



ELECTRIC LOCOMOTIVE 207E

In 2015, the Board of Rail Polska Sp. z o.o. decided to develop a design and produce at least twenty 6-axle 3kV-DC electric locomotives in order to meet its own transport demand and sell or lease them in the Polish market.

The main assumption of the Project was to create an electric locomotive with power of 2800kW, assigned for railway transport operations. The vehicle, designated as type 207E, was built on the basis of the most modern dedicated converting systems and micro processing control, on platform and modernized M62M bogies with use of low voltage traction motors type EMD-D77/78.

**Tractive loco power:
2400 kW**

**High availability
and reliability**

**Low cost of preventive
and corrective maintenance**

**Low cost
of consumables**

**Extended cycle
of repairs**

**Perfect environmental
indicators**

**Perfect
ergonomics**

Rolling stock subsystems developed by the best Polish producers were applied on the locomotive.

Operating aspects and safety of operation were treated as a priority. Lower level maintenance cycles were designed in a way allowing the service in unspecialized, smaller workshops and by operators' mobile services. The vehicle is constructed exclusively of modules, making higher level maintenance easier. With a body built on a self-supporting frame and a safety cage it is one of the safest traction vehicle constructions in the Polish market.





Technical data:

Parameters	Value
Track gauge	1435 mm
Output at the wheel	2,4 MW
Axle arrangement	Co-Co
Maximum operating / design speed	100 kph
Axle load	120 Mg
Locomotive length including buffers	17530 ±17550 mm
Voltage	3 kV DC
Braking system	Wabtec
Ambient temperature operating range	-30°C to +40°C
Continuous tractive effort	300 kN
Truck coupling / connection / joint	King-pin
Kingpin spacing	8600 mm
Rim lubrication	Graphitoidal stick
Truck axle base	2100 mm
The minimum radius of track bend:	
V=30 km/h	125 m
V=15 km/h	90 m
V=5 km/h	75 m
The minimum radius of track ridge and trough	
	300 m
Mechanical brake	Block brake
Parking (hand) brake	
	Brake operating cylinder with parking brake's spring-actuated mechanism
Wheel set type	Tyred / monoblocks optional
Wheel diameter new / worn	Ø 1050 mm / Ø 980 mm

Rail Polska Sp. z o.o. supports the users during the whole cycle of the vehicle's maintenance. The support covers technical advice, maintenance management and maintenance of all P1-P5 levels, delivery of spare parts and consumables.

Rail Polska's technical, organizational and economical experience was an asset at each stage of the loco's construction. It allowed to produce a vehicle with optimal operational parameters, an attractive price and low costs of maintenance.

