



In observance of Independence Day, our office will be closed July 5th.

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### Arc Flash - Focus on Safety

Throughout our industry, both in manufacturing, installation and operation, safety is a major concern. One of the greatest hazards facing those in the field today is **Arc Flash**. Arc Flash is basically an explosion of energy often times resulting in severe injury and damage to equipment. The costs of medical treatment and equipment repair or replacement due to these incidents can be great. It is more important than ever that employers be diligent in their effort to provide a safe working environment.

Both **OSHA** and **NFPA** codes outline regulations and requirements for employers to assist them in compliance and to protect employees from hazards such as Arc Flash.

Specifically, OSHA regulations address the need to employ safety related work practices for prevention of electric shock and other injuries caused through both direct and indirect electrical contact.



The NFPA requirements identify actions that employers must engage in to reach compliance. These actions include safety programs, providing personal protective equipment (PPE), employee training, proper tools for working safely, warning labels and Arc Flash Hazard Analysis.

For more information regarding the dangers of Arc Flash, prevention of incidents and compliance visit the following websites:

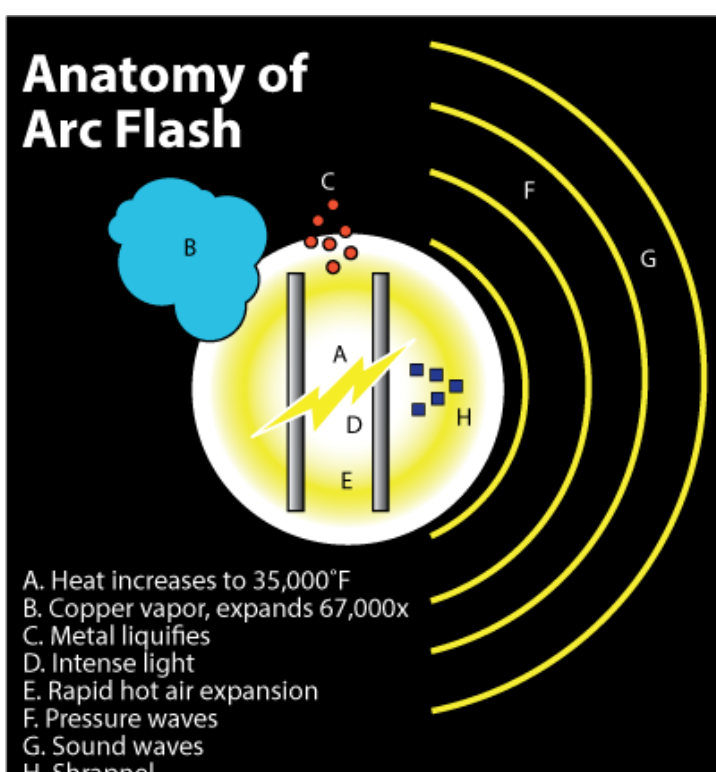
[www.osha.gov](http://www.osha.gov) (OSHA code 29)

[www.nfpa.org](http://www.nfpa.org) (NFPA 70)

### Anatomy Of Arc Flash

Arc Flash can be described as an immediate release of energy or more simply a “ball of fire”. The amount of energy released during a flash can vary but, in most cases, will be extremely destructive to the equipment and physically harmful to those personnel nearby. The resulting injuries from such extremes can be quite serious and possibly life threatening.

- Intense heat can severely burn skin or ignite clothing resulting in additional burns.
- The intense heat can also liquefy metal and the blast can launch this molten metal into the air causing physical trauma.
- Vaporized copper and other materials create a “toxic smoke” contaminating the air and potentially being inhaled by those in its path.
- Intense light and sound waves can damage vision and hearing.
- An enormous pressure wave has the ability to rupture ear drums or collapse lungs. The force can also be great enough to knock a person down or throw them into nearby equipment or structures causing additional injury.
- The explosion can be strong enough to cause shrapnel to project away from the source and inflict injuries to anyone close by.



### NEC Article 409 - The Basics


When the 2005 Edition of the National Electrical Code® (NEC®) was released in January of 2005, an addition to the code known as Article 409 went into effect. This article provided new minimum requirements for the design, installation and inspection of Industrial Control Panels (ICPs). It was no surprise that we at EPG took notice and immediately began to identify how this would impact our design and manufacturing process and what affects these new requirements would have on our current and future customers. We wanted to be certain we were providing reliable, high quality and most importantly, safe equipment. We will try to provide you with a basic understanding of this new article and encourage you to educate yourselves to insure that your facility is in compliance and operating under the safest conditions possible.

**Article 409** states “This article covers industrial control panels intended for general use and operating at 600V or less.” One significant item to note is how the control panel is to be marked for its short circuit current rating (SCCR). In the past, control panels were rated based on their individual withstand potential. Now, the SCCR must be based on the highest withstand potential, taking into account the potential load of the entire circuit ahead of the panel itself.

#### What is EPG doing to comply?

All of EPGs UL 508A control panels will be marked with the Short Circuit Current Rating (SCCR). This information will be found on the control panel’s serial number label. This will indicate to the owner and/or installer how much short circuit current the panel power components can withstand.

It is the responsibility of the owner and/or installer to understand the proper level of Personal Protective Equipment(PPE) required to work with or service control panels under powered conditions. It is also the responsibility of the owner and/or installer to label all equipment with these requirements.



PANEL MODEL: L925PT  
SERIES CODE: NA  
SERIAL NO: XX-XXXX

VOLTS: 230VAC      PH: 1      HERTZ: 60

TOTAL AMPS (PANEL): 13.81

SHORT CIRCUIT CURRENT RATING:15K AMPS RMS

PANEL IS TO OPERATE PUMP:

MOTOR: HP: 2   VOLTS: 230VAC   PH: 1   FLA: 10.0

ENCLOSURE IS RATED: NEMA 4, UL TYPE 4



What solutions can EPG provide? EPG can evaluate each installation individually and recommend solutions to improve safety at your site.

#### Key Points:

- The ultimate goal of Article 409 is to facilitate the safe and proper installation and use of Industrial Control Panels.
- The objective is to prevent injury due to electrocution and Arc Flash.
- The manufacturer is required to mark the equipment with the proper short circuit current rating (SCCR).
- It is the responsibility of the owner/installer to label the equipment to indicate proper personal protective equipment (PPE).

If you have any questions about the information above, please call EPG at **1-800-443-7426**.

### Industry Events

*This list of events is updated each month.  
We will do our best to keep the list accurate when published.*

**Jul 11-13 Missouri Waste Control Coalition Conference**  
Ozark Beach, MO (The Reich Co. Exhibiting)

**Aug 16-18 Wyoming Solid Waste & Recycling Conference**  
Saratoga, WY (The Reich Co. Exhibiting)

**Sep 7-9 Arkansas SWANA Conference**  
Springdale, AR (The Reich Co. Exhibiting)

**Sep 15-17 Louisiana Solid Waste Assoc. Conference**  
Lafayette, LA (The Reich Co. Exhibiting)

**Oct 5-7 Kansas SWANA Solid Waste Mgmt. Conference**  
Mulvane, KS (The Reich Co. Exhibiting)

**Nov 1-3 SWANA Colorado Conference**  
Boulder, CO (The Reich Co. Exhibiting)

**Nov 4 ESD Solid Waste Technical Conference**  
East Lansing, MI (EPG Exhibiting)

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