

## MGC Surge Protective Device

### MGC 100 kA/Phase Delta Configuration



### MGC 100 kA/Phase Wye Configuration



### General Technical Specifications

- Connection Type: Parallel, Prewired Wire Lead 5ft #10AWG
- Voltage, Phase Configuration: 120/208V Three Phase Wye, (4W+G)  
277/480V Three Phase Wye (4W+G)  
240V Three Phase Delta (3W+G)  
480V Three Phase Delta, (3W+G)  
600V Three Phase Delta, (3W+G)
- Maximum Continuous Operating Voltage: 120V, 150 VAC (125%);  
240V, 320 VAC;  
277V, 320 VAC;  
480V, 550 VAC;  
600V, 690 VAC; All Others 115%
- Surge Capacity: 50 kA/Mode, 100kA/Phase
- Short Circuit Current Rating (SCCR): 200kAIC
- Protection Modes: All Available Modes: L-N, L-L, L-G, N-G
- Operating Frequency Range : 47 - 63 Hz
- UL 1449 Location Type: Type 1 (SPDs intended for Line or Load Side of Main Disconnect) or Type 2 (Intended for Load Side of Main Disconnect)
- Nominal Discharge Current (In): 20 kA
- Status Indication: Dual Colored LEDs, Audible Alarm, Form C Relay
- Enclosure: NEMA 4X Polycarbonate
- Enclosure Size: 9.14" x 5.7" x 4.15" (H x W x D)
- Lifecycle Testing: Tested up 12,000 10kA Impulses - Passed
- 50 Ohm EMI/RFI Attenuation : -50 db max(Type 2), -45db max(Type 1); from 10 kHz to 100MHz. The system provides up to 120dB insertion loss from 100 kHz to 100 MHz when used in a coordinated facility system.
- Response Time: <0.5 nanoseconds
- Operating Temperature: -40°C to +75°C
- Operating Humidity: 0% to 95% non-condensing
- Warranty: 20 Years

### Designed, Manufactured, and Tested Consistent With

- UL 1449 4th Edition
- UL 1283 - Type 2 Devices
- UL 96A Lightning Protection Master Label Compliant
- ROHS Compliant
- CSA C22.2 No. 269.2
- 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 (Now NEC 2020 Article 242)
- NEC Articles 620.51, 645.18, 670.6, 695.15, 700.8 & 708 requiring SPDs
- UL 96A and NFPA 780 Lightning Protection
- IEC 61643, CE

## MGC Surge Protective Device

Part Number Ordering Information					
Product ID		Surge Current Capacity		Voltage & Phase Configuration	
Code	Low Voltage SPD Connection	Code	Capacity	Code	Voltage / Phase
MGS	#12 Wire Lead	050	25kA/Mode; 50kA/Phase	LP FO DP VD SR	120/208V 3 Phase Wye* 277/480V 3 Phase Wye* 240V 3 Phase Delta** 480V 3 Phase Delta** 600V 3 Phase Delta**
MGC	#10 Wire Lead	100	50kA/Mode; 100kA/Phase		
MGD	#10 Wire Lead	150	75kA/Mode; 150kA/Phase		
		200	100kA/Mode; 200kA/Phase		
MGA	Terminal Block 2/0 - #10	200	100kA/Mode; 200kA/Phase		
		300	150kA/Mode; 300kA/Phase		
		400	200kA/Mode; 400kA/Phase		

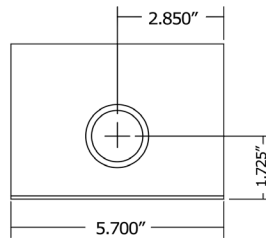
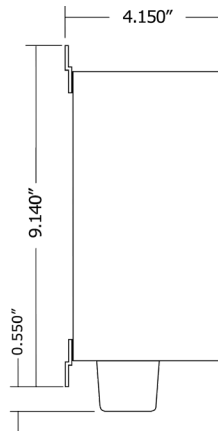
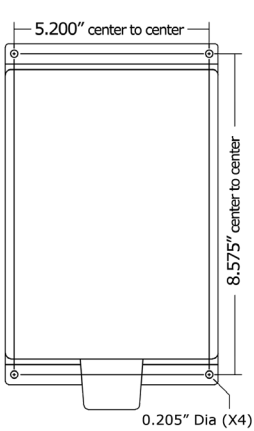
Example Product Number:

**MGC**

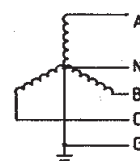
**100**

**VD = MGC - 100VD**

### MGC Dimensional Drawing

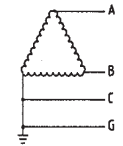


**\*Fig. 1**



Three Phase Wye, 4 W + G

**\*\*Fig. 2**



Three Phase Delta, 3 W + G

### System Voltage Compatibility

Model Voltage/Phase Code	Nominal System Voltages	System Configuration	MVOC	SCCR	UL 1449 Voltage Protection Rating			
					L-N	L-G	N-G	L-L
LP - 120/208V 3 Phase Wye	120/208; 127/220	3 Phase, 4 Wire + Ground	150	200kA	600	700	700	1200
FO - 277/480V 3 Phase Wye	220/380; 240/415; 277/480	3 Phase, 4 Wire + Ground	320	200kA	1200	1200	1200	2000
DP - 240V 3 Phase Delta	220; 230; 240	3 Phase, 3 Wire + Ground	320	200kA		1200		1200
VD - 480V 3 Phase Delta	380; 400; 415; 440; 460; 480	3 Phase, 3 Wire + Ground	550	200kA		1800		2000
SR - 600V 3 Phase Delta	525; 600	3 Phase, 3 Wire + Ground	690	200kA		2000		2500