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Application Guideline for Terminal Blocks

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Application Guideline for Terminal Blocks

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Foreword

This Applications Guideline was prepared by a technical committee of the NEMA Industrial Automation Control Products and Systems Section. It was approved in accordance with NEMA bylaws. It provides practical information concerning ratings, construction, test, performance, and manufacture of industrial control equipment. This publication is used by the electrical industry to provide guidelines for the manufacture and proper application of reliable products and equipment and to promote the benefits of repetitive manufacturing and widespread product availability.

NEMA Applications Guidelines represent the result of many years of research, investigation, and experience by the members of NEMA, its predecessors, and its sections and committees. They have been developed through continuing consultation among manufacturers, users, and national engineering societies and have resulted in improved serviceability of electrical products with economies to manufacturers and users.

One of the primary purposes of this Applications Guideline is to encourage the production of reliable control equipment that functions in accordance with accepted standards. Properly constructed industrial control equipment is, however, only one factor in minimizing hazards that might be associated with the use of electricity. Hazard reduction involves the combined effort of the equipment manufacturers, the system designer, the installer, and the user. Information is provided herein to assist users and others in the proper selection of control equipment.

The industrial control manufacturer has limited or no control over the following factors, which are vital to a safe installation:

- a) Environmental conditions
- b) System design
- c) Equipment selection and application
- d) Installation
- e) Operating practices
- f) Maintenance

This publication is not intended to instruct the control equipment user as regards these factors, except insofar as suitable equipment to meet particular needs might be recognized in this publication. Some application guidance is given.

This Applications Guideline defines the construction requirements for industrial control equipment and provides recommendations for proper selection for use under normal or certain specific conditions. Since any piece of industrial control equipment can be installed, operated, and maintained in a manner that results in hazardous conditions, conformance with this publication does not in itself ensure a safe installation. When, however, equipment conforming to this Applications Guideline is properly selected, installed in accordance with the *National Electrical Code*[®] (NEC), and properly maintained, hazards to persons and property will be reduced.

To continue to serve the best interests of industrial control and systems equipment users, the Industrial Automation Control Products and Systems Section actively cooperates with other standardization organizations in the development of simple and more universal metrology practices. In this publication, U.S. customary units are gradually being supplemented by those of the modernized metric system known as the International System of Units (SI). This transition requires no change in standard dimensions, tolerances, or performance specifications.

NEMA Applications Guidelines are subject to periodic review. They are revised frequently to reflect user input and to meet changing conditions and technical progress. Users should secure the latest editions. Proposed revisions to this Applications Guideline should be submitted to:

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