

10 kV Embedded Pole for Power Distribution

This 10 kV embedded pole provides electrical insulation and mechanical support for high-voltage applications. Its robust construction ensures durability and reliable performance in demanding power infrastructure environments.



ADDITIONAL IMAGES



Overview

High-Performance 10 kV Embedded Pole

This 10 kV embedded pole is engineered for vacuum circuit breakers (VEP series), providing superior electrical insulation and mechanical support for power distribution systems. Designed to meet or exceed IEC62271-100 and GB 1984-2003 standards, it ensures reliable performance in substations and critical switchgear infrastructure. With a mechanical life of 30,000 cycles and a 20-year shelf life, it offers a durable solution for demanding high-voltage applications.

Key Ratings

Primary Performance Metrics

12 kV

Rated Voltage

1600 A

Max Rated Current

31.5 kA

Short-circuit Breaking

30000 Cycles

Mechanical Life

Electrical Specifications

Rated Frequency	50 Hz
Power-frequency Withstand Voltage	48 kV
Lightning Impulse Withstand Voltage	85 kV
Partial Discharge	d 5pC
Circuit Resistance	d 20%©

Mechanical Performance

Mechanical Parameters

Parameter	Value	Unit
Rated Contact Stroke	9 ± 1	mm
Contact Connection Stroke	3.5 ± 1	mm
Average Opening Speed	1.1 ± 0.2	m/s
Average Closing Speed	0.7 ± 0.2	m/s
Bounce Duration of Contact Closing	d 2	ms
Out of Simultaneity	d 1	ms
Max Overtravel	d 2	mm

Contact Force Specifications

- Contact closing force: 100 ± 30 N
- Counterforce at rated contact force: 200 ± 30 N
- Added contact force: $2500/3150 \pm 200$ N

Durability & Standards

Standards & Compliance

IEC62271-100 • GB 1984-2003 • Class E2 • Autoreclosing Duty

Operational Life

- Shelf life: 20 years
- Mechanical operations: 30,000 times
- Short-circuit breaking operations: 50 times

Operational Parameters

Rated Operating Sequence	O—0.3s—CO — 180s—CO
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