



Power Generation

ROLLS-ROYCE PROVIDES EMERGENCY BACKUP SOLUTION FOR THE LARGEST DATA CENTRE IN SOUTH AUSTRALIA

Who YourDC
What MTU Emergency Backup System from Rolls-Royce
Where Adelaide, Australia

Located between the Indian Ocean and the green hills of Mount Lofty Range, Adelaide is home to about 1.3 million Australians. Every single one of them uses online services or telecommunication technologies which produce an enormous amount of data traffic every day. YourDC is an Adelaide-based data centre provider that makes it possible for the people of Adelaide to access this high amount of data every day. YourDC owns two data centres in Adelaide, including their flagship centre, the DC1 Edinburgh Parks data centre.



A Rolls-Royce solution

DC1 Edinburgh Parks is a state-of-the-art data centre with 800 server racks, making it the largest data centre in South Australia. Officially opened in May 2016, the centre has a capacity of 8 MW, floor space of 6,000 square metres and is YourDC's second facility. Furthermore, it is Australia's first TIA-942 rated 3 certified data centre, a globally accepted standard for building and operating data centres accredited by the American National Standards Institute (ANSI).

Rolls-Royce is proud to have supplied two MTU 16V 2000 DS1250 generator sets as an emergency backup power solution in the DC1 Edinburgh Parks data centre. These generator sets are now serviced by long-standing local partner, Penske Power Systems.

Rolls-Royce generator sets are first choice

Power for the facility is supplied by four 2MW full-load capacity transformers through two separate substations. However, natural disasters or system failures can cause power outages. In the case of an outage, the uninterrupted power supply will go online initially, prior to the generator sets starting up. The time delay between a loss of mains power and the generators resuming power supply to the centre could be as little as 10 seconds, which means that the uninterrupted power supply can be designed with less capacity. The generator sets consume diesel which is supplied by a tank directly on-site. The tank holds enough fuel for five days of emergency operation.

As the DC1 Edinburgh Parks data centre is TIA-942 rated 3 certified, power supply is subject to the highest standards. In addition to server protection against physical events, redundant capacity components are also required as well as multiple independent distribution paths serving computer equipment.

Connected at all times

As YourDC takes serious consideration on the security of their data centres, it is evident why our MTU generator sets from Rolls-Royce are their first choice. Rolls-Royce is well-known for its reliable,

high-end quality products. The MTU 16V 2000 DS1250 generator set combines exceptional high load factor capabilities with low maintenance requirements yielding low lifecycle costs. Furthermore, the generator sets are designed to run in the Australian climate which means that they are capable of running in ambient air temperatures up to 50°C.

There are several reasons why YourDC selected MTU generator sets from Rolls-Royce as their emergency power backup solution. Firstly, there are the unique technical features such as a reliable engine which is able to serve 100% of the load requirement in less than 10 seconds and a compact packaging design allowing more space for server racks. Also, Rolls-Royce has a very strong local partnership with Penske Power Systems which has an excellent service network around Australia. As Penske Power Systems houses its own stock levels of MTU generator sets, it is able to deliver generator sets within a very short time. This was a critical success factor in this project as YourDC required a delivery time of only 12 weeks. Additionally, Penske Power Systems stocks spare parts and employs qualified service personnel to ensure fast and high quality customer support.

“In mission critical applications, you need a partner who you can rely on. MTU products provide us with this peace of mind.”

Scott Hicks
CEO YourDC

Through innovative companies like YourDC, Adelaide has become the technological hub of South Australia, connecting its 1.3 million people all around the globe. MTU generator sets from Rolls-Royce ensure that the 1.3 million people in Adelaide are connected at all times, 365 days a year, and even when the public electricity grid supply fails.



Emergency backup power for largest data centre in South Australia – Rolls-Royce supplied two MTU 16V 2000 DS1250 generator sets as emergency backup power solution in the Edinburgh Parks data centre.