

# American National Standard

## Low-Voltage Power Circuit Breakers and AC Power Circuit Protectors— Preferred Ratings, Related Requirements, and Application Recommendations

Approved 05/19/00

American National Standards Institute, Inc.

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The Institute of Electrical and Electronics Engineers, Inc.  
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# American National Standard

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**FOREWORD** (This foreword is not part of American National Standard C37.16-2000.)

This standard has been revised to include a 5000 Ampere frame size in tables 1 through 5 and tables 22A and 22B for low-voltage AC power circuit breakers. In addition, both 1000 volt and 1200 volt ratings for DC breakers in tables 11, 11a, and 12 are now included, since both ratings of breakers are now available. The titles of tables 11 and 12 have been clarified to differentiate between “heavy duty” and “light duty” applications.

The 1997 version was revised to reflect industry trends such as deleting the 225 ampere frame size throughout since it is not utilized any longer; adding a 2000 ampere frame size fused circuit breaker (Tables 17 and 19, Line 4) which is now available; incorporating the C37.16a-1994 DC circuit breaker Tables 8, 9, 10, 11, 11A and 12, which correlated with C37.14-1992; and incorporating the electronic trip device ratings.

This standard was first published by the American Standards Association (now the American National Standards Institute) in 1956, using material developed by the National Electrical Manufacturers Association (NEMA).

Reference should be made to the appropriate American National Standards for service conditions, definitions, ratings, temperature limitations, classes of insulating material, nameplate markings, dielectric-withstand requirements, test requirements, and application standards.

American National Standards are subject to periodic review. Users are cautioned to secure the latest edition. Suggestions for improvement of this standard will be welcome. They should be sent to the National Electrical Manufacturers Association, 1300 North 17th Street, Suite 1847, Rosslyn, VA 22209.

This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Power Switchgear, C37. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time this standard was approved, the C37 Committee had the following members:

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# Low-Voltage Power Circuit Breakers and AC Power Circuit Protectors— Preferred Ratings, Related Requirements, and Application Recommendations

## 1 Scope

This standard applies to all low-voltage power circuit breakers and AC power circuit protectors as covered in the following American National Standards (see Section 4):

ANSI/IEEE C37.13-1990 (R1995), *American National Standard for Low-Voltage AC Power Circuit Breakers Used in Enclosures*

ANSI/IEEE C37.14-1999, *American National Standard for Low-Voltage DC Power Circuit Breakers Used in Enclosures*.

ANSI C37.17-1997, *American National Standard for Trip Devices for AC and General Purpose DC Low-Voltage Power Circuit Breakers*

ANSI/IEEE C37.18-1979 (R1997), *American National Standard Requirements for Field Discharge Circuit Breakers for Rotating Electric Machinery*

ANSI/IEEE C37.29-1981 (R1990), *American National Standard for Low-Voltage AC Power Circuit Protectors Used in Enclosures*

ANSI C37.50-1989 (R2000), *American National Standard Test Procedures for Low-Voltage AC Power Circuit Breakers Used in Enclosures*

ANSI C37.52-1974 (R2000), *American National Standard Test Procedures for Low-Voltage AC Power Circuit Protectors Used in Enclosures*

## 2 Referenced standards

In addition to the standards listed in Section 1, this standard is intended for use in conjunction with American National Standard National Electrical Code, ANSI/NFPA 70-1999.

## 3 Requirements

Preferred ratings, related requirements, and application recommendations for low-voltage power circuit breakers and AC power circuit protectors shall be as given in tables 1 through 23.

## 4 Revision of American National Standards referred to in this document

When the American National Standards referred to in this document are superseded by a revision approved by the American National Standards Institute, Inc., the revision shall apply.