

An American National Standard

IEEE Standard Methods for the Measurement of Sound Pressure Levels of AC Power Circuit Breakers

Secretariat

**Institute of Electrical and Electronics Engineers, Inc.
National Electrical Manufacturers Association**

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USA

Foreword

(This Foreword is not a part of ANSI/IEEE C37.082-1982, IEEE Standard Methods for the Measurement of Sound Pressure Levels of AC Power Circuit Breakers.)

Widespread interest in noise has prompted studies of the noise produced by power circuit breakers. In order to establish the uniformity necessary for correlation of test results, this standard describes a method of testing related specifically to power circuit breakers.

This standard deals with objective methods of measurement and reporting of sound levels. These methods are intended to provide data which can be used in evaluating the effects of circuit breaker sound on human observers, but the evaluation itself is outside the scope of this standard.

Impulsive sound caused by opening or closing operations is the major concern, but for purposes of a complete standard, the measurement of continuous and intermittent sound is included. Two major problem areas are recognized:

- 1) For personnel near the circuit breaker, where safety and health considerations make the impulsive sound levels of interest
- 2) For persons remote from the circuit breaker, where the impulsive sounds produced by operations may cause a nuisance, or where specific ordinances regulate permissible sound levels.

Methods of measurement in the near and far fields, for impulsive, continuous, and intermittent sound are given.

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

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Testing Laboratory Group	L. Frier E. J. Huber R. W. Seelbach (<i>Alt</i>)
US Department of the Army Corp of Engineers	J. S. Robertson
US Department of the Interior, Bureau of Reclamation	Edward M. Tomsic
US Department of Defense, Defense Communications Agency	<i>Vacant</i>
US Department of the Navy, Naval Construction Battalion Center	A. R. Hanks J. N. Montagna

This standard was prepared by the Working Group on Sound Level Measurements of the Power Circuit Breaker Subcommittee. At the time this standard was approved, the working group had the following membership:

I. E. Olivier, Chair

Harold B. Cummings, III	James Moreland	Martin J. Reilly
Thomas Garrity	John G. Reckleff	E. F. Solorzano
Martin J. Maier	Hugh K. Reid	V. N. Stewart

At the time this standard was approved, the Power Circuit Breaker Subcommittee had the following membership:

G. N. Lester, Chair

H. W. Ander	G. R. Hanks	A. B. Rishworth
J. E. Beehler	M. Hudis	W. N. Rothenbuhler
D. M. Benenson	W. C. Huening	L. H. Schmidt
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R. G. Colclaser	S. R. Lambert	G. G. Schockelt
J. C. Coon	D. M. Larson	R. D. Settembrini
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K. I. Gray	G. O. Perkins	W. R. Wilson
G. P. Guaglione	J. G. Reckleff	B. F. Wirtz
R. D. Hambrick		C. E. Zanzie

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