DATA CENTER

Today the design of power solutions for Data Centers almost requires a specific solution, in order to achieve significant economic and operational benefits, as well as to guarantee the continuous uptime, powering data and financial assets.

When the customer provides past experiences of success in designing, manufacturing, supplying, installing, testing and ensuring power generation, it allows the Customer to rely on a secure Energy Partner, who can assist them from the initial engineering phase to the final commissioning on site, with a dedicated support during the entire product lifecycle. Thanks to its high technological know-how, Asea is ready to propose bespoke energy solutions, tailored around the specific needs of its customers.

Asea offers a complete product lifecycle support to its Customers, as well as the Total Project Management:

- CONSULTING ON DESIGN AND SPECIFICATIONS
- UPTIME INSTITUTE CERTIFICATION SUPPORT
- SYSTEM INTEGRATION & ENGINEERING
- NOISE AND EXHAUST EMISSIONS COMPLIANCE ASSESSMENT
- INSTALLATION AND COMMISSIONING ACTIVITIES
- FIELD TECHNOLOGY MAINTENANCE PROGRAMS
- EMERGENCY SUPPORT 24/7

CASE STUDY

The Volkswagen Data Center required a custom-engineered power supply link for the Volkswagen Technology Center (VTC) in which the Volkswagen Over (TV) equipment had to be installed. The Customer asked for a fail-safe, power solution capable to guarantee the full host power supply for minimum 20 seconds at highly restricted area leading to a minimum environmental impact.

After the analyses of the project requirements, Asea proposed a customized solution with a very low noise level of 59 dB(A)A, converting into a 500 kW. Diesel Generator fully integrated on UPS with Hybrid Storage Technology, both hybrid (hybridization as standalone), with complete dual redundant starting and self-starting systems, in order to reach the back-ups reliability and to guarantee the maximum autonomy of the power supply system.

While selecting the proposal sent by other vendors for solutions with Rotary UPS on horizontal axis, Volkswagen selected the Asea solution, which has been designed for the TÜV (German Technical Inspection Institute) to achieve 100% compliance with the TÜV certification.

The excellent efficiency, ultra reliability and significant TCO reduction guaranteed to Volkswagen allowed Asea to sign a 12 years agreement with VTC (Volkswagen Transport), becoming the preferred supplier for the category of Modular Power Systems to the entire Volkswagen Group.
DATA CENTER

Today’s design of power solutions for Data Centers demands requires a specific attention in order to achieve significant economic and operational benefits, as well as to guarantee the continuous uptime, powering data and financial assets.

When the operator, the power tail experience with Asea Brown Boveri, developed an excellent range of power solutions, relies on the Customer to rely on a strong Energy Partner, who can assist him from the initial engineering phase to the final commissioning on site, with a dedicated support during the entire product lifecycle. Thanks to its high technological knowhow, Asea is ready to propose bespoke energy solutions, tailored around the specific needs of the customer.

CASE STUDY

The TotalNetwork Data Center required a custom-made emergency power supply link for its Network Technology Center (NTC), in which the Data Normal (DC) equipment had to be installed. The Customer needed for a Flexible power solution capable to guarantee the full load power supply (100% for minimum 20 seconds) of highly sensitive data centers leading for a minimum environmental impact.

After the analysis of the project requirements, Asea proposed a customized solution with a very low noise level of 59 dB(A) in operation, which is 50% lower than the original acoustic requirements, together with complete dual redundancy, cooling and relaying systems, in order to reach the businesses reliability and to guarantee the maximum autonomy of the power solution.

Main benefits and advantages:

Higher Efficiency

- Higher overall efficiency
- Mainly the thermal efficiency
- High reliability and long life before maintenance

Flywheel for energy storage

- Outstanding life time
- Fast recharge
- High power density
- Wide operating temperature range
- Easy to manage and control

Reliability

- No maintenance required
- Designed to be reliable even under the most adverse conditions
- Redundant starting system (electric and pneumatic)
- Integrated flange assembly fail safe
- Redundant cooling system

Monitoring

- User-friendly interface
- Comprehensive monitoring and remote access

Go-Green

- No hazardous materials
- No toxic gas emissions

Operation & Maintenance

- Reduced and simplified maintenance
- Long lifetime up to 30 years without downtime

Footprint

- Easy installation on space machines side
- Pig & Flop air-conditioned module

Noise level

- NS-082 (85 dB(A) in operation)