

# Rec35\_Smart4\_HDG Recloser

38 kV Triple-Single Design with Crossarm Mounting Kit

Compatible with SEL-651R

**5 YEAR  
WARRANTY**



Tavrída 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

Tavrída Electric is a world-class manufacturer of vacuum interrupters, magnetic actuators, circuit breaker modules and automatic circuit reclosers. The Rec35\_Smart4\_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\_Smart4\_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	Smart4(100)	Smart4(600)	Smart4(1200)
Rated voltage ( $U_r$ ), up to		38kV	
Rated continuous current ( $I_r$ )	100A	600A	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	

### Mounting Anchoring Holes Distances for Foundation Pad

	549..604 mm x 1309..1329 mm
Hot-dip galvanized design <sup>2</sup>	218..935 mm x 1055..1329 mm
	950..970 mm x 456..1180 mm

### 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	Refer to control manual

### Standards

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

Other Data	Smart4(100)	Smart4(600)	Smart4(1200)
Current Sensing	3 built-in current transformers		
	100:1, C20	600:1, C100	1200:1, C100
Voltage Sensing	6 built-in voltage sensors		
Voltage measurement accuracy	+/-0.5%		
Main contact resistance (not more than)	32 $\mu$ Ohm		
Degree of protection	IP65		
Weight (only switching module)	205 lbs. (95 kg)		
Temperature	-40 ... 131 °F (-40 ... +55 °C)		

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

<sup>2</sup> Variable distances are provided by design of mounting holders

# 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.



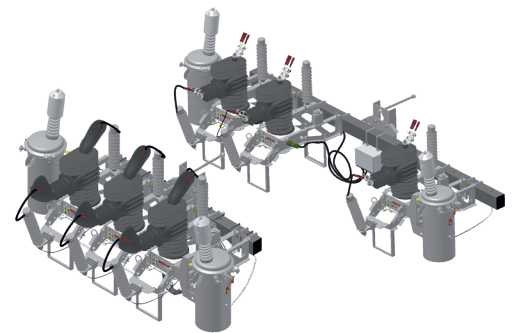
## Junction Box with Umbilical Cable

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



## Mounting Kit

Tavrada Electric offers a crossarm mounting kit with 6', 8' or 10' length option with variable accessories.



# Other Components



Surge arresters



Four hole NEMA pads for primary connection



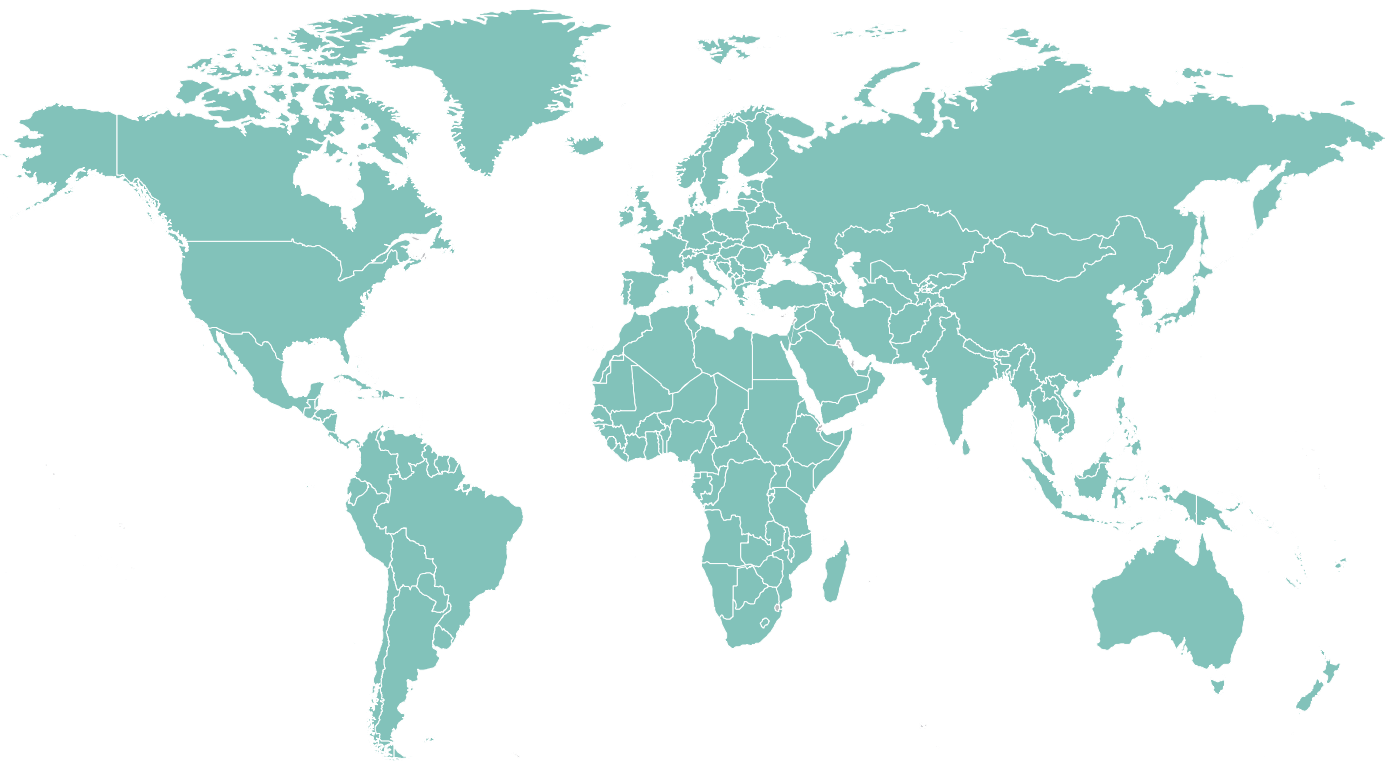
Auxiliary transformer, 2-hanger, single bushing, 120 VAC secondary, steel tank, with internal weak link and wildlife protection



Wildlife protective covers



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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