Product Research Report: Siemens 3VW9727-0FK21 RCT Mounting Kit

1. Product Name

Siemens 3VW9727-0FK21 Rogowski Coil Mounting Kit for 3WL ACB

2. SEO Keywords

- Siemens 3VW9727-0FK21 RCT mounting kit
- Siemens 3WL Rogowski coil support
- Siemens 3WL ACB current sensor kit
- 3VW9727-0FK21 specifications datasheet
- Siemens 4000A Rogowski coil bracket
- Siemens SENTRON 3WL retrofit CT kit
- 3VW9727-0FK21 mounting bracket ACB
- Siemens circuit breaker RCT accessories

3. Category

Circuit Breaker -> [new] Siemens Circuit Breaker -> Siemens 3WL Series ACB Accessories

4. Product Introduction

Series#: Circuit Breaker -> [new] Siemens Circuit Breaker -> Siemens 3WL Series ACB Accessories
- Siemens 3VW9727-0FK21 Rogowski Coil (RCT) Mounting Kit for 3WL ACB
- We have large inventory for Siemens 3WL ACB accessories, RCT mounting kits and related accessories.
- 100% Original and new, In stock by Eaton Company.
- Delivery time: Ready in stock and 1 days for ship out
- MOQ: 1pcs

5. Brand & Model

model：3VW9727-0FK21
brand：Siemens

6. Service & Applications

The Siemens 3VW9727-0FK21 is a mounting kit (support bracket set) designed for installing Rogowski Coil Transducers (RCT) onto Siemens SENTRON 3WL Air Circuit Breakers (ACBs). This retrofit kit provides the mechanical mounting supports and brackets required to attach flexible Rogowski coil sensors to the breaker's primary connection points for current measurement and electronic protection. The kit is specifically designed for high-current applications up to 4000A where traditional solid-core current transformers are impractical to install or where flexible installation is required. It is compatible with both 3WL1 and 3WL2 frame sizes. When installed, the Rogowski coils (ordered separately) wrap around the breaker's connection bars and are secured by the brackets in this kit, providing precision current sensing with Class 0.5s metering accuracy for revenue-grade applications and Class 5P10 protection accuracy for relay tripping. Typical applications include retrofit installations where electronic metering or advanced protection functionality is being added to existing 3WL circuit breakers, smart grid integration projects, and energy management systems requiring high-accuracy current monitoring on air circuit breakers in main switchboards.

7. Specifications Table

Feature	Specification
Order Number	3VW9727-0FK21
Product Type	Mounting Kit / Support Bracket Set for Rogowski Coils (RCT)
Function	Mechanical mounting supports for Rogowski sensors on 3WL ACB
Compatible ACB Series	Siemens SENTRON 3WL (3WL1 and 3WL2 frames)
Compatible Sensor Type	Siemens Rogowski Coil Transducer (RCT)
Rated Primary Current	Up to 4000A (determined by Rogowski coil size and evaluation unit)
Current Ratio (Typical RCT)	4000/1 (with compatible RCT sensors)
Accuracy Class (Metering)	Class 0.5s (with compatible sensors, revenue-grade at low loads)
Accuracy Class (Protection)	Class 5P10 (with compatible sensors, no saturation up to 10× rated current)
Installation Location	Inside 3WL circuit breaker housing (on connection bars/bushings)
Mounting Position	Rear connection area of the ACB (replaces standard solid-core CT positions)
Additional Depth Required	Approx. 40–60 mm (for loop clearance behind breaker)
Breaker 3WL1 Width (3-pole)	Approx. 315 mm
Breaker 3WL2 Width (3-pole)	Approx. 420 mm
Breaker Standard Depth (3WL)	Approx. 210 mm (without RCT kit)
Coil Cross Section	Approx. 10–15 mm (Rogowski coil diameter)
Rated Insulation Voltage (Ui)	1000V AC
Rated Impulse Withstand Voltage (Uimp)	12 kV
Short Time Withstand (Ith)	85 kA (1s) / 40 kA (3s) (dependent on breaker rating)
Frequency	50/60 Hz
Compliance Standards	IEC 61869-2 (replaces IEC 60044-1), IEC 60947-2
Terminal Type	Internal wiring leads with plug-in connectors
Operating Temperature	-25°C to +70°C
Storage Temperature	-40°C to +85°C

8. FAQ

Q: What is the Siemens 3VW9727-0FK21 used for?
It is a mounting kit (support bracket set) for installing Rogowski Coil Transducers (RCT) onto Siemens 3WL Air Circuit Breakers. It provides the mechanical supports needed to secure the flexible Rogowski sensors to the breaker's primary connection bars.

Q: Is the Rogowski coil sensor included in the 3VW9727-0FK21 kit?
No, the 3VW9727-0FK21 is only the mounting hardware (brackets and supports). The Rogowski coil sensors (RCT) and the electronic evaluation unit must be ordered separately.

Q: Which Siemens circuit breakers are compatible with this mounting kit?
It is compatible with Siemens SENTRON 3WL Air Circuit Breakers, specifically the 3WL1 and 3WL2 frame sizes. It does not fit older 3WN series breakers without an adapter kit.

Q: What current rating does the 3VW9727-0FK21 support?
The kit supports installations up to 4000A when used with appropriately sized Rogowski coils. The actual current rating is determined by the Rogowski coil size and the electronic evaluation unit.

Q: How much additional space is needed in the switchboard for this mounting kit?
The Rogowski coils and mounting kit add approximately 40–60 mm of depth clearance behind the breaker. When designing a switchboard, do not use the standard 210 mm depth — allow extra space at the rear for the sensor loops.

Q: Can this kit be installed on an existing (already installed) 3WL breaker?
Yes, the 3VW9727-0FK21 is designed as a retrofit kit. However, the circuit breaker must be de-energized and removed from the switchgear to access the mounting points. Installation should be performed by a qualified electrician.

Q: What accuracy class do the Rogowski sensors provide when installed with this kit?
With compatible Siemens RCT sensors, typical metering accuracy is Class 0.5s (revenue-grade) and protection accuracy is Class 5P10 (ensuring no saturation during fault conditions up to 10× rated current).

Q: Does the 3VW9727-0FK21 affect the breaker's short-circuit rating?
No, the mounting kit itself does not affect the breaker's short-circuit rating. The 3WL breaker typically provides 85 kA (1s) / 40 kA (3s) short-time withstand, which is maintained regardless of sensor installation.