

CONNECTION AT AIR CONDITIONING

DISCONNECT (Fig. 1)

GROUND BUS

WHITE WIRE

SURGE ARRESTOR



Lightning is the most obvious source of a power surge, but not the only culprit. Cycling of Air Conditioners, Refrigeration Systems, Generators, Motors and Appliances can also produce damaging surges. SUPCO's Surge Arrestors provide two levels of protection.

INSTALLATION INSTRUCTIONS

WIRING DIAGRAM:

These devices include two black wires and one white wire. A surge protector works by shunting the voltage surge to ground. A good ground is imperative. The National Electric Code (NEC) maximum resistance at ground is 25 ohms.

240 Volt Wiring

Black to Hot

Black to Hot

Black to Hot

Black to Neutral

White to Ground

White to Ground

A/C Disconnect Installation (For HVAC Applications): (Fig. 1)

Although the SCM60 or SCM150 can be installed at the main breaker panel, SUPCO recommends installation at the service disconnect for the A/C condenser. The surge arrestor is a simple three (3) wire installation that should take no more than 5 minutes to complete.

- 1. Turn off the main power to the service disconnect and meter test for safety.
- 2. Remove a knockout from the disconnect.
- 3. Remove the retaining ring from the nipple on the SCM60 or SCM150.
- 4. Feed the nipple and wire into the service disconnect.
- 5. Re-secure with the retaining ring.
- 6. Route the white wire to the grounding lug and secure.
- 7. Secure the two (2) black wires to the LOAD side lugs of the disconnect.

In 120V and 240V applications, once power is restored the green LED will light to indicate SURGE PROTECTION IS PRESENT, GROUND IS PRESENT AND POWER IS ON.

Electrical Panel Installation: (Fig. 2)

- 1. Turn off main breaker
- 2. Remove the front cover from the panel.
- 3. Remove 1/2" knockout on side of panel box.
- 4. Mount unit through the knockout to the side of the panel.
- 5. Secure white wire to the grounding bus.
- 6. Connect the black wires to the load side of the closest two pole breaker.
- 7. Connected wiring must be kept short.
- 8. Replace front cover of panel box.

INSTALLATION TIPS:

1. Never sharply bend the surge arrestor wires during termination. Offer the surge as straight a pathway to ground as possible.

2. Always keep the surge arrestor wires as short as possible to increase the effectiveness and response time of the unit.

CONNECTION AT ELECTRICAL PANEL (Fig. 2)

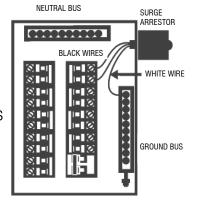
3. Always keep the protector at least 3 ft. from the equipment that you want to protect.

This allows response time for the protector to do its job before the transient gets to the protected equipment.

FOR FURTHER INFORMATION CONTACT TECHNICAL SUPPORT AT 1-800-333-9125

LIMITED LIFETIME WARRANTY FOR STANDARD INDOOR RESIDENTIAL AND COMMERCIAL SURGE PROTECTORS

Thank you for choosing a SUPCO surge protection product to protect your equipment. You will be pleased to know that SUPCO surge arrestors will proved you with years of security and protection.



LIMITED LIFETIME WARRANTY AGAINST MANUFACTURING DEFECTS;

SUPCO warrants these surge arrestors to be free of all defects in workmanship or material for the lifetime of the original purchaser and that SUPCO will repair or replace any defective unit. Warranty registration must be completed within 15 days after date of installation. This is easily done by going to our website, www.supco.com, and clicking on "Warranty Registration" on the home page. Follow the simple instructions to submit your information.

SUPCO surge arrestors are designed to dissipate the damaging effects of momentary voltage spikes or other transient power surges including impulses from lightning. They are not warranted against direct lightning, continuous over voltage, over current or dropped neutrals.

Warranty Registration must also be completed to be eligible for Electro-Mechanical Connected Equipment Guarantee.

Proper Installation:

SUPCO AC surge arrestors must be connected in accordance with SUPCO's installation instructions. Building wiring must conform to National Electric Code or Canadian Electric Code. All wires leading into the protected equipment must pass through a single SUPCO surge arrestor.

ELECTRO-MECHANICAL CONNECTED EQUIPMENT GUARANTEE FOR 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.

SPECIFICATIONS		
	SCM60	SCM150
Service Voltage	120/240 Volt,	120/240 Volt,
	Single Phase	Single Phase
Total Surge	60,000 Amps	100,000 Amps
Current		
AC Protection	L–L, L-G	L-L, L-G
Modes		
Response Time	<5ns Installed	<5ns Installed
Operating	0 – 400 Hz .	0 – 400 Hz.
Frequency		
Diagnostics	Indicator light –	Indicator light –
	Surge Suppression	Surge Suppression
	Present	Present
Class	Type 2	Type 2
	SPD	SPD
Installation Point	Electrical Panel,	Electrical Panel,
	Electrical Disconnect	Electrical Disconnect
Connection	Hardwire Parallel	Hardwire Parallel
Method	Connection	Connection
Agency Approvals	UL, cUL,	UL, cUL,
	ANSI/IEEE C62.11	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	1.15 lbs	1.15 lbs
Warranty	Limited Lifetime	Limited Lifetime





Refer to and abide by all Local and State Electrical Codes for proper installation of these devices.



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