



# Surge Protection

**LIGHTNING** is the most obvious source of a power surge, but not the only culprit. Cycling of Air Conditioners, Generators, Motors and Appliances can also produce damaging surges.

**Protect your equipment with SUPCO's Surge Arrestors.**

**With multiple levels of protection, SUPCO can cover all of your needs.**

## FEATURES/BENEFITS

- Easy Installation at Disconnect or Panel
- Weatherproof Housing
- Green LED to indicate Surge Protection is present

## APPLICATIONS

### SURGE PROTECTION FOR:

- Air Conditioning Compressors
- Heat Pump Compressors
- Refrigeration Compressors
- Pumps
- Motors
- Electro-Mechanical Devices

## VALUE ADDED CONTRACTOR BENEFITS

- Promote Additional Profits
- Reduce Callbacks
- Keep Equipment Running
- Increase Customer Referrals

**\* Contact us for a FREE Contractor Marketing Kit**



**SEALED UNIT PARTS CO., INC**  
PO Box 21, 2230 Landmark Place, Allenwood, NJ 08720 USA  
Phone: 732-223-6644 Fax: 732-223-1617  
www.supco.com • info@supco.com

# SCM60 & SCM150 Surge Arrestors

## Surge Protector Operation

Both the SCM60 and SCM150 use a diagnostic LED connected at each phase wire to indicate power, ground and surge protection present. Their unique “lattice array” design provides an unmatched level of protection against damaging surges.



## SPECIFICATIONS

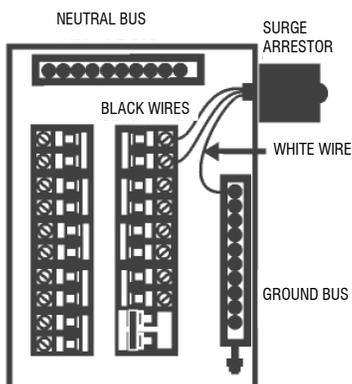
	SCM60	SCM150
Service Voltage	120/ 240 Volt, Single Phase	120/ 240 Volt, Single Phase
Maximum Surge Current	60,000 Amps	100,000 Amps
AC Protection Modes	L-L, L-G	L-L, L-G
Voltage Protection	600V L-G	600V L-G
Rating (VPR)	1200 V L-L	1200 V L-L
Response Time	< 5 ns	< 5 ns
Operating Frequency	0 – 400 Hz.	0 – 400 Hz.
Nominal Discharge Current (In)	10,000 Amps	10,000 Amps
Short Circuit Current Rating (SCCR)	10,000 Amps	10,000 Amps
Max. Current Over Voltage (MCOV)	150V L-G 300V L-L	150V L-G 300V L-L
Diagnostics	Green LED lit - Indicates Surge Protection Present	Green LED lit – Indicates Surge Protection Present
Installation Point	Electrical Panel, Electrical Disconnect	Electrical Panel, Electrical Disconnect
Connection Method	Hardwired parallel	Hardwired parallel
Agency Approvals	UL, cUL, ANSI/ IEEE C62.11	UL, cUL, ANSI/ IEEE C62.11
Housing	High Impact Plastic	High Impact Plastic
Housing Size	2 7/8" x 3 3/4" x 2"	2 7/8" x 3 3/4" x 2"
Weight	1 lb.	1 lb.
Warranty	Limited Lifetime	Limited Lifetime

## Wiring The Surge Protector

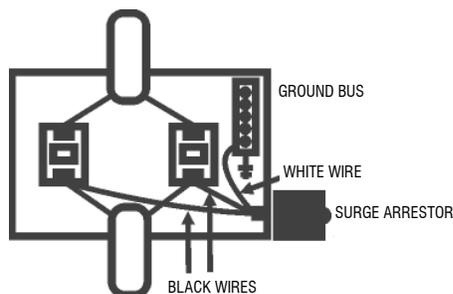
The SCM60 & SCM150 include two black wires and one white wire. Various connections are described below.

A surge protector works by shunting the voltage to ground. A good ground is imperative. The National Electrical Code (NEC) maximum resistance at ground is 25 ohms.

### CONNECTION AT ELECTRICAL PANEL



### CONNECTION AT AIR CONDITIONING DISCONNECT



### WIRE CONNECTIONS

#### 120 VOLT WIRING

- Black to Hot
- Black to Neutral
- White to Ground

#### 240 VOLT WIRING

- Black to Hot
- Black to Hot
- White to Ground

# 3 Phase Surge Arrestors

## SYCTC2403D & SYCTC4803D

- 208, 240, 480 volt three phase protection
- 50,000 amps protection, per phase
- Diagnostic Light for each phase



### SPECIFICATIONS

	<b>SYCTC2403D</b>	<b>SYCTC4803D</b>
Service Voltage	240 Volt, 3 Phase Delta	480 Volt, 3 Phase Delta
Maximum Surge Current	50,000 Amps per mode, 150,000 Amps total	50,000 Amps per mode, 150,000 Amps total
AC Protection Modes	L-L, L-G	L-L, L-G
Response Time	< 5 ns	< 5 ns
Operating Frequency	0 – 400 Hz.	0 – 400 Hz.
Diagnostics	Green LED lit - Indicates Surge Protection Present	Green LED lit – Indicates Surge Protection Present
Installation Point	Load side of Breaker	Load side of Breaker
Connection Method	Hardwired parallel	Hardwired parallel
Wire gauge, length	12 AWG, 18” long	12 AWG, 18” long
Agency Approvals	UL, cUL, ANSI/ IEEE C62.11	UL, cUL, ANSI/ IEEE C62.11
Housing	High Impact Plastic	High Impact Plastic
Housing Size	5 3/4 “ x 6 1/2 “ x 3”	5 3/4 “ x 6 1/2 “ x 3”
Weight	4 lbs.	4 lbs.
Warranty	10 years	10 years

\* Note: SYC-TC240-3D can be used in 208/240 Delta applications.

# Low Voltage Circuit Surge Arrestors

## SYC2P27B

- For Control Circuit applications
- Single pair, bi-directional protection
- One Surge Arrester per circuit



### SPECIFICATIONS

Service Voltage	0-24 AC or DC
Clamping Voltage	38 VDC or 27 VAC
Response Time	< 5 ns
Installation	Parallel Hardwire
Housing Size	2"x2"x1"
Weight	1 oz.
Warranty	Limited Lifetime
Connected Equipment Gaurantee	N/A



## ELECTRO-MECHANICAL CONNECTED EQUIPMENT GUARANTEE SUPCO SCM60 & SCM150

### Connected Equipment Guarantee:

The connected equipment guarantee applies to standard residential electro-mechanical appliances. Strictly electronic components (e.g. microprocessors and circuit boards) are not included in this guarantee. SUPCO will replace or pay to repair, up to \$500 per occurrence\* with a lifetime cap of \$10,000, any electromechanical or motor-driven appliance that is damaged by a voltage surge passing through the surge protector to the equipment.

The SUPCO Surge Protector must show signs of surge damage or be operating outside of design specifications. In order to be eligible for this connected equipment coverage the surge protector must be installed in the immediate vicinity of the equipment being protected. For instance, an A/C compressor unit must be protected no further away than the disconnect. The inside air handler may be protected at the nearest panel box but inside the same building.

**PERIOD OF COVERAGE: 3 YEARS FROM DATE OF INSTALLATION.**

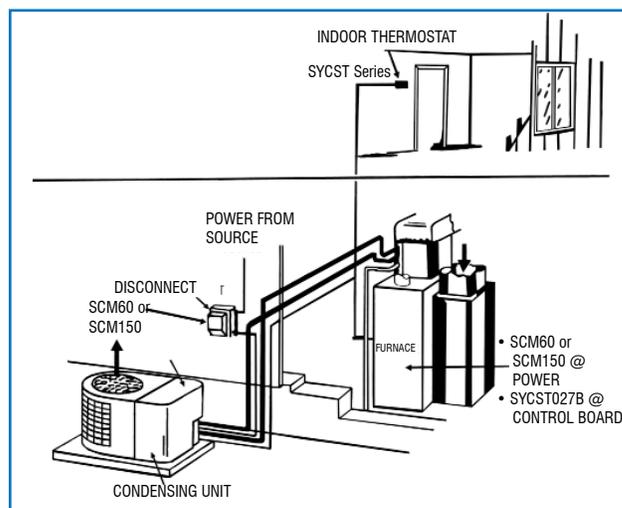
\* \$500 per occurrence for the SCM60.

\* \$1000 per occurrence for the SCM150.

### Claim Procedure:

If you want to make a claim you must first contact customer service at 1-800-333-9125 for a return authorization number to return the defective surge protector. You must notify SUPCO® at this time if you believe you have a connected equipment claim. SUPCO® will send you an information packet to be completed and returned within 20 days. SUPCO® reserves the right to inspect the damaged equipment. Once SUPCO® has determined that you are entitled to compensation for your claim, SUPCO® will at its option, pay the present fair market value of the damaged equipment, send you replacement equipment or pay for the cost of the repair.

### HVAC Installation Points



F431 - 05232011

### SEALED UNIT PARTS CO., INC

PO Box 21, 2230 Landmark Place, Allenwood, NJ 08720 USA

Phone: 732-223-6644 Fax: 732-223-1617

www.supco.com • info@supco.com