

ISM_LD Series Circuit Breaker Module

TENA ISMLD Rev 3 0613



- 15kV and 27kV, up to 1000 Amps, up to 20kA
- Magnetically actuated vacuum interrupters
- Tested 30,000–150,000 operations at full load
- Maintenance free
- Flexible mounting — vertical or horizontal
- Lightweight
- 5-year warranty



The Tavrida LD Series Circuit Breaker Modules contain the most unique design elements of any MV breaker on the market.

All components are assembled along a single axis, with three mono-stable magnetic actuators (one per pole). The actuators are mounted in a steel frame and are mechanically linked by a synchronizing shaft.

The actuators drive a pulling insulator that, in turn, connects to the advanced Tavrida vacuum interrupters at the top of the breaker.

This simple design results in the highest reliability available today. Tavrida delivers a maintenance free breaker with a life expectancy of up to 150,000 close-open operations.

The CM_15 Control Module

The CM_15 Control Module serves as the interface between the ISM_LD Circuit Breaker Module and a host of third party relays and controls.



Basic Operating Parameters	ISM15 Series	ISM25 Series
	CM_1501 Series	
Rated Data		
Rated Voltage (U _r)	15kV	27kV
Rated Current (I _r)	800A (1000A ¹)	800A
Rated Power Frequency withstand voltage (U _d)	36kV	60kV
Rated lightning impulse withstand vltage (peak) (U _p)	95kV	125kV
Rated short-circuit breaking current (I _{sc})	20kA	16kA
Rated peak withstand current (I _p , close and latch)	52kA	42kA
Rated short-time withstand current (I _k)	20kA	16kA
Rated duration of short circuit (t _k)	4s	
Rated frequency (f _r)	50/60Hz	
Switching Performance		
Mechanical life (CO cycles)	50,000 ²	30,000
Operating cycles at rated current (CO cycles)	50,000 ²	30,000
Closing time	<42ms ³	<47ms
Opening time	<27ms ³	<27ms
Break time	<38ms ³	<40ms
Standards		
Design class with regard to severity of service conditions in accordance with IEC 60932	Class 1	
International testing standards	IEC 62271-100, GB 1984-2003, ANSI C37.09	
Mechanical vibration withstand capability according to IEC 60271, IEC 60068	Class 4M4	
Other data		
Resistance of main circuit	<40μ0hm	
Available pole center distances	150mm, 210mm	210mm, 275mm
Type of driving mechanism	Monostable magnetic actuator	
Auxiliary contacts		
Number of available auxiliary contacts	6NO + 6NC	
Rated power frequency test voltage	2kV	

¹ 1000A rating is available with application of heat sinks.

² High duty breakers tested to 150,000 CO operations are also available.

³ Closing, opening and break times with CM_1501_01(12) control module standard recognition times.