

IEEE Standard for Ratings and Requirements for AC High-Voltage Circuit Breakers with Rated Maximum Voltage Above 1000 V

IEEE Power and Energy Society

Developed by the
Switchgear Committee

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(Corrigendum to IEEE Std C37.04-2018)

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Corrigendum 1

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IEEE SA Standards Board

Abstract: This standard covers the rating structure for all high-voltage circuit breakers, which include all voltage ratings above 1000 V ac and comprise both indoor and outdoor types. Preferred ratings are also provided. Typical circuit breakers covered by these standards have maximum voltage ratings ranging from 4.76 kV through 800 kV, and continuous current ratings of 600 A, 1200 A, 2000 A, 3000 A, and 4000 A associated with the various maximum voltage ratings. The rating structure establishes the basis for all assigned ratings, including continuous current, insulation capability (formerly dielectric withstand voltages), short-circuit current, transient recovery voltage, and capacitor switching, plus associated capabilities such as mechanical endurance, load current, and out-of-phase switching. This standard does not cover generator circuit breakers, which are covered by IEC/IEEE Std 62271-37-013™.

Keywords: capacitive current switching, IEEE C37.04™, indoor, insulation capability, interrupting time, mechanical endurance, outdoor, operating duty, power frequency, ratings, related capabilities, short-circuit current, short-line fault, transient recovery voltage

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