At the end of 2017, the Andina-FCA Railway Company and Stadler Valencia signed a contract for the supply of the first three SALi locomotives to be used for freight transport services on its metric gauge railway network in Bolivia.

SALi is a 6-axle diesel-electric locomotive with an ultra-lightweight 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 6 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.
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 air conditioning.
- 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
- State-of-the-art adhesion control system

Vehicle data

Customer: Empresa Ferroviaria Andina S.A
Region: Bolivia
Number of vehicles: 3
Commissioning: 2019
Locomotive type: Diesel-electric
Track gauge: 1,000 mm
Axle arrangement: Co’ Co’
Axle load: 18 ton/axle
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: Up to 6000 l
Brake system: Pneumatic y electric
Suspension: Primary: Coil springs
Secondary: Rubber metal