



S&C ELECTRIC COMPANY

Excellence Through Innovation

Product Overview

Control Module - TripSaver® II Cutout-Mounted Recloser

Prepared By: Muhammad E Tabani



Control Module Integration in TripSaver® II Cutout-Mounted Recloser

The S&C TripSaver® II Controller (Model Number TSII-CONTRL5 and TSII-CONTRL6) is an electronic control module integrates in to host product TripSaver® II cutout-mounted recloser which is self-powered cutout-mounted electronically controlled single-phase re-closer. It uses a vacuum fault interrupter technology and is offered in system class voltage ratings of 15kV and 25kV. The Control module functions remain same for all TripSaver® II cutout-mounted recloser configurations and housed in the TripSaver® II recloser. The control module processes all electronic / electrical functions required for the proper operation of the TripSaver® II cutout-mounted recloser. Aside from its primary functions, the controller can be wirelessly accessed via the IEEE 802.15.4 protocol for performing TripSaver® II cutout-mounted recloser maintenance Control module's design, hardware including transceiver and antenna, software and communication protocol remains unaltered in all configurations of TripSaver® II cutout-mounted recloser.

The Control module is an integral part of TripSaver® II cutout-mounted recloser and will be integrated by S & C at factory level. User WILL NOT integrate control module separately but will receive unit TripSaver® II cutout-mounted recloser with control module as an integral part of it. The information of 2.4GHz radio is given below.

Applicant	S & C Electric Company
Brand Name	TripSaver® II Cutout-Mounted Recloser
Product Model Name	TripSaver® II Controller 5 and TripSaver® II Controller 6
Product Model No.	TSII-CONTRL5 and TSII-CONTRL6
FCC Identifier	U3D-TSIICONTRL6
IC Identifier	5349C-TSIICONTRL6
Type of transmission	Digital Transmission System (DTS)
Rated RF Output	10 dBm (10 mW)
Frequency Range	2405 – 2480 MHz
Type of modulation/data rate	GFSK / 1Mbit/s O-QPSK / 250Kbit/s
Number of Channel(s)	16 (from 11 to 26)
Antenna(s) & Gain	PCB antenna, Gain: +3.3 dBi
CT Voltage Input	CT input 230 V AC, 2A, 50/60 Hz J10 input 11-14.5 V DC, 1A
Environmental	- 40°C (-40°F) to +40°C (104°F).
Manufacturer Name & Address	S&C Electric Company 6601 N Ridge Blvd Chicago, IL 60626



This control module has been granted modular approval for TripSaver® II cutout-mounted recloser applications. The final host TripSaver® II cutout-mounted recloser and module combination have been evaluated in certified lab for FCC Part 15B criteria for unintentional radiators to properly authorized for operation as a Part 15 digital device. Test report can be submitted upon a request.

Control Module Models:

The Control module of TripSaver® II cutout-mounted recloser provides controls and all logic functions for the proper functionality of TripSaver® II cutout-mounted recloser has 2 distinct models.

- 1) TripSaver® II Controller 5 (TSII-CONTRL5) has a main control board that provide standard 5 second open intervals during TSII reclose sequence.
- 2) TripSaver® II Controller 6 (TSII-CONTRL6) that provides Extended Open interval enabling 30 second open intervals during the TSII reclose sequence. Main control board has no sufficient storage energy to implement this feature. Therefore, addition of a battery and battery charging/discharging circuitry has been added to supply necessary energy to the control module

Both Control module of TripSaver® II cutout-mounted recloser has no changes in outer enclosure. Overall integration and assembly of battery, battery board and main control board is shown in fig. 1.

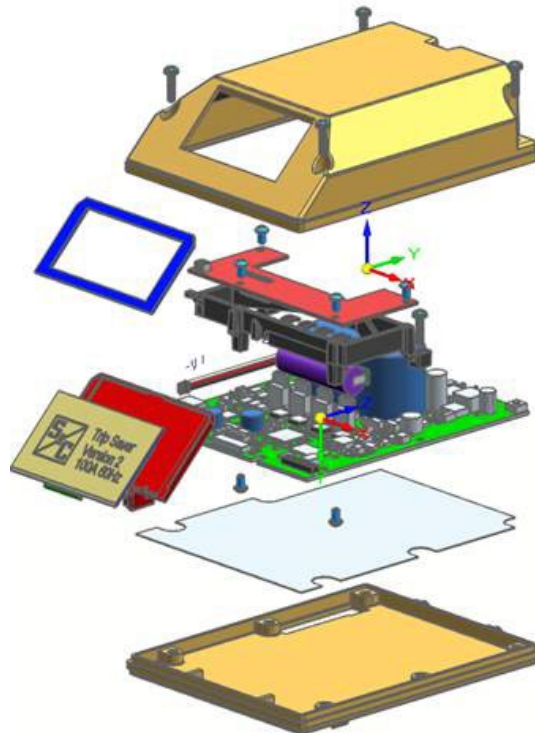


Fig. 1 Control module assembly