

# Rec35\_Smart5\_HDG Recloser

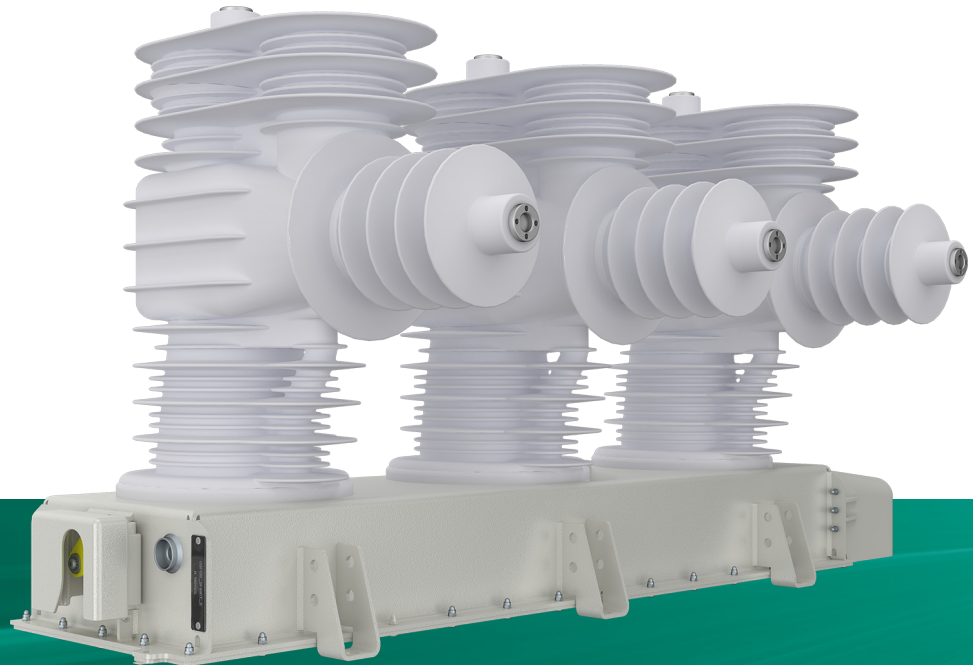
38 kV Three-Phase Gang-Operated Design

Compatible with SEL-651R

**5 YEAR  
WARRANTY**



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



- 1250A continuous rated current
- x6 voltage and x3 current sensors built in
- Voltage sensors with 0.5% accuracy
- Magnetically actuated vacuum interrupters
- Tested to 20,000 CO operations at full load
- Maintenance free and light weight
- 5-year warranty

Tavrida Electric is a world-class manufacturer of vacuum interrupters, magnetic actuators, circuit breaker modules and automatic circuit reclosers. The Rec35\_Smart5\_HDG series module is a field proven, reliable and flexible system that can be used as a switch, circuit breaker, substation breaker, sectionalizer or distribution recloser.

The Rec35\_Smart5\_HDG series recloser is fully compatible with the SEL-651R recloser control. The six (6) on-board voltage sensors provide an accuracy of 0.5% across a broad temperature range. It allow the recloser to be installed in radial or loop scheme configuration. Radial installations can be quickly changed to a loop scheme configuration by simply reprogramming the control.



## Basic Operating Parameters

### Rated Data

Rated voltage ( $U_p$ ), up to	38kV
Rated continuous current ( $I_p$ )	1250A
Rated power frequency withstand voltage ( $U_d$ ), 1 min dry	70kV
Rated power frequency withstand voltage ( $U_d$ ), 10s wet	70kV
Rated lightning impulse withstand voltage (peak) – BIL ( $U_p$ )	170kV
Rated short-circuit breaking current ( $I_{sc}$ )	16kA
Rated short-circuit making current, peak	41.2kA
Rated short-time withstand current, 4s ( $I_k$ )	20kA
Rated peak withstand current ( $I_p$ )	52kA
Rated frequency	50/60Hz

### Switching Performance

Mechanical life (CO cycles)	20,000
Operating cycles, rated current (CO cycles)	20,000
Electrical endurance, breaking current (CO cycles)	100
Closing time <sup>1</sup>	<60ms
Opening time <sup>1</sup>	<15ms
Break time <sup>1</sup>	<25ms
Rated operating sequence	Refer to control manual

### Standards

International Standard	IEC 62271-100, IEC 62271-111
American Standard	IEEE C37.60

### Other Data

Current Sensing	3 built-in current transformers <sup>2</sup>
Voltage Sensing	6 built-in voltage sensors
Voltage measurement accuracy	+/-0.5%
Main contact resistance (not more than)	32μOhm
Degree of protection	IP65
Weight (only switching module)	205 lbs. (95 kg)

<sup>1</sup> Switching module closing, opening and break times excluding control module recognition time.

<sup>2</sup> 100:1, 600:1 and 1200:1 ratios are available.

# Recloser Components

## Outdoor Switching Module

The outdoor switching module is designed for use as an automatic circuit recloser, a sectionalizer on overhead distribution lines, and as an outdoor switching module in distribution substation applications for voltages up to 38 kV.



## Recloser Control

The Tavrada Electric recloser is compatible with SEL-651R MRI control.



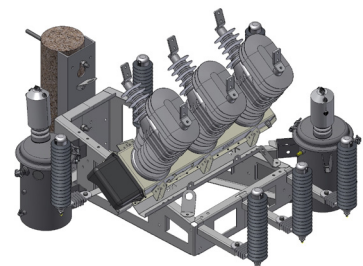
## Umbilical Cable

Connection between the switching modules and the control cabinet is accomplished with an umbilical cable which can be provided in multiple lengths.



## Mounting Kit

Tavrada Electric offers Hot Dip Galvanized steel pole mounting kit option with variable accessories.



# Other Components



Surge arresters



Auxiliary transformer, 2-hanger, single bushing, 120 VAC secondary, steel tank, with internal weak link and wildlife protection

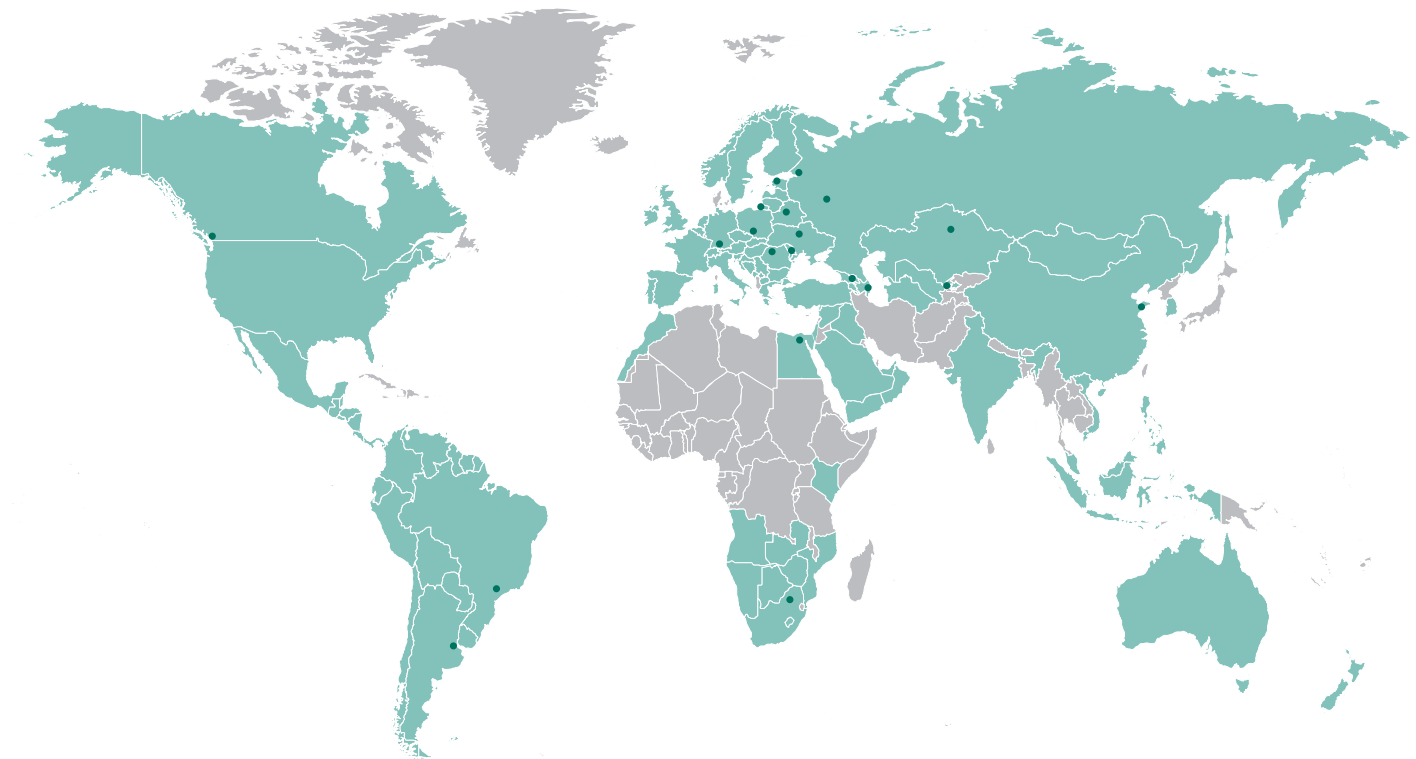


Four hole NEMA pads for primary connection



Wildlife protective covers





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