



**Features:**

- Motorola R56 compliant
- SAD/MOV hybrid or MOV
- UL 1449 Fourth Edition listed
- 160kA per phase ratings (160kA per mode)
- 20kA Inominal
- 200kA SCCR
- Complies with UL 96A 12th Edition Master Label requirements for lighting protection systems
- Redundant replaceable module design
- All SAD and MOV suppression elements monitored
- 10 year parts, 5 year labor limited warranty

**Performance Specifications**

Surge Capacities	
<b>575</b>	Motorola R56 type 2A, February 2017 (previously known as type 1) SAD/MOV SADs: 20kA, MOVs: 160kA per mode, L-N
<b>565</b>	Motorola R56 Type 2B, February 2017 (previously known as type 2) MOVs: 160kA per mode, L-N + EMI/RFI filtering
UL 1449 Fourth Edition listed type 2	
UL 1449 Fourth Edition tested Inominal (I <sub>n</sub> ): 20kA	
UL 1449 Fourth Edition tested SCCR: 200kA	
EMI/RFI filtering noise rejection:	
– 63dB maximum – UL 1449 type 2 SPD (UL 1283)	
Less than 1 nanosecond response time	

**Diagnostic Monitoring**

100% monitoring – every SAD & MOV is monitored
Green LED status indicator per phase (redundant LEDs on modules)
Red LED service indicator
Form C dry contacts, two sets, 250V, 5A

**Physical Specifications**

Relative humidity range: 0 – 95% non-condensing
Operating frequency: 47-63Hz
Operating temperature: -31° F (-35° C) to +104° F (+40° C)
Standard NEMA 4X polymeric enclosure
Size: 15.5 x 13.4 x 8 in. (394 x 340 x 203 mm)
Weight: split phase: 28lbs (12.7kg), three phase: 32lbs (14.5kg)
Lug size: #14 - #2/0 AWG

**Design Attributes**

Designed, manufactured and tested consistent with:
– Standards and guidelines for communication sites
– 68P81089E50-C FEBRUARY 2017 Motorola Solutions, Inc.
– 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
– UL 96A and NFPA 780 Lightning Protection
High energy parallel design for category C high applications
Individually fused and thermally protected SADs and MOVs
25mm round phenolic coated MOV construction
Heavy-duty axial-leaded silicon avalanche diodes (SADs) with precision inductive transitioning circuitry
Solid state bidirectional SADs and MOVs

**Third Party Testing**

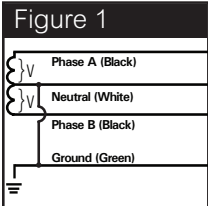
Single impulse tested - third party verified to each mode's rating, up to surge generator limit of 200kA.	
Life cycle surge testing (repetitive impulse testing):	
160kA	15,000 IEEE C High 20kV, 10kA impulses per mode
	30,000 IEEE C High 20kV, 10kA impulses per phase

**Quality, Standards & Validation**

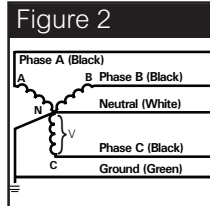
Type 2 UL 1449 Fourth Edition, UL 1283, cUL for Canada
UL file: VZCA.E324279
Operational test performed before shipment
ISO 9001:2008 quality management system
ISO 17025:2005 laboratory qualification

## 575 & 565 Model Numbers

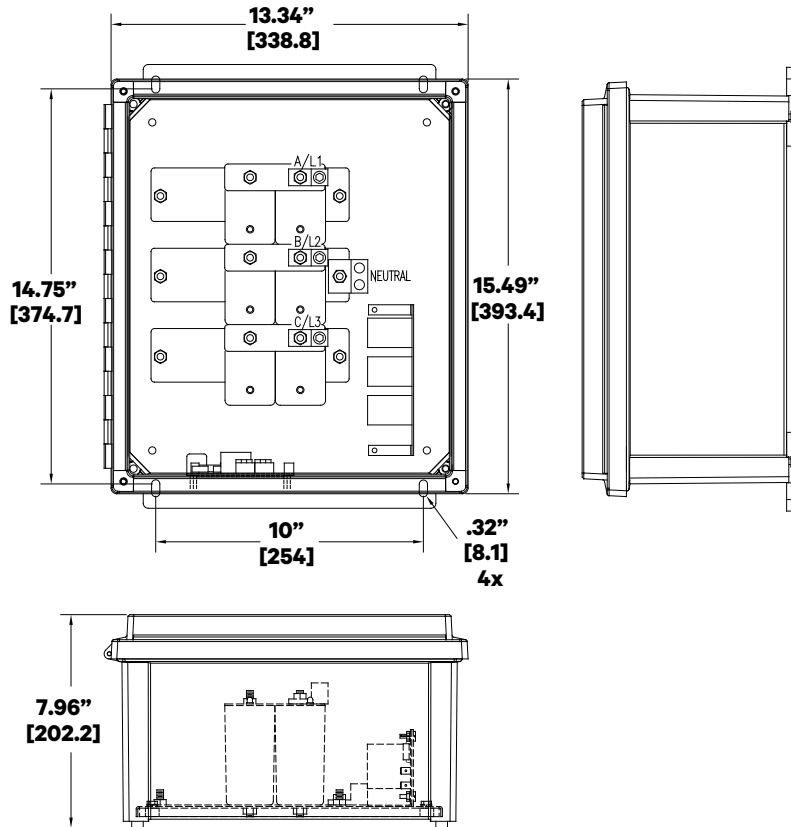
ASCO catalog number	UL legacy part number	Voltage	Motorola R56 type	UL type	cUL type	MCOV
575120SP16FCRJ20	SS550120SFNSP2	120S (Fig 1)	2A	2	2	138
575120YP16FCRJ20	SS550120YFNSP2	120Y (Fig 2)	2A	2	2	138
575277YP16FCRJ20	SS550277YFNSP2	277Y (Fig 2)	2A	2	2	320
565120SP16FCRJ20	SS500120SFNSP2	120S (Fig 1)	2B	2	2	138
565120YP16FCRJ20	SS500120YFNSP2	120Y (Fig 2)	2B	2	2	138
565277YP16FCRJ20	SS500277YFNSP2	277Y (Fig 2)	2B	2	2	320



SPLIT  
2 Phases, 1 Neutral,  
1 Ground



WYE  
3 Phases, 1 Neutral,  
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	= 240/120V split phase	600V	-	-	1000V	20kA	200kA	138
120Y	= 208Y/120V 3Ø wye	600V	-	-	1000V	20kA	200kA	138
277Y	= 480Y/277V 3Ø wye	1000V	-	-	1800V	20kA	200kA	320