

FSK II + vacuum breaker

Single- or two-phase outdoor vacuum breaker with magnetic actuator for railway power supply



ABB's FSK II + vacuum breaker uses a well-proven combination of magnetic actuator and electronic controller that eliminates several moving parts, making it robust, reliable and essentially maintenance-free.

Key features

- Simple and flexible design with selection of HV terminal configurations
- Highly compact
- Well-proven solution using a magnetic actuator and electronic controller
- Poles fitted with polymeric insulators (or porcelain on request)
- Fast and easy to replace any main component; poles and control units are replaceable
- No SF6 gas
- Available in single- or two-phase configurations
- Suitable for new installations, refurbishments and upgrades
- Suitable for 1x25 kV and 2x25 kV lines, classic structure mounted outdoor switchgear (SMOS), and integrated modules

Customer benefits and savings

- Easy to adapt and integrate into new or existing installations
- Reduction of design/redesign time
- Same design covers single- and two-phase applications
- Compact footprint (less visual impact on the landscape, land saving, cost saving per m2, reduced civil works)

- Easy to install and commission
- No need for mechanical adjustment
- Low overall power demand
- Minimal maintenance costs
- Fewer moving parts
- Easy site delivery (pole and controller are totally independent and do not need to be paired on site)
- Better performance in polluted environments with polymeric insulators (no frequent cleaning cost, no vandalism damage, minimal inventory costs)
- No SF6 emission, lower environmental impact
- No need for SF6 inventory or control
- No leak or failure concern

ABB as your competitive edge

- More than 100 years of expertise in rail best practices
- Dedicated team of rail professionals
- Global supplier with global footprint
- Proven track record with many customer references worldwide
- All equipment manufactured internally by ABB with full monitoring and control of the entire design, production and delivery process
- Unrivalled level of engineering support and after-sales service



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01 FSK II + breakers are manufactured internally by ABB with full monitoring and control of the entire design, production and delivery process.

02 An FSK II at an SNCF site in France (LGV Est Européenne). Designed and developed by the Direction de l'Ingénierie SNCF (Département Alimentation Electrique).



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Technical data

Rated voltage	27.5 kV
Rated continuous current	1250/1600 A - 2000/2500 A
Rated frequency	50 (60) Hz
Number of phases	1 or 2
Rated short-circuit breaking current	8...25 kA
Rated short-circuit making current	50...63 kA
Rated short time withstand current	25 kA, 3 s
Rated power frequency withstand voltage	105 kV
Rated impulse withstand voltage	250 kV
Opening/Closing time	≤ 45 / ≤ 65 ms
Electrical endurance, at rated current (operations)	20,000
Mechanical endurance to first maintenance (operations)	Class M2, 10,000
Standard applied	EN 50152-1 / IEC 62271-100

More product information:
abb.com/mediumvoltage
 Your contact center:
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 More service information:
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