

ABB releases new voltage regulation solution

Napier, New Zealand, 12 October 2015: ABB releases new product to combat voltage fluctuations.

ABB, the leading power and automation technology group, has released the innovative PCS100 AVC-20, an active voltage conditioner for voltage regulation, designed for use by industrial and large commercial operations in environments where an unstable network or utility voltage affects productivity.

The system's leading-edge technology ensures a continual supply of utility power where the electric infrastructure is stressed, unstable or unreliable.

A fluctuating voltage supply affects productivity and the consistency of operations, leading to a reduction in the quality of products and services. This can also lead to increased wear on machinery components, resulting in a greater number of malfunctions and a reduced life expectancy of equipment. The PCS100 AVC-20's fast, accurate voltage regulation secures productivity by improving consistency in operations and reducing the impact of inconsistent voltage on equipment and production.

Brownouts, over-voltages and an unbalanced voltage supply can cause motors in equipment and machinery to function inefficiently resulting in poor use of resource, in terms of staff, materials and energy consumption. It can also cause reliance on costly back-up systems, such as diesel generators. The PCS100 AVC-20 ensures a regulated supply of voltage, helping users to streamline their operations and optimize resource to reduce wasted capacity and improve the return on operational investment. At the same time, the PCS100 AVC-20 enables the use of utility power, resulting in a cost saving on power generation from captive power plants.

Built on a proven and dependable converter platform with sophisticated control software, the PCS100 AVC-20 corrects voltage fluctuations in less than 20 milliseconds ensuring continuous operation to commercial and industrial processes. Its rugged overload capability and modular design deliver high reliability, scalability and a low mean time to repair limiting down-time and ensuring consistent levels of production.

The system's internal bypass mechanism ensures fail-safe operation and the unit's small footprint offers industry-leading power density (power per unit volume) meaning that it can be installed into even the smallest of spaces without the requirement for additional cooling mechanisms. The PCS100 AVC-20's superior efficiency

of over 98 percent ensures a low cost of ownership, enhanced by the small number of moving parts that require ongoing maintenance.

ABB's PCS100 AVC-20 is the leading-edge solution to insecure and unreliable energy grids found all over the globe. Installing or retro-fitting the PCS100 AVC-20 will ensure industrial processes remain productive, efficient and consistent.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility, industry, transport and infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs around 140,000 people.

ABB's Power Conditioning portfolio is a unique line up of low and medium voltage power conversion technology that is part of the product group, Power Protection. The portfolio consists of static frequency converters, UPSs and voltage and power conditioners that demonstrate highly reliable and cost-effective performance. With this product portfolio, ABB offers efficient power conditioning solutions that are specifically designed to solve power quality problems and stabilize networks.

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Notes to editors

1. A picture is supplied for use in connection with this article only. For a high resolution image, please contact joanna.smith@nz.abb.com
2. For help with any technical terms in this release, please go to: www.abb.com/glossary
3. **Technical information:** Rated at up to 3 MVA, the PCS100 AVC-20 ensures continuous voltage regulation to 100 percent for voltage fluctuations of ± 20 percent of the mains voltage. The PCS100 AVC-20 also removes any imbalances from the supply voltage. If the voltage fluctuations are even higher, the PCS100 AVC-20 will undertake a partial correction, with a voltage injection of up to 20 percent. For example, with mains voltage drops of 30 percent, it corrects to 90 percent of the nominal voltage – keeping voltage levels inside standard specifications of most electrical equipment.

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