American National Standard

Wet Process Porcelain Insulators—Apparatus, Post Type

Secretariat:

National Electrical Manufacturers Association

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FOREWORD

(This foreword is not part of American National Standard C29.9-1983 (R2002, R2012))

The first edition of this standard was essentially based on the EEI-NEMA Standard *Wet-Process Porcelain Insulators (Apparatus, Post Type)*, EEI TDJ-59, NEMA 147-1956. (EEI is the Edison Electric Institute; NEMA is the National Electrical Manufacturers Association). It was developed by the American National Standards Committee on Insulators for Electric Power Lines, C29.

This standard has been revised three times by the C29 Committee. This third revision (1) makes numerous editorial changes deemed to improve clarity; (2) removes porcelain color as a requirement; (3) changes the test description for ferrous metal parts galvanizing; (4) moves packing requirements to an appendix; (5) requires electrical tests to be made on completely assembled insulators; (6) revises the mechanical proof test requirements; (7) increases routine test values to 50 percent of rating; and (8) adds optional routine cantilever and bending movement tests.

Suggestions for improvement of this standard will be welcome. They should be sent to the National Electrical Manufacturers Association, 1300 North 17th Street, Suite #1752, Rosslyn, VA 22209.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Insulators for Electric Power Lines, C29. Committee approval of the standard does not necessarily imply that all committee members voted for approval. At the time it approved this standard, the ASC C-29 Committee had the following members:

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREWORD</td>
<td>iv</td>
</tr>
<tr>
<td>1 SCOPE</td>
<td>1</td>
</tr>
<tr>
<td>2 DEFINITIONS</td>
<td>1</td>
</tr>
<tr>
<td>3 GENERAL</td>
<td>1</td>
</tr>
<tr>
<td>4 MATERIAL</td>
<td>1</td>
</tr>
<tr>
<td>5 DIMENSIONS AND CHARACTERISTICS</td>
<td>2</td>
</tr>
<tr>
<td>6 MARKING</td>
<td>2</td>
</tr>
<tr>
<td>7 SAMPLING, INSPECTION, AND TESTS</td>
<td>2</td>
</tr>
<tr>
<td>7.1 General</td>
<td>2</td>
</tr>
<tr>
<td>7.2 Design Tests</td>
<td>2</td>
</tr>
<tr>
<td>7.2.1 Low-Frequency Wet Withstand</td>
<td>2</td>
</tr>
<tr>
<td>7.2.2 Critical-Impulse Flashover, Positive</td>
<td>2</td>
</tr>
<tr>
<td>7.2.3 Impulse Withstand</td>
<td>2</td>
</tr>
<tr>
<td>7.2.4 Radio-Influence Voltage</td>
<td>2</td>
</tr>
<tr>
<td>7.2.5 Compression Strength</td>
<td>2</td>
</tr>
<tr>
<td>7.2.6 Thermal Shock</td>
<td>2</td>
</tr>
<tr>
<td>7.2.7 Torsional Strength</td>
<td>3</td>
</tr>
<tr>
<td>7.3 Quality Conformance Tests</td>
<td>3</td>
</tr>
<tr>
<td>7.3.1 Visual and Dimensional Tests</td>
<td>3</td>
</tr>
<tr>
<td>7.3.2 Porosity Test</td>
<td>3</td>
</tr>
<tr>
<td>7.3.3 Galvanizing Test</td>
<td>3</td>
</tr>
<tr>
<td>7.3.4 Cantilever-Strength</td>
<td>3</td>
</tr>
<tr>
<td>7.3.5 Tensile Strength</td>
<td>3</td>
</tr>
<tr>
<td>7.4 Routine Tests</td>
<td>3</td>
</tr>
<tr>
<td>7.4.1 Mechanical Proof</td>
<td>4</td>
</tr>
<tr>
<td>8 REFERENCED STANDARDS</td>
<td>4</td>
</tr>
<tr>
<td>8.1 American National Standards</td>
<td>4</td>
</tr>
<tr>
<td>8.2 Other Standard</td>
<td>4</td>
</tr>
<tr>
<td>TABLES 1</td>
<td>5</td>
</tr>
<tr>
<td>Dimensions &amp; Characteristics of Post Type Apparatus Insulators 350kV BIL and below</td>
<td>5</td>
</tr>
<tr>
<td>TABLES 2</td>
<td>6</td>
</tr>
<tr>
<td>Dimensions &amp; Characteristics of Post Type Apparatus Insulators above 350kV BIL</td>
<td>6</td>
</tr>
<tr>
<td>Figure 1</td>
<td>8</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>9</td>
</tr>
</tbody>
</table>
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Wet Process Porcelain Insulators—Apparatus, Post-Type

1 SCOPE

This standard covers outdoor high-voltage post-type apparatus insulators made of wet-process porcelain and used in the transmission and distribution of electrical energy.

2 DEFINITIONS


2.2 In this standard, the word insulator shall refer to a unit or to a stack of two or more units.

2.3 The technical reference numbers appearing in tables are a widely used and recognized identification series for apparatus insulator units or stacks.

3 GENERAL

3.1 Insulators shall conform in all respects to the requirements hereinafter stated. The text and figures supplement each other and shall be considered part of this standard.

3.2 Some insulators are tapered and may contain units that have certain characteristics whose strengths exceed those given in tables. Each unit shall comply with the manufacturer's strength requirements.

3.3 Manufacturer's drawings, if furnished, shall show the outline of the insulators, together with all pertinent dimensions. Any variations in these dimensions due to manufacturing tolerances shall be indicated.

4 MATERIAL

4.1 The insulators shall be made of good commercial-grade wet-process porcelain.

4.2 The entire porcelain surface of the insulators that will be exposed after assembly shall be glazed. The entire surface shall be relatively free from imperfections. Color is not a part of this standard. If gray is required, it shall be in accordance with ANSI Z55.1-1967 (R1973) and conform to Munsell notation 5BG 7.0/0.4 with the following tolerances:

1) Hue: ± 12 (3G to 7B)
2) Value: ± 0.5
3) Chroma: -0.2 to +0.6

4.3 Metal parts shall be made of a good commercial grade of malleable iron, ductile iron, steel, or aluminum. Ferrous parts other than stainless steel shall be galvanized in accordance with ASTM A153-80.