ASCO[®]



Performance Specifications

Surge Capacities	L-N	L-G	N-G		
160kA Per Phase (80kA Per Mode)	80kA	80kA	80kA		
250kA Per Phase (125kA Per Mode)	125kA	125kA	125kA		
320kA Per Phase (160kA Per Mode)	160kA	160kA	160kA		
400kA Per Phase (200kA Per Mode)	200kA	200kA	200kA		
500kA Per Phase (250kA Per Mode)	250kA	250kA	250kA		
750kA Per Phase (375kA Per Mode)	375kA	375kA	375kA		
1000kA Per Phase (500kA Per Mode)	500kA	500kA	500kA		
UL 1449 Fourth Edition Listed Type 1 or	Type 2				
UL 1449 Fourth Edition tested Inominal	(I _n): 20kA				
UL 1449 Fourth Edition tested SCCR: 20	0kA				
 UL 1449 Fourth Edition Voltage Protection Ratings (VPRs): 208Y/120V: as low as 700V 480Y/277V: as low as 1000V (data table on back) 					
EMI/RFI Filtering Noise Rejection: - 63dB Maximum - UL 1449 Type 2 SPD (UL 1283) - 25dB Maximum - UL 1449 Type 1 SPD					
100% monitoring – Every MOV is monitored, incl. N-G					
Green LED Status indicator per phase (Redundant LEDs on modules)					
Rea LED service indicator					
Built-In Automated Test Function, Audible Alarm with Silence Switch					
Portional Surge Counter & Dual Surge Countered & digit without & second					
Available Active Surge Meniter (ASM) see pub DS 70116 S SL 70100					
Available Active Surge Monitor (ASM), see pub. DS-70116 & SE-70109					
Physical Specifications					
Relative Humidity Range: 0 – 95% non-condensing					
Operating Frequency: 47-63Hz					
Maximum Operating Temperature: 85°C (185°F)					
Standard NEMA 1/12/3R/4 Steel Enclosure					

Size/Weight vary by Surge Capacity & Disconnect Switch:

- Min: 16" x 12" x 9" (406mm x 305m x 229mm), 35lbs (16kg)
- Max: 20" x 20" x 9" (508mm x 508mm x 229mm), 85lbs (39kg)

Lug size: #14 - #1/0 AWG (Opt. Disconnect: #8 - #1/0 AWG)

Typical connection: #4 AWG and 30-70A circuit breaker

Benefits:

- UL 1449 Fourth Edition Listed
- 160kA 1,000kA per phase ratings (80kA-500kA per mode)
- All UL required OCP & Safety Coordination included inside
 True 1 SDDs intended for Line or Load Side of Main Disconness
 - Type 1 SPDs intended for Line or Load Side of Main Disconnect
 Type 2 SPDs intended for Load Side of Main Disconnect

SERIES 500

Model 560 Data Sheet

- Type 2 SPDs intended for Load Side of Main Disconnec
 20kA Inominal
- 200kA SCCR
- UL 96A Lightning Protection Master Label compliant
- Redundant Replaceable Module Design
- **Optional Rotary Disconnect Switch**
- Voltage Specific Design Highly configurable
- All MOV suppression elements monitored
- All Modes of Protection
- 10 Year Parts, 5 Year Labor Warranty (longer optional)

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 61643-11, Class I & II

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

Robust 25mm round Phenolic Coated MOV Construction

Solid State Bidirectional Operation

Third Party Testing

Single Impulse Tested - Third Party Verified (former NEMA LS-1 style). To Each Mode's Rating Up To Surge Generator Limit Of 200kA

Life Cycle Surge Testing (Repetitive Impulse Testing):				
160kA-240kA	15,000 IEEE C High 20kV, 10kA impulses Per Mode 30,000 IEEE C High 20kV, 10kA impulses Per Phase			
320kA-500kA	30,000 IEEE C High 20kV, 10kA impulses Per Mode 60,000 IEEE C High 20kV, 10kA impulses Per Phase			
750kA-1000kA	45,000 IEEE C High 20kV, 10kA impulses Per Mode 90,000 IEEE C High 20kV, 10kA impulses Per Phase			
Quality, Standards & Validation				
Type 1 UL 1449 Fourth Edition				

Type 2 (Opt.) UL 1449 Fourth Edition, UL 1283, cUL for Canada

UL file: VZCA.E324279

RoHS- compliant

Burn-in tested prior to shipment

ISO 9001:2008 Quality Management System

ISO 17025:2005 Laboratory Qualification

Model 560 Number Configurator & Options





— в —			Disconnect	20" x 20" (508 x 508)	21.25" (540)	14" (356)	85lb (38.6kg)
Figure 1 }V Phase A (Black) }V Neutral (White) Phase B (Black) Ground (Green)	Figure 2 Phase A (Black) A B Phase B (Black) N Neutral (White) V Phase C (Black) C Ground (Green)	Figure 3 Phase A (Black) Phase B (Orange) Phase C (Black) Neutral (White) Ground (Green)	Figure 4 Phase B (Phase C (Ground (C	Black) Black) Black Black Black) Treen)	ie A (Black) tral (White) ind (Green)	Figure	6 V Phase A (Black) Phase C (Black) Ground (Green)
SPLIT	WYE	HIGH LEG DELTA	DELTA & HRG WY	/E SINGLE PC	DLE	CORNER	GROUND

Disconnect

Wire Lua

3 Phases, 1 Ground

20" x 16" (508 x 406)

1 Phase, 1 Neutral,

1 Ground

21.25" (540)

10" (254)

55lb (24.9kg)

DELTA (B grounded)

2 Phases, 1 Ground

16-25

37

(B High) 3 Phases,

(B High), 1 Neutral, 1 Ground

Performance Data

2 Phases, 1 Neutral,

1 Ground

	UL 1449 Fourth Edition Test Data						
Common Power Systems	Voltage Protection Ratings (VPR - 3kA)				SCOD	MCOV	
	L-N	L-G	N-G	L-L	I n	SCCR	IVICOV
120S = 240/120V Split Phase	700V	700V	700V	1000V	20kA	200kA	150
120Y = 208Y/120V 3Ø Wye	700V	700V	700V	1000V	20kA	200kA	150
240H = 240/120V B High Leg Delta	700/1200V	700/1200V	700V	1000/1500V	20kA	200kA	150 / 320
277Y = 480Y/277V 3Ø Wye	1000V	1200V	1000V	1800V	20kA	200kA	320
480D = 480V Delta		1800V		1800V	20kA	200kA	552

Optional rotary disconnect switch may increase VPRs

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3 Phases, 1 Neutral,

1 Ground

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