CATEGORY: SECTION INSULATOR

FYFH-1.8BT-E Enhanced Section Insulator (25kV)

Reference URL: https://en.chuangwit.com/sectioning-insulator/fyfh-18bt-e.html

1. Product Overview

Enhanced-insulation inter-phase section insulator per TB/T 3036-2016 for severe-service 25kV AC railway OCS, up to 200 km/h. Download Technical Datasheet (PDF) Technical Specifications | The FYFH-1.8BT-E combines the inter-phase capability of the FYFH-1.8BT with the enhanced insulation geometry of the -E variant. It is designed and manufactured per TB/T 3036-2016 for inter-phase electrical sectioning of 25kV AC electrified railway overhead contact systems in severe-service environments. | The air insulation gap is enlarged to >=430mm and creepage distance is reinforced for high-altitude lines (2000-4000m), coastal and salt-fog regions, and heavy-pollution industrial corridors - sites where both inter-phase stress and severe pollution must be managed simultaneously. | A high-strength aluminum alloy body carries the contact wire tensile load; arc-resistant insulating elements with reinforced creepage deliver inter-phase separation. Rated for 27.5kV systems, line speeds up to 200 km/h, -40 deg C to +70 deg C and altitudes up to 4,000 m. | Henan Chuangwit Railway Equipment provides datasheets,

2. Published Technical Specifications & Parameters

Parameter	Published Value / Specification
Model	FYFH-1.8BT-E
Drawing No.	CWLFD1.8BT-E-00
Standard	TB/T 3036-2016 Section Insulators for Electrified Railway OCS
Rated Voltage	27.5kV rated (25kV AC 50Hz single-phase traction supply)
Design Speed	Up to 200 km/h (designed to TB/T 3036-2016)
Operating Temperature	-40 deg C to +70 deg C
Altitude	<= 4,000 m (designed for 2000-4000m high-altitude service)
Materials	High-strength aluminum alloy body; arc-resistant insulating elements; reinforced creepage; enlarged air gap geometry
Installation	In-line series suspension on the contact wire; both ends mechanically connected to the contact wire
Nominal Voltage	27.5kV (System Voltage 25kV AC)
Air Clearance	>=430mm (Reinforced)
Altitude	<=4000m (applicable for 2000-4000m high altitude)
Ambient Temperature	-40 deg C~+70 deg C
Max. Design Speed	<=200km/h (designed per TB/T 3036-2016)
Applicable Standard	TB/T 3036-2016 (Section Insulators for Electrified Railway Catenary)

3. Operating Conditions

Designed for severe-service outdoor railway environments combining inter-phase stress with high altitude, coastal/salt-fog, or heavy-pollution conditions.

FYFH-1.8BT-E Enhanced Section Insulator (25kV) - Continued

4. Mechanical Performance

Aluminum alloy body carries full contact wire tension; reinforced insulation geometry supports enlarged air gap without increasing installation envelope excessively.

5. Electrical Performance

Enhanced arc-resistant insulation with air gap >=430mm and extended creepage provides inter-phase separation per TB/T 3036-2016 for 27.5kV systems in severe-service inter-phase applications.

6. Typical Applications

Inter-Phase + Severe Service | Inter-phase sectioning in high-altitude or heavy-pollution zones. | High-Altitude Boundaries | Substation feeding boundaries on plateau lines. | Coastal & Salt-Fog | Inter-phase sectioning on coastal corridors with salt pollution. | Cold Regions | Operation down to -40 deg C.

Engineering & Quality Compliance Notice

Manufactured under ISO 9001 and CRCC product certification rules where applicable. All values mirror published site specifications.
Inquiry & Custom Engineering Support: info@chuangwit.com | Tel: +86-375-6051688 | https://en.chuangwit.com/contact/