



# AvK<sup>®</sup> DUAL FUELLED HYBRID

TORGHATTEN NORD



## Case history

Vard Electro AS

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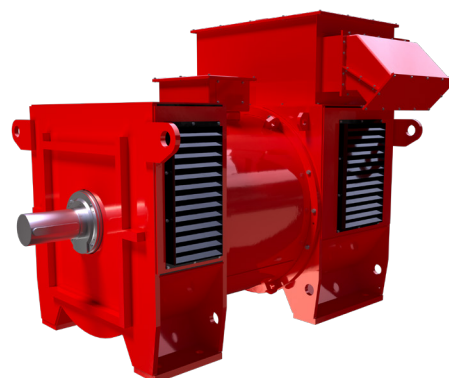
**Where:**  
Norwegian Fjords

**Specified:**  
3 x AvK<sup>®</sup> DSG 114 alternators

**Purpose:**  
Car/Passenger Ferry

When global designer and shipbuilder Vard Electro AS won the contract for a new fleet of five dual fuelled car/passenger ferries, it was a natural decision for Vard to approach Cummins Generator Technologies. With a partnership built over many years and a proven track record in marine applications Vard chose AvK<sup>®</sup> products and services for this project.

Conscious of protecting the environment, the ferries are equipped with hybrid gas-electric propulsion plus battery systems to reduce fuel consumption and emissions, meeting the latest requirements for energy efficiency.



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POWERING TOMORROW, TOGETHER

Over the years AvK® have proven to be one of our most valuable suppliers, offering the product reliability we look for together with the shortest response time to our requests.”

VAR D Electro AS

The new environmentally friendly car/passenger ferries are designed for operation all year round in the Norwegian Fjords with a total capacity of up to 180 cars and 550 passengers.

The combination of high customisation requirements from Vard and the nature of AvK’s range of bespoke product designs, means that alternators are able to meet the variable speed with fixed voltage requirements for continuous operation with periodic changes in load and speed.

Each ferry has three AvK® DSG 114 alternators, giving a combined total output of 7800 kVA to meet the criteria required for the fleet, plus a speed range from 700-1000 rpm (35-50Hz).

AvK® engineering expertise in electro magnetic design allows reactance’s to be aligned to short circuit requirements, meaning they can be kept as low as possible; a key request from Vard for this project.

AvK’s bespoke DSG 114 alternators also include IP44 enclosure protection with an air/water heat exchanger, specifically located water connections and an integrated main terminal work — all specific requirements of the customer.

We are here to support your future decarbonisation goals, through our end-to-end expertise in versatile solutions. Backed by the reassurance of our world-renowned brands recognised for reliability and complete peace of mind, we are with you on your journey towards sustainability.



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