

A B S T R A C T

A METHOD OF DISCRIMINATING BETWEEN AN INTERNAL ARC AND A
CIRCUIT-BREAKING ARC IN A MEDIUM OR HIGH VOLTAGE CIRCUIT-
BREAKER.

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10 The method relates to discriminating between an
internal arc and a circuit-breaking arc established in
the enclosure of a circuit breaker in a bay of a medium
or high voltage metal-clad substation. The appearance of
an internal arc is detected by a protection system which
15 responds by transmitting a disengagement order (15) to
the circuit breaker, thereby causing a circuit-breaking
arc to appear. The method consists in:

 • continuously measuring the pressure of the
dielectric gas inside the enclosure of the circuit
20 breaker;

 • recording said pressure measurements so that after
the instant at which the disengagement order (15) is
transmitted, it is possible to recover a first pressure
value measured before said instant; and

25 • comparing said first pressure value with a second
pressure value measured after said instant in order to
identify whether the internal arc was struck in said
circuit breaker enclosure.

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