ZGR MIT NG

HIGH RELIABILITY CHARGER-RECTIFIER

ZGR MIT NG range, thanks to the robustness of its design, ensures a high-reliability continuous current supply

ZGR MIT NG range consists of battery chargers - rectifiers of conventional thyristor technology, controlled by microprocessor, in single-phase and three-phase product versions.

ZGR has combined the proven reliability of thyristor technology with the microelectronics functionalities, offering the ZGR MIT NG range at a maximum level in terms of performance and features.

The ZGR MIT NG range ensures the user a quality continuous supply. ZGR's wide experience in power electronics systems has allowed the design of a range of easily customizable equipment.

Applications

TELECOM · INDUSTRY · DATA CENTERS · RAILWAY SECTOR · INSTALATIONS · ELECTRICITY SECTOR

Characteristics

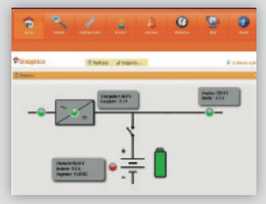
- Galvanic isolation
- Complete thyristor bridge
- Automatic disconnection due to minimum battery voltage (LDV)*
- Voltage dropping device*
- Temperature and electrolyte level sensors*
- Hall effect current sensors*
- Customized output voltage filtering according to user specification*
- Thermomagnetic input protection
- Overvoltage protection by varistors at input and output
- Distribution adaptable to user requirements
- Control and signalling
  - Battery voltage and load measurements
  - Charger, battery and load current measurements
  - Comprehensive monitoring and signalling of charger status
  - Local alarms with LCD and remote with relays
  - Communications and remote management gateway with the possibility of implementing different protocols: MODBUS, SNMP, etc. *
- Battery management
  - Charge Ni-Cd (open) y Pb (open and sealed)
  - Battery and charger current limitation
  - Charging modes:
    - Ni-Cd and Pb open: flotation, fast charge, exceptional charge
    - Pb sealed: flotation, fast charge, automatic fast charge and manual charge

* *Optional*

Connectivity and monitoring

Communication gateway integrated. It enables the communication via Web Server (http).

The Web Server provides full access to all information of ZRG MIT NG: status, measurements, configuration, alarms, control, network, equipment, etc.



TECHNICAL SPECIFICATIONS		
Model	ZGR MIT NG 1	ZGR MIT NG 3
INPUT ELECTRICAL CHARACTERISTICS		
Nominal voltage (1)	230 V + 10 - 15 %* (Single-phase)	400 V + 10 - 15 %* (Three-phase)
Frequency	50 / 60 Hz ± 5 %	
Power factor	0.7 ~ 0.9 (on request)	
OUTPUT INPUT ELECTRICAL CHARACTERISTICS		
Nominal voltage	12 / 24 / 48 / 110 / 125 / 220 V	
Ripple voltage with batteries	< 1 %	
Ripple voltage without batteries	< 2 %	
Ripple current in batteries (1)	≤ 5 %	
Voltage stability (1)	± 1/2 % (with/without battery)	
Dynamic regulation	< 2 % (10 – 90 % of charge)	
Charger current limitation (1)	100 % (up to 120 % optional)	
Battery charge current limitation	Configurable	
Transfer time	< 300 ms	
COMMUNICATIONS		
Monitoring	Websever TCP/IP, control panel	
Communications	ModBus RS485	
OTHERS		
Active parallel	Optional (up to 2 units)	
Dry contacts	4 (8 optional)	
Protections	Overvoltage, over-temperature, current limitation, short-circuit, input/output high/low voltage	
Cooling (1)	Natural convection	
Working temperature	0ºC ~ +45ºC (+50ºC on demand)	
Protection degree	IP 21 (on request up to IP54)	
Noise level	< 63 dBA	
Operating altitude	< 1000m without power loss (up to 4500 m on demand)	
Relative humidity	0 - 95 % without condensation (up to 100% on demand)	
STANDARDS		
Marks	CE	
General directives	EN 50178 (1998), EN 61000-6-4 (2001), EN 61000-6-2(2001), EN 61000-3-2, EN 61000-3-3, IEC 60146-1-1	

Special configurations on demand
These specifications may change without notice

ZGR MIT NG STANDARD RANGE

Ouput voltage	Model	Current (A)									
		5	7.5	10	15	25	35	50	75	100	125
12 V	MIT NG 1	■	■	■	■	■	■	■	■		
	MIT NG 3							■	■	■	■
24 V	MIT NG 1	■	■	■	■	■	■	■	■		
	MIT NG 3							■	■	■	■
48 V	MIT NG 1	■	■	■	■	■	■	■			
	MIT NG 3						■	■	■	■	■
110-125 V	MIT NG 1	■	■	■	■	■	■				
	MIT NG 3					■	■	■	■	■	
220 V	MIT NG 1	■	■	■	■						
	MIT NG 3			■	■	■	■	■	■		

CONNECTIVITY

CUSTOMIZABLE