

SAFETY MEMO

May 10, 2021 - Electrical Equipment Marking Requirements



Did you know?

Electrical Equipment Marking for Safety Requirements Background

Laporte engineers' projects employ tens, hundreds, or even thousands of pieces of electrical equipment. We size, specify, design, support installation, support testing, support commissioning, and support maintenance of electrical equipment.

Did you know that the Occupational Safety and Health Administration (OSHA) and the National Electric Code (NEC / NFPA70) mandate that a Nationally Recognized Testing Laboratory (NRTL) approves all electrical equipment in a facility? In special cases, where no reviews such equipment, a local authority is responsible for approval.

In practice, for commercial equipment and components, a NRTL such as Underwriters Laboratory (UL), CSA Group (CSA), or Intertek will provide their marking/labeling on electrical equipment or listing within a database. The marking/labeling or listing indicates to the installer/owner/local authority with that the NRTL recognizes the equipment to be in full compliance with the appropriate safety standard and it performs periodic factory inspections.

Equipment which has not been inspected by an OSHA and NEC approved method, may be a serious safety risk to a facility and its personnel.

Local authorities having jurisdiction (AHJ) including local inspectors, OSHA inspectors, insurance representatives, and others with responsibility periodically audit installations and cite (and penalize) Owners which are out of compliance.

As specifying engineers, we should be cognizant of the fact that the improper internal design and wiring of vendors' products may pose significant risk to personnel safety or process reliability. We should recommend that owners and suppliers purchase and install equipment that has been tested and approved for your specific use to help mitigate these risks.



Industrial Control Panels

- Industrial control panels are often designed and built to standards by Underwriters Laboratory (UL). Specifications which require a UL-marked control panel are ubiquitous and require adherence to UL 508A, the Standard for Safety of industrial control panels.
- Panel fabricators can become certified to apply UL markings following inspection, routine training, and periodic auditing by UL.

Custom Equipment

Custom equipment (including panels) which tends to be unique to each installation can be field-inspected and labeled by the various NRTLs.

