

TracFeed® TAA

AIR INSULATED 16,7 HZ SWITCHGEAR FOR TRACTION POWER SUPPLY

English

Application

Traction switchgears, the interface between electrical generation and the catenary system, are supplying power to the electric trains.

Due to frequent but mostly temporary short circuits in the traction system this plant is essential for safe electrical rail- operation by protecting:

- people from dangerous touch and step voltage
- environment from harmful emissions and
- rail infrastructure from undue stress.

TracFeed® TAA are especially designed to meet the demands of modern 16.7 Hz 15 kV railway application. This product-platform serves all types of AC rail feeding systems including booster and autotransformer systems.

To benefit rail operators and environment.

Special features & Advantages

- More compact traction switchgears by integrated and maintenance free line testing equipment (AGP).
- Switchgear panels are type tested according to EN 62271 200 and EN 50152
- Prefabricated compact switchgear
- Use of circuit breakers meeting special requirements of railway standard EN 50152-1.
- Earthing of outgoing circuits directly by earthing switches with making capacity
- Up to 4 medium voltage cables with indoor sealing ends can be connected to each outgoing circuit
- Easy and fast installation on site
- Installation without cable-cellar is possible
- Lateral and back side access not required

Protecting the environment

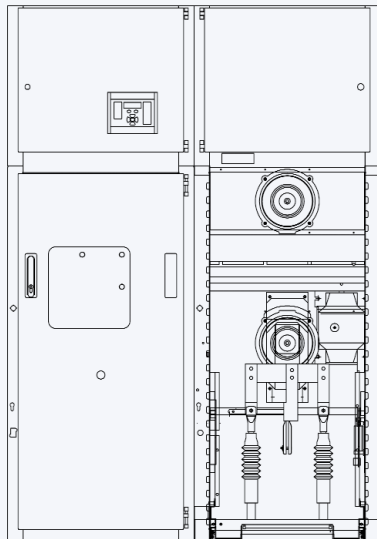
- Circuit breakers with vacuum interrupters
- Air insulation: no emission of green-house gasses
- Easy and safe recycling of all materials in the end of life span

High safety level

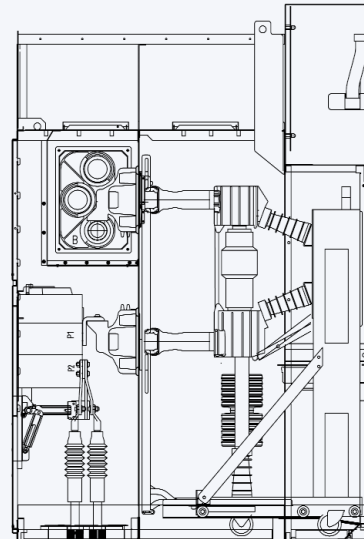
- Integrated mechanical and electrical interlocking
- Metal enclosed with three high voltage compartments
- Automatically operated shutter system to protect operators from accessing life parts
- Capacitive voltage indication (Option)
- Pressure proof segregations limit internal failure effects to a single compartment
- Integrated pressure relieve channel



TracFeed® TAA



Panel front view of line feeder with by-pass (right side: Cable compartment with removed partition)



Sectional view of line feeder panel

Lowest possible maintenance efforts

Electrical equipment can be seen as maintenance free in public power supplies. In railway systems regular preventive maintenance is required, because of high switching numbers. The necessary works are minimized by:

- Truck mounted circuit breakers and line test equipment enable easy service access
- Air insulation leads to no SF6 handling and no pressurized compartments
- Metal enclosure minimizes dust deposit

Mechanical construction

- Rigid panels made of hot dip galvanized steel to last for minimum 30 years of service
- Separate compartments for circuit breaker, outgoing circuit and busbar. The busbar is additionally segregated between panels.

Technical main data TracFeed® TAA

Insulating	Air, at ambient pressure
Rated frequency	16.7 Hz
Rated voltage	15 kV
Operating voltages	according to EN 50163
Rated lightning impulse withstand	125 kV
Rated power frequency withstand	50 kV
Rated current	up to 2500 A
Rated short circuit current	up to 40 kA 1 s
Rated peak withstand current	up to 100 kA
Installation	Indoor
Altitude	< 1000 m msl
Height, overall	2300 mm
Depth, no rear access required	1550 mm
Width	800 mm
Weight	ca. 800 kg
Compartmentation class	LSC2B-PM
Internal arc classification	IAC AFLR 40 kA 0.3 s IAC AFLR 25 kA 1 s

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