In July 2014, Stadler received an order for the delivery of 26 vehicles for the new tram system in Aarhus, the second largest city in Denmark. The order includes 14 Variobahn low-floor Light Rail Vehicles and 12 Tango low-floor tram trains. In 2017, Aarhus will be the European Capital of Culture. To mark the start of the cultural year, the Variobahns will be put into service between Lystrup and the main station. The bi-directional vehicles for Aarhus have a floor height of 385 millimetres (100% low-floor) and a gauge of 1435 millimetres.

The Variobahn is a modern, modular tram system with a high level of flexibility in terms of length, width, gauge and catenary voltage.
Technical features

Technology

- Modular design based on main functions
- Bi-directional vehicle
- Body shell made of stainless steel
- Adhesive bonding technology for external panelling
- Energy-efficient double glazing of side windows
- Pneumatic suspension with constant height
- Length and width can be adjusted using selected modules
- Spacious articulated area with flexible interior panelling
- Optimum use of minimum clearance outline

Comfort

- Constant floor level: 100% low-floor
- Free seat configuration in the passenger modules
- Air-conditioned passenger compartments
- WIFI for passengers
- LED lighting in interior

Personnel

- Ergonomically designed driver’s cab
- Modern, screen-based vehicle control system
- Air-conditioned driver’s cabs

Reliability / Availability / Maintainability / Safety

- Technically optimised to the conditions in Scandinavia based on experience in the field from the Variobahn Bergen (Norway) maintenance project
- Digital transfer of telemetry data to maintenance operations
- Video surveillance

Vehicle data

Customer
Aarhus Letbanen I/S

Area serviced
Aarhus city centre

Number of vehicles
14

First delivery
2016

Vehicle length
32560 mm

Vehicle width
2650 mm

Height (with roof-mounted components)
3540 mm

Access height
350 mm

Floor height
385 mm

Aisle width
695 mm

Gauge
1435 mm

External doors
4 on each side

Wheel diameter
650/570 mm (new/worn)

Driving wheels/carrying wheels
8/4

Catenary voltage
750 V

Drive system
8 × 45 kW

Max. speed
80 km/h

Seats
84 (incl. tip-up seats)

Standing capacity (4 pers./m²)
132

Curve radius
25 m