



**ALSTOM**

# **STAMFORD®** **RAIL AUXILIARY POWER**

## **Case history**

Addressing the needs of a modern, high efficiency fleet

**Where:**  
**Victoria, Australia**

**Specified:**  
**STAMFORD UC27**

**Auxiliary Mover:**  
**Cummins QSB6.7**

**Purpose:**  
Reliable and efficient, high-speed VLocity passenger trains, transporting over one million passengers per month

The VLocity rail project, initiated in 2002, aimed to revolutionize regional rail transportation in Victoria, Australia. With a \$250 million investment from the Victorian Government as part of the 2022/23 Victorian State Budget, it not only supports economic growth but also underscores their commitment to innovation and the well-being of regional communities. The VLocity is the highest-speed train in the V/Line fleet, with a top speed of 160 km/h (99 mph) and requires efficient, reliable and safe operation for the one million plus passengers the fleet sees every month.



**STAMFORD | AvK™**  
POWERING TOMORROW, TOGETHER

STAMFORD UC27

**“STAMFORD | AvK was part of the reputable generating set for the product compactness, reliability and peace of mind with this rail project”**

**ALSTOM**

Alstom, originally Bombardier, is a renowned railcar manufacturer that has played a pivotal role in the success of the VLocity rail project. Their expertise in designing and producing reliable and efficient trains has made them a leader in their field. With their Dandenong facility in Victoria, Australia, Alstom has been instrumental in manufacturing the VLocity trains that have become a hallmark of excellence in passenger rail transportation.

The project sought to address the need for the high efficiency fleet, with the STAMFORD UC27 alternator range selected as a crucial component contributor for each of the initial 300 carriages and a further 224 carriages for the subsequent part of the commission.

STAMFORD UC27 alternator was a testament to STAMFORD | AvK's reputation for producing high-quality and reliable products that meet the demanding requirements as a superior component, being compact and suitable for the undercarriage compartment.

Each carriage has a QSK traction engine and a separate diesel-electric genset dedicated to the auxiliary power. The QSK19 750 HP horizontal traction diesel engines deliver the power necessary for the trains to operate at speeds of up to 160 km/h. The QSK19 is solely a traction engine driving a Voith hydraulic transmission.

The delivery of the 300th genset for the VLocity trains marks a significant milestone in the power supply solutions for rail transportation. Our partnership with Alstom has ensured the high availability and on-time performance of the VLocity fleet, making it one of the most reliable passenger railcars in the world. The selection of gensets showcases its exceptional features and benefits, such as power, reliability, fuel efficiency, and modular design.

In addition to this, the procurement and delivery of the VLocity line trains has created opportunities for job creation and local economic development. The manufacturing, supply, and maintenance of the trains require a skilled workforce, fostering employment prospects within the state. Furthermore, the improved connectivity offered by the expanded regional rail network can attract businesses, tourists, and investors to regional Victoria, driving economic activity and prosperity.

To ensure the longevity and continued performance for main traction and auxiliary power, STAMFORD® and AvK® offer a comprehensive range of modular based alternators in the range from 7,5 to 11,200kVA low to high voltage, which can be customized to meet specific customer needs and application demands. In addition to market-leading product solutions, STAMFORD | AvK offer end-to-end support, from installation and commissioning to maintenance and repairs, throughout the lifecycle of their power solutions.



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.

[stamfordavk.li/future-ready](https://stamfordavk.li/future-ready)



**STAMFORD | AvK** <sup>TM</sup>  
**POWERING TOMORROW, TOGETHER**

[stamford-avk@cummins.com](mailto:stamford-avk@cummins.com)

[www.stamford-avk.com](https://www.stamford-avk.com)



Copyright 2024, Cummins Generator Technologies Ltd. All rights reserved.  
Cummins and the Cummins logo are registered trade marks of Cummins Inc.  
STAMFORD and AvK are registered trademarks of Cummins Generator Technologies Ltd.

Part No. CS\_ALSTOM\_EN\_AF\_Rev. 02