



ELECTRIC MULTIPLE UNITS

S-Bahn Berlin GmbH

The consortium of Siemens AG and Stadler Pankow GmbH entered a bid into a EU-wide tender and, in December 2015, was awarded a contract to supply 106 multiple unit suburban rail trains. A total of 85 vehicles will be 4-car trains, 21 will be 2-car.

The suburban rail multiple units can be operated in multiple unit train control and with combinations of four, six or eight carriages. The train configurations have unrestricted bidirectional capability and a complete driver's cab at both ends. The vehicles are fully accessible to passengers throughout the entire length of the passenger compartment (between the two driver's cabs).

www.stadlerrail.com

**Konsortium Neue S-Bahn-Züge für Berlin
Siemens/Stadler**

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Technical features

Technology

- High degree of redundancy in the power unit; each carriage is equipped with a separate traction group

Comfort

- Modern and low-maintenance interior equipment
- Air-conditioned passenger areas
- Modern passenger information system
- Spacious entrance areas
- Multifunctional zones with generous storage space for prams and bicycles
- Glazed draught screens in the entrance areas
- Barrier-free design of the entrance areas
- Special wheelchair area located in the direct vicinity of the driver
- Modern face-to-face passenger seats
- Tip-up seats in selected areas

Personnel

- Ergonomically designed driver's cab
- High level of flexibility and easy cleaning thanks to cantilever seat mount

Reliability / Availability / Maintainability / Safety

- External and internal cameras providing images that can be viewed from the driver's cab

Vehicle data

Customer	S-Bahn Berlin GmbH/Deutsche Bahn AG	
Designation	EMU2/BR 483/ quarter train	EMU4/BR 484/ half train
Lines serviced	Berlin suburban rail network: Ring lines S41 and S42, as well as the S46, S47 and S8 lines	
Number of vehicles	21	85
Commissioning	First trains from 2020, further trains in succession until 2023	
Gauge	1435 mm	1435 mm
Length over buffers	36800 mm	73600 mm
Vehicle width	3140 mm	3140 mm
Vehicle height	3600 mm	3600 mm
Floor height	1000 mm (throughout)	1000 mm (throughout)
Entrance doors per side	6 doors, 1300 mm each	12 doors, 1300 mm each
Longitudinal force	800 kN	800 kN
Seats (of which tip-up seats)	80 (20)	184 (40)
Standing capacity (2 pers./m²)	94	202
Axle arrangement	(1A)Bo' + Bo'(A1)	(1A)Bo' + Bo'(A1) + (1A)Bo' + Bo'(A1)
Bogie wheelbase	2100 mm	2100 mm
Driving wheel diameter, new	820 mm	820 mm
Supply voltage	750 V DC (side conductor rail)	
Maximum speed	100 km/h	100 km/h
Max. acceleration	1.0 m/s ²	1.0 m/s ²
Output	6 × 140 kW = 840 kW	12 × 140 kW = 1.80 kW
Starting tractive effort	104 kN	208 kN