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An American National Standard

IEEE Standard
**Requirements for Capacitance Current Switching for
AC High-Voltage Circuit Breakers
Rated on a Symmetrical Current Basis**

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**Requirements for Capacitance Current Switching for
AC High-Voltage Circuit Breakers
Rated on a Symmetrical Current Basis**

Sponsor

Switchgear Committee of the IEEE Power Engineering Society

Approved December 10, 1969

IEEE Standards Committee

Secretariat

**Edison Electric Institute
Institute of Electrical and Electronics Engineers
National Electrical Manufacturers Association**

Approved January 12, 1972

American National Standards Institute, Inc

American National Standard

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Foreword

(This Foreword is not a part of American National Standard and IEEE Standard Requirements for Capacitance Current Switching for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis, C37.073-1972, IEEE Std 341-1972.)

This standard is one of a series of complementary standards on ac high-voltage circuit breakers rated on a symmetrical current basis as follows:

C37.03-1964 (R1969)	Definitions for AC High-Voltage Circuit Breakers
C37.04-1964	Rating Structures for AC High-Voltage Circuit Breakers (Including Supplements C37.04a-1964 [R1969] and C37.04b-1970)
C37.05-1964 (R1969)	Methods for Determining the Values of a Sinusoidal Current Wave and a Normal-Frequency Recovery Voltage for AC High-Voltage Circuit Breakers
C37.06-1971	Schedules of Preferred Ratings and Related Required Capabilities for AC High-Voltage Circuit Breakers
C37.07-1969	Interrupting Capability for Reclosing Service for AC High-Voltage Circuit Breakers
C37.09-1964 (R1969)	Test Procedure for AC High-Voltage Circuit Breakers (Including Supplement C37.09a-1970)
C37.010-1964 (R1969)	Application Guide for AC High-Voltage Circuit Breakers (Including Supplements)
C37.11-1972	Requirements for Power Circuit Breaker Control
C37.12-1969	Guide Specifications for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis and a Total Current Basis

American National Standard C37.073-1972 is one of several additional standards being developed on specific subjects applicable to ac high-voltage circuit breakers rated on a symmetrical current basis. Each will be published as soon as the work is completed and it has been approved, rather than waiting until all are complete to effect a complete revision of the basic standards. This approach will make the standards more readily available to the industry. It is planned in the future, to integrate these standards into revisions of the basic American National Standards on circuit breakers listed above.

The additional standards are:

C37.071-1969	Requirements for Line Closing Switching Surge Voltage Control
C37.072-1971	Requirements for Transient Recovery Voltage
C37.0721-1971	Application Guide for Transient Recovery Voltage
C37.0722-1971	Preferred Transient Recovery Voltage Ratings and Related Required Capabilities
C37.073-1972	Requirements for Capacitance Current Switching
C37.0731	Application Guide for Capacitance Current Switching
C37.0732-1972	Preferred Ratings for Capacitance Current Switching
C37.074	Requirements for Switching-Impulse Voltage Insulation Strength
C37.076	Requirements for Pressurized Components
C37.077	Requirements for Current Transformers
C37.078	Requirements for External Insulation (Outdoor)
C37.0781	Dielectric Test Values for External Insulation (Outdoor)
C37.079	Guide to the Testing of Circuit Breakers with Respect to Out-of-Phase Switching

American National Standards C37.073-1972, C37.0731 (under development), and C37.0732-1972 are intended to provide an important need in the industry on requirements for capacitance

current switching for ac high-voltage circuit breakers rated on a symmetrical current basis. See Sections 1 and 2 of this standard.

The scope, purpose, definitions, ratings, and test procedure sections in this standard were prepared by the Working Group on Standards for Capacitance Current Switching of the IEEE High-Voltage Power Circuit Breaker Subcommittee of the IEEE Switchgear Committee. An application guide (C37.0731) is now under development in the IEEE Switchgear Committee. The schedule of preferred ratings in C37.0732-1972 were prepared by the High-Voltage Circuit Breaker Technical Committee of the NEMA Switchgear Section.

Suggestions for improvement gained in the use of this standard will be welcome. They should be sent to the American National Standards Institute, 1430 Broadway, New York, N. Y. 10018 with copy to the Secretary, IEEE Standards Committee, Institute of Electrical and Electronics Engineers, 345 East 47th Street, New York, N. Y. 10017.

The American National Standards Committee on Power Switchgear, C37, which reviewed and approved this standard, had the following personnel at the time of approval:

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The personnel of the Working Group of the IEEE Switchgear Committee and of the NEMA High-Voltage Circuit Breaker Technical Committee that prepared this standard were as follows:

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When the IEEE Standards Committee approved this standard on December 10, 1969, it had the following membership:

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