

NEMA ICS 2.3-2019

Standard for Industrial
Control and Systems:
Instructions for the
Handling, Installation,
Operation, and
Maintenance of MCCs
Rated Not More Than
600 Volts



NEMA Standards Publication ICS 2.3-2019

*Industrial Control and Systems: Instructions for the Handling, Installation, Operation,
and Maintenance of MCCs Rated Not More Than 600 Volts*

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Foreword

This publication is a guide to practical information containing instructions for the handling, installation, operation, and maintenance of MCCs rated 600 volts or less. It is not the intent of these instructions to supersede the manufacturer's instructions. These instructions do not purport to cover all details or variations in equipment, nor to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise, which are not covered sufficiently, the matter should be referred to the manufacturer. These recommendations of the Industrial Automation Control Products and Systems Section of the National Electrical Manufacturers Association will be found useful by architects, electrical engineers, electrical contractors, electricians, maintenance engineers, and others. They will be reviewed periodically by the Section for the purpose of updating them as necessary. Please address any comments or questions you may have on the text to:

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Section 1 General

1.1 Scope

These guidelines are provided to facilitate movement, handling, installation, and maintenance of motor control centers (MCC) at the job site and to help avoid personal injury and equipment damage during these processes.

Information includes the following:

- a. Handling
- b. Storage
- c. Installation of sections, units, conduits, and wires
- d. Pre-energization and energization
- e. Permissible loading
- f. Care and maintenance

1.2 Electrical Hazards

WARNING—HAZARDOUS VOLTAGES IN ELECTRICAL EQUIPMENT CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. UNLESS OTHERWISE SPECIFIED, INSPECTION AND MAINTENANCE SHOULD ONLY BE PERFORMED ON MCCs AND EQUIPMENT TO WHICH POWER HAS BEEN TURNED OFF, DISCONNECTED, AND ELECTRICALLY ISOLATED SO THAT NO ACCIDENTAL CONTACT CAN BE MADE WITH ENERGIZED PARTS. FOLLOW ALL MANUFACTURER'S WARNINGS AND INSTRUCTIONS

Safety-related work practices, as described in NFPA 70E, should be followed at all times. All requirements of the *National Electrical Code*® (NEC) NFPA 70 should be followed.

1.3 Proper Operation

The successful operation of MCCs is dependent upon proper handling, installation, operation, and maintenance by qualified personnel, as defined in NFPA 70E. Failure to follow certain fundamental installation and maintenance requirements could lead to death, personal injury, failure or loss of the MCC, damage to other property, or any combination thereof.

* Available from the National Fire Protection Association, Publication Sales Department, Batterymarch Park, Quincy.