





# EURODUAL LOCOMOTIVE

**Dual Mode - Electric (AC) and Diesel Locomotive** 



The new EuroDual six-axle hybrid locomotive is more than just a locomotive for the "last mile" and offers two solutions in one. It can be used for heavy-haul operations on both electrified and non-electrified lines. During operation, it is possible to switch from the electric to diesel mode.

The EuroDual is equipped with  $15\,\mathrm{kV}\,16.7\,\mathrm{Hz}$  and  $25\,\mathrm{kV}\,50\,\mathrm{Hz}$  and has an output of  $6.2\,\mathrm{MW}$  in electric operation. For non-electrified lines, the EuroDual has a powerful diesel engine with a  $2.8\,\mathrm{MW}$  output.

The locomotive is available for operation in Germany/ Austria/Slovenia/Croatia and Serbia, as well as in a configuration for use in Norway and Sweden – with further country certifications to follow.

The locomotives for Scandinavia are equipped with an additional winter package designed for reliable operation in extreme weather conditions, prepared for temperatures down to -40 °C, facing heavy snow and ice conditions.

Depending on the train composition, a single Co'Co' hybrid locomotive can replace two Bo'Bo' locomotives in double traction. The state-of-the-art three-axle bogie causes less wear and tear and extends the lifespan of the wheels.

The two ergonomically designed cabins offer an exceptional level of comfort and safety, with comfortable central seating, as well as climate control and other modern design features.

Equipped with remote control, a limited 20.5 ton axle load and a 90-meter minimum curve radius, the EuroDual is perfectly suited to cover first- and last mile operation, eliminating the need for shunting locomotives and limiting 3<sup>rd</sup> party dependency.

The EuroDual stands out as a freight locomotive, known for its high performance, innovation, flexibility, and optimized efficiency.

## **EURO**DUAL LOCOMOTIVE



#### **Technology**

- Modern 6.2 MW Electric and 2.8 MW Diesel locomotive, designed for heavy rail freight transportation
- Electric (AC) six axle hybrid locomotive (15 kV / 25 kV AC)
- High 500 kN starting tractive effort, in both diesel and electric mode (with single axle control)
- Radio remote control for efficient shunting operations
- Extremely low track forces due to state-of-the-art three-axle boogie design
- Equipped with latest version of ETCS BL3.4.0 and all national Class B systems
- Designed for the (Digital) Automatic Coupler

#### **Personnel**

- Clean and healthy working environment, climate-controlled cabins with optimal noise and vibration isolation
- Central driver seating, allowing for optimal visibility (with 4 sideview windows in each cabin)
- Two ergonomically designed driver cabins, fitted with assistant driver seats
- Simple and uniform operating concept "easy to drive"

### Reliability / Availability / Maintainability / Safety

- Guaranteed availability and reliability
- Modern maintenance concept, with 50.000 km service intervals
- Decreased environmental footprint
- Diesel engine EU Stage V compliant (HVO ready)
- Latest safety standards regarding crash and fire hazards
- Approved according to the latest European legislation (full TSI compliancy)
- Winterization package for locomotives being used in Scandinavia.

| Hybrid locomotive for AC electric and Diesel operation    |
|---|
| 1.435 mm  |
| Co'Co'  |
| 15 kV AC 16,7 Hz and 25 kV AC 50 Hz                       |
| CAT C175, Stage V (HVO ready)                             |
| 2.800 kW  |
| 6.200 kW  |
| 500 kN  |
| 3.500   |
| 120 km/h  |
| Pneumatic and electric brake (regenerative/rheostatic)    |
| Germany-Austria / Slovenia-Croatia-Serbia / Sweden-Norway |
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