

## Technical data

# VD4-LMT 12kV Indoor Vacuum Circuit Breaker

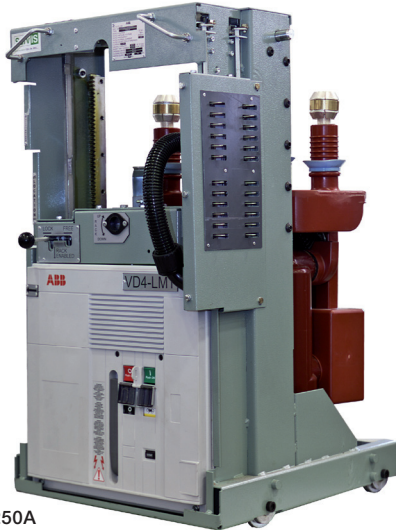
### VD4-LMT Medium Voltage Vacuum Circuit Breaker

The VD4-LMT medium voltage circuit breaker consists of three separate vacuum circuit breaker poles, that are maintenance free lifelong sealed units complying with IEC 62271-100 and CEI 17-1.

The EL type mechanically-operated mechanism with stored energy performs the opening and closing operations independently from that of the operator's actions. Mounted on a steel-wheeled carriage, the breaker can be horizontally withdrawn to the service, earth or fully withdrawn positions.

Raising and lowering of the circuit breaker is by means of a geared mechanism with a removable operating handle. Motorised raising and lowering of the circuit breaker is optional.

In the VD4-LMT range of 630–2000A the secondary connections between the circuit breaker and the enclosure is by means of self-aligning isolating contacts, which are located on the inner right hand side of the circuit breaker compartment. Plug and socket type secondary connections are optional.



VD4-LMT 630/1250A

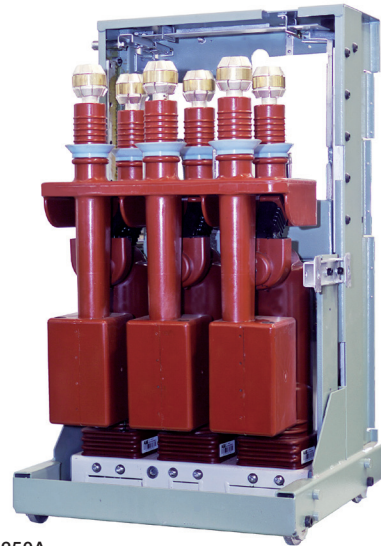
### Vacuum Arc Breaking Technique

The contacts in ABB's vacuum interrupters have a special spiral geometry that creates a self-generated rotating magnetic field over the full area of the arc column. This tangentially forces the rapid rotation of the arc around the contact axis giving a more even distribution of thermal stresses, that results in negligible erosion, free of any restriking and a longer life.

### Interlocks

Safety is ensured by simple positive interlocks which will prevent:

- Racking up or down of a closed circuit breaker.
- Moving of a circuit breaker unless it is fully lowered.
- Locating of a circuit breaker in any other position than the one selected.
- Closing of a circuit breaker unless it is fully raised or fully lowered.
- Closing of a circuit breaker when fully raised unless the required secondary connections are made.



VD4-LMT 630/1250A

### Feature Benefits

- In the range 630–2000A the VD4-LMT can be retrofitted to any Reyrolle type LMT, LMS, LSR, LMVP, LMR switchgear panel.
- Sealed for life poles.
- Manual or motorised mechanism.
- 10,000 mechanical operations.
- Maintenance free circuit breaker poles.

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## Technical Specifications

Standards	IEC 62271-100, CEI 17-1 (File 1375) & CENELEC HD 348 S6
Operating Sequence	Rapid re-closing cycle (0-0,3s-CO-3min-CO)
Rated Frequency fr (Hz)	50 / 60
Impulse Withstand Voltage Up(kV)	95

Type Rated	Rated Current Ir(A)	Rated Voltage Ur(kV)	Withstand Voltage Ud (1 min)(kV)	Rated Breaking Capacity I <sub>sc</sub> (kA)	Making Capacity I <sub>p</sub> (kA)	Rated Short Time Current I <sub>k</sub> (kA) 3sec
VD4-LMT 630	630	12	28	31.5	80	31.5 *
VD4-LMT 1250	1250	12	28	31.5	80	31.5
VD4-LMT 1250	1250	12	28	25	62.5	25
VD4-LMT 2000	2000	12	28	31.5	80	31.5

\* Short Time Current Rating is determined by Panel Type.



VD4-LMT 2000A



VD4-LMT 2000A

For more information please contact:  
**ABB South Africa Power Products**

<b>Johannesburg</b>	<b>Cape Town</b>	<b>Secunda</b>
Tel: +27 10 202 5000	Tel: +27 21 506 7700	Tel: +27 17 634 4953
Fax: +27 11 579 8000	Fax: +27 21 506 7711	Fax: +27 17 634 2609

<b>Durban</b>	<b>Port Elizabeth</b>
Tel: +27 31 533 7200	Tel: +27 41 365 4125
Fax: +27 11 236 8532	Fax: +27 41 364 0868

E-mail: [sales@abb.co.za](mailto:sales@abb.co.za)  
 Internet: <http://www.abb.com/heritage>  
 Web Enquiries: <http://abbppmv-za.custhelp.com>

**ABB Sharecall: +27 10 202 6995**  
**ABB Maxicall: 0861 488 488 (24-hour Technical Support)**

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