

RIVO MULTITRADE OPTICAL SYSTEMS

Medium-voltage cable tray markings



Overview

392.18 (H) Cable Trays. Marking. When cable trays contain conductors rated over 600 volts they are required to be marked “DANGER — HIGH VOLTAGE — KEEP 392.

Key Takeaways

Cable trays carrying conductors operating over 600 volts must be marked with “DANGER — HIGH VOLTAGE — KEEP AWAY” at intervals not exceeding 10 feet, following NEC 392.18(H) and labeling standards.NEC Requirements

Cable trays containing medium-voltage conductors (over 600 volts) are required to have permanent, legible warning labels stating: “DANGER — HIGH VOLTAGE — KEEP AWAY”. These labels must be placed in readily visible locations along the tray, with a maximum spacing of 3 meters (10 feet) between labels to ensure continuous hazard awareness (NEC 392.18(H)), .

Label Design and Compliance

- Labels must comply with NEC 110.21(B), which requires that hazard markings effectively warn of the danger using appropriate words, colors, and symbols .
- Handwritten labels are not permitted, except for variable information such as voltage ratings or installation-specific data.



- ANSI Z535.4-2011 provides guidance on font type, size, color, capitalization, and symbol usage to ensure the label is clearly understood .

Operational vs. Rated Voltage

- The 2020 NEC clarifies that markings are required based on the operating voltage of the conductors, not just the rated voltage. For example, a conductor rated at 1000 volts but operating at 480 volts does not require a danger label unless the operating voltage exceeds 600 volts .

Exceptions

- In industrial settings where equipment is inaccessible to unqualified personnel, labels may be exempt if maintenance and supervision ensure only qualified persons service the installation .

Practical Considerations

- Ensure labels are durable and resistant to environmental conditions such as UV exposure, moisture, and chemical contact.
- Position labels at eye level or other highly visible locations along the tray, especially near entry points, junctions, and areas where personnel may work.
- Regularly inspect labels for legibility and damage, replacing them as needed to maintain compliance and safety. By following these guidelines, medium-voltage cable trays will meet NEC requirements, provide clear hazard warnings, and enhance workplace safety for personnel working near high-voltage conductors .

Article Content

392.18 (H) Cable Trays. Marking.

When cable trays contain conductors rated over 600 volts they are required to be marked "DANGER — HIGH VOLTAGE — KEEP

392.18 (H) Marking.

Cable trays containing conductors operating over 600 volts shall have a permanent, legible warning notice carrying the wording

Cable tray manual

These documents: ANSI/NEMA VE-1, Metal Cable Tray Systems; NEMA VE-2, Cable Tray Installation Guidelines; and NEMA FG-1,

Cable Tray Technical Guide A practical guide to product selection

In designing supports for a cable tray system, consideration should be given to the loads associated with future cable additions and

Cable Tray Installation Rules (NEC 392) - Electrical Trader

Core rules for selecting, installing, grounding, and filling cable trays—clearances, materials, separation, and bonding

Document DICOS

To install the cable tray supports, first find the required elevation from the floor to the bottom of the cable tray and establish a level

Marking Guide Wire and Cable

Underwriters Laboratories Inc. (UL) has developed this guide for use by code and inspection authorities, electric utilities, contractors,

Electrical Labeling – A Quick Primer

Cable trays containing conductors over 600 volts are required to be marked “Danger – High Voltage – Keep Away”.

Cable Tray Technical Guide A practical guide to product selection

A practical guide to product selection and installation This guide for engineers and installers has been developed by ABB as a

Wire and Cable

UL has developed this guide for use by code authorities, electric utilities, contractors, installers, users, designers, and

392.18 (H) Cable Trays. Marking.

392.18 (H) Marking. Cable trays containing conductors rated over 600 volts shall have a permanent, legible warning notice carrying

Understand how to size wire and cables in medium-voltage electrical ...

Tag marking: Where a printed tag with the required markings is attached to the cable reel. Optional marking of wire

First Revision No. 8030-NFPA 70-2018 [Global Input]

Article 311 Medium Voltage Cable Part I. General 311.1 Scope. This article covers the use, installation, construction specifications

Explaining NEC Article 392 on Cable Trays

NEC Article 392 explains cable trays, their components, appropriate wiring methods for cable trays, and instances

Labeling of Electrical Areas and Equipment – Method Statement

Other cable trays should be labeled as follows: For cable trays containing conductors rated >50 to 600 volts, label them as "LOW

How to Read a Cable Print Legend: Markings, Codes & What They Mean

Learn how to read cable print legends and wire markings. Understand UL listings, voltage ratings, footage markers, temperature

Medium-Voltage Cables 26 05 13

Installer: Engage a cable splicer, trained and certified by splice material manufacturer, to install, splice, and terminate medium

SECTION : 2

For Cable trays designed, tested and confirming to IEC 61537, thickness of cable tray should be according to the manufacturer's

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

