

Supplement to IEEE Guide for Synthetic Fault Testing of AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis

8.3.2: Recovery Voltage for Terminal Faults; Asymmetrical Short-Circuit Current

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Abstract: The transient recovery voltage needs to be modified when interrupting asymmetrical currents. The voltage rate R , the peak voltage E_2 and the rate of change of current di/dt all change with the asymmetrical current zero. Guidance is provided on how to make these corrections when compared to the symmetrical case.

Keywords: asymmetrical current, correction factors, major current zeros, minor current zeros, X/R ratio

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Introduction

(This introduction is not part of IEEE Std C37.081a-1997, Supplement to IEEE Guide for Synthetic Fault Testing of AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis—8.3.2: Recovery Voltage for Terminal Faults; Asymmetrical Short-Circuit Current.)

This supplement was prepared by the Working Group on Synthetic Testing of The High Voltage Circuit Breaker Subcommittee. At the time this guide was approved the working group had the following membership:

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