

Arc flash safety services and training

With energized equipment comes arc flash risk. Understanding that risk; ensuring compliance with NFPA, NEC® and OSHA®; and properly protecting personnel is critical. Our team of experts offers arc flash safety services and training to help you achieve, and sustain, a safe workplace.

Is your electrical system safe?

OSHA can use NFPA 70E® to establish whether or not you are providing a safe work place, as required in Section 5(a)(1) typically referred to as the “General Duty Clause.”

Similarly, in OSHA enforcement actions, the provisions in NFPA 70E can be used as evidence of whether the employer acted reasonably to ensure a safe workplace.

Although NFPA 70E is not law until adopted by a regulatory body, it is clear that NFPA 70E can be used in enforcement actions by OSHA and may also be used in a similar way in civil actions.

By complying with these standards, an employer can minimize their risks and potential costs while providing a safer workplace for their employees.

Has your facility completed an arc flash risk assessment?

Has your electrical system remained unchanged within the last five years since the assessment?

Has your team completed electrical safety training within the last 3 years?

If you answered no to any of these questions, your personnel and facility may be at risk.

We'll help you become a safe workplace

Minimizing arc flash hazards and ensuring a safe, reliable electrical system are essential in providing a safe workplace. Whether you need a complete arc flash risk assessment, an update to an existing assessment, or training for your team, we're here to get you what you need — so that at the end of the day, every team member goes home safe.



SERVICES

For an arc flash risk assessment, our team completes all five services. To update an existing arc flash risk assessment, we can perform any number or combination of these services.

System one-line diagram

Facility safety starts with an accurate one-line diagram of all power sources, switching capabilities and other circuit parameters.

Fault current analysis

State-of-the-art engineering software is used for a fault current analysis to determine, at designated points, the available fault current levels.

Overcurrent protective device analysis

Evaluating operating characteristics of overcurrent protective devices, including relays, fuses and circuit breakers determines how they interact and the level of protection they provide.

Arc flash hazard analysis

With fault current and overcurrent protective device time-current characteristics studies performed, an arc flash hazard assessment can be made for each designated point in the system.

Arc flash hazard label production

Proper equipment warning labels to ensure compliance with codes and safety standards by marking key safety parameters.

ADDITIONAL SERVICES

These studies, audits, predictive maintenance solutions and training can be added to an arc flash risk assessment to further advance the safety of your electrical system.

Power system studies

Power system studies offer the most focused and systematic approaches available to enhance power system performance and identify inefficient system designs, incorrect equipment selection and potential problems between your equipment and the rest of the power system.

Power quality and reliability studies

We use power quality and reliability studies to evaluate the safety levels and the reliability of your electrical infrastructure. These studies usually include harmonic, grounding, voltage flicker and surge suppression analyses to ensure the power quality to sensitive loads.

Selective coordination review

To maximize the reliability of your facility's electrical system, we evaluate portions of the electrical power systems to determine compliance with selective coordination requirements as mandated by the 2020 NEC. Based on manufacturers' test data and published overcurrent protection characteristics, recommended modifications to the system design are outlined to achieve complete selective coordination up to the available fault current.

Power chain audits

Through analysis, monitoring and equipment audits, Eaton's experienced engineers uncover existing problems and develop strategies to prevent future system distress. We have the expertise to identify design weaknesses, determine the reason that something failed to operate properly, find means of resolving system safety or performance and implement improvements.

Maintenance and support services

In the event that you need OEM equipment serviced and upgraded, Eaton has the expertise and the ability to work on virtually all manufacturers' equipment. With an outstanding electronic library of OEM user and maintenance manuals, we can deliver a comprehensive maintenance program to your equipment every time.

Operational and maintenance training

Eaton offers both standardized and customized training programs that reflect the full range of electrical system engineering disciplines, including distribution systems analysis, power quality and grounding, arc flash safety and electrical equipment maintenance. Taught by an experienced instructor at one of our training facilities or on-site, these courses involve classroom instruction complemented by hands-on exercises that reflect real workplace situations. Additionally, many courses award CEU credits for an additional charge.

Mitigation strategies and incident energy reduction

Services for elimination, substitution, engineering controls, awareness, administrative controls and PPE.

TRAINING

With ever-increasing requirements of NFPA 70E, NFPA 70® (NEC) and OSHA for a safe workplace, we're here to help you. Our experts provide training to help improve electrical safety and meet regulatory requirements. Your electrical workers are trained on electrical safety and awareness, regulations, electrical hazards and how to properly follow arc flash warning label information. Led by a certified engineer, our training options are ideal for maintenance staff, machine operators, electricians, supervisors, or facilities staff. Professional Development Hours (PDHs) are given upon completion of the 4-hour and 8-hour sessions only.

	2-hour Virtual only	4-hour Virtual or in-person	8-hour In-person only
REGULATIONS, STANDARDS AND CODES	✓	✓	✓
WORKING WHERE A HAZARD EXISTS	✓	✓	✓
Safe working conditions and exceptions	✓	✓	✓
Arc flash hazards	✓	✓	✓
Incident energy and arc flash boundary		✓	✓
SELECTING AND USING PPE AND INSULATED TOOLS	✓	✓	✓
Responsibilities when using PPE	✓	✓	✓
PPE for electrical work	✓	✓	✓
Selecting arc-rated garments and other PPE	✓	✓	✓
Selecting and using insulated tools		✓	✓
WORKING SAFELY			✓
Understanding hazards and maintaining a safe work area			✓
Emergency training and procedures			✓
Hazardous Energy Control Program (HECP) and backfeed			✓
Lockout/tagout and Re-energizing			✓
TEMPORARY GROUNDING			✓
Protective grounding equipment			✓
Using temporary grounding conductors			✓
Ground-Fault Circuit Interrupter protection			✓

For quotes on our arc flash training options, contact your local Bussmann™ series product representative. Find your local rep [HERE](#).



PERSONAL PROTECTIVE EQUIPMENT

When working on or servicing energized equipment, personal protective equipment (PPE) is imperative to protect against arc flash hazards. While Bussmann series products inside the equipment have always protected against arc flash hazards, we have expanded our breadth of solutions to include protecting the individual worker with PPE.

Our new Bussmann series arc flash suits are available as kits or in component form. We also offer electrical gloves and a tool kit to ensure your team has all the gear they need to safely work on equipment.

12 calorie arc flash suit kit

Includes hard hat and face shield, coverall with zip front, balaclava to cover face and neck and a nylon storage bag. Arc flash rated 12 cal/cm² and meets ANSI/ISEA 125 Level 2 Conformity and Arc Flash PPE Category 2.

40 calorie arc flash suit kit

Includes hood, coat and bib overalls. Arc flash rated 42 cal/cm² and meets ANSI/ISEA 125 Level 2 Conformity and Arc Flash PPE Category 4.

40 calorie comfort arc flash suit kit

Includes hood, coat and bib overalls. Arc flash rated 46 cal/cm² and meets ANSI/ISEA 125 Level 2 Conformity and Arc Flash PPE Category 4.

Rubber electrical glove kit

Includes rubber electrical gloves, goat skin leather protectors and a canvas storage bag. Meets and exceeds ASTM D120 and ASTM F696 standards for electrical gloves.

Electrician's tool kit

9-piece tool kit tested to 10,000 Vac and rated for 1,000 Vac when working on live parts.

[Get complete product details online >](#)







Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Bussmann Division
114 Old State Road
Ellisville, MO 63021
United States
Eaton.com/bussmannseries

© 2022 Eaton
All Rights Reserved
Publication No. 11267
February 2022

Eaton and Bussmann are valuable trademarks of Eaton in the US and other countries. You are not permitted to use the Eaton trademarks without prior written consent of Eaton.

ANSI is a trademark of the American National Standards Institute. NEC, NFPA 70 and NFPA 70E are trademarks of the National Fire Protection Association, Inc. OSHA is a trademark of the U.S. Department of Labor, Occupational Safety and Health Administration.

For more information on Bussmann series arc flash products, services and training, visit: Eaton.com/bussmannseries/arcflash

Follow us on social media to get the latest product and support information.

