



FLIRT ELECTRICAL LOW-FLOOR MULTIPLE-UNIT

Since its market launch in 2004, more than 1500 trains of the FLIRT type have been sold in 18 different countries. Depending on the equipment fitted, the FLIRT can be used for suburban, regional and intercity rail routes. Furthermore the passenger capacity can be adjusted at the demand using three to six cars per train unit. During development of the new generation FLIRT, particular importance was placed on low energy consumption and reduced maintenance costs. In addition, the TSI norm (Technical Specification for Interoperability) and Crash worthiness norm (EN 15227) were implemented. The FLIRT excels due to its modular train configuration, comfortable low-floor entrances, its open, bright and transparent interior as well as its individual customisation options for seating arrangements, multifunctional areas and luggage racks. Sealed engine compartments provide the traction equipment with optimum protection from rain, dust, snow and ice. Pneumatic suspension, high-grade materials, a modern passenger information system and a pleasant, proven HVAC system guarantee comfortable travel for everyone on board.

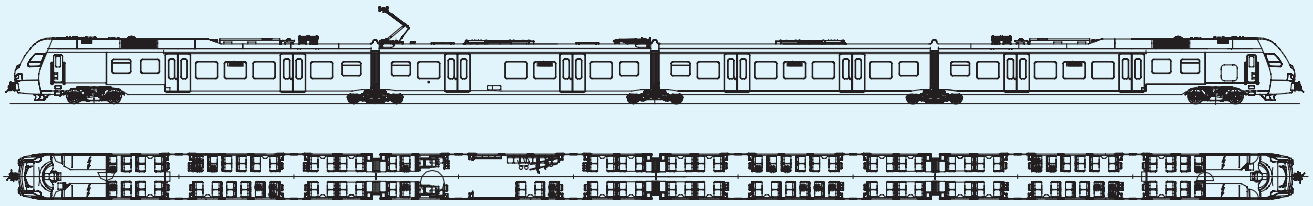
www.stadlerrail.com

Stadler Rail Group

Ernst-Stadler-Strasse 1
CH-9565 Bussnang
Phone +41 71 626 21 20
stadler.rail@stadlerrail.com

Stadler Bussnang AG

Ernst-Stadler-Strasse 4
CH-9565 Bussnang
Phone +41 71 626 20 20
stadler.bussnang@stadlerrail.com



Technical features

Technology

- Standard four car configuration modularity for three to six car version
- Low-floor area about 90%
- Trailer bogies with pneumatic suspension
- Multiple-unit control of more trains

Comfort

- Transparent, open interior design and easy access for the elderly, families and people with reduced mobility
- Spacious multipurpose area in entrance section
- Air conditioned passenger compartments and drivers' cabs
- Vacuum toilet system in the low-floor area, suitable for people with reduced mobility

Personnel

- Ergonomically designed driver's desk

Reliability/Availability/Maintainability/Safety

- Redundant drive equipment consisting of 4 drive chains with water-cooled IGBT power converters
- Vehicle control system with train bus and diagnostic computer

Vehicle data 4 car configuration

Gauge	1435 mm
Supply voltage	15kV, 16.6 Hz/25 kV, 50 Hz/ 3 kV DC/1.5 kV DC
Axle arrangement	Bo'2'2'2'Bo'
Seating capacity incl. tip up seats	235
Floor height	
Low -floor	600–780 mm
High -floor	1200 mm
Entrance width	1300 mm
Overall length	80.7 m
Vehicle width	2820–2880 mm
Axle base	2700mm
Driving wheel diameter, new	870 mm
Carrying wheel diameter, new	760mm/870mm
Max. power at wheel	2600–3000 kW
Starting traction force	200 kN
Starting acceleration	1.2 m/s ²
Maximum speed	160 km/h