



EUROLIGHT

Mainline Diesel-Electric Locomotive

The New Weight Category

EUROLIGHT

high power locomotive for low axle-loads

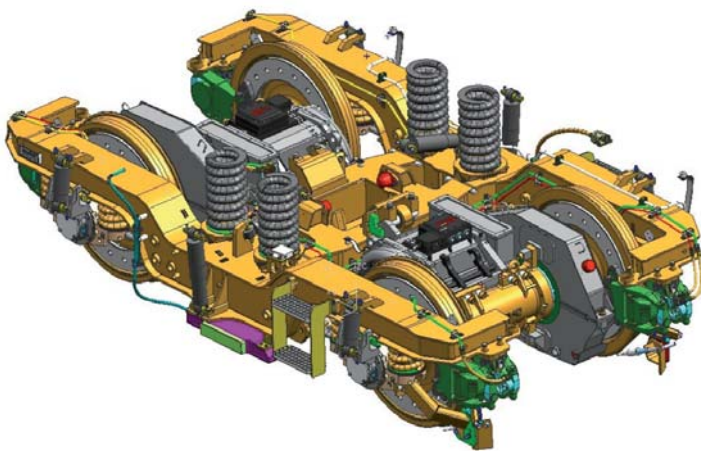
Closely linked with the industrial history of railways and with more than a century of experience, Vossloh Rail Vehicles has made it their business to put visionary solutions on track. In doing so the locomotive manufacturer focuses on creating intelligent transport networks with high-performance locomotives, new vehicle concepts and comprehensive maintenance services. Since foundation of the origin company in 1897 more than thousand locomotives of all types have left the company for destinations throughout the world.

The EUROLIGHT is the new diesel-electric locomotive designed by Vossloh Rail Vehicles with the focus on those market niches, where high demand on low axle load are a must as well as where demand for high power locomotives is expected. Thanks to its low weight, the EUROLIGHT is able to circulate for all the lines (principal and secondary lines), allowing operators to give a flexible operation saving time and money due to the less constraining circulation slot requirements.



A new model for the Vossloh EURO Family

Based on the experience of the EURO family the new *EUROLIGHT* locomotive is a high-power 4-axle Diesel-Electric Locomotive, AC-AC transmission, specially designed to have a reduced axle load fulfilling the latest EU regulations and operator necessities. The *EUROLIGHT* locomotive integrates systems and components already installed in the EURO4000 and EURO3000 models, as well as new propulsion and traction components developed by well known and high qualified railway suppliers: ABB and Caterpillar.



Green and Safe Technology

All relevant environmental standards are fulfilled: UIC and EU Emissions regulations (EU Stage IIIA + further update to IIIB). The new *EUROLIGHT* locomotive also fulfils the latest EU regulations concerning the crashworthiness and other safety requirements.

Best power-weight ratio

Thanks to its locomotive platform design, the *EUROLIGHT* can be equipped with two different Caterpillar engines: CAT C175-16 (2800 kW) and CAT C175-12 (2300 kW). Due to the Vossloh extensive experience in the design of light-weight diesel locomotives, the new *EUROLIGHT* offers the best power-weight ratio, having a nominal power of 2800 kW with an axle-load of less than 20 tons.

Modular design

- Passenger version: 140 km/h (up to 200 km/h upon customer request)
- Freight version: 120 km/h

Vossloh Integrated Efficiency systems

Aside the development of locomotives and LRVs, Vossloh Rail Vehicles has developed a series of tools/equipments that help operators to improve their overall operational efficiency as well as to reduce the emissions from their fleet. The Vossloh efficiency systems are integrated in the design of the new *EUROLIGHT* locomotive.

EFITREN: We can only save what it is measured.

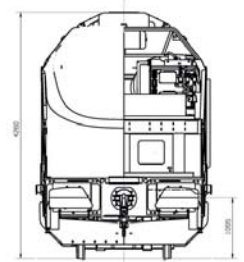
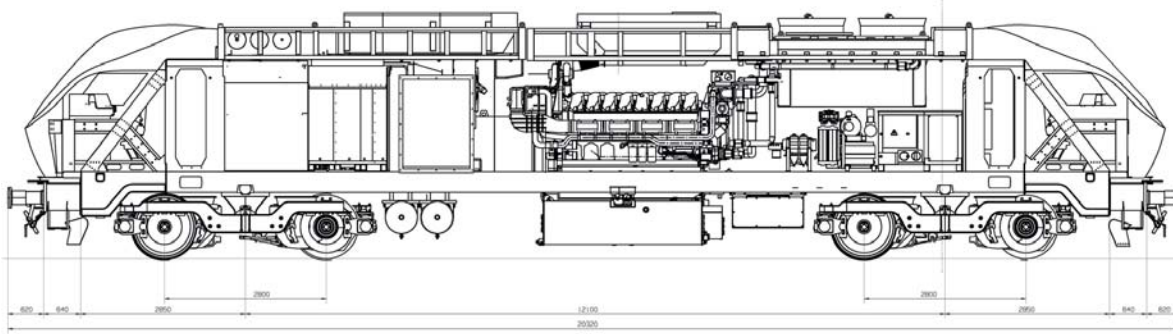
The EFITREN system performs a real time measuring of the locomotive energy consumption to implement energy saving actions.

DAS System: Improving energy efficiency

The Vossloh DAS system gives a support to the driver in order to maximize the energetic efficiency and to reduce the emissions of the locomotive

TWC: expert system to improve the operation through:

- maintenance assistance
- driver assistance
- wireless communications
- locomotive fleet location via GPS.



GENERAL CARACTERISTICS

Axle arrangement	Bo'Bo'
Gauge	1435 mm
Loading Gauge	UIC 505-1
Weight	79-77,5 Ton (full - 2/3 supplies)
Axle load	19,8-19,4 Ton (full - 2/3 supplies)
Maximum speed	120 km/h (freight) - 140 km/h (up to 200 km/h; pax.)
Starting tractive effort	300 kN
Number of cabs	2, air-conditioned
Coupler	UIC type
Fuel tank	4.000 l
Multiple unit	Yes (2 units)
Crash	EN15227
HEP Inverter	500 kW (passenger version)
Noise	According to TSI CR Noise (2006/66/EC)
Exhaust emissions	EU 97/68 Stage IIIA (opt. IIIB)

DIESEL ENGINE

Manufacturer	CAT
Model	C175-16 / C175-12
Power	2.800 KW / 2.300 KW
Number of cylinders	16V – 12V
Rated speed	1800 rpm

BRAKE SYSTEM

Pneumatic	UIC Electropneum.
Dynamic Brake	2100 kW
Blending Features	Opt.
Wheel slide protection	Yes
Compressor	Knorr SL20-5-61 2400 l/min const
Air capacity	1000 l

ELECTRICAL TRANSMISSION

Type	AC/AC
Supplier	ABB
Traction Motors	4FRA6063
Main Generator	WCqx560pb6
Inverters (number of)	4
Traction Converter	Bordline – CC1500 DE

BOGIE

Bogie Frame	Fabricated Steel
Wheel	1100 mm, R8T
Suspensions	Primary: Coil Springs Secondary: Coil springs Vertical, horizontal dampers
Traction Motor	Nose suspended
Brake	Disc brake

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