DYNAPOWER
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IGBT Chopper Rectifiers

High Density DC Power with Built-in Redundancy

Designed for processes that require large voltages and currents, our Chopper rectifier consists of high frequency switching technology in a modular design package that converts the secondary AC voltage to a regulated output DC voltage.

IGBT Chopper rectifiers are designed for high power factor and low harmonic distortion, eliminating the need for power faction correction equipment and harmonic filters. They also have inherently low ripple (typically <2%) at full output so ripple filters are not needed.

Compared to standard thyristor rectifiers, the Chopper offers a modular approach to rectification, resulting in simplified transformer designs and systems that are easier to install, cost less, and save valuable space. Its modular design also makes repairs fast and easy should a module fail.

Chopper rectifiers come with an intuitive touchscreen controller integrated with a programmable logic controller that features system protection, dynamic response, and stored system data.

System Advantages

- High power density and efficiency
- High power factor, low harmonics and low ripple eliminate need for expensive additional equipment
- Modular design provides built-in redundancy

STANDARD CONTROLS

Touchscreen PLC

A touchscreen controller integrated with a programmable logic controller for system protection and monitoring. The intuitive touchscreen controller gives access to all chopper modules, allowing for fast and dynamic unit response. You can easily control all unit outputs from the easy to navigate menus. The controller automatically saves alarms with the date and time of occurrence under the event history tab so you can easily monitor and review event occurrence.

TECHNICAL SPECIFICATIONS

Electrical

Input Voltage:	**Up to 69kV, 3Ph**
Frequency:	**50/60Hz**
Output Voltage:	**Up to 2000V_{DC} (higher voltages available on request)**
Output Amps:	**Up to 100,000A_{DC} (higher current available on request)**
Pulse:	**Up to 24 pulse system**
Ripple:	**≤2% at full output**
Regulation Range:	**Stepless at constant voltage or current 10-100%**
Control Precision:	**Voltage/current at +/- 1%**
Duty Cycle:	**Designed for continuous operation at rated load**

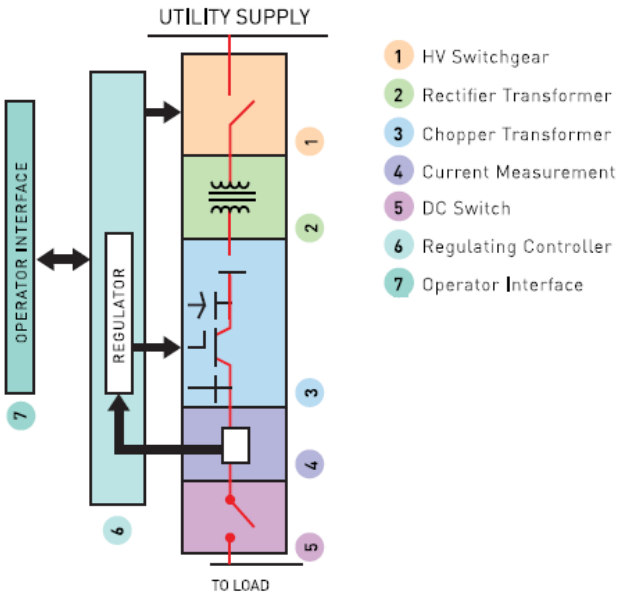
Environmental

Cooling:	**Water-cooled**
Enclosure:	**Various options available**
Max Ambient:	**40°C**

Available Protections

- Over Current
- Over Voltage
- Over Temperature
- Short Circuit
- Low Coolant and Coolant Leak

System Block Diagram



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