## **CAPACITOR REPLACEMENT**

Equipment Upgrades & Replacements



#### **BENEFITS**

# Extend the Service Life of Your UPS

Your UPS systems are designed with large capacitor banks made up of both DC electrolytic and AC polymeric film capacitors that degrade over time. They can and do fail unexpectedly. Proactively replacing a full bank of capacitors is strongly recommended.

Knowing how to get the most out of your capacitors and precisely when to replace them requires knowledge of data center infrastructure and your equipment. The factory-trained technicians at Vertiv<sup>™</sup> have this knowledge. We work with you to proactively replace your capacitors, helping you achieve a long service life for your UPS and avoid unplanned downtime.

#### **Benefits**

- Improve UPS system availability
- Achieve longer mean time between failures (MTBF)
- Minimize unplanned downtime
- Extend battery service life



# Plan for full bank capacitor replacement to keep your UPS system running

The expected service life of capacitors varies significantly based on factors including age, operating conditions, and load. Over time, their ability to withstand voltage and pressure changes is diminished, which can lead premature failure and downtime.

Leveraging historical field data, the industry-leading experts of Vertiv who replace thousands of capacitors each year, will recommend the ideal time to replace the capacitors in your UPS system. This proactive service allows you to get the most out of your capacitors, while extending the life of your UPS system and avoiding downtime.

Our capacitor replacement includes:

- Component inspection
- Installation
- Equipment restart

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#### **Component Inspection**

Inevitably, the capacitors in your UPS will fail due to several influential factors.

Timely replacement is the key to avoiding downtime. Therefore, full bank capacitor replacement performed by Vertiv™ technicians starts with an inspection of critical components to verify age, UPS system performance, and capacitor health. This information can then be compared to our extensive UPS portfolio and serve as a baseline when determining future capacitor replacement.

#### Installation

Our factory-trained technicians install capacitors that meet the engineering and safety standards of the original equipment manufacturer (OEM). They have extensive experience with Liebert® UPS systems. Having these data center infrastructure experts handle your full bank capacitor installation ensures optimal performance for your peace of mind.

#### **Equipment Restart**

Vertiv's capacitor replacement services are not complete until your UPS is operating properly. Our technicians restart your power equipment with the newly installed capacitors to ensure there are no anomalies when supporting your business-critical equipment.

#### **Summary**

Proactively replacing a full bank of capacitors is the best way to ensure they don't age to a point of probable failure, causing expensive data center downtime. Yet, knowing just the right time to perform this replacement and ensuring you get the most out of your capacitor investment requires some expertise.

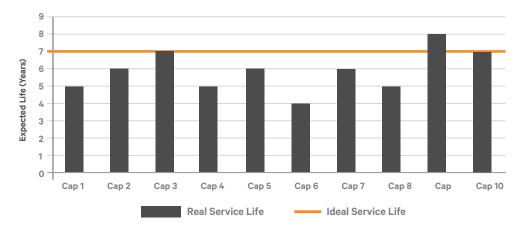
The factory-trained technicians at Vertiv have expertise built from extensive field experience and direct access to OEM tools and resources. We draw on our thorough knowledge of capacitors, UPS units, and data centers to personalize a replacement program for you.

Developing a program based on historical field data is the most reliable approach to predicting ideal replacement time and one that will ultimately help you maximize availability.

#### **Ordering Information**

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

### Capacitor Aging - Ideal vs. Real



Failure rates witnessed in the field when a group of capacitors with the same model number are operated under the same max rated conditions.

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