

ZGR TELSIS APS

MODULAR SWITCHING CHARGER - RECTIFIER



ZGR TELSIS APS rectifiers - chargers range combines great flexibility with high performance.

ZGR TELSIS APS battery chargers - rectifiers have been designed to respond to the new needs of the battery charger market, improving the performance and flexibility of the system for both telecom and industrial applications.

Being modular equipment, it is not necessary a baseline oversizing, which means an initial investment savings. Their small size and high energy density allow them to be installed in the same locations of the loads and as a result, shorter distances and wiring sections are required, obtaining improvements in distribution. High frequency switching technology allows parallel connection with automatic load sharing. They also allow the configuration of redundant systems $n + 1$, $n + 2$.

Moreover, ZGR TELSIS APS operates autonomously without the need for any auxiliary elements and is controlled and managed at all times by the Central Management Unit. Thanks to the possibilities of remote communication, the system can be controlled and monitored in real time from a single control center. This feature allows diagnosing possible problems with sufficient anticipation to plan maintenance interventions, both preventive and corrective, which will result in a reduction in costs (manpower, travel, etc.).



APPLICATIONS



TELECOM



INDUSTRY



RAILWAY
SECTOR



ELECTRICITY
SECTOR

CHARACTERISTICS

- » Compact design
- » High efficiency
- » Easy maintenance
- » Control and supervision of the equipment via Web Server
- » Possibility of progressive power increase
- » Configuration of redundant systems $n + 1$, $n + 2$

» Applications

- Telecommunications
- Action on high and medium voltage distribution circuits through on / off switches
- Power supply of converters, emergency lighting systems, large areas, etc.
- Signalling, control and command centers
- Solar energy applications
- DC security applications
- Substations and Power Plants

ZGR TELSIS APS MODULAR SWITCHING CHARGER - RECTIFIER

CONNECTIVITY AND MONITORING

ZGR TELSIS APS provides centralized monitoring, control and management of chargers - rectifiers. Supervision is based on a series of elements that incorporate microprocessors and are linked by an internal communications network.

The fundamental elements are:

Central Management Unit

It presents the status of the equipment, allows local action and configuration and acts as an external communication link.

Communications gateway (optional)

It allows remote communication via SNMP and WEB (http).

The central supervision unit and the gateway (optional) are integrated.

Rectifier module

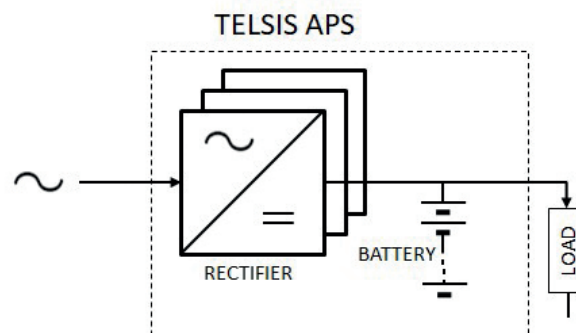
It includes the intelligence necessary for monitoring its status, alarms, cooling control, output voltage, current limitations, etc.

This Web Server allows the user to access the following menus in different languages:

- Status
- Configuration
- Events
- Orders



BLOCK DIAGRAM



ZGR TELSIS APS ELEMENTS

- Rectifier rack
- CC distribution rack
- Mixed rectification and distribution board
- Reserve board and continuity (Batteries)
- Auxiliary systems
- Central Management Unit
- Batteries: Pb (open or sealed) or Ni - Cd



ZGR TELSIS APS MODULAR SWITCHING CHARGER - RECTIFIER

RECTIFIER MODULES



ZR2048 Rectifier module



ZR3048 Rectifier module



ZR30110 Rectifier module

TELSIS APS 48 V 2000 - 18000 W

ZR 2048 RECTIFIER MODULE

RACK	UNITS	POWER	IMAX RACK @ V NOMINAL OUTPUT
1 U / 19"	1 - 4	2000 - 8000 W	166 A
3 U / 19"	1 - 9	2000 - 18000 W	375 A

TELSIS APS 48 V 3000 - 27000 W

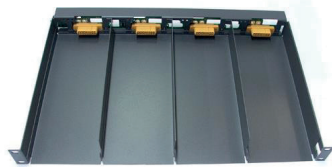
ZR 3048 RECTIFIER MODULE

RACK	UNITS	POWER	IMAX RACK @ V NOMINAL OUTPUT
1 U / 19"	1 - 2	3000 - 6000 W	120 A
5 U / 19"	1 - 9	3000 - 27000 W	540 A

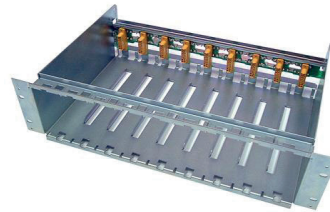
TELSIS APS 120 V 3000 - 27000 W

ZR 30110 RECTIFIER MODULE

RACK	UNITS	POWER	IMAX RACK @ V NOMINAL OUTPUT
1 U / 19"	1 - 2	3000 - 6000 W	50 A
3 U / 19"	1 - 9	3000 - 27000 W	225 A



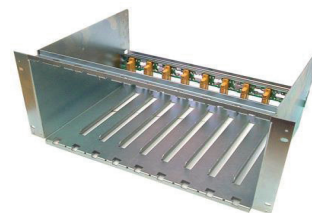
Rack 4 x ZR2048



Rack 9 x ZR2048



Rack 2 x ZR3048 or 2 x ZR30110



Rack 9 x ZR3048 or 9 x ZR30110

RECTIFIER MODULES TECHNICAL SPECIFICATIONS

Model	ZR2048	ZR3048	ZR30110
Voltage	48V	48V	125V
INPUT ELECTRICAL CHARACTERISTICS			
Voltage	230 Vac, 50 / 60Hz		
Voltage range	175 Vac - 300 Vac (at full output power) 90 Vac - 175 Vac (at reduced output power)		
Frequency range	45 - 65Hz		
Power factor	> 0,99 de 20% - 100 % output power		
Efficiency	> 92 % (> 50 % output power)		
Maximum input current	12,7A	19A	19A
OUTPUT ELECTRICAL CHARACTERISTICS			
Nominal power	48V	48V	125V
Voltage range	43 - 58V	43 - 58V	80 - 155V
Maximum current	41,7A	60A	27,3A
Maximum power	2000W	3000W	3000W
PROTECTIONS			
Over-temperature	Auto power off		
Reverse – polarity	Output fuse with diode		
Overvoltage	Adjustable limit		
Battery test	Yes		
MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS			
Operation temperature range	-10°C to 50°C		
Extended temperature range	50 °C to 70 °C with automatic power reduction (derating)		
Storage temperature	-20°C to 70°C		
Operating altitude	< 2500m		
Relative humidity	5 to 95 % without condensation		
STANDARDS			
Marks	CE		
General directives	2004/108/CEE, EMC (61000-6-4, 61000-6-2), IEC 60146-1-1, EN 50178		

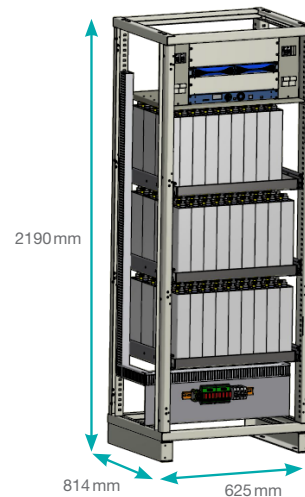
* These specifications may change without notice.

DIMENSIONS OF THE COMPLETE SYSTEM

TELSIS ZGR APS 48 V 27 kW *



TELSIS ZGR APS 110 V 27 kW *



* Customizable equipments. Orientative photos and measurements.