# LIEBERT® VSD UPGRADE SERVICE

Equipment Upgrades and Replacements



#### **BENEFITS**

### Meet Load Demand Using Less Energy at Lower Cost

Balancing system performance with energy efficiency has long been a key challenge for data center managers.

You can't compromise availability, but the pressure is on to reduce costs at the same time. Your legacy thermal management system is likely a big part of the challenge. In the average data center, cooling accounts for 40 percent of total energy consumption.

Many legacy thermal management units are sized for peak demand in order to protect infrastructure, but that peak demand rarely occurs. The result is overcooling and wasted energy, which can be remedied with a fan upgrade.

#### **Benefits**

- Increase energy efficiency
- Lower utility and operating costs
- Extend useful life of equipment
- Reduce time and costs needed for maintenance
- Realize a timely return on investment (ROI)



# Increase your data center's energy efficiency and cut operating costs by using variable speed technology

Liebert® variable speed drive (VSD) upgrades performed by Vertiv™ technicians allow you to increase energy efficiency by up to 50 percent without harming system performance.

Adding a VSD to the motor of your computer room air conditioning (CRAC) units allows you to match fan motor speed and power draw with changing load demands and system requirements. As load decreases, so does fan speed.

Each 20 percent reduction in fan speed yields about 50 percent savings in power consumption. With VSD technology, your energy efficiency increases. You put less wear and tear on your thermal equipment, extending equipment life and reducing maintenance costs. You also see an immediate reduction in electrical costs, potentially saving thousands of dollars per year, per CRAC unit.

Our Liebert VSD upgrade service includes:

- Expert consultation
- Professional installation
- System coordination
- Comprehensive warranty

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#### **Expert Consultation**

Liebert® VSD upgrade service begins with a site visit from a Vertiv™ thermal management expert. This on-site consultation allows us to walk through your data center, talk with managers or owners, and get a better understanding of the performance goals and priorities for your thermal infrastructure.

During the visit, we will look for airflow issues and inefficiencies. We recommend improvement strategies that will reduce energy consumption significantly. Your service technician will also evaluate the ROI for your unique space, which can help justify the cost of the upgrade. Payback periods are often less than two years. You may also be eligible for energy efficiency rebates in your area that cover the cost of installation and further reduce your payback period.

#### **Professional Installation**

The best approach to achieving optimal airflow through a VSD upgrade is having Vertiv, the service team for Liebert products, handle the installation. As the OEM, we have direct access to the engineering group who built the equipment and are specifically trained to optimize the performance of thermal systems.

In addition to having industry-leading expertise, Vertiv knows the importance of using genuine OEM parts that work seamlessly with Liebert products versus aftermarket replacement parts. Our thermal management experts are equipped with the knowledge and parts needed to ensure your business-critical equipment runs efficiently with minimal downtime.

## **System Coordination**

IT systems are critically sensitive to extreme variations in temperature and humidity. Therefore, making proper set point adjustments along with a Liebert VSD upgrade is crucial to thermal system operation.

Following installation, our service team will help with system coordination and adjust the set points of existing controls. Proper set points help reduce energy consumption, improve compressor life, and reduce "fighting" between units due to excessive humidification or dehumidification.

#### **Comprehensive Warranty**

A comprehensive, one-year warranty on all parts and labor is included with the purchase of a VSD upgrade. Should an issue arise, you can rest easy knowing that your system is covered. We will help you get up and running, utilizing only OEM parts and labor from the industry's best factory-trained thermal experts.

# Summary

Load demand in your data center changes all the time. But fan speed and airflow from your legacy CRAC system likely remain constant.

What's more, fan speed is likely set to accommodate peak loads, which rarely exist. As a result, you're using energy you don't need and running up costs.

Liebert VSD upgrade service allows you to match motor speed to changing load demand, reducing energy costs without compromising data center performance.

#### **Ordering Information**

To learn more about this service and other Vertiv solutions, visit VertivCo.com or call 1-800-543-2378.