

# Rec35\_Smart4\_HDG Recloser

38 kV Triple-Single Design with Crossarm Mounting Kit

Compatible with SEL-651R

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 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.



# **Basic Operating Parameters**

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

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

### **Switching Performance**

30,000	
30,000	
100	
<60ms	
<15ms	
<25ms	
0-0.2s-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_4E(600.200_150_ALL) 3 built-in current transformers		
Current Sensing			
	600:1, C100	200:1, C20	
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)	212 lbs. (96 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 Tavrida 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**

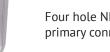
Tavrida Electric offers a crossarm mounting kit with  $6^\prime,\,8^\prime$  or  $10^\prime$  length option with variable accessories.

# **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



TAVRIDA ELEC



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

TUVNORD				
CERTIFICATE	TUVNORD			
Management system as per ISO 9001 : 2015				
The Cardination Body TOV NORD CERT Set44 hereby continue as a result of the sould, assessment and certification decision according to ISOREC 17021-12015, that the organization	CERTIFICA	TE	TÜVNORD	
MVT ELEKTRİK SAN. VE TİC. LTD. ŞTİ. Ege Sərbəst Bölgəsi, Zəfer Sb Mah., Defne Sok., No:3 35410 Gaziemir, İzmir Turkey	Management system as per ISO 14001 : 2015			
EUTKOY openative a management system in accordance with the negativenership of 800 8001 (2015 and will be assessed for end/ormaly within the 3 year form of validity of the confidence.	The Certification Budy TOV NORD CERT Ceribil hereby con assessment and certification decision according to ISO/IEC	dens as a read of the audit, 17221-1:0015, that the organization	CERTIFICATE	
for conformily within the 3 year torm of waldity of the contilicate. Scope	MVT ELEKTRİK SAN. VE TİC. LTD. ŞTİ. Ege Serbest Bölgesi, Zafer Sb Mah., Defne Sok., No:3 35410 Gaziemir, İzmir		Management system as per ISO 45001 : 2018	
Automatic circuit breaker, switching modules, control module production an silicone rubber production and packaging and shipment of these products.	Turkey operations a management system in accordance with the reg, for contemity within the 3 year lasm of validity of the certifics		The Gerlification Body TÚV NORD CERT Grabh handsy confirms as a would of th assessment and confiduration decision according to IDOREC 17021-12015, that th	e sujarization
Confinese Region Note No. 100 2453/031 100 (100 2453/031) 100 (100 2453/03 1) 100 (100 250 26 1) 100 (100 250 250 250 250 250 250 250 250 250 2	Scope	ex. nodules, control module production and iging and shipment of these products.	MVT ELEKTRİK SAN. VE TİC. LTD. ŞTİ. Ege Serbest Bölgesi, Zafer Sb Mah., Defne Sok., Nu 35410 Gaziemir, İzmir Turkey	o:3
Centituation thouy Internet, 2024-06-12 at TOV NORD CERT Great			openales a management system in accordance with the requirements of ISO 4500 for conformity within the 3 year term of validity of the certificate.	1: 2018 and will be assessed
TUV NORD CERT GebH An TUV 1 45007 Essen www.base-cor	Centrate Registration No. 44 134 24530031 Audit Report No. 111 2289	Valid from 2024-08-12 Valid until 2022-08-11 Initial certification 2024	Soope	
CARKS Market and Andreas	Certification Dody at TOV NORED CERT GINEH	Istanbul, 2924-06-12	Automatic circuit breaker, switching modules, cont silicone rubber production and packaging and ship	rol module production and assembly, ment of these products.
C AN LLOU Y & SH	TÜV NORD CERT Green Are TÜV 1	45307 Essen www.hav.ntrd-c	Certificate Registration No. 44 128 24530031 Audit Report No. TIR 2289	Aldd fram 2024-08-12 Aldd unell 2027-08-11 Aldal certification 2024
	CARE CARE AND A CONTRACT OF CO		Centradio Boty at TOW MODE CERT Great	Blandul, 2024-08-12
			TOV NORD CERT Guidel Are TOV 1 40	1337 Fisson www.hov-ment.com
			TAF (Dakks	
			Kinandharangadhe D an Kinar ki si	
TÜVNORD				_
CERTIFICAT	E	TÜVNORD		
Management system as per ISO 9001 : 2015				
The Certification Body TDV NORD Turkey Teknik Kontrol ve Belgeler assessment and certification decision according to ISO/IEC 17021-1:	dime A.S. hereby confirms as a result of the audit, 2015, that the organization	CERTIFIC	ΑΤΕ	
MVT ELEKTRİK SAN. VE TİC. LTD. Ege Serbest Bölgesi, Zafer Sb Mah., Defne 35410 Qazlemir, İzmir Turkey	ŞTİ. Sok., No:3	Management system as per ISO 14001 : 2015		
coperation a management system in accordance with the requirement for conformity within the 3 year larm of waldity of the certificate.	of ISO 9001 : 2015 and will be assessed		trol ve Belgelendime A.Ş. hereby confirms as a result of the audit. DREC 17021-1/2016, that the organization	
broothenty while the 3 year land of the certificate. Boops Automatic circuit breaker, switching modu silicone rubber production and packaging		MVT ELEKTRİK SAN. VE Tİ Ege Serbest Bölgesi, Zafer Sb Ma 35410 Gaziemir, İzmir Turkey	C. LTD. ŞTİ. h., Defne Sok., No:3	
silicone rubber production and packaging	and shipment of these products.	operates a management system in accordance with the for conformity within the 3 year term of validity of the o	te requirements of ISO 14001 : 2015 and will be assessed pertilicate.	
Centificate Registration No. 1002124 And Report No. 111 2249 Wurneb Cy	Valid from 2024-09-12 Valid until 2027-06-11 Initial certification 2024	Scope	ing modules, control module production and ass ackaging and shipment of these products.	embly,
Centification Body at TUV NORD Turkey Teknik Kontrol ve Belgelendinne A.S.	Intentivel, 2024-08-12			
https://bds.turkak.org.tr.	ed by TBDS on mobile devices or by using TBDS Docur	Contificato Registration No. 2002124 Audit Report No. TR 2249	Valid from 2924-08-12 Valid until 2927-08-11 Initial contification 2024	
TÜR	KAB	Certification Body at TOY NORD Turkey Teknik Kontrol ve Belgelendim	Istantovi, 2024-08-12 te A.Ş.	
Poge-1-res	Sehit Mehmat Fabh Ongil Solak, No 1 Odak Pizza, Kozystaja, Kadéko, TR-34742 Istanbul www.tus-turkay.com tus-nordigitus-turi	The certificate inquiry can be done by reading the squar https://tods.turiedcorg.tr.	m code generated by TBDG on mobile devices or by using TBDG Document num	ber forn
		FCB1 IRE	TOV NORD Turkey Tein's Konrol vs Beigeloo Ant Merner Faith Ogi Sokak, No 5, Kold, Osak Pleza, Koyatab, Koldiv, Thorizot Lamabul www.Karakayada Markon Tarken Gillau-Lurkey, com	6moA. S.

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

#### NORTH AMERICA (USA)

### Tavrida Electric North America (US) Inc.

2000 Tall Pines Dr. Suite 200 Largo, FL 33771 USA Phone: +1 (604) 540-6604 Fax: +1 (604) 540-6604 E-Mail: info@tavrida-na.com

## NORTH AMERICA (CANADA)

Tavrida Electric North America Inc. 726 Chester Rd Delta, BC V3M 6J1 Canada Phone: +1 (866) 551-8362 Fax: +1 (604) 540-6604 E-Mail: info@tavrida-na.com