For the operation on the Emsland line, i.e. Münster–Rheine–Emden, Alpha Trains has ordered 15 FLIRT electrical low-floor motor units. The line is operated by WestfalenBahn GmbH. Since December 2015, the 4-part vehicles will be used partly in double-traction on the line in Lower Saxony. The FLIRT is characterised by high drive power and a maximum speed of 160 km/h. The bright and friendly passenger compartment is air-conditioned and can be designed individually. For example the multi-purpose area will have up to 42 bicycle spaces on the Emsland line in the summerstyle.
Technical features

Technology

- Operated mostly in double-traction in the specified area of operation.
- Automatic central buffer coupler
- Aluminium light-weight construction
- Redundant traction equipment consisting of two power trains with one transformer each, IGBT current converters and two asynchronous traction motors
- Car body designed for a longitudinal compressive force of 1,500 kN
- Air-suspended bogies ensure necessary smooth running
- Bi-directional car designed for one-man operation
- Door height 780 mm
- Compliant to TSI PRM and TSI Noise

Comfort

- 24 bicycle spaces, expansion to 42 during summertime possible
- Bright and friendly passenger compartments with great low-floor section
- Air-conditioned passenger compartment and driver’s cab
- 2 closed-circuit WC systems
- One WC complying with TSI PRM – for people with reduced mobility
- 4 double-winged swing-plug doors
- Modern passenger information system

Staff

- Ergonomically designed driver workplace

Reliability / Availability / Maintainability / Safety

- Compliant to crash standard EN 15227

Vehicle data

Customer: Alpha Trains
Operator: WestfalenBahn GmbH
Operated lines: Munster–Rheine–Emden
Number of vehicles: 15
Start of operations: December 2015
Gauge: 1,435 mm
Length over coupler: 74,700 mm
Vehicle width: 2,880 mm
Vehicle height: 4,120 mm
Floor height: 780 mm (above TOR)
High floor: 1,200 mm (above TOR)
Door width: 1,300 mm
Door height: 780 mm
Seats: 215
1st class: 15
2nd class: 200, Fold-up seats 50
Standing capacity (4 pers./m²): 243
WCs: 2
Axle arrangement: Bo'222Bo'
Traction
nominal power: 4 × 500 kW = 2,000 kW
maximum power: 4 × 680 kW = 2,720 kW
Maximum speed: 160 km/h