

Arc Suppression Devices

Improving the Life of Your Zone Monitor

Inductive loads from high-voltage machines can affect the performance of your Zone Monitor. Arcing between relay contacts may cause early failure of your Zone Monitor's relay contacts and nuisance shutdowns.

To protect your Zone Monitor system against this problem, Larco recommends the installation of arc suppression devices (or snubbers), electronic components designed to eliminate contact arcing and suppress unwanted electrical noise in relay and switch contacts.

What is an Arc Suppression Device?

An arc suppression device is an electrical component comprised of capacitors and resistors connected in series with each other. The capacitor absorbs peak voltage surges and the RC combination smoothes the waveform and absorbs high frequency oscillations.

What are the benefits of Arc Suppression Devices?

Arc suppression devices effectively suppress arcing caused by back electromotive force and dampen high frequency oscillation. In addition, they can be used in the following applications:

- To protect contacts from problems caused by electrical noise during switching operations of radio, TV, tool machine equipment, packaging machinery and other equipment.
- To protect electronic instruments while relays, solenoids and motors are in operation.
- To protect semiconductor devices during control of triacs, thyristors, motors, welders, illumination equipment and other machines.
- To extend relay life.
- To eliminate or reduce electronic noise that can negatively affect nearby electronic devices.

How Do You Select an Arc Suppression Device for a Particular Application?

Larco recommends selecting an arc suppression device according to your specific machine circuit load characteristics. Check with your manufacturer regarding specifications for your particular device. Some suppliers manufacture their own arc suppression devices designed specifically for the component they manufacture.

WARNING!! Never install an arc suppression device across the machine control contacts of your Zone Monitor. If your arc suppression device fails to a shorted condition in this position, it would allow your machinery to continue to operate regardless of the Zone Monitor's output signals.



Protect Your Zone Monitor Safety Mat Control System by installing Arc Suppression Devices (RC Networks or Snubbers).