

## Thyristor Rectifiers

# Reliable, high-power performance for heavy industrial use

**Our Thyristor rectifiers are designed, manufactured, and tested for use in high-voltage and high-current industrial processes such as electrowinning, chlorine production, hydrogen production, electroplating and other specialized applications.**

Featuring robust power electronics, our custom-designed Thyristor rectifier is guaranteed for long-lasting reliability and decreased maintenance. We evaluate the impact of the rectifier system on the incoming power grid and design power factor correction and harmonic filtering to precisely engineer your Thyristor rectifier system. With our deep knowledge of the latest techniques and rectifier technologies, our application engineers can work with you to recommend the optimum configuration for your project.

Thyristor rectifiers include an intuitive touchscreen controller integrated with a programmable logic controller that features system protection, dynamic unit response, and stored data and history.

### System Advantages

- Reliable, cost-effective DC power
- Additional equipment options for power factor correction, harmonic filtering and reduced ripple available



## 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 1500V <sub>DC</sub> (higher voltages available on request)
Output Amps:	Up to 100,000A <sub>DC</sub> (higher current available on request)
Pulse:	Up to 24 pulse system
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

