

eVM1

Medium voltage magnetic actuator circuit-breaker with integrated on-board sensors, protection and control

- Vacuum interruption technique
- Vacuum interrupters embedded in epoxy resin and sealed for life
- Perfectly compatible with the VD4 and VM1 series of circuit-breakers
- Withdrawable version
- Circuit-breaker racking-out and racking-in with the door closed
- Possibility of use in all types of installation
- Simplification in preparing specifications and ordering procedures
- Circuit-breaker and panel components fully factory tested and commissioned
- Drastic reduction in cabling and the risk of errors
- Improvement of safety and service reliability
- Inductive sensors for open-closed indication
- Control of the circuit-breaker state and continuity of the opening-closing coils
- Watchdog function
- Maintenance-free
- High level of environmental and electromagnetic compatibility



Protections according to IEC 60255-3 and IEC 60255-8 Standards

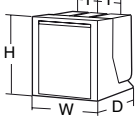
The basic series includes:

- 51 Overcurrent IDMT (NI, VI, EI, LI)
- 50 Overcurrent DT1
- 50 Overcurrent DT2
- 51N Earth fault IDMT
- 50N Earth fault DT1
- 50N Earth fault DT2.

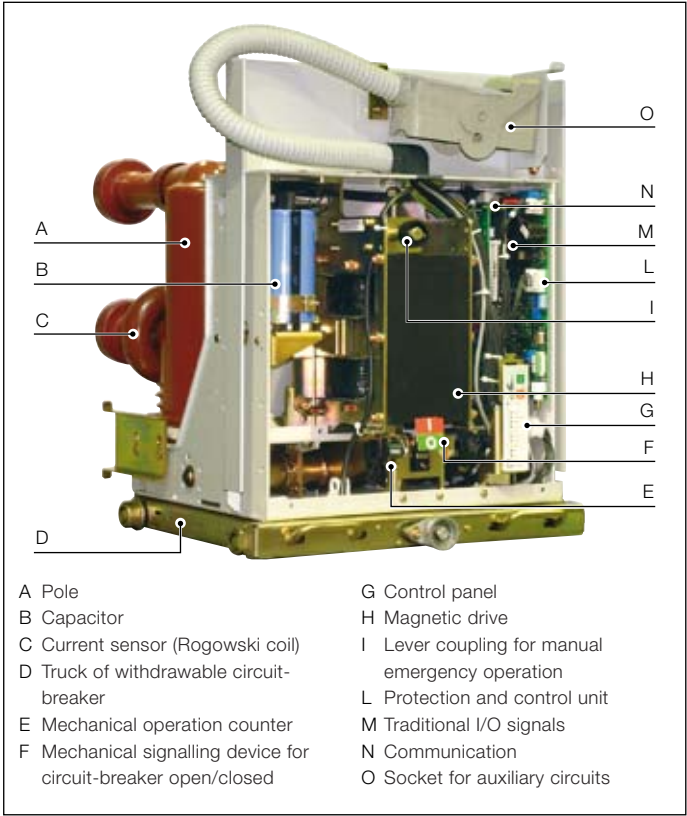
The complete series includes:

- 51MS Motor starting protection
- 66 Number of start-ups
- 51LR Locked rotor
- 49 Thermal overload
- 46 Unbalanced load.

Technical characteristics

Circuit-breaker		eVM1 12	eVM1 17
Standards	IEC 62271-100	•	•
Rated insulation voltage	[kV]	12	17,5
Withstand voltage at 50 Hz (1 min)	[kV]	28	38
Impulse withstand voltage	[kV]	75	95
Rated frequency	[Hz]	50-60	50-60
Rated normal current (40 °C)	[A]	630-1250	630-1250
Rated breaking capacity	[kA]	16-20-25-31,5	16-20-25-31,5
Rated short-time withstand current (3 s)	[kA]	40-50-63-80	40-50-63-80
Making capacity	[kA]	O-0,3s-CO-3min-CO	O-0,3s-CO-3min-CO
Sequence of operations		O-0,3s-CO-3min-CO	O-0,3s-CO-3min-CO
Duration of: Opening / Closing	[ms]	33 / 50	33 / 50
Mechanical operation cycles:	Drive	100.000	100.000
	Vacuum interrupters	30.000	30.000
Operation cycles at rated current	[Nr.]	30.000	30.000
Consumption: On stand-by / After a reclosing cycle	[W]	≤ 15 / ≤ 110	≤ 15 / ≤ 110
Overall dimensions (withdrawable version)		H [mm]	624,5
		W [mm]	531
		D [mm]	662
		I [mm]	150
Operating temperature	[°C]	- 5 ... + 40	- 5 ... + 40
Technical catalogue	Nr.	1VCP000168	1VCP000168

Main components



For more information please contact:

ABB S.p.A.
Power Products Division
Unità Operativa Sace-MV
Via Friuli, 4
I-24044 Dalmine
Tel.: +39 035 6952 111
Fax: +39 035 6952 874
e-mail: sacetms.tipm@it.abb.com

ABB AG
Calor Emag Medium Voltage Products
Oberhausener Strasse 33 Petzower Strasse 8
D-40472 Ratingen D-14542 Glindow
Phone: +49(0)2102/12-1230, Fax: +49(0)2102/12-1916
E-mail: calor.info@de.abb.com

www.abb.com

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