

A new era for wind energy has begun. New connection rules have been imposed by operators at an international level, meaning that manufacturers, planners and suppliers are now faced with a new set of challenges. Drawing on its many years of experience in the fields of power quality and power electronics, Converteam has managed to consistently meet these requirements as regards wind energy.



Key features

- Available as an individual solution for single turbines or as a cluster for wind farms
- Maximum flexibility thanks to modular hardware for optimisation of specific applications
- Excellent price-performance ratio
- Can be retrofitted in existing wind farms
- Straightforward operation and visualisation
- Easy to integrate into higher-level systems and wind farm control systems.

Experience pays off

For decades, Converteam has dominated the fields of mining, power generation and transport with its dynamic compensation systems. Generally speaking, these are based on traditional power electronics.

Converteam is now launching a dynamic compensation system (Power Conditioning System, PCS) that makes use of the latest IGBT technology and tops the existing STATCOM system in terms of performance.

In the event of a voltage dip on the grid, the PCS can make its maximum reactive current available in a matter of milliseconds. As a result, turbines or wind farms are able to support the grid even in serious situations and thus can meet applicable grid codes.

The perfect solution for both clusters and individual systems

Thanks to its compact design, the smallest unit (with a power rating of 2 MVAR) can easily be integrated into the existing design of a wind turbine.



Control unit on slide out runner

On wind farms, individual units can be installed as a cluster inside a central medium-voltage station. This makes for cost-effective expansion, as the PCS becomes modular and can gradually be added to for power ratings of up to 30 MVAR and more.

Custom-made software

The Power Conditioning System provides flexibility of use in respect of all requirements thanks to the parallel connection of individual devices.

The PCS basic software offers all the same features as the tried-and-tested Converteam high performance control:

- Connection via various fieldbus systems
- User-friendly visualisation, operating and commissioning tools
- User-defined parameters for customized solutions

Functionality can be expanded, depending on the application.

The central closed-loop and open-loop control unit offers the following options, which can be parameterized as required:

- Reactive power control
- Grid voltage control
- Power factor control

Worldwide use

Right from the planning and development phase, we made sure that your finished product would comply with the key standards and regulations: EN standards, IEC, VDE. Possible to upgrade to UL at any time.



| Easy replacement of modules without water leakage

Converteam's service network provides customers with rapid expert support:

- Specialist team with experience of the relevant field
- 24-hour service hotline
- Individual maintenance and service contracts

Always available – expert teleservice

Teleservice means: rapid and effective support from our specialists. Whenever you need them, our experts can respond to you from any location, no matter where you are. Consequently, optimum operation and a high degree of availability can be achieved throughout a turbine's life cycle. The manner in which support is provided will depend on the equipment level of the turbine concerned as well as the intended scope of the support agreement.

Technical data

Grid supply voltage:
3 AC 600 ... 690 V
Grid frequency: 50/60 Hz
Rated current: 1200 A
Max. current: 1400 A
Cooling: Liquid or air
Ambient temperature:
-25 °C to +40 °C

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