



## Technical characteristics

The train composition consists of a diesel-locomotive, 3 trailer cars (Trailer car - TC) and 1 power car with power supply equipment (Power Car - PC).

The advantage of the double-deck concept in comparison with one-level vehicles is the very high seat capacity. The lower and upper floor areas are open saloons with mostly vis-a-vis seat arrangement. This configuration allows for a maximum number of seats. There is seating space for a total of 505 passengers.

The car body structure is a welded steel-lightweight construction.

The train's maximum velocity of 140 km/h is combined with a powerful brake system. The wide doors with a clear width of 1880 mm and the roomy

entrance areas make it easy for the passenger to enter or leave the train. Every trailer car has at one end a closed lavatory system. Apart from the passenger compartment, the power car also contains the power supply equipment for the entire train and the driver's cab.

The driver's cab is located at the head of the vehicle from where the train is steered in push-pull running. The driver has access to his modern and ergonomic place of work through a separate outside door. The machine room can be entered through a hinged door that can be easily opened in case of an emergency.

The power supply system consists of two diesel-generator-aggregates, the air intake and cooling units, the exhaust air system, the necessary control systems, the diesel tanks and the auxiliary air compressor on the lower floor, and the starter batteries. The power supply system of the PC has an electrical capacity of 2 x 275 kVA, thus being able to supply, among others, the powerful HVAC-systems of the PC and the three TCs. Given this power capacity, the HVAC-system guarantees a high level of comfort for the passengers even under the climatic conditions in Israel.

The trains are equipped with modern diagnosis and control systems. The data transfer is provided by a bus-system (MVB). A visual and acoustic passenger information system (PIS) provides the passengers with ride-related data, e.g. stops, etc..

The trains run on Görlitz VIII-bogies. This bogie type has been in service for double-deck cars since 1994 and offers a maximum ride comfort through a secondary air suspension system.

## Basic Data

(The parameters for trailer car (TC) and cab car (PC) are identical, except for the separately indicated data.)

**Car length**  
- trailer car  
26,800 mm  
- power car  
27,270 mm

**Car width**  
2,774 mm

**Car height over roof center line**  
4,631.5 mm

**Entrance height over top of rail**  
1,150 mm

## Height of passenger compartments

- lower floor  
2,010 mm  
- upper floor  
2,010 mm

**Clear width of doors**  
1,880 mm

**Gauge**  
1,435 mm

**Maximum speed**  
140 km/h

**Dead weight**  
- trailer car  
ca. 47.5 t  
- power car  
ca. 56 t

**Number of seats**  
- trailer car  
142  
- power car  
79  
- total capacity  
505

## Entrance doors

- trailer car with electrical sliding plug doors  
4  
- power car with electrical sliding plug doors  
2  
- driver's cab with hinged doors  
2

## Bogie

Görlitz VIII, air-suspended

## HVAC-system

roof-mounted compact aggregate  
- trailer car  
2  
- power car  
1

Car body structure as welded steel-lightweight construction

Closed lavatory systems in the trailer cars

Power supply system in the power car, maximum capacity 2 x 275 kVA

Diagnosis and control system, data transfer through bus-system (MVB)