



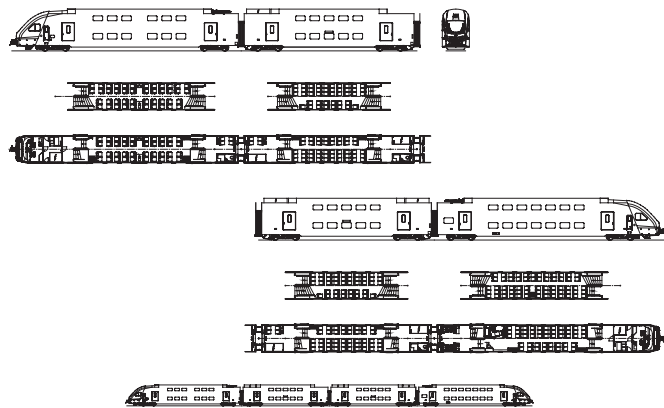
## **KISS Double-Decker Electric Multiple Unit for the Aeroexpress, Moscow**

On 12 February, 2013, the Russian company Aeroexpress made the decision to purchase 25 double-decker multiple units from Stadler; 9 six-unit and 16 four-unit formations. The trains, given the name «Eurasia» by the Aeroexpress, will operate on the 3 routes between the centre of Moscow and the airports. With these new trains, Aeroexpress will be able to meet the quickly increasing levels of demand and offer its passengers greater levels of comfort. The new trains have 396 and 700 seats respectively, 84 of which are Business Class. They will fulfil all relevant Russian standards and, at the same time, set new standards for commuter traffic in Russia.

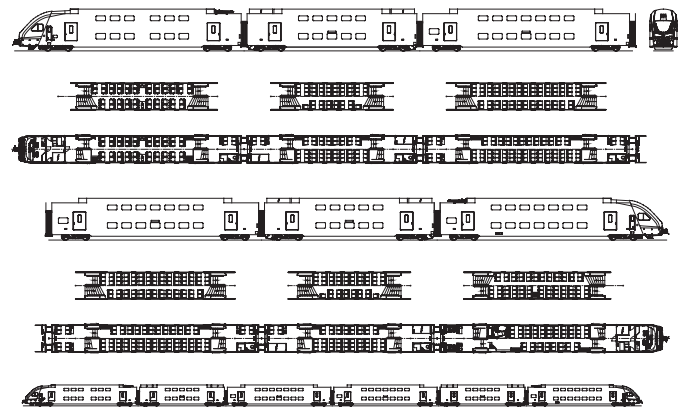
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## 4-part



## 6-part



## Technical features

- Bright, passenger-friendly interior with individual scope for design
- Seating arrangement in rows of three or two seats facing each other and mounted on cantilevers
- Generously dimensioned entrance areas for optimum passenger flow
- 8 or 12 entrance doors on each side for a rapid exchange of passengers
- Air conditioning for passenger compartment and driver's cab adjusted to Russian climatic conditions
- Vacuum WC systems in every carriage, one of which per train has disabled access
- Equipment for PRM: wheelchair space and folding boarding ramp. Ramps within the vehicle to provide wheelchair access throughout.
- Ergonomically designed driver's cab for driver, driver's assistant and instructor
- Vehicle body made of extruded aluminium sections
- Fulfils the latest crash requirement in acc. with GOST
- Motor and trailer bogies with pneumatic suspension with disc brakes and cleaning block brakes
- Redundant drive equipment with 3 or 4 drive chains with water-cooled IGBT power converters
- Redundant vehicle control system and train bus
- Comprehensive diagnostic system
- Multiple-unit control for up to 3 trains
- Train radio: RLSM-10-305-D
- Automatic train control: BLOK fulfils functions of KLUB-U and TSKBM
- Power meter
- PIS: Passenger information and multimedia system with 21" and 27" full HD TFT screens
- CCTV: A total of up to 64 outside and inside cameras, a pantograph camera
- GSM: Two digital repeaters per vehicle
- PWLAN: total of 3 Wi-Fi antennas per passenger deck



## Vehicle data

Customer	Aeroexpress
Area of operation	Moscow airport link
Track gauge	1520 mm
Supply voltage	3 kV direct current
Axle arrangement	2'2'+Bo'2'+Bo'Bo'+2'2' or 2'2'+Bo'Bo'+2'2'+2'2'+Bo'Bo'+2'2'
Number of vehicles	25
Commissioning	2015
Seating capacity 1st + 2nd class	84 + 312 and 84 + 616
Tip-up seats	8
Standing capacity (7 pers./m <sup>2</sup> )	523 and 842
Floor height	
Entrance door	1285 mm
Lower deck	685 mm
Upper deck	2974 mm
Access width	1400 mm
Headroom	2150 mm
Length over coupling	101700 mm or 155100 mm
Vehicle width	3400 mm
Vehicle height	5240 mm
Operating mass, unladen weight	237t and 349t
Bogie wheelbase	
Motor bogie	2500 mm
Trailer bogie	2500 mm
Drive wheel diameter, new	920 mm
Carrying wheel diameter, new	920 mm
Continuous output at wheel	2400 kW or 3200 kW
Maximum output at wheel	3900 kW or 5200 kW
Starting tractive force (up to 54 km/h)	300 kN or 400 kN
Starting acceleration up to 60 km/h	0.8 m/s <sup>2</sup>
Maximum speed	160 km/h