SB7 SCR Charger

Product Description

SB7 is the 7th generation SCR based battery charger for stationary applications. Utilizing the latest in technological advances the SB7 sets engineering standards, and will meet the toughest specifications and feature requirements within the industry.

The superior SB7 communication capability provides remote setup and monitoring of parameters, making it easy to use and program. Reliability is paramount, and important new design features include a significant reduction in the number of components and printed circuit boards which will increase the “Mean Time Between Failure” to over 150,000 hours. This innovative design feature will also reduce the “Mean Time Between Repair” to less than 30 minutes, greatly reducing downtime and gains uptime for redundancy.

Applications

- Utility, Switchgear, and Substations
- Oil and Gas
- Pulp and Paper
- Department of National Defense
- Municipal and General Industrial
- Data Centers
- Hospitals and Laboratories
- Solar Power Systems
- SCADA and Control Systems
- OEM Applications

Standard Features

- Digital design for ease of use
- Alarm logging with date and time stamp
- Battery test mode
- 3 x programmable digital inputs
- 3 x programmable analog input (0-5VDC)
- 6 x programmable Form C relays
- 4 x programmable LEDs
- Audible alarm with silent
- A C Input and DC Output Breakers
- Temperature Compensation
- LED Test Feature
- Modbus Communications (RS-485)
- Designed for Parallel Operation
- VFD display for extreme temperatures
- Very Low Input Harmonics
- Remote Battery Sense (Bi-directional Battery Current)
- Auto Equalize with timer (0-96 Hours)
- Low/High Temperature shutdown
- Output Voltage and Current Metering
- Output blocking diode
- Wall/Floor Mounted Nema 1
## Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>&lt; 0.5% for input variation of 10%</td>
</tr>
<tr>
<td>Short Circuit Protection</td>
<td>Auto shutdown at 250% of rated output (Auto Recovery)</td>
</tr>
<tr>
<td>Enclosure</td>
<td>NEMA 1</td>
</tr>
<tr>
<td>Efficiency Model Dependant</td>
<td>82 to 90%</td>
</tr>
<tr>
<td>Power Factor Model Dependant</td>
<td>0.88 to 0.95</td>
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<tr>
<td>Ripple</td>
<td>&lt; 0.5%</td>
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<tr>
<td>Operation</td>
<td>-25°C to 50°C</td>
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| Approvals                     | Input AC Voltage: 1φ - 120, 240, 480, 600  
                           |            | 3φ - 208, 480, 600  
                           |            | 50/60 Hz |
| Output DC Voltage             | 12, 24, 48, 120, 240, 480, Custom |
| Output Amperage               | 5 to 500 |
| Dimension Model Dependant     | 20”H x 20”W x 16”D  
                           |            | 36”H x 30”W x 16”D  
                           |            | 77”H x 23”W x 20”D |
| Weight Model Dependant        | 1φ - 30 to 330 lbs  
                           |            | 3φ - 260 to 1200 lbs |

### Alarms and Monitoring

- Battery Equalize
- High DC Voltage
- AC Failure/loss
- Rectifier Failure
- Ground Fault (+/-)
- Charger Overload
- Battery Test
- Control Card Temperature (High/low)
- Auxiliary Temperature probes (High/low)
- Auxiliary Input alarms (3)
- Shunt Trip (AC/DC/Battery Breaker)
- Low DC / End of Battery Voltage

### Available Options

- Self Standing Nema 4 and 12
- Integrated Battery Rack
- Redundant Configuration with load sharing
- 12 Pulse Rectifier
- Conformal Coating
- Distribution Breakers
- Extended Temperature -40°C to 50°C
- Ethernet Communications
- Input Monitoring (V, A, & Frequency)
- Dual Input Source Option c/w Breaker Interlock

### Warranty

18 Months from Date of Sale