



Medium Voltage Full Size Converter

Woodward is one of the leading suppliers of wind converters used for renewable energy generation. More than 7,000 installed converters used in Onshore and Offshore applications attest the competence and experience of Woodward within the wind energy business. The precise and intelligent control algorithms of Concycle wind converters together with variable-speed generators create an optimised powergeneration system.

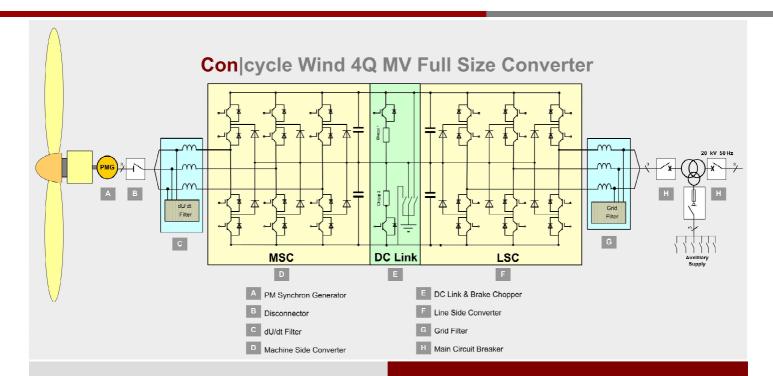
Concycle wind converters actively dampen dynamic torque loads in the drivetrain thus protecting the gearbox. This will extend the lifetime and increase the reliability of your system.

The intelligent control of your Concycle wind converter ensures compliance with all valid international grid code requirements at the point of common coupling. The modular design of Concycle medium voltage full size converters currently covers power classes from 4 MW to 10 MW. Woodward's modern manufacturing facilities in the US and China also guarantee converter availability for growth markets.

- · High efficiency at any speed
- High power density
- Compact, modular design
- Rugged design
- Reactive power compensation
- Asymmetrical fault compensation
- Concycle activeFRTTM active drive train damping
- High dynamic control
- Encoderless Control
- No inrush currents
- Detailed simulation models
- Service organisation worldwide
- Integrated data logger and fault data recorder
- Variable field bus communication interfaces



concycle | efficiency, reliability experience, performance



Inverter Typ

Voltage Source Converter 3 level High Voltage IGBT (Integrated Bipolar Transistor

Auxiliary Voltage

Common 400 - 480VAC, 3-phase, 50/60 Hz

UPS

UPS can be connected for control power

Efficiency of Converter

Typically 98,5 %

Ambient Temperature

-40°C – 50°C (higher with derating)

Enclosure Class

IP 54

Power and Voltage Range

4MVA – 10MVA 3,3kv – 4,16 kV Woodward Kempen GmbH Krefelderweg 47 47906 Kempen Germany

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