

ISM15/25_LD Series

Three-Phase and Single-Phase
Vacuum Circuit Breakers

**5 YEAR
WARRANTY**



Tavrida Electric solutions ensure reliable power system operation in more than 80 countries.



- 15kV and 27kV systems
- Continuous Current Rating up to 1,000A
- Magnetically actuated vacuum interrupters
- Design tested with the highest CO operations in the industry
- Maintenance free and light weight
- 5-year warranty

Tavrida Electric is a world-class manufacturer of medium voltage switchgear such as Vacuum Circuit Breakers & Automatic Circuit Reclosers. The ISM series circuit breaker is the result of extensive R&D efforts to provide outstanding performance for compact switchgear designs, retrofit programs, and special applications.

After 30 years on the market, the ISM series install base has reached over 500,000 units worldwide continuing to resolve most ambitious customer problems.

ISM15/25 LD Series



The Tavrída 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 Tavrída vacuum interrupters at the top of the breaker.

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

The CM_16 Control Module serves as the interface between the ISM_LD Circuit Breaker Module and a host of third party relays and controls.

ISM Accessories and Spare Parts¹



Mechanical trip and interlock interface kit:

The kit attaches to the ISM Interlocking shaft and serves as a manual trip / lockout accessory.



Insulation kit:

The insulation kit provides the necessary phase-to-phase and phase to-ground insulation for the 27kV breaker when standard clearance requirements cannot be met.



Control module (CM):

Control module (the CM is a microprocessor based controller that provides ISM operation, protection and data logging functions) can be ordered separately as a spare part.



Manual generator:

The manual generator is used to charge the control module in cases where the main auxiliary power supply is not available.

¹Additional accessories are available. Contact Tavrída Electric North America Inc. for details.

Basic Operating Parameters

Rated Data

Rated voltage (U_r), up to	15kV	27kV
Rated continuous current (I_r)	800A (1000A ¹)	800A
Rated power frequency withstand voltage (U_d)	36kV	60kV
Rated lightning impulse withstand voltage (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, 4s (I_k)	20kA	16kA
Rated frequency	50/60Hz	

Switching Performance

Mechanical life (CO cycles)	50,000	30,000
Operating cycles, rated current (CO cycles)	50,000	30,000
Electrical endurance, breaking current (O-CO cycles)	100	50
Closing time ²	<30ms ²	<35ms ²
Opening time ²	<15ms ²	<15ms ²

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	<40 μ Ohm	
Available pole center distances	150mm, 210mm (5.91inch, 8.27 inch)	210mm, 275mm (8.27inch, 10.83inch)
Type of driving mechanism	Monostable magnetic actuator	
Weight	34-36kg (74.96lbs-79.37lbs)	35-38kg (77.16lbs-83.78lbs)

Auxiliary contacts

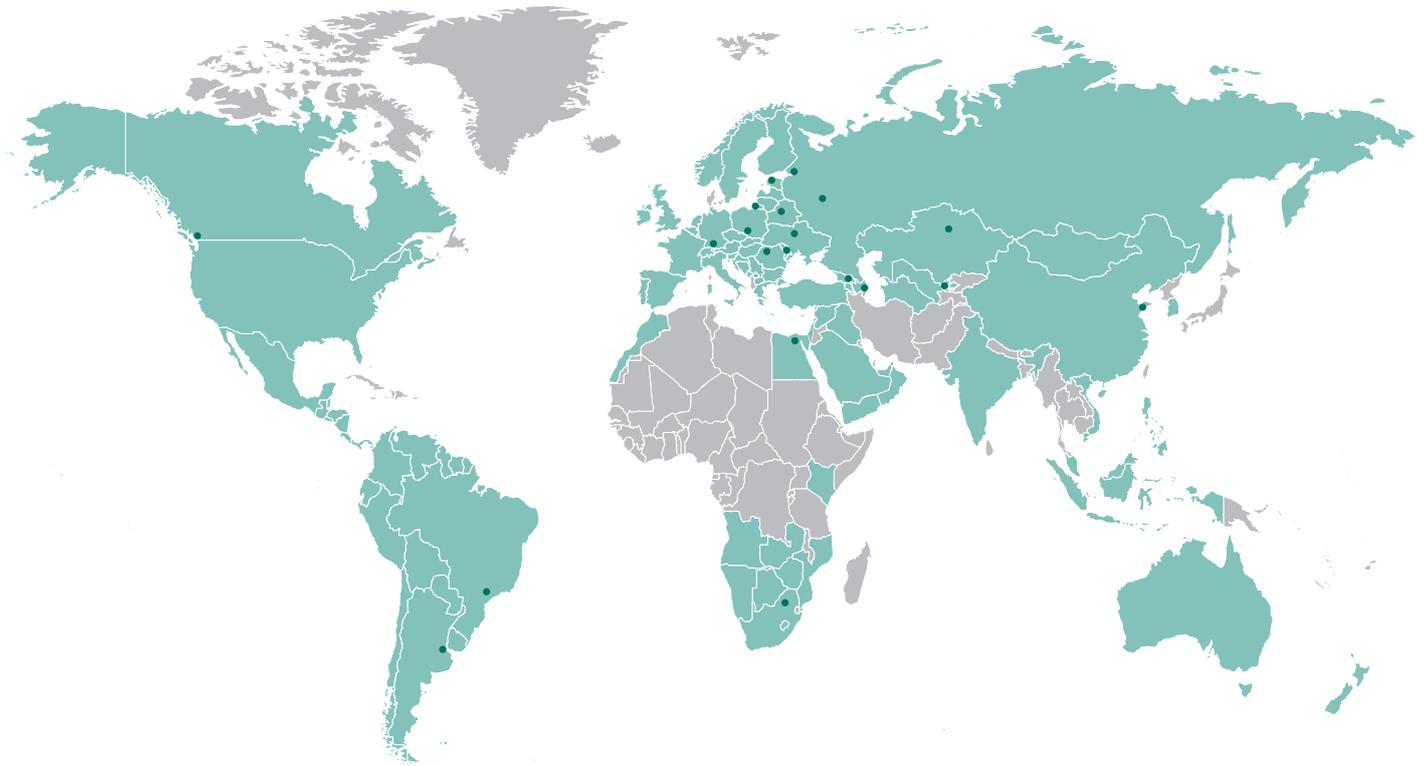
Number of available auxiliary contacts	6NO + 6NC
Rated power frequency test voltage	2kV

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

² Closing and opening times of the ISM without control module standard recognition times.



If you would like to obtain more detailed information about our solutions or become one of our local partners, please feel free to contact us



EUROPE

Tavrida Electric GmbH

Im Leimen 14, 88069
88069 Tettngang,
Germany
Phone: +49 7542 94 678 51
Fax: +49 7542 94 678 61
E-mail: info@tavrida.de

BRAZIL

Tavrida Electric do Brasil

Av. Ireno da Silva Venâncio, 199
GP04A - Protestantes
18111-100, Votorantim / SP, Brazil
Phone: +55 (15) 3243-2555
Fax: +55 (15) 3243-4233
E-Mail: info@tavrida.com.br

NORTH AMERICA

Tavrida Electric North America Inc.

1105 Cliveden Ave.
Delta, BC V3M 6G9
Canada
Phone: +1 (866) 551-8362
Fax: +1 (604) 540-6604
E-Mail: info@tavrida-na.com

SOUTH AMERICA

Tavrida Electric Argentina

Av. Hipólito Yrigoyen 9183/5, 9 piso dpto.
B. Lomas de Zamora,
1832, Provincia de Buenos Aires, Argentina
Phone: +54 (11) 4243-9373
Phone: +54 (9 11) 4026-8563
E-Mail: info@tavrida.com.ar

SOUTH AFRICA

Tavrida Electric Africa (Pty) Ltd.

Unit 8, N12 Industrial Park,
188 Dr Vosloo Road, Bartlett,
Boksburg, 1459 South Africa
Phone: +27 (11) 9142-199
Fax: +27 (11) 9142-323
E-Mail: support@tavrida.co.za

REST OF THE WORLD

Tavrida Electric AG

Bahnhofstrasse 27, 6300
Zug, Switzerland
Phone: + 49 7542 9467851
E-mail: info@tavrida.ch

