

Test Document

Report No.: 04-026-MM/E

Copy No.: 0

Contents: 18 sheets

Equipment under test: Three-pole vacuum circuit-breaker 3AH5272-2 (24 kV, 16 kA, 1250 A) with vacuum interrupters VS 24016

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

Client: Siemens AG, PTD M C R&D 1, 13623 Berlin

Testing station: Siemens AG, Prüffeld der Schaltwerke, Berlin

Date of test: From May 05-2004 till June 14-2004

Applied test specifications:

IEC Publication 60694, Edition 2.2, 2002-01

DIN EN 60694 (VDE 0670, Teil 1000), 2002-09

IEC Publication 62271-100, 1st edition, 2001-05

DIN EN 62271-100 (VDE 0671 Teil 100), 2004-04


Tests performed: Mechanical operation test at ambient air temperature
Low and high temperature test (-25°C / +55°C)
Extended mechanical operation test (M2, 10.000 operations)

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


Jäger
Manager of Prüffeld der Schaltwerke
Medium Voltage Division




Kurth
Manager of Mechanical Testing Department
Medium Voltage Division

Berlin, Dezember 17, 2004

The test results exclusively
relate to the items tested.



DAT-P-017/92-02

Technical Data of Test Object

Switching Device

Ratings assigned by the manufacturer

Test object: Three-pole vacuum circuit-breaker
Type: 3AH5272-2
Manufacturer: Siemens AG, PTD M C PB1
Serial No.: 3AH52/00000497 **Year of manufacture:** 2004
Drawing No.: Drawings and part lists - see sheet 6

| | | |
|--|-------------------|-------------|
| Rated voltage | 24 | kV |
| Rated lightning impulse withstand voltage | 125 | kV |
| Rated switching impulse withstand voltage | - | kV |
| Rated short-duration power-frequency withstand voltage | 50 | kV |
| Rated frequency | 50 | Hz |
| Rated normal current | 1250 | A |
| Rated peak withstand current | 40 | kA |
| Rated short-time withstand current | 16 | kA |
| Rated duration of short-circuit | 3 | s |
| Rated short-circuit breaking current | | |
| Rated short-circuit current | 16 | kA |
| D.C. component | 36 | % |
| Rated short-circuit making current | 40 | kA |
| Rated transient recovery voltage | | |
| Peak value | 41 | kV |
| Rate of rise | 0.47 | kV/ μ s |
| 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 / Minimum pressure (20 °C) | - | MPa |
| Driving mechanism | | |
| Type of drive | motor / spring | |
| 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 | 110 | V DC |
| Rated frequency of supply voltage | 50 | Hz |
| Further specifications: | | |
| Tube in pole R | S.-No.: | 14506 |
| Tube in pole S | S.-No.: | 14427 |
| Tube in pole T | S.-No.: | 14428 |

Essential characteristics: -

Remarks: -