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Standard for
Installing Medium-Voltage
Metal-Clad Switchgear

NEIS



Published by
National Electrical
Contractors Association



NECA 430-2006

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Installing Medium-Voltage
Metal-Clad Switchgear

**An American
National Standard**



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National Electrical
Contractors Association



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Table of Contents

Foreword	iii
1. Scope	1
1.1 Products and Applications Included	1
1.2 Products and Applications Excluded	1
1.3 Regulatory and Other Requirements	1
2. Definitions	2
3. Delivery, Handling, and Storage	4
3.1 Delivery	4
3.2 Handling	4
3.3 Storage	5
4. Site Preparation	7
4.1 General Requirements	7
4.2 Site Selection	7
4.3 Conduits	7
4.4 Switchgear Foundation	7
5. General Installation Requirements	9
5.1 General Requirements	9
6. High Voltage and Electrical Safety	10
6.1 General 15	10
6.2 Existing Facilities	11
7. Installing Metal-Clad Switchgear	12
7.1 General Requirements	12
7.2 Setting Switchgear in Place	12
7.3 Single-Aisle Outdoor, Walk-in Switchgear	13
7.4 Common-Aisle Outdoor, Walk-in Switchgear	14
7.5 Installing New Sections to Existing Metal-Clad Switchgear	15
7.6 Final Assembly Checks	16
8. Electrical Connections	17
8.1 Bus Bar Connections	17
8.2 Bus Insulation	18
8.3 Control Cables	19

NECA 430 Installing Medium-Voltage Metal-Clad Switchgear

8.4	Medium-Voltage Cable Terminations	19
8.5	Metal-Enclosed Bus	20
8.6	Surge Arresters	20
8.6	Outdoor, Walk-in Switchgear Ancillary Equipment Connections	21
9.	Closing Equipment	22
10.	Checking and Installing Drawout Components	23
10.1	Circuit Breakers	23
10.2	Circuit Breaker Lifting Truck	24
10.3	Circuit Breaker Installation and Removal	24
10.4	Potential Transformer Drawout Units	26
10.5	Grounding and Testing Drives	27
	Annex A: Reference Standards	28
A.1	Components	28
A.2	Record Keeping	28
A.3	General Conditions	28
A.4	Electrical Testing	30
A.5	Energizing Switchgear	36
	Annex B: Reference Standards	38

(This foreword is not a part of the standard)

Foreword

National Electrical Installation Standards[™] (*NEIS*[™]) are designed to improve communication among specifiers, purchasers, and suppliers of electrical construction services. They define a minimum baseline of quality and workmanship for installing electrical products and systems. *NEIS* are intended to be referenced in contract documents for electrical construction projects. The following language is recommended:

Medium-voltage metal-clad switchgear shall be installed in accordance with NECA 430-2006, *Standard for Installing Medium-Voltage Metal-Clad Switchgear* (ANSI).

Use of *NEIS* is voluntary, and the National Electrical Contractors Association (NECA) assumes no obligation or liability to users of this publication. Existence of a standard shall not preclude any member or non-member of NECA from specifying or using alternate construction methods permitted by applicable regulations.

This publication is intended to comply with the edition of the National Electrical Code[®] (NEC) in effect at the time of publication. Because they are quality standards, *NEIS* may in some instances go beyond the minimum safety requirements of the NEC. It is the responsibility of users of this standard to comply with state and local electrical codes when installing electrical products and systems.

Suggestions for revisions and improvements to this standard are welcome. They should be addressed to:

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1. Scope

This standard describes site preparation and installation of medium-voltage metal-clad switchgear rated 5 kV and 15 kV AC.

1.1 Products and Applications Included

1. Metal-clad switchgear
2. Vacuum circuit breakers
3. Indoor and outdoor locations
4. Testing, energizing, and commissioning

1.2 Equipment and Applications Excluded

1. Pad-mounted, compartmentalized switchgear
2. Metal-enclosed switchgear
3. Sulfur-Hexafluoride (SF₆) circuit breakers
4. Load interrupter switches
5. Underground installations
6. Transformers or unit substations
7. Station-type switchgear
8. Installation of conduits, conductors, cabling, or busways
9. Maintenance

1.3 Regulatory and Other Requirements

a) All information in this publication is intended to conform to the *National Electrical Safety Code* (ANSI/IEEE C2) and *National Electrical Code* (ANSI/NFPA 70). Installers should always follow the NESC, NEC, applicable state and local codes, manufacturer's instructions, and contract documents when installing medium-voltage metal-clad switchgear.

b) Only qualified persons familiar with medium-voltage metal-clad switchgear should perform the work described in this publication. It is recommended that all work be performed in accordance with NFPA 70E, *Standard for the Electrical Safety in the Workplace*.

c) General requirements for installing electrical products and systems are described in the latest version of NECA 1, *Standard Practices for Good Workmanship in Electrical Contracting* (ANSI). Other *NEIS* provide additional guidance for installing particular types of electrical products and systems. A complete list of *NEIS* is provided in Annex B.