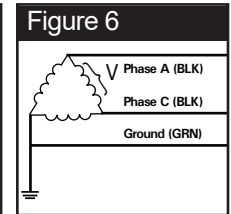


Figure 6
CORNER GROUND
DELTA (B grounded)
3 Hots, 1 Grnd

Performance Data

Common Voltages	UL 1449 Fourth Edition Test Data						
	Voltage Protection Ratings (VPR - 3kA)				I _n	SCCR	MCOV
	L-N	L-G	N-G	L-L			
01 = 240/120V Split Phase (=>300kA)	700	700	700	1200	20kA	100kA	150
02 = 208Y/120V 3Ø Wye (=>300kA)	800	700	700	1200	20kA	200kA	150
03 = 240Y/120V B High Leg Delta	800/1200	700/1200	700	1200/1800	20kA	200kA	150 / 320
04 = 480Y/277V 3Ø Wye (=>300kA)	1200	1000	1200	1800	20kA	200kA	320
07 = 380Y/220V Wye	1200	1200	1200	2000	20kA	200kA	320
21 = 220Y/127V Wye	900	800	800	1500	20kA	200kA	180

Other Available Systems:

Please see supplementary data sheet, contact us at info@pqglobal.com, or confirm at www.UL.com using CCN of VZCA
 Optional disconnect switch may increase VPRs