



SALi DIESEL-ELECTRIC LOCOMOTIVE

Empresa Ferrovial Andina S.A, Bolivia

At the end of 2017, the Empresa Ferrovial Andina (FCA) and Stadler signed a contract for the supply of the first three SALi locomotives to be used for freight transport services on its metre-gauge railway network in Bolivia.

SALi is a Co'Co' diesel-electric locomotive with an ultra light-weight design and with forefront technology, to successfully face the challenges entailed in operating on metre-gauge networks under conditions of great altitude (over 5,000 metres above sea-level) at a maximum speed of 100km/h, combining a high-power output at great altitude with reduced fuel consumption. It features six AC traction motors and two acoustic and heat-insulated driver's cabs, to enhance comfort under extreme temperature conditions. Due to its design and performance, it is destined to become the benchmark locomotive of the Bioceanic Rail Integration Corridor which, crossing Bolivia, will link the Peruvian port of Ilo with the port of Santos, near Sao Paulo in Brazil.

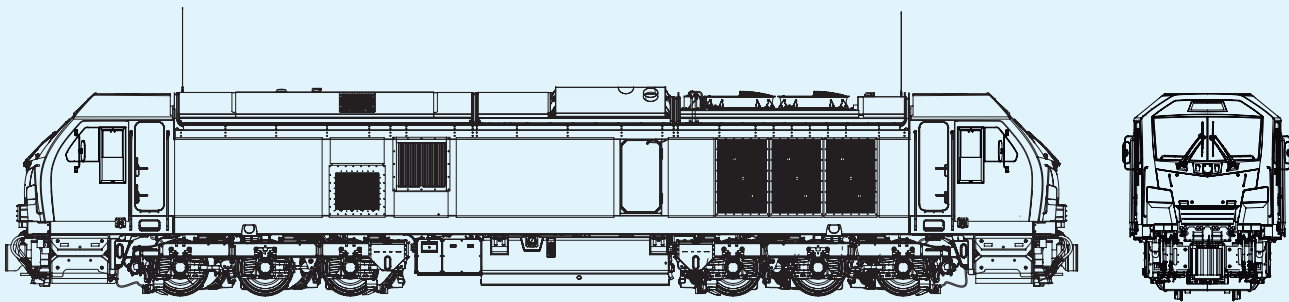
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Technical features

Technology

- Based on proven models such as the EURO4000, UKLIGHT and EURODUAL.
- Suitable for operations at high altitude (over 5,000 m above sea level)
- Freight applications
- Monocoque light and resistant structure made of carbon steel and high strength steel
- AC traction system with IGBT
- 6 traction motors: Nose suspended
- State-of-the-art adhesion control system
- Able to operate in simple or multiple unit (up to 3 locomotives)

Comfort / Personnel

- Two acoustic and heat-insulated driver's cabs with HVAC
- Ergonomically designed driver's desk
- Adjustable driver and assistant seats
- Lighting of the engine room with incandescent or fluorescent or LED lamps

Reliability / Availability / Maintainability / Safety

- Reduced operation costs
- Impressive visibility from driver's desk
- Energy absorption system in the front
- Outdoor lighting with LED multifunction headlights

Vehicle data

Customer	FCA
Region	Bolivia
Number of vehicles	3
Commissioning	2019
Locomotive type	Diesel-electric
Track gauge	1,000 mm
Axle arrangement	Co' Co'
Axle load	18 t/axle
Engine power	1,865 kW
Diesel engine	CUMMINS QSK60
Transmission	AC/AC
Maximum speed	100 km/h
Starting tractive effort	415 kN
Coupling	AAR
Fuel tank	5,480 l
Brake system	Pneumatic y electric
Suspension	Primary: Coil springs Secondary: Rubber metal