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American National Standard

guide to specifications for
ac high-voltage circuit breakers
rated on a symmetrical current basis
and a total current basis

ANSI C37.12-1981



american national standards institute, inc.
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**American National Standard
Guide to Specifications for
AC High-Voltage Circuit Breakers
Rated on a Symmetrical Current Basis
and a Total Current Basis**

Secretariat

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

Approved August 27, 1981

American National Standards Institute, Inc

American National Standard

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Foreword

(This Foreword is not a part of American National Standard Guide to Specifications for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis and a Total Current Basis, ANSI C37.12-1981.)

This publication represents standard practices in the United States relating to ac high-voltage circuit breakers and is one of a series of American National Standards on this subject. It was first published as an American National Standard in 1952.

The Committee on Electric Power Apparatus of the Association of Edison Illuminating Companies (AEIC), which originated these specifications prior to their adoption in 1952, initiated a review in 1976 for the purpose of establishing a suitable and up-to-date guide for construction and performance of alternating-current power circuit breakers. This work, which was carried out by a Subject Committee on Specifications, included such general requirements as are ordinarily fixed in uniform, supplementing rating standards, and contained applicable specific requirements of the purchasers. ANSI C37.12-1981 is issued as a guide and as such is advisory in nature. This edition includes revisions and additions to the previous edition in the following areas:

- (1) Performance
- (2) Operating mechanism
- (3) Structural features
- (4) Incorporated secondary and control devices
- (5) Purchaser's detailed requirements
- (6) Information to be furnished by manufacturer or vendor with bid

This standard applies to circuit breakers covered by both the total current basis of rating and symmetrical current basis of rating. Related standards include the following:

<i>Total Current Basis of Rating</i>	<i>Symmetrical Current Basis of Rating</i>
ANSI C37.4-1953 (R1976)	ANSI C37.06-1979
ANSI C37.4a-1958 (R1976)	ANSI C37.11-1979
ANSI C37.4b-1970 (R1976)	ANSI/IEEE C37.04-1979
ANSI C37.4c-1979	ANSI/IEEE C37.09-1979
ANSI C37.6-1971 (R1976)	ANSI/IEEE C37.010-1979
ANSI C37.7-1960 (R1976)	ANSI/IEEE C37.011-1979
ANSI C37.9-1953 (R1976)	ANSI/IEEE C37.012-1979
ANSI/IEEE C37.5-1979	

Suggestions for improvement of this standard will be welcome. They should be sent to the American National Standards Institute, 1430 Broadway, New York, N.Y. 10018.

This standard was processed and approved for submittal to ANSI by American National 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 it approved this standard, the C37 Committee had the following members:

C. L. Wagner, Chairman
J. E. Beehler, Vice-Chairman
W. E. Laubach, Executive Chairman of Low-Voltage Switchgear Standards
S. H. Telander, Executive Vice-Chairman of IEC Activities
J. D. Hopkins, Secretary

Organization Represented

<i>Organization Represented</i>	<i>Name of Representative</i>
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Electric Light and Power Group.	J. E. Beehler
	D. O. Craghead
	H. G. Frus
	K. D. Hendrix
	R. L. Capra (Alt)
	R. L. Lindsey (Alt)
	J. P. Markey (Alt)

<i>Organization Represented</i>	<i>Name of Representative</i>
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U.S. Department of the Army.	J. S. Robertson
U.S. Department of the Interior, Bureau of Reclamation	E. M. Tomsic
U.S. Department of the Navy, Naval Construction Battalion Center	R. L. Clark

A subcommittee of the AEIC Committee on Electric Power Apparatus worked on this revision to coordinate with the applicable standards on high-voltage circuit breakers rated on both the symmetrical current basis and the total current basis. During the tenure of the subcommittee many members of AEIC and operating companies contributed to the task of revising this standard. Representatives of several switchgear manufacturers served as advisers. This subcommittee had the following members:

J. E. Beehler
J. P. Fitzgerald
L. J. Himes
G. W. Supplee
J. C. Wells

The Subcommittee on High-Voltage Circuit Breakers of the ANSI C37 Committee, which developed this standard, had the following members:

R. D. Hambrick, Chairman	J. E. Beehler	G. G. Schockelt
	C. J. Dvorak	H. M. Smith
	G. Hanks	D. L. Swindler
	G. N. Lester	W. R. Wilson
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