



Hyperion Rectifier / Industrial Battery Charger Technical Specifications

GENERAL		
Phase	Single-Phase	Three-Phase
Technology	6 or 12 Pulse Thyristor Controlled Full Bridge AC/DC Rectifier	
Control	Automatic Microprocessor Controlled	
INPUT		
AC Voltage	220/230/240 Vac (or 110/120/127 Vac)	380/400/415 Vac (or 208/480/600 Vac)
Voltage Tolerance	±15%	
Frequency	50 Hz / 60 Hz ±10%	
Power Factor	≥ 0.8 Inductive	
THDi	≤5% (6 Pulse), ≤2.5% (12 Pulse)	
Input Protection	MCB, Input High-Low Voltage Protection	
OUTPUT		
DC Voltage	12 / 24 / 48 / 72 / 110 / 220 / 400 Vdc (custom outputs available)	
Output Accuracy	±1%	
Current Adjustment	0 - 100% Digitally Adjustable	
Voltage Adjustment	0 - 100% Digitally Adjustable	
Charging Time	Digitally Adjustable	
Charging Protocol	Constant Current and Voltage	
Charging Stages	Boost, Equalize and Float	
Voltage Ripple	≤ 1% RMS	
Boost Voltage	2.4 Vdc for AGM, 1.60 for NiCd (adjustable with battery type)	
Float Voltage	2.2 Vdc for AGM, 1.40 for NiCd (adjustable with battery type)	
Boost Charging Timer	Digitally Adjustable	
Overload Operation	100% - 125% load: 2 min, 125% - 150% load: 30 sec, > 150% load: 2 sec	
Output Protection	MCB, DC High/Low, Over Temp, Short Circuit, Earth Fault Optional	
Efficiency	>92% at Full Load	
CONTROL PANEL		
Display	LCD Graphic Display	
Displayed Parameters	Float/Boost Voltage, Operation/Boost Charging Timer, Alarms Adjust, Password	
Displayed Units	Float/Boost Charge Voltage, Charge Current Optional: Battery Capacity, Boost Charging Time	
Event Log	512 Events Recorded (Optional)	
COMMUNICATION		
Standard	Dry Contact Card (up to 10 adjustable relays), RS485 MODBUS	
Optional	SNMP, CANBUS, Profibus, IEC 61850, RS232, USB	
Dropper Module	Included with Load Output	
SAFETY and STANDARDS		
Over Voltage	IEEE 587 4500 A, Surge Arrestor (Optional)	
Safety	EN 61204, EN 60950-1, IEC 60146	
Standards	EN 50091-1 (Security), EN 61204-3 (EMC), ISO 9001, ISO 14001, CE	
ENVIRONMENT		
Operating Conditions	-10 C° / + 60 C°, 0 - 90% (non-condensing)	
Storage Conditions	-20 C° / + 70 C°, 0 - 90% (non-condensing)	
Noise Level	Less than 60 dB	
Protection Level	IP42 Indoor Type, IP56 Outdoor Type	
Cooling	Forced Air Cooling with Axial Fans	

Highlights

- Single or Three-Phase Input
- Galvanic Isolation via Transformer
- LCD Graphic Display
- Thyristor Controlled
- 6 or 12 Pulse Options
- Easy Installation and Start-Up
- Low/High Voltage Protection
- Over Temperature Protection
- Charges All Type of Batteries
- Parallel Operation
- Automatic Start-Up After Power Cut
- 3 Stage Charging
- Remote Monitoring
- Load Output with Dropper Diode
- Double or More Outputs Available
- Sturdy Construction
- Quiet Operation
- Simple Program Menu
- 2 Years Warranty

General Features

Hyperion Series Industrial Rectifiers are designed for scada systems, RTU, substations, transformer centers, emergency lightning and security systems to provide clean DC energy and power backup from batteries to critical DC loads.

Hyperion Rectifiers provide full protection, including DC leakage and earth fault protections. Rectifiers can be manufactured with or without battery compartments. Float and boost charging can be customized. Parallel operation is allowed up to 8 units.

All the parameters are adjustable. Wide communication options are available for easy automation integration.