

3 PHASE 12VDC: 50A-200A, 24VDC: 30A-300A
48VDC: 30A-150A, 110/220VDC: 30A-200A

1 PHASE 12/24VDC: 10A-300A, 36/48VDC: 10A-150A
110VDC: 10A-200A, 220VDC: 10A-100A

THYRISTOR CONTROLLED BATTERY CHARGER

Usage Areas:

- Transformer Centers
- Vessels and Yachts
- Shipyards
- Rail Systems
- Solar Power Plants
- Automobile Services
- Hospitals
- Electrical Devices
- Energy Generation
- Transmission and Distribution Centers
- Petroleum and Natural Gas Industry
- Mining Industry



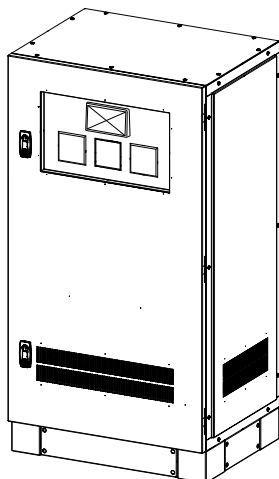
HIGHLIGHTS

- Thyristor Controlled, Full Automatic System with Isolation Transformer
- Available for Using as DC Current Supply
- All Operating Values Adjustable
- Excess/Low Voltage, Over Current, Short Circuit Protection

Thyristor Controlled Transformer Battery Charging Rectifier

- Transformer battery charging devices are AC/DC rectifiers with automatic constant voltage and constant current properties. The isolation transformer and the load and batteries are completely isolated from the grid system.
- Thyristor control ensures fast regulation and voltage distortions in the mains do not affect the batteries and loads. With the L-C filters on the output, the AC output fluctuation on the DC is less than 1%, helping to maximize the life of the charged battery pack.

MODEL	
INPUT	
Phase	3 Phase 1 Phase
Voltage	380 V, 400 V, 415 V 220 V, 230 V, 240 V
Voltage Tolerance	±20%
Frequency	50/60Hz (±5%)
Power Factor	>0.8
THDi	<30%
OUTPUT	
Voltage	12 / 24 / 48 / 110 / 220 VDC
Voltage Tolerance	±1%
Current	Up to 300A
Fast Charging (Boost) Voltage	Up to 120% of the Float Voltage
Ripple	±1% RMS AC
Dynamic Response	±2%
Output Protection	Electronic Short Circuit / Over Voltage / Over Temperature / Over Current Reverse Voltage (Reverse Connection) Protection
INDICATOR/COMMUNICATIONS	
LCD Indicator	Voltage, Current, Temperature and Status Information
LED Indicator	Mains, Normal, Output, Fault
Alarm	Mains Out of Limit, Fault (Adjustable)
Communication	RS485 / Modbus Communication Feature
NTC Input	Battery Temperature Compensation
Parallel	Redundant Operation with Active or Passive Load Sharing Option
Programmed Operation	Special Process is Applied for Each Process
Input / Output Connection	Thermic Magnetic Switch / Copper Bus Bar
GENERAL	
Topology	Isolation Transformer, Thyristor Phase Angle Controlled
Electrical Standards	EN60146-1-1, EN60335-1 / EN60335-2-29/A2(LVD) EN61000-6-2 / EN61000-6-4 (EMC)
Cooling	Forced (Fan)
Isolation Voltage	2500VAC Output/Chassis Bridge
Efficiency	>85%-92%
Operating Temperature	0-50°C
Humidity	5%-90%
Protection Class	IP20-IP54
Altitude	Max. 2000m



OPTIONS

- Individual Outputs for Battery and Load
- Additional LVD Contactor Separating Load and Battery from each other
- Battery Racks Integrated into the Rectifier
- Chassis with Different Protection Class (IP31/IP42/IP54/IP65)
- DC +/- Ground Leakage Protection
- Redundant Operation with Active or Passive Load Sharing Option
- Battery Monitoring / Management System (BMS)
- Analog Hand Measuring Instruments
- Battery Charge Temperature Compensation
- ModBUS Communication