

KISS - EMU

ÖBB Passenger Transport AG, Austria (Vienna)

In March 2022, ÖBB signed a framework agreement for up to 186 double-decker multiple units.

The units will be used throughout Austria for local and long-distance operation (and for airport transfers between Wien Mitte and Vienna Airport).

In the first call of the framework contract, 41 local transport vehicles are ordered and will be used to expand and partially replace the existing fleet. Due to the high utilisation rate of the existing fleet, the additional vehicles will be used to eliminate capacity bottlenecks. With a seating availability of 373 for the 4-car unit and 593 for the 6-car unit vehicles, the accessible two-floor multiple-unit trains are perfectly suited for transporting a large number of passengers within a very short time.

The units meet all legal requirements, current specifications and TSI's as well as the accessibility-guidelines of the Austrian Council for the disabled (ÖBR) and therefore enable people with reduced mobility to travel independently. The vehicles are equipped with power sockets and multifunctional areas, sufficient toilets as well as a modern and passenger-oriented information system.

Stadler Rail Group

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Technical features

Technology

- Interoperable vehicle according to the latest TSI
- ETCS train protection system "Guardia" Level 3
- Air-conditioning system with natural refrigerant and heat pump
- Multiple unit traction of up to three multiple units

Comfort

- Modern passenger information system
- Barrier-free boarding (low-floor)
- Spacious entrance areas for optimum passenger flow
- Mobile permeable windows for better mobile reception
- At least 2 standard toilet systems + 1 universal toilet system for accessibility according to TSI PRM

Personel

- Ergonomically designed driver's desk
- Train crew cabinet with power sockets and storage facilities for personal belongings in long-distance vehicles
- Height-adjustable and sprung trainer seat in every driver stand
- Refrigerator for drinks and small food containers

Reliability / Availability / Maintainability / Safety

- Redundant drive control, consisting of two pantographs and four powertrains with water-cooled IGBT power converters
- Selective deselection of individual doors depending on platform length and driver request

Vehicle data

Operation areaLocal transport in AT and DE incl. near-border routes CZ, HU and SKGauge1,435 mmDesignation4,734 (4 car) / 4,736 (6 car)Supply voltage15 kV AC or 25 kV ACBo Bo + 2'2' + 2'2' + Bo'Bo' / Bo' Bo' + 2'2' + 2'2' + Bo'Bo' / Bo' Bo' + 2'2' + 2'2' + 2'2' + 2'2' + 2'2' + 2'2' + 2'2' + Bo' Bo' / Bo' Bo' + 2'2' + 2'2' + 2'2' + 2'2' + 2'2' + 2'2' + Bo' Bo' / Bo' Bo' + 2'2' + 2'2' + 2'2' + 2'2' + 2'2' + Bo' Bo' / Bo' Bo' + 2'2	Customer	ÖBB-Personenverkehr AG
Designation 4,734 (4 car) / 4,736 (6 car) Supply voltage 15 kV AC or 25 kV AC Axle arrangement Bo'Bo' + 2'2' + 2'2' + Bo'Bo' / Bo'Bo' + 2'2' +	Operation area	•
Supply voltage	Gauge	1,435 mm
Axle arrangement Bo' Bo' + 2' 2' + 2' 2' + 8o' Bo' / Bo' Bo' + 2' 2' 4' 2' 2' + 2' 2' 2' 4' 2' 2' 4' 2' 2' 4' 2' 2' 4' 2' 2' 4' 2' 4' 2' 4' 2'	Designation	4,734 (4 car) / 4,736 (6 car)
Axle arrangement Bo` Bo` + 2`2` + 2`2` + 2`2` + 2`2` + 2`2` + Bo`Bo` Commissioning 2025 (local transport) Seats 373 (4 car) / 593 (6 car) / 518 (6 car) Wheelchair: 2 (4 car) / 518 (6 car) Wheelchair: 2 (4 car) / 73 (6 car) Standing capacity ~ 600 (4 car) / ~ 900 (6 car) Floor height Low-floor area 440 mm High-floor area 2,524 mm Entrance width 1,400 mm Longitudinal force 1,500 kN Length over coupling 106.94 m (4 car) / 159.86 m (6 car) Vehicle width 2,800 mm Vehicle height 4,630 mm Bogie wheelbase Motor bogie 2,700 mm Trailer bogie 2,500 mm Driving wheel diameter 920 mm (new) Carrying wheel diameter 920 mm (new) Continuous power at wheel 4,000 kW Max. power at wheel 4,800 kW (4 car) / 5,200 kW (6 car) Starting acceleration, gross 1.1 m/s² (4 car) / 0.95m/s² (6 car)	Supply voltage	15 kV AC or 25 kV AC
Seats 373 (4 car) / 593 (6 car) 2nd class: 318 (4 car) / 518 (6 car) Wheelchair: 2 (4 car) / 2 (6 car) Tip-up seat: 53 (4 car) / 73 (6 car) Standing capacity ~ 600 (4 car) / ~ 900 (6 car) Floor height Low-floor area 440 mm High-floor area 2,524 mm Entrance width 1,400 mm Longitudinal force 1,500 kN Length over coupling 106.94 m (4 car) / 159.86 m (6 car) Vehicle width 2,800 mm Vehicle height 4,630 mm Bogie wheelbase Motor bogie 2,700 mm Trailer bogie 2,500 mm Driving wheel diameter 920 mm (new) Carrying wheel diameter Continuous power at wheel 4,000 kW 4,000 kW Starting tractive effort 380 kN Starting acceleration, gross 1.1 m/s² (4 car) / 0.95m/s² (6 car)	Axle arrangement	Bo`Bo` + 2`2` + 2`2` + 2`2` +2`2`
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Maximum speed 160 km/h		1.1 m/s² (4 car) / 0.95m/s² (6 car)
	Maximum speed	160 km/h

