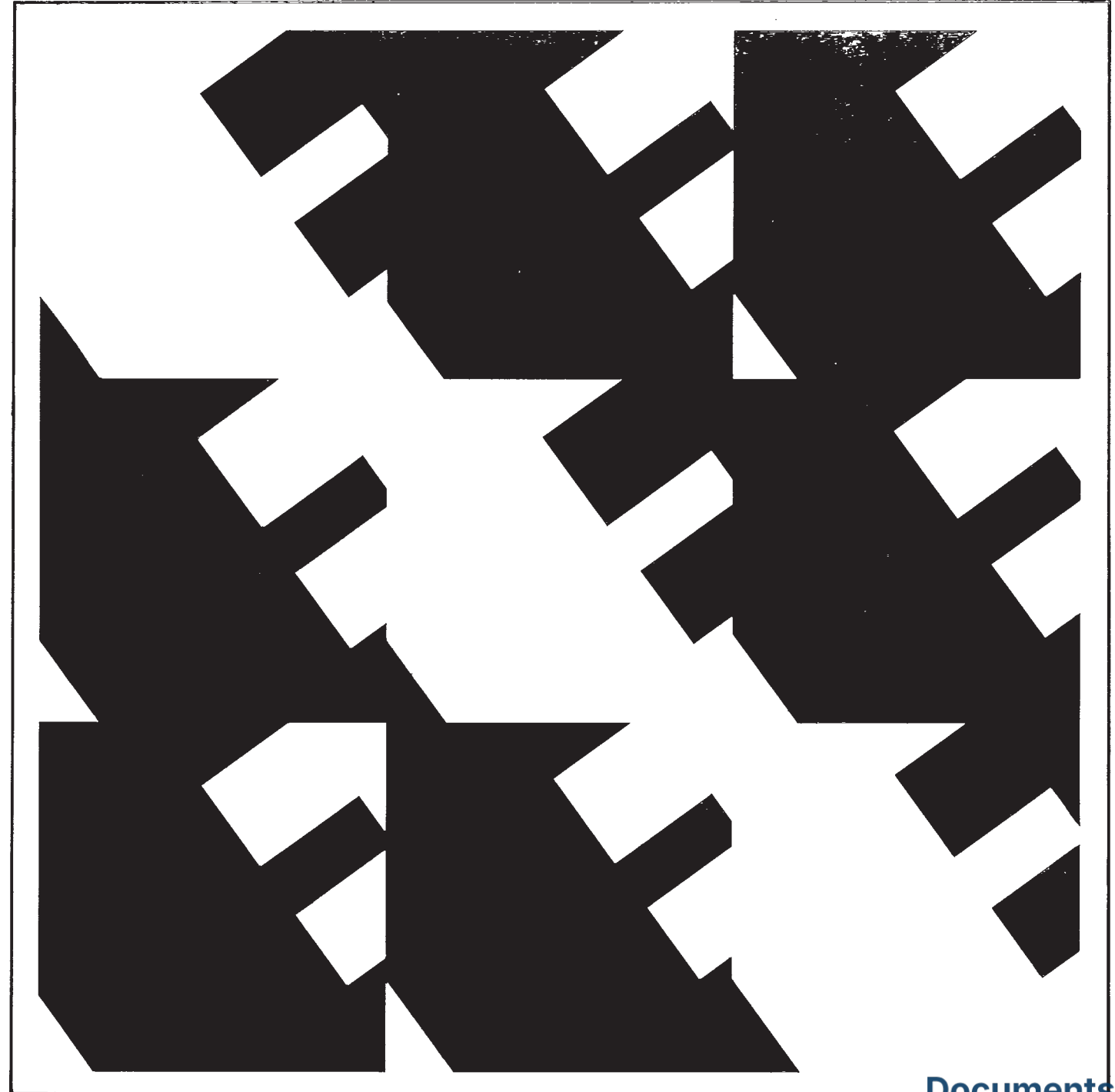


IEEE Standard for Calculation of Bare Overhead Conductor Temperature and Ampacity Under Steady-State Conditions

ANSI/IEEE Std 738-1986



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An American National Standard

**IEEE Standard for Calculation of
Bare Overhead Conductor Temperature and
Ampacity Under Steady-State Conditions**

Sponsor
**Transmission and Distribution Committee of the
IEEE Power Engineering Society**

Approved September 13, 1984
IEEE Standards Board

Approved March 29, 1985
American National Standards Institute

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Foreword

(This Foreword is not a part of ANSI/IEEE Std 738-1986, IEEE Standard for Calculation of Bare Overhead Conductor Temperature and Ampacity Under Steady-State Conditions.)

There has been considerable diversity in the methods used by various electric utilities to rate the current-carrying capacity of power lines. The ampacity ratings of conductors have also varied within some companies with different ratings utilized by design, operating, and planning engineers. The conductor temperatures and ampacity ratings affect the useful life of the conductor, conductor clearances, and economic power transfer; therefore, this standard has been developed so that a practical, sound, and uniform method may be utilized and referenced.

Many persons from electric companies, suppliers, and universities have contributed to the development of this standard. In addition to those persons and the present members of the working group, the contributions of H. W. Adams, E. A. Chiarito, L. H. Fink, R. E. Larson, R. F. Lehman, W. H. McKinnon, E. Overn, and A. Wright are acknowledged and appreciated.

At the time this standard was approved, the members of the Task Group on Calculation of Bare Overhead Conductor Temperatures of the Towers, Poles, and Conductors Subcommittee were as follows:

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