

Test Document

Report No.: 02-020-MH/E

Copy No.: 0

Contents: 14 sheets

Equipment under test: Three-pole vacuum circuit-breaker 3AH5124-2 (12 kV, 25 kA, 1250 A) with vacuum interrupters VS12031P

Manufacturer: Siemens AG, PTD M C PB1, 13623 Berlin

Client: Siemens AG, PTD M C R&D VCB 13, 13623 Berlin

Testing station: Siemens AG, Prüffeld der Schaltwerke, Berlin

Date of test: May 07, 2002

Applied test specifications:

IEC Publication 60694, edition 2.2, 2002-01

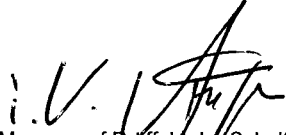
DIN EN 60694 (VDE 670, Teil 1000), Oktober 1998

Tests performed: Dielectric tests, including:
Short-duration power-frequency withstand voltage: 28 kV
Lightning impulse withstand voltage: 75 kV

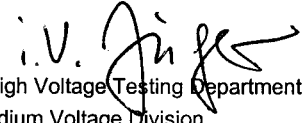
Test results:

The apparatus tested has passed the above indicated tests without any objection. The results obtained and the proved performance comply with the requirements mentioned above.

Siemens Aktiengesellschaft
Prüffeld der Schaltwerke, Berlin


Manager of Prüffeld der Schaltwerke
Medium Voltage Division
Anger




Manager of High Voltage Testing Department
Medium Voltage Division
Jäger

Berlin, July 25, 2002

The test results exclusively
relate to the items tested.



DAT-P-017/92-01

Technical Data of Test Object

Switching Device

Ratings assigned by the manufacturer

Test object: Three-pole vacuum-circuit breaker with vacuum interrupters type VS12031P
Type: 3AH5124-2
Manufacturer: Siemens AG
Serial No.: 3AH5/00010836 **Year of manufacture:** 2002
Drawing No.: Drawings and part lists - see sheet 6

| | |
|--|-------------------|
| Rated voltage | 12 kV |
| Rated lightning impulse withstand voltage | 75 kV |
| Rated switching impulse withstand voltage | - kV |
| Rated short-duration power-frequency withstand voltage | 28 kV |
| Rated frequency | 50 Hz |
| Rated normal current | 1250 A |
| Rated peak withstand current | 63 kA |
| Rated short-time withstand current | 25 kA |
| Rated duration of short-circuit | 3 s |
| Rated short-circuit breaking current | |
| Rated short-circuit current | 25 kA |
| D.C. component | 36 % |
| Rated short-circuit making current | 63 kA |
| Rated transient recovery voltage | |
| Peak value | 20.6 kV |
| Rate of rise | 0.34 kV/μs |
| First-pole-to-clear-factor | 1.5 |
| Rated operating sequence | O-0.3s-CO-3min-CO |
| Arc extinguishing medium | vacuum |
| Rated pressure (20 °C) (absolute) | < 0.01 Pa |
| Insulating medium | air |
| Rated pressure / Minimal pressure (20 °C) | - MPa |
| Driving mechanism | |
| Type of drive | spring/ motor |
| Rated voltage | 110 V DC |
| Number of poles | 3 |
| Number of units per pole | 1 |
| Rated opening time | < 65 ms |
| Rated closing time | < 75 ms |
| Rated voltage of opening release | 110 V DC |
| Rated voltage of closing release | 110 V DC |
| Rated supply voltage | - V DC |
| Rated frequency of supply voltage | - Hz |
| Further specifications: | |
| Tube in pole R | S.-No.: 39466 |
| Tube in pole S | S.-No.: 39454 |
| Tube in pole T | S.-No.: 39459 |

Essential characteristics: -

Remarks: -