



Vacuum circuit-breaker type VM1

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Mechanical
operating cycles

- a) Operating mechanism
...100,000
- b) Vacuum interrupter
...30,000

Operating cycles
at rated short-circuit
breaking current
...30,000



VM1

Vacuum circuit-breaker with
magnetic actuator mechanism

- 12 kV, ...3150¹⁾ A, ...50 kA
- 17.5 kV, ...3150¹⁾ A, ...40 kA
- 24 kV, ...2500 A, ...25 kA

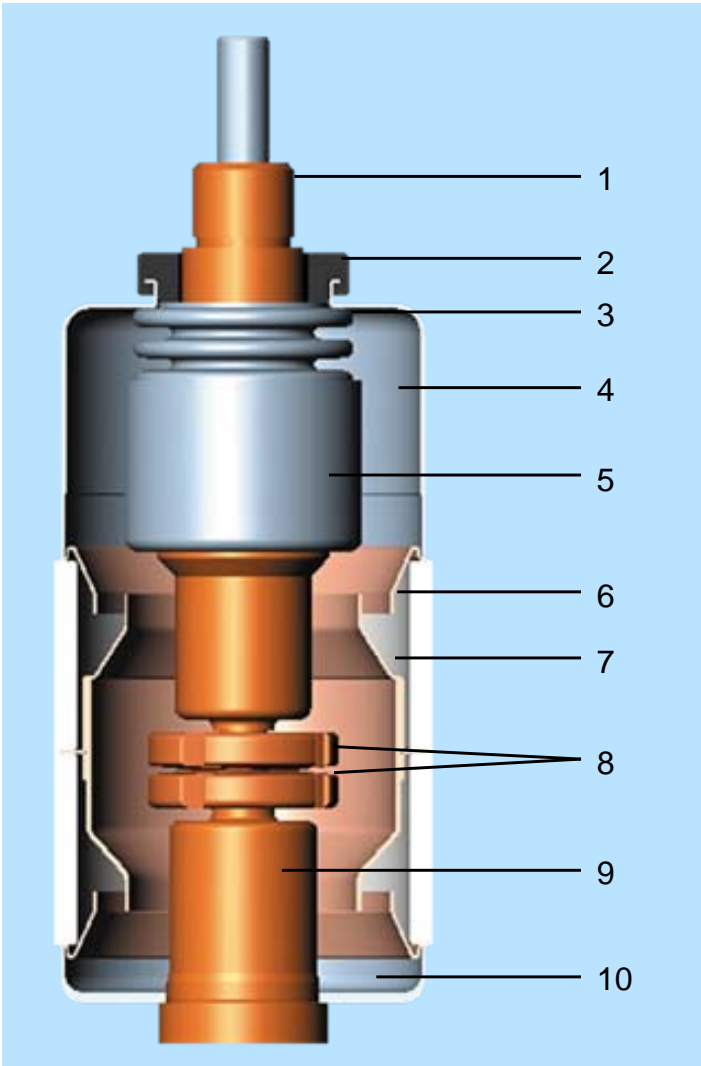
¹⁾ Breakers for 4000 A with fan cooling

Vacuum circuit-breaker type VM1



Removable vacuum
circuit-breaker module
(breaker withdrawable)

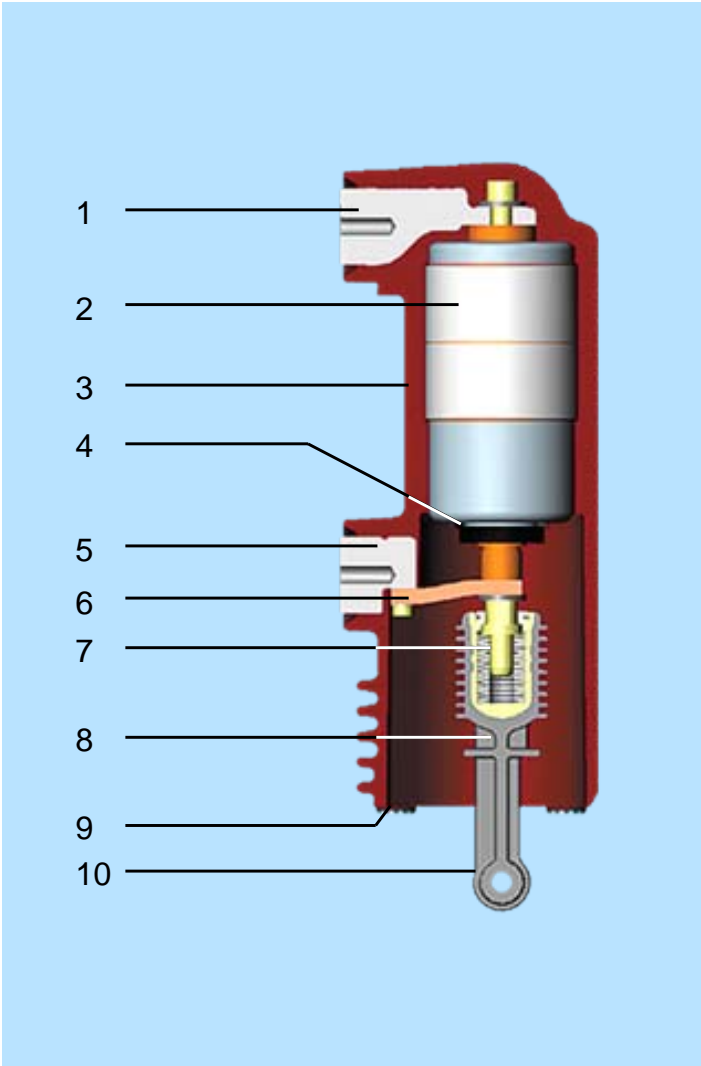
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Vacuum interrupter (principle structure)

- 1 Stem / terminal
- 2 Twist protection
- 3 Metal bellows
- 4 Interrupter lid
- 5 Shield
- 6 Ceramic insulator
- 7 Shield
- 8 Contacts
- 9 Stem / terminal
- 10 Interrupter lid

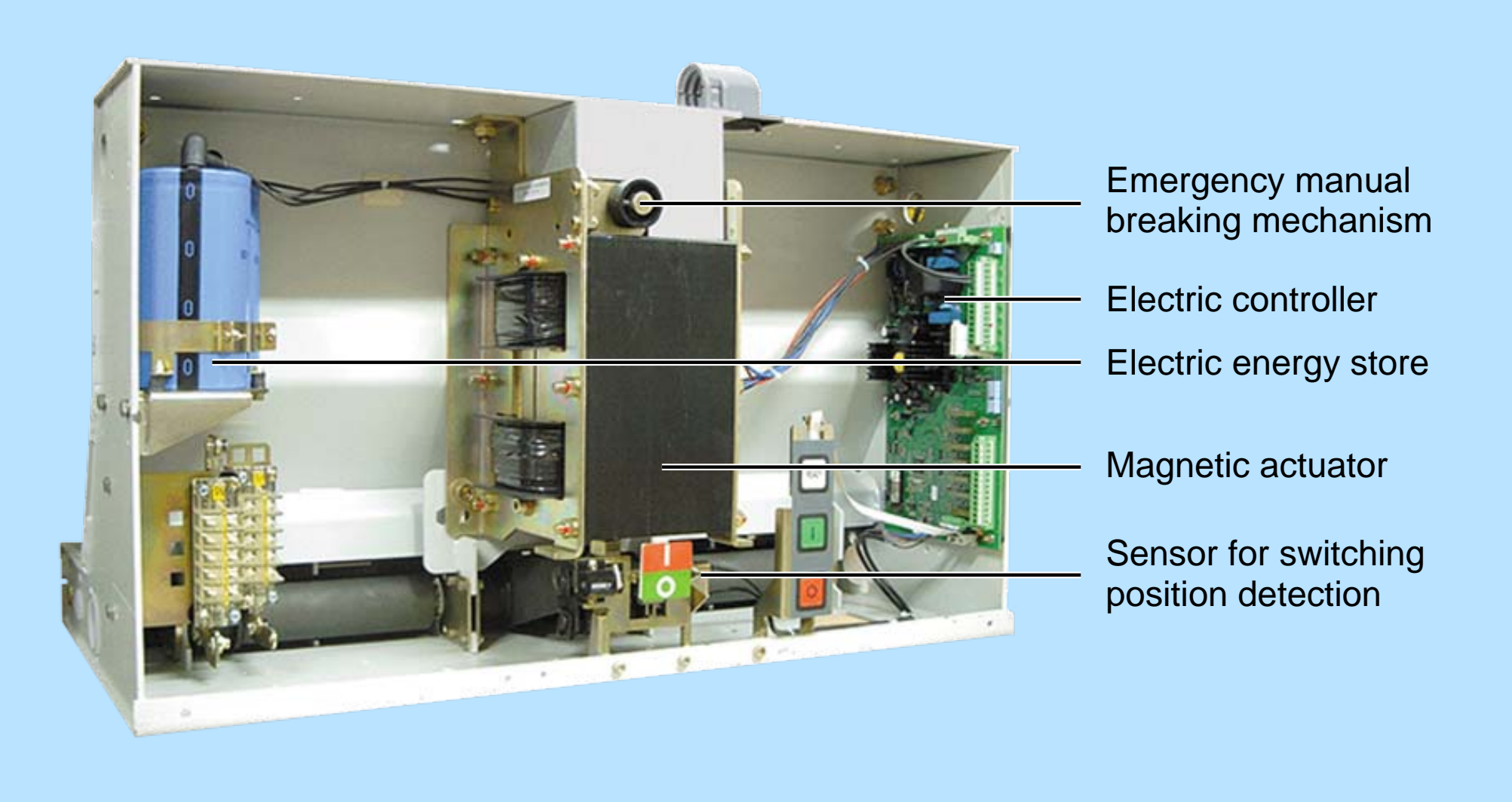
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Embedded pole (principle structure)

- 1 Upper terminal
- 2 Vacuum interrupter
- 3 Epoxy resin
- 4 Stem
- 5 Lower terminal
- 6 Flexible connection
- 7 Contact force spring
- 8 Push rod
- 9 Fixing point
- 10 Connection to operating mechanism

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Emergency manual breaking mechanism

Electric controller

Electric energy store

Magnetic actuator

Sensor for switching position detection

Vacuum circuit-breaker type VM1-T



Fast VM1-switch type VM1-T

- 12 kV, less than 20 ms respectively for closing and opening (including arcing time)
- Mechanical endurance over 2,000 operations (CO)

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All benefits at a glance

- High reliability
(according to DIN EN 61511-1 SIL3)
- Few individual parts
- Simple mechanical sequences
- Extremely maintainability
- High quality standard
- Long life

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