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Dry Type Transformers for General Applications

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NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

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Dry Type Transformers for General Applications

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Foreword

This foreword is not part of ST-20 NEMA Standards for Dry-Type Transformers for General Applications.

This standard references applicable ANSI and other national standards.

This update maintains or incorporates applicable sections of documents in the Reference Section to provide a "one source" technical requirement standard. The "Authorized Engineering Information" has been retained as a background and tutorial source to hopefully help the user to better understand and use this standard.

Since Audible Sound Levels do not exist in ANSI standards, this data has been retained in this standard until future revisions of ANSI standards incorporate the sound level data.

If a conflict of definitions occurs between this standard and ANSI/IEEE 100, the Electrical Dictionary ANSI/IEEE 100 should be used.

In preparation of this Standards Publication, input of users and other interested parties has been sought and evaluated by the Dry-Type and Specialty Transformer Section of NEMA.

Suggestions for improvements, comments, and proposed future revisions should be submitted to:

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Washington, DC 20037-1526

Scope

This Standards Publication applies to single-phase and polyphase dry-type transformers (including autotransformers and non-current-limiting reactors) for supplying energy to power, heating, and lighting circuits and designed to be installed and used in accordance with the *National Electrical Code*.

It applies to transformers with and/or without accessories having the following ratings:

1. 1.2 kV class (600 volts nominal and below), 0.25 kVA and up.
2. Above 1.2 kV class sound level limits are supplied. These limits are applicable to commercial, institutional, and industrial transformers.

This Standards Publication applies to transformers, commonly known as general-purpose transformers, for commercial, institutional, and industrial use in nonhazardous locations both indoors and outdoors. The publication includes ratings and information on the application, design, construction, installation, operation, inspection, and maintenance as an aid in obtaining a high level of safe performance. These standards, except for those for ratings, may be applicable to transformers having other than standard ratings. These standards, as well as applicable local codes and regulations, should be consulted to secure the safe installation, operation, and maintenance of dry-type transformers.

This publication does not apply to the following types of specialty transformers: control, industrial control, Class 2, signalling, oil- or gas-burner ignition, luminous tube, cold cathode lighting, incandescent and mercury lamp. Also excluded are network transformers, unit substation transformers, and transformer distribution centers.