



### Benefits:

- **UL 1449 Fourth Edition Listed**
- **100kA – 200kA 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<sub>n</sub>)**
- **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
<b>100kA Per Phase</b>	50kA	50kA	50kA
<b>150kA Per Phase</b>	100kA	50kA	50kA
<b>200kA Per Phase</b>	100kA	100kA	100kA
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 <sub>n</sub> ): 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)			
AC Sinewave Tracking Filter with EMI/RFI Filtering up to -50dB from 10kHz to 100MHz (Type 2 option only, incl. UL 1283 Listing)			
Repetitive Impulse: 5,000 hits			
Less than 1 nanosecond response time			

### Physical Specifications

Relative Humidity Range: 0 - 95% non-condensing
Operating Frequency: 47 - 63Hz
Peak Operating Temperature: +85°C (185°F)
Operating Temperature: -25°C (-15°F) to +60°C (140°F)
Weight: 5 lbs (2.3 kg)
NEMA 4X Polycarbonate enclosure – UL 746C(f1) & UL 94-5VA
Dimensions: 6" x 6" x 4" (152mm x 152mm x 102mm) (excluding removable mounting feet)
Lug size: #8 - #10 AWG
Typical connection: #8 AWG and 40A 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 <sup>®</sup> Article 285
– NEC <sup>®</sup> 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 (Contact rated 240V, 5A)

### 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

# Model 430 Number Configurator & Options

**430**

Model 430  
Product Line



Voltage Codes

**P**

Per Phase  
kA Rating  
System



kA Rating  
Per Phase

**A**

Modes of  
Protection  
(Default)

**C**

Connection  
Type

**O**

Monitoring  
Options

**J**

Enclosure

**U**

UL 1449  
Type1/Type 2

**O**

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

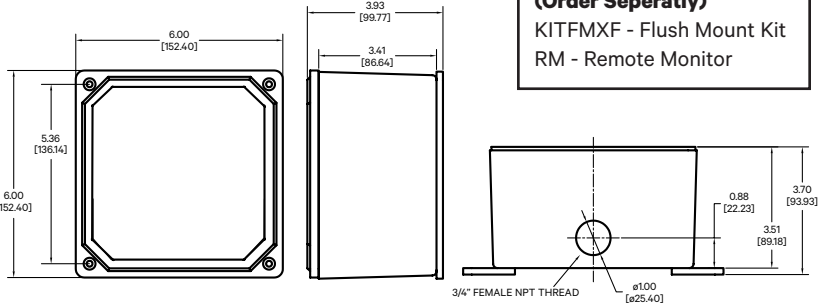
- 10 = 100kA
- 15 = 150kA
- 20 = 200kA

C = Compression  
Lugs or  
Terminals  
(No Wires  
Included)  
(Default)

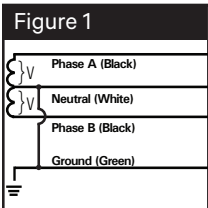
- 1 = UL 1449 Type 1
- 2 = UL 1449 Type 2,  
(Includes UL1283 Filter)
- 0 = No Trailing Accessory/Option
- X = Yes Trailing Accessory/Option

J = NEMA 4X Non-Metallic  
(Polycarbonate)  
Size - 6" x 6" x 4"

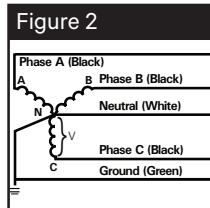
- S = LEDs
- A = LEDs/Audible Alarm/Relay



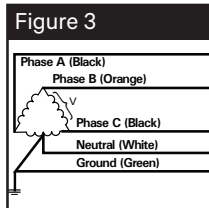
**Available Accessories  
(Order Separately)**  
 KITFMXF - Flush Mount Kit  
 RM - Remote Monitor



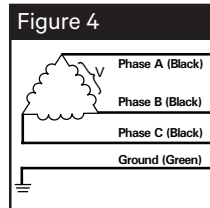
**Figure 1**  
 SPLIT  
 2 Phases, 1 Neutral,  
 1 Ground



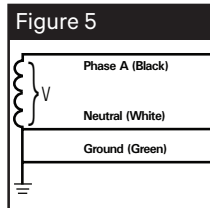
**Figure 2**  
 WYE  
 3 Phases, 1 Neutral,  
 1 Ground



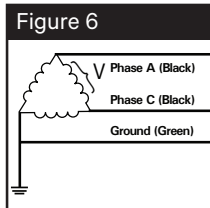
**Figure 3**  
 HIGH LEG DELTA  
 (B High) 3 Phases,  
 (B High), 1 Neutral,  
 1 Ground



**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 <sub>n</sub>	SCCR	MCOV
		L-N	L-G	N-G	L-L			
120S	= 240/120V Split Phase	700	700	600	1000	20kA	100kA	150
120Y	= 208Y/120V 3Ø Wye	700	700	600	1000	20kA	200kA	150
240H	= 240/120V B High Leg Delta	700/1200	700/1200	600	1000/2000	20kA	200kA	150/320
277Y	= 480Y/277V 3Ø Wye	1200	1200	1200	2000	20kA	200kA	320
480D	= 480V 3Ø Delta	-	1800	-	2000	20kA	200kA	552
347Y	= 600Y/347V 3Ø Wye	1500	1500	1500	2500	20kA	200kA	420