#### Anodizing Rectifier 6V till 230V / 50A till 25.000A



















www.germarel.de



- Easy Monitoring, Output Voltage Controlling and Current from Screen
- Short Circuit, Overload, Over Voltage & Over Temperature Protection
- High Frequency Switchmode or 6 Pulse or 12 Pulse Technology
- Wide Input Voltage Range for Rural Areas & 50 Hz or & 60Hz Input
- Small Footprint, Easy Maintenance & Robust & Anti Rust Cabinet
- Warning LEDs and Dry Contac or Siren or Modbust as Optional
- Easy Give Service and Updates and 20 Years Life Time Design
- Micro Chip Controlled, Fast and Precisely, Efficient Control
- 2 Years Warranty & 10 Years Spare Part Availability
- Perfect DC Supply for Industrial Solutions
- Adjustable 0.1V and 1Amper Sensitivity
- Constant Voltage or Current Option
- High Efficiency up to 91%
- Logs for Basic Problems
- Optional: Outdoor External Screen
- Optional: Stand Alone or With Wheel
- Optional Dry Contact & Modbus & GSM / GPRS Control
- Optional: Fresh Air Cooling or Oil Cooling or Water Cooling
- Optional: Engineering for Your Application for Better Solution
- Optional: Project & Client Oriented New Designs & Factory Design
- Optional: IP20 till IP65, Indoor or with Airconditioner & Cabinet or Container
- Optional: Anodizing & Electrolysis & Plating & Coloring & Static Painting
   : Water Treatment & Chemical Nickel & Galvanizing & Chemical



**Anodizing Solutions** 



**Anodizing Solutions** 



**Automation Control** 



Plating Rectifier









10V - 12V - 20V - 24V - 30V - 60V - 100V - 230 / 50 Amper - 25.000 Amper

REC-GER series anodizing rectifiers are developed for plating high capacity metal industry used in rectifiers use a recipe system, which allows you to keep a record of the work that has been done before, and with just a simple click, you can use the same recipe in order to define the paint thickness.

This feature makes sure that you end up with a standardized product as well as making the process as easy as possible for your operator. ... and designed for both individual for your electrical vehicles or industrial use. User friendly control panel and easy operating system is very practical to connect, control. Since the plating rectifier is electrically smart micro chips controlled plating operation is very safe, easy and extends your lead acid battery life. Day-off charging function enables the battery fully charged when it is not used and increase the life time of the battery.

There is no need for any adjustments with Plug and play function and charging starts

automatically when the battery is connected.

The anodizing rectifier consists of economic, environment-friendly, and reliable DC power supplies that use the resonant converter technology, operating at high frequencies. They have a high input power factor along with very low output voltage ripples. The plating rectifiers are used extensively for the metal sector and as customized for the clients needs.

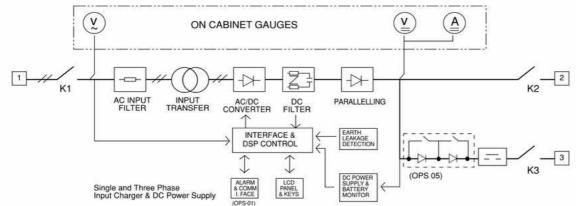
We as Germarel, give our clients to work with us collaborative to write software together. That means how many ramps our clients want with what kind of voltage and current control let us to make our connection with our client help us and our client to produce best machines end best products.

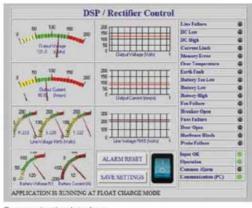
#### Easy Installation in you anodizing facilities:

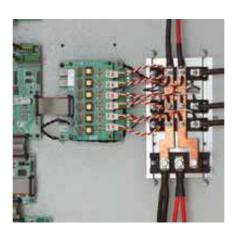
- \* Ease of Maintenance for the power electronic parts
- \* Operator Panel, PC or PLC control Profi Bus
- \* DP Comprehensive Error Diagnostics, Logging
- \* User-Friendly Design for technicians
- \* Wide Program Options, customisable
- \* Functional Control Panel Options
- \* Smart Bug Tracking System
- \* Superior Protection Against User Errors
- \* Easy to supply spare parts
- \* Environmental design
- \* Energy-saving system
- \* Different line voltage selector
- \* Perfect for chemical reaction

























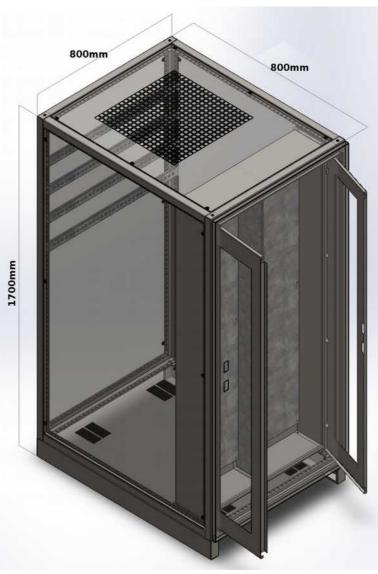












6V - 10V - 12V - 20V - 24V - 30V - 60V - 130V - 230V / 50 Amper - 25.000 Amper

INPUT	Voltage	European Voltage or American Voltage Single Phase 108Volt or 220Volt or 230Volt or Three Phase 230Volt – 380Volt - 400 Vo
	Voltage Tolerance	± 15%
	Frequency	50/60 Hz.
	Frequency Tolerance	±10%
	Power Factor	1-Phase: 0.98 (THD 4%) / 3-Phae: 0.92 (THD 30%)
OUTPUT	Voltage	For different Voltage 6V - 230V (front panel selectable 0.1V and 1Amper Sensitive)
	Current	100Amper till 10.000Amper
	Current Limiting	I nom x 100%, 1Amper Sensitive
		front panel selectable between 0 and 100%, 0.1V Sensitive
	Ripple	<0.5%
	Voltage Regulation	Perfect Voltage Regulation at Output Side
	Efficiency	3- Phase: >92% / 1- Phase: >85%
	Protections	Input, output (thermal/magnetic) fuses, Advanced short circuit protection,
		Over voltage protection, Over current protection, Automatic restart
Process	Votlage Control	Automatical or Manual Control
	(Adjustable Charging voltages)	Adjustable Voltage and Current
	Ramps	Adjustable Ramps, Standard 10 Ramps
	LCD Properties	2x16 character-wide display, showing, Optional Remote Screen:
		Output voltage & current, Output voltage high/low Load(%), Log Records up to
		200 logs with Real Time Clock Calender AC (AC available), Fault, Current limiting,
	Displays	Automatic charge,Ramps and Desinged Voltage Current
		Different Ramps, Voltage and Current Values, Common alarm
	Alarms	Common relay contact output for AC input low, DC output low and overheat
	Operation and control	Via menu selections from buttons on front panel
	Endurable Dielectric Voltage	2000 V Input-Output
	Endurable Biologino Vellage	2000 V Input-Chasis
		500 V Output - Chasis (For PS with output voltage <50 V)
		1000 V Output - Chasis (For PS with output voltage >50 V)
GENERAL FEATURES	Case Dimensions (WxDxH)	Check the Cabinet Dimensions with Additional Technical Specifications
	Protection Class	IP20
	Audible Noise 1m.	50dBA
	Cooling	Mandatory cooling (Fan) or Oil Cooled or Water Cooled or AC or Outdoor Solution
	Input Voltage	1- Phase Please Ask
	Туре	3- Phase Please Ask
	Operation Temperature	O°C40°C
	Storing Temperature	-20°C 70°C
	Relative Humidity	98% (Non-condensing)
STANDARDS	Standards	VDE,DIN 41773
		Chemical Protection, Humidity Standard, European Industrial Zone Standards
		ANSI-NEMA PE 5
		TS 2000

<sup>\* 1</sup> Phase Input max output power

PLEASE ASK FOR DIMENSIONS

<sup>\*\* 3</sup> Phase Input max output power