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Guide for the Application,  
Handling, Storage,  
Installation, and  
Maintenance of  
Medium-Voltage  
AC Contactors,  
Controllers, and  
Control Centers



**NEMA Standards Publication ICS 3.1-2009 (R2014)**

*Guide for the Application, Handling, Storage, Installation, and Maintenance  
of Medium-Voltage AC Contactors, Controllers, and Control Centers*

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## FOREWORD

This publication is a guide containing practical information to the application, handling, storage, installation and maintenance of AC general-purpose medium-voltage contactors and Class E controllers. It was prepared by the Medium Voltage Controllers Technical Subcommittee of the NEMA Industrial Automation Control Products and Systems Section. It was approved in accordance with the bylaws of NEMA.

This guide was developed in response to the many questions from the user public and has been developed from the experience of the member companies working with their customers and users. It provides information that will be useful to architects, electrical engineers, electrical contractors, maintenance engineers, and others who are responsible for the installation of this equipment. It is not intended to replace the manufacturer's instructions and does not purport to cover all possible circumstances arising from the handling, storage, and installation of this equipment. Any problems or questions should be discussed with the manufacturer.

NEMA publications are subject to periodic review. Any comments or proposed revisions to this guide should be submitted to:

Vice President, Technical Services  
National Electrical Manufacturers Association  
1300 North 17th Street, Suite 1752  
Rosslyn, Virginia 22209

This Standards Publication was developed by the Industrial Automation Control Products and Systems Section. Section approval of the standard does not necessarily imply that all section members voted for its approval or participated in its development. At the time it was approved, the Group/Section was composed of the following members:

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## 1 SCOPE

This guide applies to AC medium-voltage contactors and Class E controllers rated 1,501-15,000 volts, installed in accordance with the *National Electrical Code (NEC)*, NFPA 70 and the manufacturer's instructions. The requirements in the CANENA-developed UL 347 and NEMA SG 10-2008 apply. These instructions are not considered appropriate to industrial control equipment intended for use in locations designated as hazardous (classified) in the *National Electrical Code*.

This guide was developed in response to the many questions from the user public and has been developed from the experience of the member companies working with their customers and users. It provides information that will be useful to architects, electrical engineers, electrical contractors, maintenance engineers, and others who are responsible for the installation of this equipment. It is not intended to replace the manufacturer's instructions and does not purport to cover all possible circumstances arising from the application, handling, storage, and installation of this equipment. Any problems or questions should be discussed with the manufacturer.

Note—Extension of the voltage range in UL 347 to extend up to 15 Kv is under consideration.