UL 977

STANDARD FOR SAFETY

Fused Power-Circuit Devices

UL Standard for Safety for Fused Power-Circuit Devices, UL 977

Sixth Edition, Dated March 27, 2026

Summary of Topics:

This new Sixth Edition of ANSI/UL 977 dated March 27, 2026 which includes editorial corrections and updates to align with current style and format.

The revised requirements are substantially in accordance with Proposal(s) on this subject dated January 23, 2026.

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Standard for Fused Power-Circuit Devices

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Sixth Edition

March 27, 2026

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The most recent designation of ANSI/UL 977 as an American National Standard (ANSI) occurred on March 27, 2026. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

The Department of Defense (DoD) has adopted UL 977 on August 28, 1984. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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INTRODUCTION

1 Scope

1.1 These requirements cover fused power-circuit devices to be employed in accordance with NFPA 70®, *National Electrical Code*® (NEC®). Fused power-circuit devices, as covered by these requirements, are considered to be either bolted-pressure contact switches or high-pressure butt-type contact switches. Bolted-pressure contact switches are devices in which the blade-jaw connections have an additional pressure or clamping action provided at both ends of the switch blades when the blades are in the fully closed position. High-pressure butt-type contact switches are devices having butt-type contacts and a spring-charged mechanism.

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1.2 Fused power-circuit devices may be manually or electrically operated and may incorporate electrical tripping means. An electrically tripped device is one whose closing is performed manually or electrically but contact opening is performed by a release energized by a separate source of voltage. A device with an electrical operator is one whose contact closing and opening is performed by electrical means.

1.3 Fused power-circuit devices have continuous current ratings of more than 600 A and voltage ratings of 600 V or less AC, DC, or both. Devices rated AC are intended for use on circuits having maximum available short-circuit currents of 100,000, 150,000, or 200,000 A (rms symmetrical). Devices rated DC are intended for use on circuits having maximum available short-circuit currents of 20,000, 50,000, 100,000, 150,000, or 200,000 A DC.

1.4 Fused power-circuit devices have provisions for mounting (or are intended to be used with upstream) Class L fuses or Class T fuses rated more than 600 A.

1.5 These requirements cover:

a) Complete, enclosed fused power-circuit devices in which the switch is integral with the enclosure;

b) Open-type fused power-circuit devices intended for mounting in other equipment, such as switchboards or a separately shipped enclosure; and

c) Enclosures intended for mounting open-type fused power-circuit devices.

1.6 These requirements also cover electrically tripped and/or operated devices that have been evaluated to determine their acceptability for ground-fault protection when combined with ground-fault sensing and relaying equipment as follows:

a) Switches for use with Class I ground-fault sensing and relaying equipment including those devices that are capable of interrupting 12 times their rated current or that have integral means intended to prevent disconnecting at levels of fault current exceeding the contact interrupting capability of the switch; and

b) Switches for use with Class II ground-fault sensing and relaying equipment are capable of interrupting at 10 times their rated current and are for use in ground-fault protection systems where means intended to prevent disconnecting levels at fault current exceeding the contact interrupting capabilities of the switch are incorporated within the ground-fault sensing and relaying equipment.

1.7 These requirements do not apply to low-voltage AC integrally fused power circuit breakers as covered by the Standard for Low-Voltage AC (1058 V and Below) Power Circuit Breakers Used in Enclosures, IEEE C37.13.

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2 Components

2.1 A component of a product covered by this Standard shall:

a) Comply with the requirements for that component as specified in this Standard;

b) Be used in accordance with its rating(s) established for the intended conditions of use; and

c) Be used within its established use limitations.

2.2 A component of a product covered by this Standard is not required to comply with a specific component requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product;

b) Is superseded by a requirement in this Standard; or

c) Is separately evaluated when forming part of another component, provided the component is used within its established ratings and limitations.

2.3 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.4 A component that is also intended to perform other functions such as overcurrent protection, ground-fault circuit-interruption, surge suppression, any other similar functions, or any combination thereof, shall comply additionally with the requirements of the applicable standard(s) that cover devices that provide those functions.

3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

4 Referenced Publications

4.1 Any undated reference to a code or standard appearing in the requirements of this Standard shall be interpreted as referring to the latest edition of that code or standard.

4.2 The following publications are referenced in this Standard:

ASTM A90/A90M, *Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings*

ASTM A653/A653M, *Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process*

ASTM E28, *Standard Test Methods for Softening Point of Resins Derived from Pine Chemicals and Hydrocarbons, by Ring-and-Ball Apparatus*

IEEE C37.09, *Standard Test Procedures for AC High-Voltage Circuit Breakers with Rated Maximum Voltage Above 1000 V*

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IEEE C37.13, *Low-Voltage AC (1058 V and Below) Power Circuit Breakers Used in Enclosures*

NFPA 70®, *National Electrical Code®* (NEC®)

NFPA 70E®, *Electrical Safety in the Workplace®*

UL 50E, *Enclosures for Electrical Equipment, Environmental Considerations*

UL 486A-486B, *Wire Connectors*

UL 486E, *Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors*

UL 969, *Marking and Labeling Systems*

CONSTRUCTION

5 General

5.1 A fused power-circuit device shall employ materials throughout that are acceptable for the particular application, and shall be made and finished with the degree of uniformity and grade of workmanship practicable in a well-equipped factory.

5.2 The construction of a fused power-circuit device shall be such as to provide ample strength and rigidity.

5.3 All parts of a fused power-circuit device shall be properly assembled in place when shipped from the factory, except as noted in 5.4 – 5.9.

5.4 If a fused power-circuit device is acceptable for use without a neutral assembly as well as with such assembly, the neutral assembly is not required to be shipped from the factory with the switching unit provided that:

a) The neutral assembly is shipped from the factory completely assembled with the necessary barriers and all other accessories that are required for its installation and use; and

b) The neutral assembly and switch are marked in accordance with 52.13.

5.5 In reference to 5.4, hardware for mounting the neutral assembly must be furnished with that assembly, but is not required to be assembled in place.

5.6 External operating handles are not required to be assembled in place but in place of such assembly, they are to be packaged and shipped with the switching unit.

5.7 When a fused power-circuit device without enclosure is shipped for assembly in a switchboard or similar equipment, the load fuse terminal assembly need not be mounted in place when all the following conditions are met:

a) All poles of the load fuse terminal assembly are secured to a common base that can be installed as a single unit by a simple assembly operation;

b) Assembly instructions and markings are provided. See 52.28;

c) The construction is such that alignment of fuse mounts will be assured;

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