



ANSI/NEMA C12.9-2014

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# American National Standard for Test Switches and Plugs for Transformer-Rated Meters





**ANSI C12.9-2014**  
Revision of ANSI C12.9-2005

*American National Standard for  
Test Switches and Plugs for Transformer-Rated Meters*

Secretariat:

**National Electrical Manufacturers Association**

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**American National Standards Institute**

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**Foreword** (This foreword is not part of American National Standard C12.9-2014.)

This standard is a major revision of ANSI C12.9-2005, *American National Standard for Test Switches for Transformer-Rated Meters*. It was developed by the Accredited Standards Committee on Electricity Metering, C12, for full consensus approval as an American National Standard. This revised version supersedes ANSI C12.9-2005.

This standard covers the dimensions and functions of meter test switches for transformer-rated watt-hour meters when used in conjunction with instrument transformers. It also adds specifications for test jacks used in conjunction with the test switches. These additions ensure that test jacks used in conjunction with switches meeting this standard will operate properly and safely.

Suggestions for improvements of this standard are welcome. They should be in the form of a proposed change of text, together with appropriate supporting comments.

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## 1 Scope

This standard is intended to encompass the dimensions and functions of meter test switches used with transformer-rated watt-hour meters in conjunction with instrument transformers and test plugs used in conjunction with the test switch.

## 2 Definitions

- 2.1 **short-circuiting switch:** A single-pole double-throw (make-before-break) transfer switch used to transfer current away from the meter.
- 2.2 **test jack:** A spring-jaw receptacle in the current element of a test switch that provides a bipolar test connection in the metering current circuit without interruption of the current circuit.
- 2.3 **test-jack switch:** A single-pole, single-throw disconnect switch used in conjunction with a test jack to provide a parallel current path during normal operating conditions.
- 2.4 **test plug:** A bipolar mating plug to a test jack for inserting instrumentation into the metering-current circuit.
- 2.5 **voltage switch:** A single-pole, single-throw switch used to open or close a voltage circuit.

## 3 Standard Ratings

### 3.1 Current

The current rating shall be 20 A minimum.

### 3.2 Voltage

The voltage rating shall be 300 V or 600 V.

## 4 General Requirements for Test Switches

### 4.1 Material and workmanship

The test switch and its components shall be substantially constructed of suitable material in a workmanlike manner.

### 4.2 Nameplates

Nameplates are not required on these test switches, but a manufacturer's identifying marking (such as catalog number, trademark, etc.) shall be stamped, printed, affixed, or cast in a convenient place on each test switch. When required, a warning label indicating hidden internal jumpers should be affixed.

### 4.3 Movable parts

Movable conducting parts, such as blade hinges, shall be held in place by locknuts or pins or their equivalent, arranged so that a firm and secure connection will be maintained at any position of the switch blade.