### VM<sub>1</sub>

## Vacuum circuit-breaker with magnetic actuator mechanism

- High availability
- Extremely high number of operating cycles
- Extremely Maintainability
- Electronic controller with sensor technology
- Vacuum interrupters embedded in epoxy resin
- High quality standard
- For universal applications worldwide



## Vacuum circuit-breaker type VM1

#### Technical data

Circuit-breaker		VM1 12	VM1 17	VM1 24
Standards: VDE 0670, Part 1000 and IEC 60694 / VDE 0671, Part 100 and IEC 62271-100		•	•	•
Rated and insulation voltage	kV	12	17.5	24
Rated power frequency withstand voltage 50 Hz (1 min.)	kV	28	38	50
Rated lightning impulse withstand voltage	kV	75	95	125
Rated frequency	Hz	50 - 60	50 – 60	50 – 60
Rated current (40 °C)	Α	4000 1)	3150	2500
Rated short-circuit breaking current	kA	50	40	25
Rated short-circuit making current	kA	125	100	63
Rated operating sequence for autoreclosing	(	D-0,3s-CO-3min-CO	O-0,3s-CO-3min-CO	O-0,3s-CO-3min-CO
Opening time / Closing time	ms	3550/4560	3550/4560	3550/4560
Arcing time (at 50 Hz)	ms	≤ 15	≤ 15	≤ 15
Total break time	ms	≤ 60	≤ 60	≤ 60
Mechanical operating cycles: Actuator / vacuum interrupter		100,000/30,000	100,000/30,000	100,000/30,000
Electrical operating cycles: at rated current / at short-circuit current		30,000/100	30,000/100	30,000/100
Overall dimensions	H (mm)	461668	461668	631662
(fixed version)	B (mm)	570750	570750	570750
	T (mm)	424459	424459	424
	P (mm)	150275	150275	210/275
Operating temperature	°C	- 25+ 40	- 25+ 40	- 25+ 40

<sup>1) 4000</sup> A with fan cooling



Emergency manual breaking mechanism

Electrical controller

Electrical energy store

Magnetic actuator

Sensor for switching position detection

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