

40.5KV Vacuum Circuit Breaker Embedded Pole

This 40.5KV vacuum circuit breaker embedded pole features a vacuum arc extinguishing chamber. The component is critical for high-voltage circuit breaker applications, providing reliable interruption of electrical current and arc quenching.



ADDITIONAL IMAGES



Overview

High-Performance Embedded Pole

This 40.5KV vacuum circuit breaker embedded pole utilizes an advanced epoxy solid sealing process (APG) to encapsulate the vacuum arc quenching chamber, outlet seats, and current-carrying components into a single, integrated module. This design significantly reduces the physical volume and part count of the circuit breaker while enhancing insulation, mechanical strength, and thermal aging performance. Engineered for reliability in demanding environments, it offers maintenance-free operation and superior resistance to high and low-temperature shocks, making it ideal for power transmission, chemical, metallurgical, and mining applications.

Electrical Ratings

Rated Voltage	40.5 KV
Rated Current	1600/2000A
Rated Frequency	50 Hz
Rated Short-circuit Breaking Current	31.5 KA
Rated Short-circuit Making Current (Peak)	80 KA
Mechanical Life	10000

Mechanical Requirements

Contact Stroke	18±1 mm
Average Opening Speed	1.6±0.2 m/Sec
Average Closing Speed	0.8±0.2 m/Sec
Bounce Duration of Contact Closing	d2ns

Compliance & Standards

Standards Compliance

IEC 62271-100, GB 1984-2003, Class E2

Key Metrics

Performance Highlights

185 KV

Lighting Impulse Withstand

95 KV

Power-frequency Withstand

20 Years

Shelf Life