

ISM15_Shell Series Circuit Breaker Module



- 27kV, up to 2000 Amps, up to 31.5kA
- Magnetically actuated vacuum interrupters
- Tested 30,000 operations at full load
- Maintenance free
- High speed switching designs available
- Lightweight
- 5-year warranty

The ISM15_Shell Series Circuit Breaker Module has superior characteristics for fast trip applications as well as high-duty switching. The interrupters are driven by three (3) separate magnetic actuators (one per pole) and the module is capable of 30,000 close-open operations at full load.

The ISM15_Shell can handle as much as 2000A continuous with 31.5kA interrupting. At only 21" high and 9" deep, the exceptionally compact, solid dielectric design insulates the phases from each other while the direct, linear connection from the actuator to the interrupter

delivers a break time of less than 3 cycles as a standard. A 1 cycle break time is available for special applications.

An integrated trip lever at the rear of the module blocks the unit operation electrically as well as manually. Six NO and six NC contacts are built-in and a visual position indicator is also provided.

This simple design results in the highest reliability available today. Tavrída delivers a maintenance free breaker with a life expectancy of up to 30,000 close-open operations.

CM_15 Control Module

The CM_15 Control Module serves as the interface between the ISM15_Shell Circuit Breaker Module and a host of third party relays and controls.



Basic Operating Parameters	ISM15_Shell Series
	CM_1501 Series
Rated Data	
Rated Voltage (U_r)	15kV
Rated Current (I_r)	1200A (2000A ¹)
Rated Power Frequency withstand voltage (U_d)	36kV
Rated lightning impulse withstand voltage (peak) (U_p)	95kV
Rated short-circuit breaking current (I_{sc})	29kA @15kV 31.5kA @ 5kV
Rated peak withstand current (I_p , close and latch)	up to 82kA
Rated short-time withstand current (I_k)	up to 31.5kA
Rated duration of short circuit (t_k)	4s
Rated frequency (f_r)	50/60Hz
Switching Performance	
Mechanical life (CO cycles)	30,000
Operating cycles at rated current (CO cycles)	30,000
Closing time	<32ms ² (24ms) ³
Opening time	<20ms ² (12ms) ³
Break time	<31ms ² (23ms) ³
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	<18μ0hm
Available pole center spacing	150mm, 180mm, 210mm, 275mm
Type of driving mechanism	Monostable magnetic actuator
Auxiliary oncontacts	
Number of available auxiliary contacts	6NO + 6NC
Rated power frequency test voltage	2kV

¹ 1200A rating for ISM15_Shell_2(150). 2000A rating for all other pole center distances.

² Closing, opening and break times with CM_1501_01(12) control module standard recognition times.

³ Fast clearing breakers for arc flash mitigation, fast transfer and other high speed switching applications.