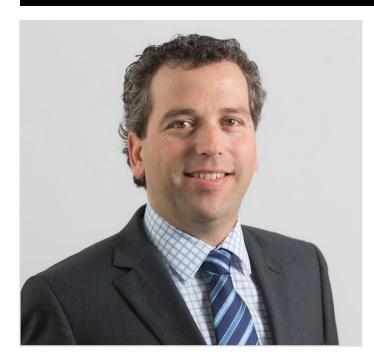
Interview

Power conditioning – An interview with Perry Field – General Manager, ABB Power Conditioning



With the recent interest around medium voltage UPS technology, ABB decided to sit down with the general manager for ABB Power Conditioning, Perry Field, whose team has recently introduced the PCS100 MV UPS, to discuss the technology and future expectations for the product.

Why has ABB Power Conditioning developed a range of medium-voltage (MV) uninterruptible power supplies (UPSs)?

This development came about as a result of the changing landscape in industry and data centers. To gain economies of scale, facilities are becoming larger and demanding increasing levels of power. As power requirements increase, moving to medium voltage is a natural step.

How do these MV UPSs help industries that have sensitive or critical loads?

Increased automation demands more and more high quality power to protect complete manufacturing processes, not only control systems. Performing power protection at medium voltage allows complete facility protection, ensuring all sensitive loads are protected.

How do these MV UPSs tackle the ever-increasing number of renewable energy generators entering the power grid?

Distributed renewable generators in the grid do not increase the reliability of the grid, but in fact the opposite. Voltage fluctuations are more common with increasing renewable energy and events such as clouds covering a photo-voltaic generation park cause large power fluctuations in the grid network.

What advantages do the MV UPSs from ABB Power Conditioning offer users in terms of installation and housing?

The ABB MV UPS is extremely compact for the level of power protection offered. As well as this, with medium voltage the currents in the conductors are lower, meaning locating the power protection in an electrical room, or away from the main production site, is possible without expensive cable runs. The efficiency level of the ABB MV UPS is also class leading, at not only 99 percent but 99.5 percent typical efficiency.

Are there any recent case studies that you are particularly proud of?

Yes of course, but unfortunately we cannot mention names yet! One customer is an electronics component supplier to one of the largest consumer electronics companies globally. Their most recent purchase was for 2 MVA and 4 MVA PCS100 MV UPS systems.

Where do you currently supply to? Are there plans to expand operations in the near future?

We supply globally throughout the ABB network. The present product offering currently is up to 6.6 kV and 6 MVA. Plans are already in progress to increase the voltage offering to cover more of the common voltages worldwide.

How do you see your sector progressing over the next decade?

I think there will be two key trends over the next decade: 1) Economies of scale will further drive the development of large manufacturing facilities, with increased automation, and colocation datacentres. 2) Responsible use of resources. This means using energy efficiently and being able to adapt to the changing energy generation landscape.

How will ABB Power Conditioning be a part of this change?

If you look to our product portfolio and where we are going with our products, it is clear that we are constantly evolving as we stay on the cutting edge of technology. Power and productivity for a better world is the motto of ABB, and ABB Power Conditioning fulfils this exactly, increasing our customers' productivity while being responsible with how we use the world's resources.

Do you have a question about PCS100 MV UPS technology? Email: powerconditioning@abb.com

