

# Rec35\_Smart4\_HDG Recloser

5 YEAR WARRANTY

38 kV Triple-Single Design with Crossarm Mounting Kit

Compatible with SEL-651R and Beckwith M-7679 controls





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
- Compatible with 42-pin MRI and 32-pin controls

Tavrida Electric and Magvatech are world-class manufacturers 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 0.5% accuracy across a broad temperature range. This allows the recloser to be installed in either a radial or loop scheme configuration. Radial installations can be quickly converted to a loop scheme simply by reprogramming the control.



www.tavrida.com/tena Rec35\_Smart4\_HDG Recloser

# **Basic Operating Parameters**

Rated Data	OSM35_Smart_4E(600.200_150_ALL)
Rated voltage ( $U_r$ ), up to	38kV
Rated continuous current (I <sub>r</sub> )	1250A <sup>1</sup>
Rated power frequency withstand voltage $(U_d)$ , 1 min dry	70kV
Rated power frequency withstand voltage (U <sub>d</sub> ), 10s wet	70kV
Rated lightning impulse with stand voltage (peak) $-$ BIL (U $_{p}$ )	170kV
Rated short-circuit breaking current (I <sub>SC</sub> )	16kA
Rated short-circuit making current, peak	41.2kA
Rated short-time with stand current, 4s $(I_k)$	16kA
Rated peak withstand current (Ip)	38kA
Rated frequency	50/60Hz

<sup>1 -</sup> When used with 600:1 CT ratio, 600A - when used with 200:1 CT ratio

## **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 <sup>2</sup>

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

#### **Standards**

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

#### OSM35\_Smart\_4E(600.200\_150\_ALL) **Other Data** 3 built-in current transformers **Current Sensing** 600:1, C100 200:1, C20 Voltage Sensing 6 built-in voltage sensors +/-0.5% Voltage measurement accuracy $32\mu Ohm$ Main contact resistance (not more than) Degree of protection IP65 212 lbs. (96 kg) Weight (only switching module) Temperature -40 ... 131 °F (-40 ... +55 °C)

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

# **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 switch in distribution substation applications for voltages up to 38 kV.



#### **Recloser Control**

The Tavrida Electric recloser is compatible with SEL-651R (42-Pin (MRI) and 32-Pin control interface, Beckwith M7679 as well as custom controls.



#### 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**

Tavrida Electric offers a crossarm mounting kit with 6', 8' or 10' length options and a variety of 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



# Certificates ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018



If you would like to obtain more detailed information about our solutions, please feel free to contact us.

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