

Where: Paris, France

Specified: STAMFORD S4

Prime Mover: Volvo TAD1344GE

## **Purpose:**

Back-up solution for substation, supplying power for train traffic signalling

Genmac, an Italian based company, with its rich history spanning over four decades, has established itself as a trusted name in the generator manufacturing industry.

With a power range offering from 2 to 2645kVA, Genmac serve a diverse range of customers, including those in the construction, residential, emergency services, mining and hospital healthcare sectors.

Genmac approached STAMFORD | AvK with a specific standby power requirement for a Paris train station substation in Archeres, France. The total power requirement for the project, including grid supply, was 400 kVA at 400V, 50Hz.





STAMFORD S4

"The reputation and expertise of STAMFORD | AvK in the power solutions industry played a significant role in the decisionmaking process"

STAMFORD | AvK supplied the STAMFORD S4 alternator with a twin AVR AS440. The generator design considerations included environmental factors, size, altitude, temperature, and ingress, coupled with the VOLVO TAD1344GE engine.

GENAC your power source

The nature of the application was classified as standby power for the train traffic signalling system. The installation required the supply of a standby generator as a backup solution in case of mains failure, ensuring uninterrupted power supply for the critical signaling system.

The end-user of the system was the National French Railway Company, with the installation carried out by AMGE France. The system operates continuously, providing reliable power to the train traffic signaling system.

The installation of the set presented certain challenges that required careful consideration. Some of these challenges included avoiding damages for low load conditions, testing underload without blackout, providing adequate space to integrate contactors and circuit breakers.

To enhance safety and reliability, Genmac installed an integrated load bank and a valve on the fuel circuit. The load bank ensures testing can be performed without blackout and ensure that the engine is running with correct minimum load.

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The valve can be manually closed in case of an emergency, allowing rescue teams to take immediate action. Additionally, Genmac incorporated a position contact on the valve handle to send a stop request to the engine, preventing the fuel circuit from draining during periodic valve testing.

The successful implementation of the project at the Paris train station substation showcases the reliability, performance, and support provided by STAMFORD | AvK, reinforced by the brand's reputation and industry expertise.

With a 15-year long term partnership, Genmac and STAMFORD | AvK offer and provide reliable and innovative solutions that meet the diverse needs of their customers.





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