

CHLORINATION RECTIFIER (HIGH POWER RECTIFIER)

We manufacture High power rectifiers that serve hundreds of industrial, commercial and research applications. These industrial applications require the use of direct current ranging from 1KA to 10KA for power ratings of 100kW to 1MW. We offer both standard and highly customized designs for your rugged industrial application.

Rectifier cooling options for these supplies include forced-air, oil cooled, direct water, convection as well as a variety of closed loop systems. Our highly customizable systems also feature a variety of control and monitoring options, which include digital and analogue communication for interface with an upstream PLC or computer system.

Applications

Custom designed units for applications that include:

Steel Plants <ul style="list-style-type: none">• Continuous Strip• Cranes• Electromagnets• DC Shop Power	Electrochemical Processes <ul style="list-style-type: none">• Chlorine• Hydrogen• Oxygen	Electro winning Processes <ul style="list-style-type: none">• Copper, Cobalt, Gold, Zinc, Lithium, Silver etc.
	Electrochlorination Systems <ul style="list-style-type: none">• Desalination• Hypo-chlorination	Mining Applications <ul style="list-style-type: none">• Underground Locomotive traction supplies• DC Shop Power
		Resistive Heating

High grade, hermetically-sealed semiconductors are mounted on heat sinks and are protected with quick-acting silver sand fuses. The PIV rating of all semiconductors used is well above the ratings specified in standards. This increased PIV margin yields additional transient voltage protection and a higher mean time between failure (MTBF).

Rectifier Transformer

Transformer coils are wound with continuous copper conductors, varnish impregnated, and then oven baked for protection against dust, moisture, and fumes.

On a core using interleaved sheets of high-grade, grain-oriented silicon electrical steel designed for high efficiency.

Thermal-overload sensing devices are included in each leg of the transformer to detect winding over temperature due to single phasing, overloading or loss of cooling.

Enclosure

Enclosures are rigid, welded, free-standing, self-supporting painted cold rolled sheet steel. The base of the rectifier assembly is a heavy duty assembly formed from structural steel members with provisions for fork lifting of the supply.

The front and rear of the enclosure is serviceable through lockable, latch-type full length doors or panels. We can manufacture custom designed units with any rating, cabin and Colour. Enclosures are treated with two coats of a suitable primer and two coats of light gray RAL7035. Custom paint colors available upon request.

Remote mentoring and control can be provided through Analogue Transducers and Potential free contacts. These can be hooked to Customer PLC/DCS system.

Standalone Digital Remote Monitoring and control can also be provided through RS485 serial link.

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