

# Rec35\_Smart5\_HDG Recloser

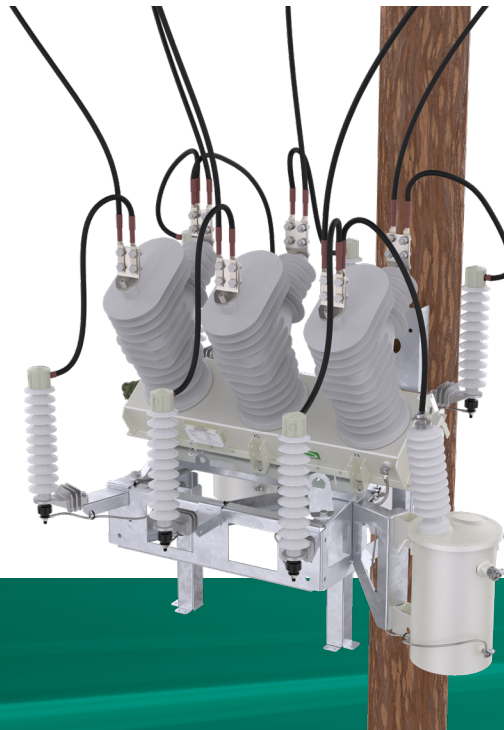
38 kV Three-Phase Gang-Operated Design

Compatible with SEL-651R

**5 YEAR  
WARRANTY**



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



## The most compact 38kV recloser in the world!

- 1250A continuous rated current
- x6 voltage and x3 current sensors built in
- Fits perfect in normally open and sectionalizing applications
- Voltage sensors with 0.5% accuracy
- Magnetically actuated vacuum interrupters
- Tested to 30,000 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 allows 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	OSM35_Smart_5(600.200_150_All)
Rated voltage ( $U_r$ ), up to	38kV
Rated continuous current ( $I_r$ )	1250A <sup>1</sup>
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

1 - When used with 600:1 CT ratio. 600A – when used with 200A CT ratio.

### Mounting Anchoring Holes Distances for Foundation Pad

	549..604 mm x 1309..1329 mm
Hot-dip galvanized design <sup>1</sup>	218..935 mm x 1055..1329 mm
	950..970 mm x 456..1180 mm

1 - Variable distances are provided by design of mounting holders.

### Switching Performance

Mechanical life (CO cycles)	30,000
Operating cycles, rated current (CO cycles)	30,000
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	O-0.2s-CO-1.5s-CO-2s-CO-2s-CO <sup>2</sup>

1 - Switching module closing, opening and break times excluding control module recognition time.

2 - Fastest operating sequence when used with SEL-651R-2 Recloser Control. Subject to change when used with different controls.

### Standards

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

Other Data	OSM35_Smart_5(600.200_150_All)
Current Sensing	3 built-in current transformers
	600:1, C100                      200:1, C120
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. (93 kg)
Temperature	-40 ... 131 °F (-40 ... +55 °C)

# 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.



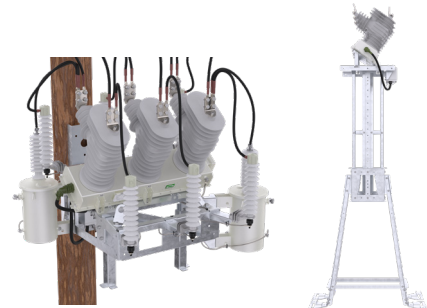
## Umbilical Cable

Connection between the switching modules and the control cabinet is accomplished with an umbilical cable which can be provided in multiple lengths. Two types of cables can be used depending on connection type - direct SEL-OSM or through junction box with safe trip functionality



## Mounting Kit

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



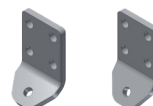
# Other Components



Surge arresters



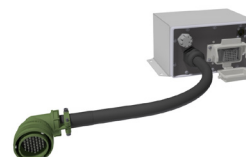
Auxiliary transformer, 2-hanger, single or dual bushing, 120 VAC secondary, steel tank, with internal weak link and wildlife protection



Four hole NEMA pads for primary connection



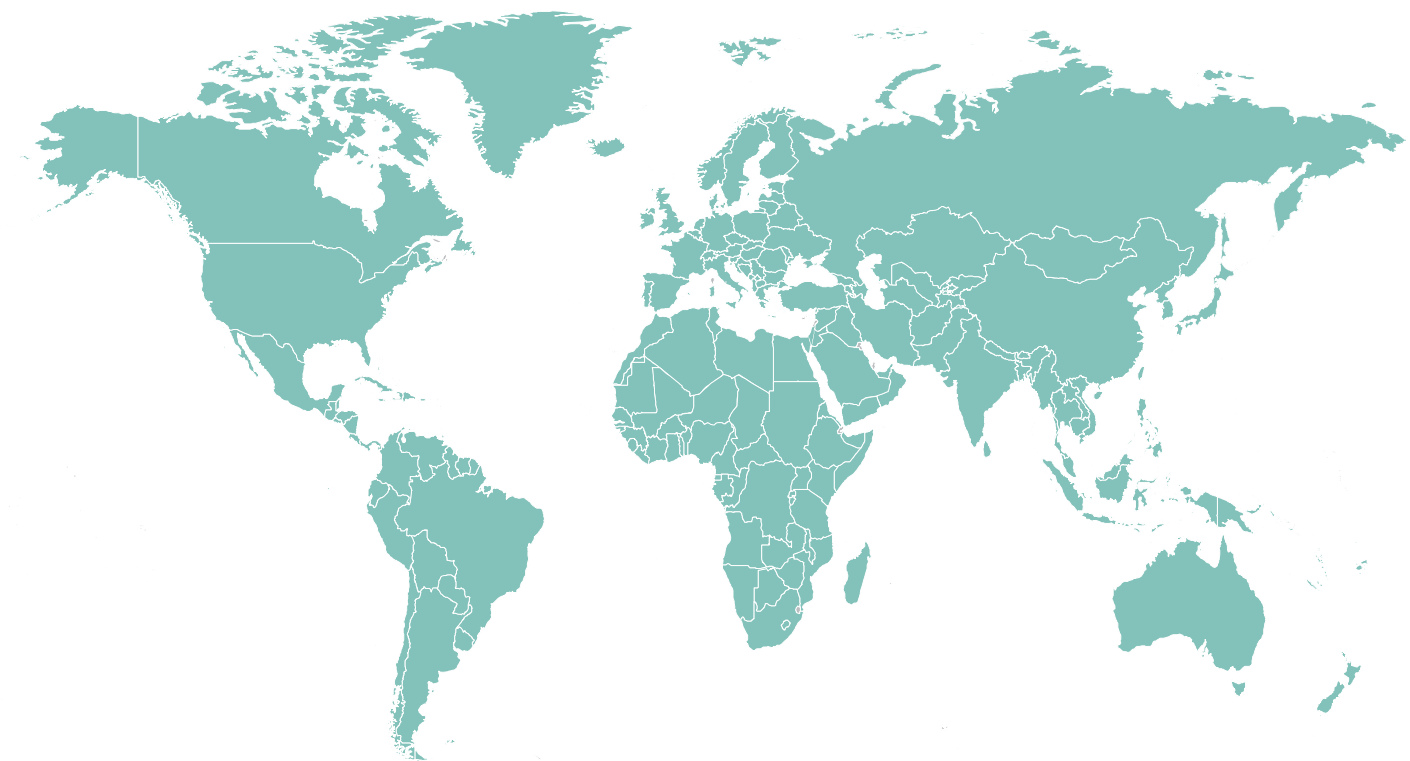
Wildlife protective covers



Junction box providing safe trip functionality.



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



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