

Case Study

DATACENTER APPLICATION

KOHLER® POWER EQUIPMENT

Three -2000-kW Diesel Generators

Switchgear

Automatic Transfer Switches



Leading global organizations continue turning to Kohler for datacenter expertise

Modern-day businesses run on data. In today's world, it's critically important for companies to gather and analyze information to best serve their customers and optimize their operations. The data industry is also helping to drive the global economy forward as companies all around the world invest significantly in new tools, technologies and facilities to manage their extensive digital records.

This is certainly the case for one multinational conglomerate, which recently invested more than \$50 million toward the construction of two buildings near its sprawling headquarters. One of the two new buildings, a 38,000-square-foot datacenter, significantly increases the company's secure data storage capabilities in the North American market. The new datacenter allows the company to manage and analyze huge amounts of information provided by its customers, suppliers and more.

Of course, with all this top-tier technology and sensitive equipment under one roof, losing power—even for a short period of time—is not an option. That's why the company turned to Buckeye Power Sales, an authorized distributor of KOHLER generators, automatic transfer switches, switchgear, monitoring controls and related accessories.

Buckeye, based in Columbus, Ohio, worked closely with the company to evaluate the power needs of the new datacenter and then custom developed a backup system that would keep the state-of-the-art facility up-and-running if utility power is ever lost.

A Reliable and Redundant Solution



Kohler Power Systems manufactures complete power systems, including generators up to 3250-kW, automatic transfer switches, switchgear, monitoring controls and accessories, for emergency, prime power and energy-management applications. Kohler Power Systems has delivered energy solutions for markets worldwide since 1920. For more information, visit KOHLERPOWER.com.

Three KOHLER® generators (model 2000REOZMD) were identified as the ideal solution for the expansive new datacenter. The generators—installed in parallel—provide more than enough power to back up the center and its numerous advanced systems. The configuration also provides for redundancy and risk reduction to ensure the sensitive data remains safe, secure and accessible.

Each of the three 2000-kW KOHLER generators features a powerful diesel engine as well as a brushless alternator with permanent magnetic pilot exciter for excellent load response. The 60-Hz generators offer UL 2200 listing, meet NFPA 110, Level 1 and were prototype-tested, factory-built and production tested prior to installation.

To seamlessly bridge the gap between loss of utility and standby power, KOHLER 880A automatic transfer switches (ATS) were integrated. The ATS utilized for the datacenter include KOHLER-designed and built MPAC® controllers, which offer full system control and a variety of usability features, including an intuitive LCD display, LED-indicated source status and switch position, and programmable pickup and dropout voltage.

Highly customized KOHLER PD-Series switchgear was also engineered for the project, highlighting the benefits of Kohler’s total system integration.

“The switchgear wasn’t part of the initial bid, but after consulting with our engineers, learning more about our expertise in this area and seeing some of the massive datacenters Kohler has been working with on a global scale, they wanted to move forward with our team’s solution,” said Vince Campise, marketing manager for Buckeye Power Sales. “By installing a complete KOHLER power system, this company can now rest assured knowing every component—from generator and transfer switch to paralleling switchgear and controller—was designed, built and tested to work together and provide complete dependability.”

To help keep the new KOHLER power system safe and secure, while protecting the generators from harsh weather, these units were installed within a sound-attenuated aluminum enclosure. A platform and stairs were also added for service personnel. ■