400 SERIES
Model 425 (teXCS Series)
Data Sheet

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	□□□□	P	10	A	W	□	J	□	□
Model 425 Product Line	Voltage Codes	Per Phase kA Rating System	kA Rating Per Phase	Modes of Protection *(Default)*	Connection Type	Monitoring Options	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

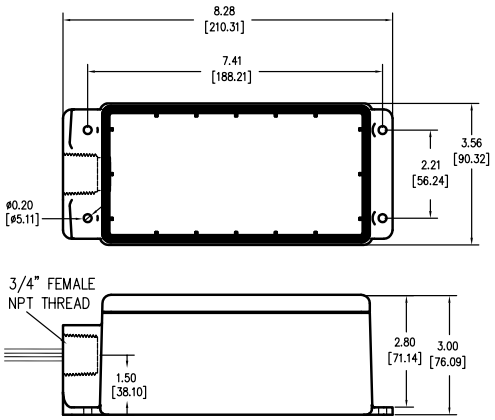
W = Wire Leads

S = LEDs
A = LEDs/Audible Alarm/Relay

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

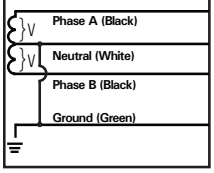
0 = No Trailing Accessory/Option
X = Yes Trailing Accessory/Option

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



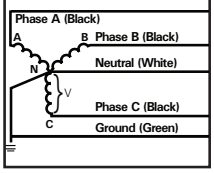
Available Accessories (Order Seperatly)
XMFMKIT - Flush Mount Kit
RM - Remote Monitor

Figure 1



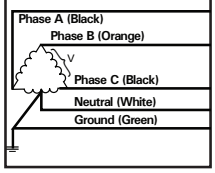
SPLIT
2 Phases, 1 Neutral, 1 Ground

Figure 2



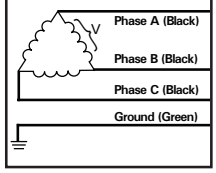
WYE
3 Phases, 1 Neutral, 1 Ground

Figure 3



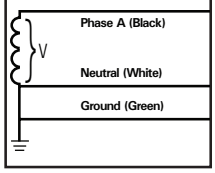
HIGH LEG DELTA
(B High) 3 Phases, (B High), 1 Neutral, 1 Ground

Figure 4



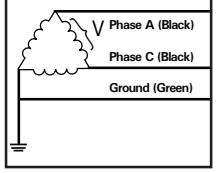
DELTA & HRG WYE
3 Phases, 1 Ground

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

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