

APPLICATION OVERVIEW

ABB® Ability™ electrical distribution control system (EDCS) and the data center electrical distribution system.



Data center operators and facility managers are under tremendous pressure to keep their data centers up and running. And because of the exponential growth data centers are experiencing, their massive energy consumption is being criticized.

AUTHORS

Stan Levenstone Business Development Manger, ABB Ability, ABB, Electrification Products Division

Daniel Lightsey Technical Manager, ABB Ability, ABB, Electrification Products Division As a data center operator or facility manager, understanding the electrical distribution in your data center is a key component to keeping things up and running, efficiently.

There are generators to back up your utility power, and UPSs to condition the power before you provide it to your critical IT load. However, your facility's electrical distribution system is also subject to your control and can benefit from more efficient control. You can ensure that the right amount of conditioned power is delivered to each segment of your IT load and that every asset in your electrical distribution system is operating efficiently.

To make sure the right amount of power gets to the right places and the assets in your electrical distribution system are in proper condition to deliver that power reliably, the power flowing through the electrical distribution system must be managed. Managing begins with monitoring.

ABB Ability EDCS

The ABB Ability EDCS provides monitoring capability that allows you to manage your power usage. The ABB Ability EDCS is very cost-effective, and it doesn't add complexity or require investment of manpower on your part. It is quick to install and get up and running. The new, simple ABB Ability EDCS components are easily integrated with your data center distribution system.

With the addition of EDCS, you now have the tools to monitor your electrical systems at one or many sites using a cloud-based Windows system that is an inherent part of the ABB Ability concept. The monitored data allows you to optimize and control the amount of power you use and the performance of the assets you rely on to continue to deliver it.





The ABB Ability EDCS is a cloud-based solution designed to provide the following for electrical systems:

- Monitor: Determine plant performance, supervise the electrical system and immediately access the most important information.
- Optimize: Collect data from each device, analyze it and use the output to inform business decisions.
- **Control:** Set up reports and alerts; remotely implement an effective power management strategy.
- Predict: Reduce unplanned downtime with predictive maintenance.

The ABB Ability EDCS provides insight into data centers of all sizes and complexities. It has been designed with operators, facility managers, consultants and panel builders in mind. Monitoring multiple data center sites enables you to compare the performance of all connected sites. Connection through a web app using a smartphone, tablet or personal computer is all that is needed to see the status of the connected low-voltage power distribution system. Once you are connected, monitoring and management are in the palm of your hand.