



# ELECTRICAL LOW-FLOOR MULTIPLE UNIT FLIRT

Belarusian Railway (BZD), Belarus

In October 2013, Belarusian Railway (BZD) ordered two seven-part low-floor multiple unit FLIRTs from Stadler. The trains are designed for a maximum speed of 200 km/h and are used as Intercity trains and on interregional transport routes. They offer 382 seats and 412 standing spaces. The new-generation FLIRT is based on the established FLIRT platform and has been developed for the special conditions in Finland, Norway, Estonia, Russia and Belarus. The generous, comfortable interior allows the passengers to to experience a pleasant journey. The modern passenger information system provides travellers with relevant information, and the video surveillance system guarantees maximum safety.

www.stadlerrail.com

### Stadler Rail Group

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# Technical features

## Technology

- Lightweight aluminim carbody design according to the newest crashworthiness (EN 15227) and structural strength (EN 12663) standards
- Automatic coupler, Scharfenberg coupler type 10
- Air-suspended bogies
- Welded aluminium car body structure made of welded aluminium profiles
- Multiple traction of up to 2 vehicles

# Comfort

- Comfortable and bright interior with customised design
- Business and economy class compartments
- Barrier-free and gap free entrance with sliding steps for persons with reduced mobility (wheelchairs, elderly, prams and bikes), > 80% low-floor area
- Space for up to two wheelchairs
- Bistro for the sale of snacks and hot and cold beverages
- Powerful heating and air conditioning with heat recuperation
  Single leaf doors and sliding steps for fast and easy
- passenger flow – 5 vacuum toilets (1 with access for people with reduced
- mobility) – Passenger information system
- Equipped with passenger WLAN

#### Personnel

- Ergonomically and comfortable designed working environment to prevent inanition of driver (for 1 or 2 drivers)
- Ease control of train operation, safety, passenger comfort and service related systems by train attendants
- Easy cleaning and safety risk detection inside the train by train attendants (while running the train)
- Expiration optimized kitchen layout

### Reliability/Availability/Maintainability/Safety

- Video surveillance
- Intercom system with train driver and attendants
- Emergency brakes, emergency buttons
- Fire detection, alarm and extinguishing systems
- Passenger information system (PIS on disturbance and emergency situations)
- Intermittent or continious train control systems (E)TCS
- Occupational safety, ergonomics, operator friendliness

# Vehicle data

Customer	Belarusian Railway
Lines	operated Belarus
Gauge	1520 mm
Catenary voltage	25 kV, 50 Hz
Number of trains	2
Start of services	2016
Seating capacity	382
Standing capacity	
(4 persons/m²)	412 (DIN 25008)
Floor height	
Entrance	600 mm
Low floor	700 mm
Intercar connection	900 mm
High floor	1240 mm
Door width	1000 mm
Longitudinal strength	2000 kN
Overall length	134500 mm
Vehicle width	3480 mm
Vehicle height	4600 mm
Bogie wheelbase	
Motor bogie	2700 mm
Trailer bogie	2750 mm
Driving wheel diameter (new)	870 mm
Carrying wheel diameter (new)	800 mm
Continuous power at wheel	3000 kW
Maximum power at wheel	3900 kW
Starting tractive effort	
(up to 47 km/h)	300 kN
Max. acceleration (0– 47 km/h)	0.9 m/s <sup>2</sup>
Maximum operating speed	200 km/h