

Third Rail System

High-performance feeding system for metros

Alstom developed its own Third Rail System, completing its Cariboni feeding systems offer. Alstom's Third Rail System can be easily adapted to fit any specific project constraint, as well as any civil works and rolling stock interface.

GENERAL DESCRIPTION

Alstom's third rail system is a metro feeding solution to be installed on the side of the running rail to supply the electrical power from the substation to the rolling stock. The contact line is composed of a highlyconductive aluminium profile with a stainless steel cap clamped on top. It is compatible with sleepers (concrete or wooden) and concrete slab. The third rail is kept in defined position and insulated from the ground by supports and insulators designed in accordance with the line voltage and the civil works constraints. The traction power is transferred from the third rail through collector shoes located on the vehicles.

CUSTOMER BENEFITS

High performance

With its innovative Conductor Rail design with no central weld (optimal interaction with Collector Shoe), Alstom's third rail system is guaranteed for at least 30 years of minimum operational service. Its design is also compliant with NFPA fire and smoke standards.

Easy integration

Alstom's third rail system allows for easy extension, conversion, upgrade or replacement of existing lines, and thanks to different profiles manufacturing capability, it offers high interchangeability.

Tailored to your needs

The same design can be adapted to suit various voltage and current levels and cope with any civil works and rolling stock constraints.

Integrated offering

Alstom's third rail system can be easily integrated within a turnkey metro package, matching Alstom's Appitrack mechanised track-laying technology and the Axonis metro system.

HIGHLIGHTS

Expansion Joint

- Up to 200 mm compensating gap
- Reduced number of components over the whole line

Quick to maintain

Any component replaceable within max. 1 hour

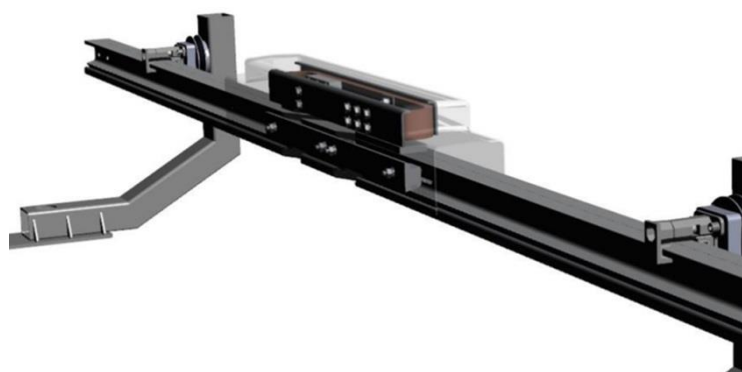


THIRD RAIL COMPONENTS

Conductor rail



Expansion joint



Ramp



The following installation tools can be supplied:

- Drilling jigs
- Positioning jigs and setting gauges
- HuckBolts equipment

Complete Support Assembly



Cable Terminal Assembly



Insulator Clamp Assembly



For more information
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