



VCB15\_HD1\_16F



VCB15\_MD1\_16F

The VCB15\_MD and VCB15\_HD are the next generation of Tavrída Electric circuit breakers. Designed by our team of engineers with more than 30 years of experience – these circuit breakers are higher rated versions of the time-proven Tavrída Electric LD and SHELL circuit breakers, renowned for exceptional reliability, operational speed, dimensions in a maintenance free design.

**High operational speed:**

- The fastest VCB on the market with Opening/Closing time - 12/24 ms.

**Most Compact dimensions, lightest weight, any spatial orientation:**

- Optimum usage of space guaranteed.
- Able to fit in the most unique switchgear designs for confined spaces.
- Applicable for retrofit or new installations.

**Long life and high reliability VCBs:**

- 30, 000 close-open cycles.
- Life expectancy of at least 30 years.



**Easy installation, maintenance free:**

- Low power consumption of control module.
- Minimum VCB O&M costs.
- Easy installation and integration into OEM solutions.

**Higher level of automation:**

- Continuous self-supervision of the entire trip and close circuit.
- Local and SCADA control, event log and oscillography as well as advanced user software.

**Environmentally friendly:**

- SF6-free vacuum circuit breakers.



The VCB15\_HD1\_16f has a pole center distance of only 210 mm/275 mm, which can conduct a rated continuous current up to 2500 /3150A. Never before have VCBs with such high ratings been available in a compact and applicable design.

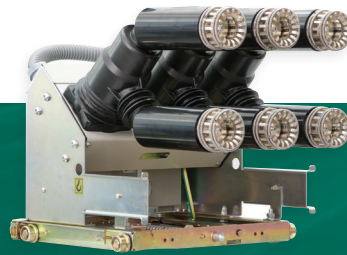
The new TEL VCBs are also available in a withdrawable configuration complete with the rack-in cassette, guide-arms, tulip contacts and safety interlocks. Withdrawable TEL VCBs are perfectly suited for drawout panel manufacturing,



delivering all the benefits of the fixed type VCBs. Draw-out units can also be easily integrated into existing switchgear designs.



VCB15\_HD1\_16D



VCB15\_MD1\_16D

**FIXED TYPE VCB**

Parameter	MD	HD
Rated voltage (Ur)	15.5 kV	15.5 kV
Rated power frequency withstand voltage (Ud)	38 (42*) kV	38 (42*) kV
Rated lightning impulse withstand voltage (peak) (Up)	95 kV	95 kV
Rated normal current (Ir)	1250 A	2500 A (PCD 210 mm) (2000 A for draw-out unit) 3150 A (PCD 275 mm)
Rated short-circuit breaking current (Isc)	31.5 kA	31.5 kA
Mechanical life (CO-cycles)	30,000	30,000
Operating cycles, rated short circuit breaking current (CO-cycles)	50	50
Closing time	60 ms (24ms)**	60 ms (24ms)**
Opening time	35 ms (12 ms)**	35 ms (12 ms)**
Weight	73-78 lbs	155-159 lbs
Number of available auxiliary contacts	6 NO + 6 NC	6 NO + 6 NC

**DRAW-OUT UNITS**

Pole-Center distance	150/210 mm	210/275 mm
Terminal center distance	205 mm	310 mm
Lower terminal height	260 mm	280 mm
Resistance of main circuit	≤ 30 μOhm	≤ 20 μOhm
Weight	160-166 lbs	282-287 lbs

\* Value in brackets- tested in accordance with GB1984-2003

\*\* Special configuration available with opening times of 12 ms and closing times of 24 ms

Control Module	CM_16_1(60_x_x)	CM_16_1(220_x_x)
Embedded self-supervision of the trip and close circuit	✓	✓
Rated range of supply voltage	24V to 60V DC	110V to 220V AC/DC
Charging the close and trip capacitors	≤ 25 W	≤ 42 W AC / ≤ 37 W DC
Standby power consumption	≤ 5 W	≤ 7 W AC / ≤ 5 W DC