ASME Y14.44-2008

REAFFIRMED 2024

Reference Designations for Electrical and Electronics Parts and Equipment

Engineering Drawing and Related Documentation Practices

AN AMERICAN NATIONAL STANDARD

The American Society of Mechanical Engineers

ASME SETTING THE STANDARD

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FOREWORD

This Standard establishes the requirements for the generation and application of reference designations for electrical and electronics parts and equipment. All information contained in this Standard was documented in IEEE Std 200 (ANSI Y32.16), which was previously withdrawn. Due to the need for this Standard in the industry, it was agreed that it should be reestablished by ASME and a new subcommittee (Subcommittee Y14.44) was formed to carry out the development of a new standard under the ASME Y14 series of engineering drawing and related documentation practices.

The following is a summary of the significant changes that were made to the previous IEEE Std 200 Standard and incorporated into this Standard:

(a) Reformatted document per the requirements contained in *The ASME Codes and Standards Writing Guide 2000*.

(b) Figure 8 (formerly, Fig. 3) was revised as follows: A7J2 and A9J2 were changed to reflect a male connector with the appropriate symbology per IEEE Std 315A. W2P1 and W3P1 were changed to reflect a female connector with the appropriate symbology per IEEE Std 315A.

(c) Revised Fig. 3 (formerly, Fig. 8) to reflect the appropriate symbology per IEEE Std 315A.

(d) Corrected location code and reference designation breakdown in Fig. 17.

Was: 12 D 5 B6 / Q3

Is: 12 D 6 B5 / Q3

(e) Deleted section 10.

(f) Deleted Appendix B.

Where this Standard is specified as a requirement in a document, its defined requirements are assumed to be consistent with the needs of the user. Therefore, each user provides appropriate interpretations, as the need arises, consistent with the environment in which it is applied.

The successful generation of this Standard is attributed to the subcommittee members and their respective companies and the department and agencies of the U.S. Government.

Suggestions for improvement of this Standard are welcome. They should be sent to The American Society of Mechanical Engineers, Secretary, Y14 Standards Committee, Three Park Avenue, New York, NY 10016-5990.

This Standard was approved as an American National Standard on July 3, 2008.

ASME Y14 COMMITTEE
Engineering Drawing and Related Documentation Practices

(The following is the roster of the Committee at the time of approval of this Standard.)

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General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by proposing revisions and attending Committee meetings. Correspondence should be addressed to:

Secretary, Y14 Standards Committee
The American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Proposing a Case. Cases may be issued for the purpose of providing alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval and shall be posted on the ASME Committee Web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the standard, the paragraph, figure or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the standard to which the proposed Case applies.

Attending Committee Meetings. The Y14 Standards Committee regularly holds meetings or telephone conferences, which are open to the public. Persons wishing to attend any meeting or telephone conference should contact the Secretary of the Y14 Standards Committee or check the ASME Web site at http://cstools.asme.org.

REFERENCE DESIGNATIONS FOR ELECTRICAL AND ELECTRONICS PARTS AND EQUIPMENT

1 GENERAL

1.1 Scope

This Standard covers the formation and application of reference designations for electrical and electronics parts and equipment.

The reference designations of this Standard are intended for uniquely identifying and locating discrete items on diagrams and in a set; for correlating items in a set; graphic symbols on diagrams; and items in parts lists, circuit descriptions, and instructions.

This Standard includes three methods for forming and applying reference designations.

(a) the unit numbering method

(b) the location numbering method

(c) the location coding method

A complete reference designation may incorporate reference designations formed by the use of any of these methods at any level from basic parts to complete units.

The unit numbering method has a long history of satisfactory use in all types of electrical and electronics equipment. The location numbering method and location coding method have been developed to permit a rapid physical location of items in large, complicated equipment featuring multiple use of many identical or closely similar items. These methods shall be applied in such a way that duplicate complete reference designations do not occur in a piece of equipment or system.

Device function designations for power switchgear and industrial control use are not covered by this Standard.

1.2 Application

The reference designations of this Standard are for use on equipment and related diagrams, drawings, parts lists, and in manuals or similar publications. Reference designations are not intended to replace other identification numbers, such as drawing, part, type, or stock numbers. Additions or changes to an existing unit or set should follow the designation system originally used.

In this Standard, the unit is the highest level to which a reference designation is assigned.

1.3 References to This Standard

If this Standard is referenced in a contract or order, the following should be specified:

(a) title, number, and date.

(b) the reference documents that are to govern, where applicable (e.g., American National Standards or Military Standards). See para. 1.6.

(c) marking of reference designations on product (whether required or not). See section 6.

1.4 Changes in Reference Designation Class Letters

If changes in the state-of-the-art appear to make changed or new reference designation class letters necessary, provide the following information:

(a) item for which new designation is requested, type or class of item, and frequency of use (per drawing, per set, etc.)

(b) present reference designation used

(c) proposed reference designation

(d) reasons for recommending a change (supply source material, if feasible)

(e) graphic symbol

Address comments to The American Society of Mechanical Engineers, Secretary, Y14 Standards Committee, Three Park Ave., New York, NY 10016, and refer to this Standard.

1.5 Use of "Shall," "Should," and "May"

In this Standard, the word "shall" is to be understood as a requirement; the word "should" as a recommendation; and the word "may" as permissive, neither mandatory nor recommended.

1.6 Reference

The following revisions of American National Standards form a part of this Standard to the extent specified herein. A more recent revision may be used, provided there is no conflict with the text of this Standard. In the event of a conflict between the text of this Standard and the references cited herein, the text of this Standard shall take precedence.

IEEE Std 315-1975, Graphic Symbols for Electrical and Electronics Diagrams

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