

Metrans

PRIMA H3 Shunting Locomotives

The PRIMA H3 locomotive for Metrans, based on a three-axle design, allows faster speeds, best in class traction effort and reduced track wear. The PRIMA H3 locomotive is a green component of the PRIMA locomotive range and reduces gas and noise emissions significantly.



Country..... Germany

Context..... Alstom has been awarded by the logistics company Metrans Rail GmbH the supply of two PRIMA H3 hybrid shunting locomotives for shunting operations in the port of Hamburg, as well as the associated maintenance for ten years. The locomotives were delivered in 2016 from Alstom's site in Stendal, Germany.

Solution..... The PRIMA H3 for Metrans shows diesel savings of up to 60% compared to existing locomotives in same operation mode. In comparison with conventional shunting locomotives, the PRIMA H3 with its hybrid drive produces up to 50% less CO2, while other pollutant emissions are cut by up to 70%. Noise emissions have also been significantly reduced. The 350 kW diesel generator meets the requirements of exhaust gas standard stage IIIB and has been designed with future exhaust gas standards in mind. Depending on its use, the shunting locomotive will spend between 50% and 75% of its service time in battery mode. This makes it possible to achieve zero-emission rail transport in urban areas or production halls. The locomotive reaches maximum speeds of 100 km/h and can therefore easily be integrated in main line traffic.

These two PRIMA H3 shunting locomotives will help Metrans to master the growing rise for shunting operations in the port of Hamburg. Alstom's newly developed PRIMA H3 shunting locomotive is based on a low-consumption, environmentally friendly hybrid drive concept, which also makes zero emission operation possible. This unique concept guarantees flexibility as well as cost efficiency for Metrans.

KEY BENEFITS

Operational flexibility – PRIMA H3 technology makes it possible to manage 60m curve radius. The high traction effort, up to 240 kN, makes this locomotive the best solution for Industrial Sites.

Environmental friendly - PRIMA H3 Hybrid can achieve up to 50% diesel fuel saving. It operates in emission-free mode while using batteries, avoiding pollution in sensitive areas or in tunnel.

Continuous improvement – Being part of the PRIMA range, the H3 Locomotive takes advantage of the return of experience from more than 2.400 Locomotives sold all over the world.

KEY FEATURES

Architecture	A'A'A'
Class of service	Shunting
Gauge	1.435 mm
Overall dimensions	According to UIC
Weight	67,5 t
Temperature range	-25°C to +40°C
Nominal power	700 kW
Maximum speed	100 km/h
Tractive effort	240 kN
Fuel tank capacity	2.200 l



CUSTOMER'S VOICE

"We are looking forward to these efficient and environmentally friendly locomotives with which we are able to reach our very ambitious goal to reduce pollutant emissions"

Roger Mahler

Managing Director of Metrans Rail (Germany) GmbH



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