



EURODUAL LOCOMOTIVE

Körfez Ulaştırma A.Ş., Turkey

In July 2019, Stadler and Körfez Ulaştırma, first private rail freight operator in Turkey and wholly owned subsidiary of Turkey's largest refinery Tüpraş, signed a contract for the supply of seven Co'Co' dual-mode locomotives type EURODUAL, as well as spare parts and a full service maintenance agreement for 8 years. These versatile locomotives are the first bi-mode locomotives in Turkey. Körfez Ulaştırma will use them in freight transport services, combining both 25 kV AC electric and diesel operating modes, on lines with high gradient, where a strong traction force is required. The new EURODUAL will be utilized as a single locomotive to haul up to 2000 tons fuel product trains, which will improve the operational efficiency of the Turkish rail operator. The EURODUAL is more than just a "last-mile" locomotive. It boasts a power range of 2.8 MW in diesel mode and 6.15 MW in electric catenary operation, as well as an outstanding tractive effort of up to 500 kN, thanks to six-powered axles and a state-of-the-art adhesion control system. It features a compact design, light weight monocoque carbody, AC/AC transmission system, high hauling capability and performance as well as an optimal visibility and ergonomic working conditions for the drivers. A vehicle at the avant-garde of technology that covers every need in an efficient and reliable way, offering rail operators numerous economic and ecological benefits.

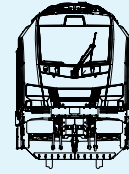
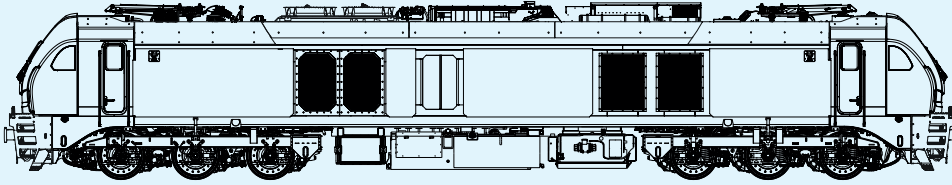
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Technical features

Technology

- Based on subsystems and components from proven models such as the EURO4000 and EUROLIGHT
- Application: Rail freight operations
- AC traction system with IGBT, one inverter per axle
- High starting and continuous tractive effort
- State-of-the-art adhesion control system
- Extremely low track forces (best non-self steering bogie)
- Monocoque structure made of carbon steel, high strength steel and oxidation-resistant steel

Personnel

- Two ergonomically designed driver's cabs with HVAC system
- High cab comfort and visibility, beyond TSI requirements
- Full cab isolation

Reliability / Availability / Maintainability / Safety

- Reduced operation costs
- Decreased environmental footprint
- EC 26/2004 Stage IIIB compliant
- TSI compliant

Vehicle data

Customer	Körfez Ulaştırma
Region	Turkey
Number of vehicles	7
Commissioning	2021
Locomotive type	Dual-mode: Electric/Diesel-electric
Track gauge	1435 mm
Axle arrangement	Co'Co'
Electric energy supply	25 kV AC
Diesel engine	CAT C175-16, IIIB
Diesel engine power	2,800 kW
Electric Power at wheel rim	6,150 kW
Transmission	AC/AC
Fuel tank	4,000 l
Urea tank	480 l
Starting tractive effort	500 kN
Maximum speed	120 km/h
Brake system	Mechanic: pneumatic Dynamic: regenerative/ rheostatic Parking brake
Suspension	Primary: coil springs Secondary: rubber metal vertical and horizontal dampers