



Benefits:

- **UL 1449 Fourth Edition Listed**
- **100kA 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 (I_n)**
- **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**
- **10 Year Warranty (longer optional)**

Performance Specifications

Surge Capacities	L-N	L-G	N-G
100kA Per Phase	50kA	50kA	50kA
UL 1449 Fourth Edition Listed			
UL 1449 Fourth Edition Type 1, CSA 22.2 No. 269.1			
Optional UL 1449 Fourth Edition Type 2 SPD, CSA 22.2 No. 269.2			
UL 1449 Fourth Edition tested Inominal (I _n): 20kA			
UL 1449 Fourth Edition tested SCCR: 200kA & 100kA			
UL 1449 Fourth Edition Voltage Protection Ratings (VPRs):			
– 208Y/120V: as low as 600V			
– 480Y/277V: as low as 1000V (data table on back)			
Repetitive Impulse: 5,000 hits			
Less than 1 nanosecond response time			

Physical Specifications

Relative Humidity Range: 0 - 95% non-condensing
Operating Frequency: 47 - 63Hz (also 400Hz on <480V)
Operating Temperature: -40°C (-40°F) to +85°C (185°F)
Weight: 3 lbs (1.4 kg)
NEMA 4X Polycarbonate enclosure – UL 746C(f1) & UL 94-5VA
Dimensions: 8.3" x 3.6" x 3.0" (211mm x 91mm x 77mm)
3/4" threaded hub - weather resistant 4X
Pre-wired with 3' (1m) of #10 AWG conductor
Typical connection: #10 AWG and 30A breaker

Design Attributes

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 & 708 requiring SPDs
– UL 96A and NFPA 780 Lightning Protection
– IEC 61643, CE
High Energy Parallel Design for Category C-High applications
For external Mounting on Electrical Distribution Equipment, Switchgear, Switchboards, Motor Control Centers, Panelboards, Transfer Switches, etc.
Individually Fused & Thermally Protected MOVs
Large-Block, 34mm square, 50kA MOVs
Solid State Bidirectional Operation

Diagnostic Monitoring

100% monitoring – Every MOV is monitored, including N-G
Green LED Status indicator per phase
Phase Loss monitoring (toggles LED & dry contacts)
Electrically isolated circuitry ensures surges do not damage diagnostics
Optional: Audible Alarm & Form C Dry Contacts (Contacts rated 240V, 5A; leads are pre-wired through nipple with #18 AWG)

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 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

Model 425 Number Configurator & Options

425
Model 425
Product Line



Voltage Codes

P
Per Phase
kA Rating
System

10
kA Rating
Per Phase

A
Modes of
Protection
(Default)

W
Connection
Type

**Monitoring
Options**

J
Enclosure

**UL 1449
Type1/Type 2**

**Accessory/
Option(s)**

Common Systems

- 120S = 240/120V Split Phase - 1Ø, 3W+Grnd, (Fig 1)
- 120Y = 208Y/120V Wye - 3Ø 4W+Grnd, (Fig 2)
- 240H = 240/120V High Leg Delta (B High), (Fig 3)
- 277Y = 480Y/277V Wye - 3Ø 4W+Grnd, (Fig 2)
- 347Y = 600Y/347V Wye - 3Ø 4W+Grnd, (Fig2)
- 480D = 480V Delta - 3Ø 3W+Grnd, (Fig4) & HRG Wye

Other Available Systems - Confirmation Encouraged

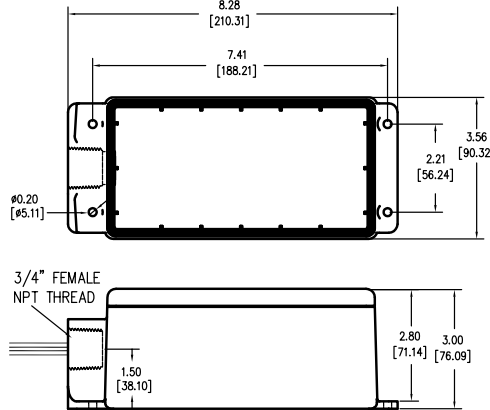
- 120N = 120V Single Phase (Fig 5)
- 127N = 127V Single Phase (Fig 5)
- 127S = 254/127V Split Phase - 1Ø 3W+Grnd, (Fig 1)
- 127Y = 220Y/127V Wye - 3Ø 4W+Grnd (Fig 2)
- 220Y = 380Y/220V Wye - 3Ø 4W+Grnd (Fig 2)
- 230Y = 400Y/230V Wye - 3Ø 4W+Grnd (Fig 2)
- 240N = 240V Single Phase (Fig 5) - Not split phase
- 240S = 480/240V Split Phase, or Two legs of Wye, (Call)
- 240Y = 415Y/240V Wye - 3Ø 4W+Grnd (Fig 2)
- 240C = 240V B Corner Grnd Delta, 3Ø 3W+Grnd (Fig 6)
- 240D = 240V Delta - 3Ø 3W+Grnd (Fig 4)
- 254Y = 440Y/254V Wye - 3Ø 4W+Grnd (Fig 2)
- 277N = 277V Single Phase (Fig 5)
- 277S = 480/240V Split Phase, or Two legs of Wye, (Call)
- 300N = 300V Single Phase (Fig 5)
- 300Y = 520Y/300V Wye - 3Ø 4W+Grnd (Fig 2)
- 480N = 480V Single Phase (1 Hot, 1 Neu, 1 Grnd) (Fig 5)
- 480C = 480V B Corner Grnd Delta, 3Ø 3W+Grnd (Fig 6)
- 600C = 600V B Corner Grnd Delta, 3Ø 3W+Grnd (Fig 6)
- 600D = 600V Delta - 3Ø 3W+Grnd (Fig 4) & HRG Wye

10 = 100kA
W = Wire Leads
S = LEDs
A = LEDs/Audible Alarm/Relay

1 = UL 1449 Type 1
2 = UL 1449 Type 2,

0 = No Trailing Accessory/Option
X = Yes Trailing Accessory/Option

J = NEMA 4X Non-Metallic
(Polycarbonate)
Size - 8.3" x 3.6" x 3.0"



Available Accessories

- (Order Separately)
- XMFMKIT - Flush Mount Kit
 - RM - Remote Monitor

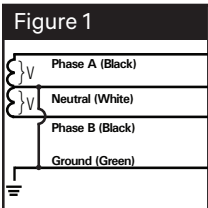


Figure 1
SPLIT
2 Phases, 1 Neutral,
1 Ground

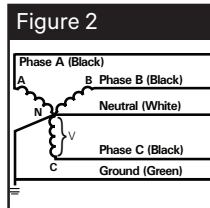


Figure 2
WYE
3 Phases, 1 Neutral,
1 Ground

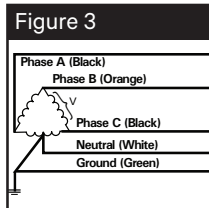


Figure 3
HIGH LEG DELTA
(B High) 3 Phases,
(B High), 1 Neutral,
1 Ground

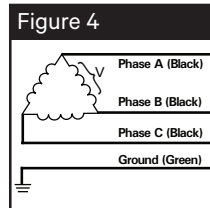


Figure 4
DELTA & HRG WYE
3 Phases, 1 Ground

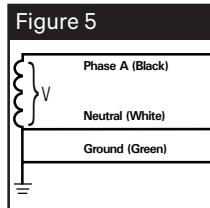


Figure 5
SINGLE POLE
1 Phase, 1 Neutral,
1 Ground

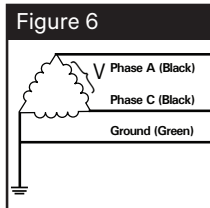


Figure 6
CORNER GROUND
DELTA (B grounded)
2 Phases, 1 Ground

Performance Data

Common Power Systems		UL 1449 Fourth Edition Test Data						
		Voltage Protection Ratings (VPR - 3kA)				I _n	SCCR	MCOV
		L-N	L-G	N-G	L-L			
120S	= 120/240V 1Ø, 3 wire	600	700	500	1000	20kA	100k	150
240H	= 120/240V 3Ø, 4 wire High Leg Delta	600/1200	700/1200	500	1000	20kA	200k	150/320
120Y	= 208Y/120V 3Ø, 4 wire Wye	600	700	500	1000	20kA	200k	150
277Y	= 480Y/277V 3Ø, 4 wire Wye	1200	1200	1000	1800	20kA	200k	320
480D	= 480V 3Ø, Delta	-	1800	-	1800	20kA	200k	552
230Y	= 380Y/220V 3Ø, 4 wire Wye	1200	1200	1000	1800	20kA	200k	320
347Y	= 600Y/347V 3Ø, 4 wire Wye	1500	1500	1500	2500	20kA	200k	420