

## Test Documents for Vacuum Circuit-Breaker 3AE5134-1Z "E13+E95" (12 kV, 25 kA, 800 A)

The vacuum circuit-breakers of type 3AE were type tested in accordance with

IEC Publication 62271-1, Edition 1.1, 2011-08,  
IEC Publication 62271-100, Edition 2.1, 2012-09 and the relevant harmonisation documents.

For vacuum circuit-breaker 3AE5134-1Z "E13+E95" the following test documents are valid:

| Type Tests  | Rated Values  | Test Documents         |
|---|---|------------------------|
| Dielectric tests  | $U_p = 95 \text{ kV}$<br>$U_d = 42 \text{ kV}$          | 14-100-MH              |
| Temperature-rise tests  | $I_r = 800 \text{ A}$                                   | 14-061-ME              |
| Mechanical operation test at ambient temperature,<br>Low and high temperature tests | 10.000 op. Cycles<br>-5 / +40 °C                        | 14-067-MM<br>14-055-MM |
| Short-time withstand current and peak withstand current tests                       | $I_{sc} = 25 \text{ kA/3s}$<br>$I_{ma} = 63 \text{ kA}$ | 14-041-MS              |
| Short-circuit making and breaking tests   | $I_{sc} = 25 \text{ kA}$<br>$I_{ma} = 63 \text{ kA}$    | 14-050-MS              |

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Berlin, March 17, 2015

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If a test is carried out with a vacuum circuit-breaker with different order number, the validity of the test document is given by the following statements:

The listed test documents for the mentioned vacuum circuit-breaker are valid in respect to familiar design of the vacuum circuit-breakers, as the construction of the main current path and mechanical driving mechanism is nearly identical.

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In addition to the type tests in accordance with IEC 62271-1 and IEC 62271-100 the following tests were carried out:

| Type Tests  | Test Documents |
|---|----------------|
| Single-phase and double earth fault tests   | 14-050-MS      |
| Capacitive current switching tests:<br>-cable-charging current breaking tests<br>-single capacitor bank switching tests | 14-047-MS      |
| Out-of-phase making and breaking tests  | 14-050-MS      |

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