



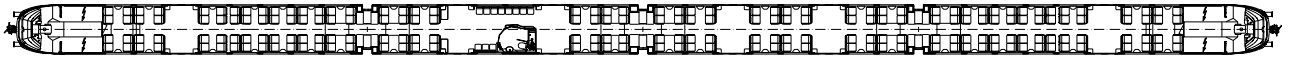
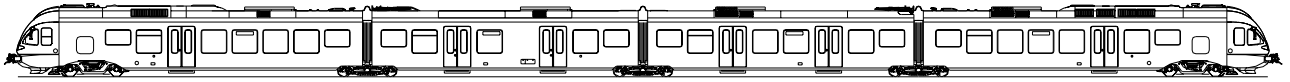
Electric low-floor multiple unit FLIRT for MÁV ZRt. (Hungarian State Railways), Hungary

For the Budapest - Székesfehérvár, Budapest - Pusztaszabolcs and Budapest - Tatabánya suburban lines MÁV ZRt. signed an agreement to procure 30 EMUs of the „FLIRT“ type with an option on further 30 trains. The first two trains will be delivered in spring 2007, the last one twelve months later. The FLIRT (**F**ast **L**ight **I**nnovative **R**egional **T**rain) is setting a new benchmark in suburban transport, which is due to its outstanding characteristics, like the contiguous passenger compartment - with an entrance optimized for platform heights of 550 mm - and the exceptionally high acceleration. For even greater passenger comfort the new FLIRT offers air-conditioning, a roomy design and by utilisation of the newest technologies an exceptionally comfortable and quiet ride.

Stadler Bussnang AG
Industriestrasse 4
CH-9565 Bussnang, Switzerland
Phone +41 (0)71 626 20 20
Fax +41 (0)71 626 20 21
stadler.bussnang@stadlerrail.ch

A Company of Stadler Rail Group
Bahnhofplatz
CH-9565 Bussnang, Switzerland
Phone +41 (0)71 626 21 20
Fax +41 (0)71 626 21 28
stadler.rail@stadlerrail.ch

www.stadlerrail.com



Technical features

- Bright, passenger-friendly interior with customized design
- End-to-end walk-through passenger compartment without steps (steps only at the ends of the vehicle)
- Low-floor section > 90%
- Spacious multipurpose area in entrance section
- 6 doors on each side for fast passenger boarding/unboarding
- Air-conditioned passenger and driver compartments
- Vacuum toilet system, also suitable for the disabled
- Ergonomically designed driver's cab
- Fibre glass reinforced front section with automatic coupling
- Welded superstructure built with extruded aluminium profiles
- Air-suspended bogies
- Redundant traction chain with water-cooled IGBT power converters from ABB Switzerland AG
- SELECTRON® vehicle control system with train bus, vehicle bus and diagnostic computer
- Multiple-unit control for up to three vehicles

Vehicle data

Customer	Magyar Államvasutak Zártkörűen Működő Részvénytársaság (MAV ZRt.)
Lines operated	Budapest – Székesfehérvár, Budapest – Püspöcsanak, Budapest – Tatabánya
Gauge	1'435 mm
Catenary voltage	25 kV AC, 50 Hz
Axle arrangement	Bo' 2'2'2' Bo'
Number of vehicles	30 + 30 Option
Service startup	2007
Seating capacity	200
Fold-up seats	11
Standing capacity (3 Pers./m ²)	164
Floor height	
Low floor	600 mm
High floor	1'120 mm
Door width	1'300 mm
Longitudinal strength	1'500 kN
Overall length	74'278 mm
Vehicle width	2'880 mm
Vehicle height	4'150 mm
Tare weight	ca. 120 t
Bogie wheelbase	
Motor bogie	2'700 mm
Trailer bogies	2'700 mm
Powered wheel diameter (new)	860 mm
Trailer wheel diameter (new)	750 mm
Continuous power at wheel	2'000 kW
Maximum power at wheel	2'600 kW
Starting tractive effort	200 kN
(up to 47 km/h)	
Max.acceleration (full load)	1.2 m/s ²
Operating speed	120 km/h
Design speed	160 km/h

