



STATCON ENERGIAA PVT. LTD.

Inspire ★ Innovate ★ Implement



**STATCON
ENERGIAA**

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Company profile :

We take pleasure in introducing **STATCON ENERGIAA PVT. LTD.**, as an ISO 9001-2008 certified company specialising in manufacturing, supplying, installing and maintaining Battery Chargers, DC Mobile Rectifier-cum-Battery Chargers, Dischargers, Cell-Boosters, DC Distribution Board, AC Distribution Board, SMPS based modular design battery chargers, Power Supplies etc. for thermal power stations, refineries, chemical/petro-chemicals & fertilizers industries, sub-stations-power distribution companies, hydroelectric power stations, EPC companies, Steel Industries, Public Sector, Solar sector, Cement industries, Pipe line projects, Indian Navy, Delhi Metro Rail Corporation, Jaipur Metro Rail Corporation, Lucknow Metro Rail Corporation and many more.

STATCON ENERGIAA PVT. LTD. is India's most preferred company in the field of DC Power Solutions of the last three decades. It has been supplying a variety of standard as well as customised DC Power solutions to all types of Power Stations, Distribution and Industrial applications.

STATCON ENERGIAA PVT. LTD. is a registered and approved vendor with all major engineering consultants, thanks to its capability in handling customizations and unmatched project execution skills. Apart from our pan India presence with installation of more than 12,000 systems, we also offer skilled after sales support (AMC, upgradation et al) from our offices, ensuring a quick response to the customers' needs.

In-house experienced Research and development department and a dedicated engineering department ensure highly robust design customised end products.

We are registered with Quality Assurance Departments of **Delhi Metro Rail Corporation, Jaipur Metro Rail Corporation, Lucknow Metro Rail Corporation, Indian Air force (DGAQA)/ HAL/ MDL/ NAVAL DOCKYARDS, BHEL (Thermal / Hydro / TBG), PGCIL, TCE, NHPC, NTPC, GEB, RSEB, MECON, DESIEN, PSEB and AVANTE GRADE, RDSO (Railways), MNRE etc.**

INTRODUCTION :

STATCON ENERGIAA PVT. LTD. offers highly reliable and rugged DC Systems for the industrial market sectors in various voltage ranges like 12V, 24V, 30V, 48V, 96V, 110V, 125V, 220V, 360V and others (as per requirement). We have supplied battery chargers ranging from 10A to 4500A.

Statcon has shown its presence felt by more than 12,000 systems already working throughout the length & breadth of India.

The range of DC Systems are generally custom designed to provide a rugged, reliable and efficient power solution for critical loads to prevent expensive outages. These types of power systems are widely used in the harsh operating environments encountered in the thermal power stations, refineries, chemical/petro-chemicals & fertilizers industries, sub-stations, power distribution companies, hydroelectric power stations, EPC companies, Steel industries, Public Sector, Solar sector, Cement industries, Pipe line projects, Indian Navy, Delhi Metro Rail Corporation, Jaipur Metro Rail Corporation, Lucknow Metro Rail Corporation etc.

SEPL MANUFACTURING PLANT AT PILAKHUWA



Statcon Energiaa Pvt. Ltd.

Plot 1 Sector-63 Noida G.B. Nagar 201307 Uttar Pradesh India Ph.: +91 120 3891600 | 11, Fax: +91 120 4306507 Email: info@statconenergiaa.com

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DC SYSTEMS :

Built over glossy epoxy board, the control circuit uses advanced digital and analog circuits blocks and suitable customization is done for all special application of the user. The special design feature of **STATCON ENERGIAA PVT. LTD.** systems is high transient response under specified load & line variations.

STATCON ENERGIAA PVT. LTD. offers various configurations like Float-Cum-Boost Charger with Dropper diodes, Dual Redundant systems, Float & Float-Cum-Boost-Chargers, Dual Float-Cum-Boost-Chargers with Auto Changeover System, Dual Float-Cum-Boost-Chargers manual Auto changeover System, Dual Float & Dual Float-Cum-Boost-Chargers with redundant (Standby) charger etc.

Multi stage battery charging is done so as to get an optimum state of charge and life of the battery bank is stretched to its maximum possible time.

However, needs of various battery charging are always kept in mind so as to get best state of



PRODUCT SALIENT FEATURES :

- Single phase or three phase input option
- Automatic voltage regulation with Reliable and high performance control,using Digital/Microprocessor based control through embedded programming
- Charger Short Circuit & Over load Protection
- Soft Start feature for minimizing the IN-RUSH current when unit powers ON
- Smoothing Filter Circuit for limiting the ripple & protecting the Battery
- Quick time response for Step loading
- High efficiency
- Over voltage cut-off to save the equipment
- Temperature compensation of battery charging voltage (for VRLA Battery)
- RS-485 interface for remote monitoring
- Potential free contacts for all indications or faults
- Reverse polarity protection
- Surge Suppressor Circuit
- dv / dt protection for thyristors
- Alarm with annunciation windows/ Microprocessor based LCD display
- LCD display for fault monitoring and measuring the AC/DC voltage/current
- Earth leakage protection
- Automatic changeover from Float to Boost & Boost to Float depending on the condition of battery
- Single or redundant Blocking Diodes for preventing the charger in DC path
- Phase reversal/ phase fail operation insure the charger continues functioning even when phase reversal/phase fail occurs
- 6Pulse/ 12Pulse/ 24Pulse Charger Design
- Cabinet fabrication, Sheet thickness, IP- protection meets varying needs and requirements of industries
- Both Natural cooling and forced air cooling available
- Cable entry provision for Top/Bottom
- Class "F" to Class "B" insulation for magnetics, which are manufactured as per relevant IS/IEC standard meets varying needs and requirements of industries
- Temperature rise limit Class "F" to Class "A" for Thyristors Bridge, magnetics meets varying needs and requirements of industries
- Over temperature protection
- Analog or digital meter for easy measurement of data



ADVANTAGES :

STATCON ENERGIAA PVT. LTD. Battery Chargers offers many Advantages, some of listed below-

- **Extensive Range -**
Available in wide range with highly reliable and rugged DC System for industrial market sector in various voltages ranges like 12V, 24V, 30V, 48V, 96V, 110V, 125V, 220V, 360V and more(as per requirement) and current rating up to 4500A.
- **Highly Reliable-**
Compact design & better quality which meets all applicable IS/IEC ensuring absolute reliability of the equipment and fail-safe operations. Chargers' life is approximately very mature 20years.
- **User friendly-**
Easily accessible component mounting, simple & better design, made in India, easy availability of spare parts and operation & maintenance is very easy.
- **System Solutions -**
STATCON ENERGIAA PVT. LTD. offers complete DC systems include Battery, Battery Charger, Battery Discharger, Cell-Booster. We are authorized dealers of M/S. Exide Industries Ltd. For their industrial range of batteries which makes us single source of complete DC power
- **Minimal Maintenance -**
STATCON ENERGIAA PVT. LTD. battery chargers are designed for low maintenance and remote operations. They can work for a long time, without requiring any special attention.



OPTIONS AVAILABLE :

To meet the client specific requirements, the DC system is custom designed and configured. Custom designed systems can be configured from numerous options available. These include but are not limited to the following:

- Differing enclosure sizes and colours
- Enclosure (IP) protection ratings
- Alarm and system monitoring schemes
- Charger and battery redundancy schemes
- Customer specific distribution



SEPL OFFICE AT NOIDA



Statcon Energiaa Pvt. Ltd.

B-81 Sector-63 Noida G.B. Nagar 201307 Uttar Pradesh India Ph.: +91 120 3891600 | 11, Fax: +91 120 4306507 Email: info@statconenergiaa.com

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THE BOARD TECHNICAL PARAMETERS FOR THYRISTOR BASED BATTERY CHARGER :

AC Input With Wide Operational Range

Nominal Voltage Range	230V AC or 415V AC $\pm 10\%$, 3/4 Wire Or As Per Customer Requirement
Nominal Frequency Range	50Hz $\pm 5\%$

DC Output With An Adjustable Wide RANGE

Rectifier Type	Full wave Half Controlled Rectifier For Single Phase Charger Full wave Fully Controlled Rectifier For Single Phase Charger
Charging Methods	Constant Voltage For Float Charging Constant Current For Boost Charging
Output Voltage Range	12V/ 24V/ 30V/ 45V/ 95V/ 110V/ 125V/ 220V/ 250V/ 380V/ 480V DC Or As Per Customer Requirement
Adjustable Voltage Range	Float Mode - 0 to 110% Of Rated Voltage Or As Per Customer Requirement Boost Mode - 0 to 110% Of Rated Voltage Or As Per Customer Requirement
Current Range	10A To 4500A Or As Per Customer Requirement
Adjustable Current Range	Float Mode - 80 to 100% Of Rated Output Current Or As Per Customer Requirement Boost Mode - (50 to 100% Of Battery AH)/10 Or As Per Customer Requirement
Ripple	3% RMS (With & Without Battery) Or As Per Customer Requirement
Output Voltage Regulation	$\pm 1\%$ Of Rated Voltage For 45V To 480V DC (At Nominal Voltage with Input Range) $\pm 1V$ Of Rated Voltage For 12V To 24V DC (At Nominal Voltage with Input Range)
Type of Cooling	Natural Air Cooled Or Forced Cooling

DC Output With An Adjustable Wide RANGE

a) Rectifier Transformer	90°C as per class-F Or As Per Customer Requirement
b) SCR	80°C Or As Per Customer Requirement
c) Choke	90°C as per class-F Or As Per Customer Requirement
Guaranteed Efficiency At Rated Output	Up To 93% Depending Up On Rating
Temperature Compensation	3mV / Cell / °C
Power factor	>0.8 lag at rated output and nominal input
Transient response	200m sec
Gasket material	Rubber or Neoprene
Bus Bar material	Al or Cu
Communication	RS 485 Interface For Remote Monitoring
Remote Indications	Potential Free Relay Contacts
Instrumentation Type	Analog or Digital or Microprocessor Based LCD Display
Standard Instrument	Input - One Voltmeter & Ammeter Output - One Voltmeter & Ammeter
Annunciation Type	LED Or Window or Microprocessor Based LCD Display
Standard Protection	AC UV/OV Phase Fail/Phase Reversal DC UV DC OV Over Load Fuse For Thyristors Fuse For AC Capacitor Fuse For Filter Capacitor Blocking Diode for Reverse Leakage Circuit Breaker Soft Start Surge Suppressor Short Circuit Reverse Polarity Protection (On Request) Earth Leakage (On Request)
Standard Protection	55dB At One Meter For Natural Cooling 57.5dB At One Meter For Forced Cooling

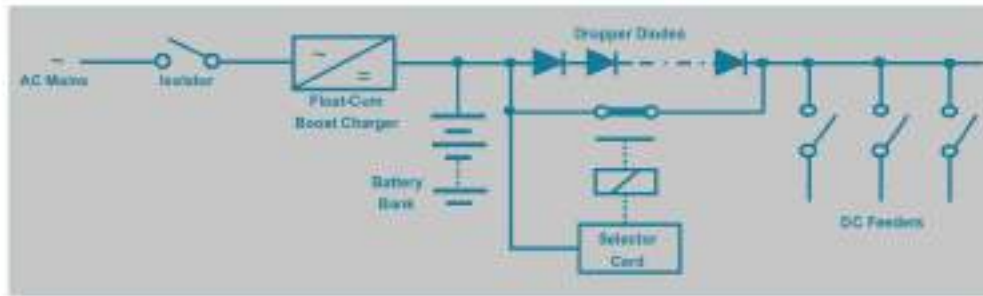
Mechanical

Construction	Folded Sheet / MS Construction
Sheet Thickness	1.5mm To 3.0mm-Based On Customer Requirement
Panel Access	Front & Rear Both or Front Access only
Cable Entry	Bottom or Top Entry As Per Requirement
Terminal Arrangement	Front Side Or As Per Customer Requirement
Paint Shade	External & Internal - RAL-7032 Or As Per Customer Requirement
Paint Finish	Powder Coating or Structure Finish
IP Protection	IP20 / IP31 / IP42 Or As Per Customer Requirement

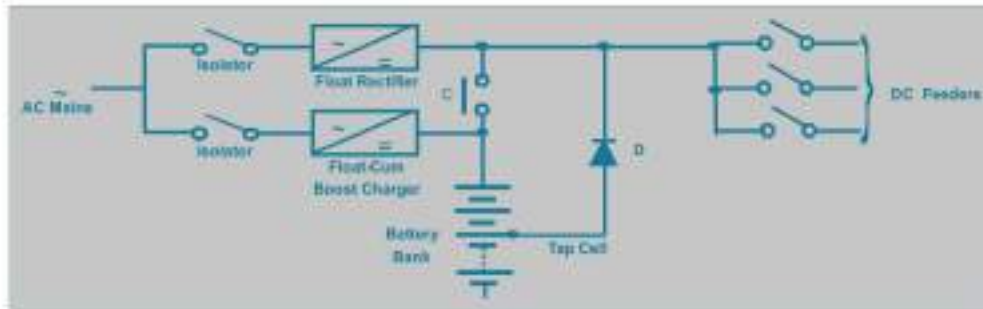


BASIC SCHEMES OF BATTERY CHARGERS :

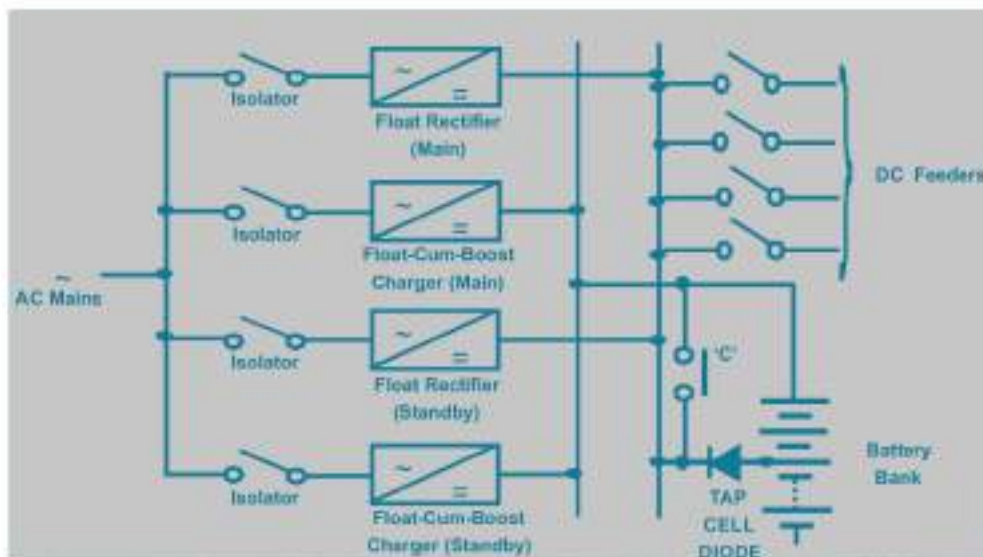
Schemes # 1:- Float-Cum-Boost Charger with Single Battery Bank



Schemes # 2:- Float & Float-Cum-Boost Charger with Single Battery Bank

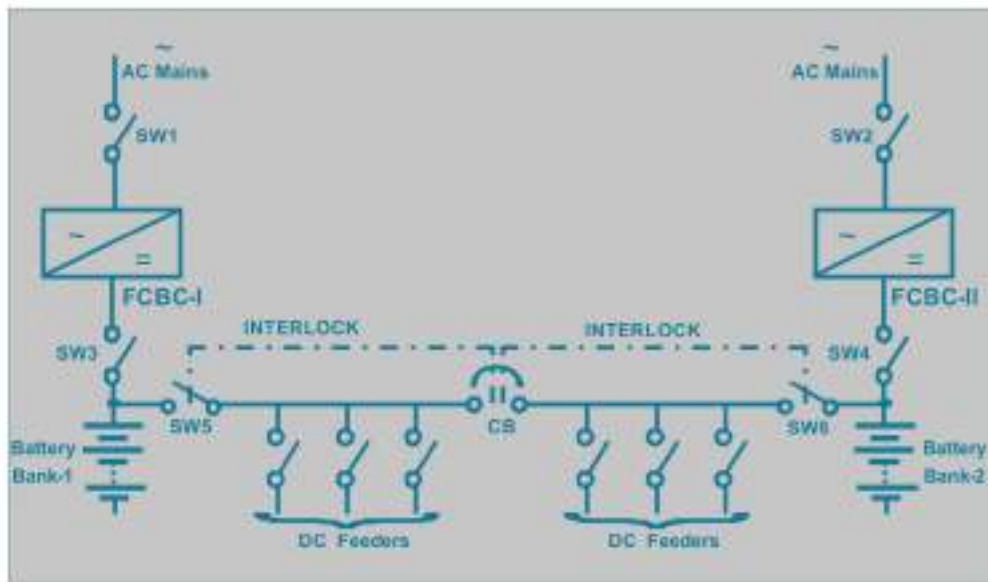


Schemes # 3:- Dual Float & Float-Cum-Boost Charger with Single Battery Bank

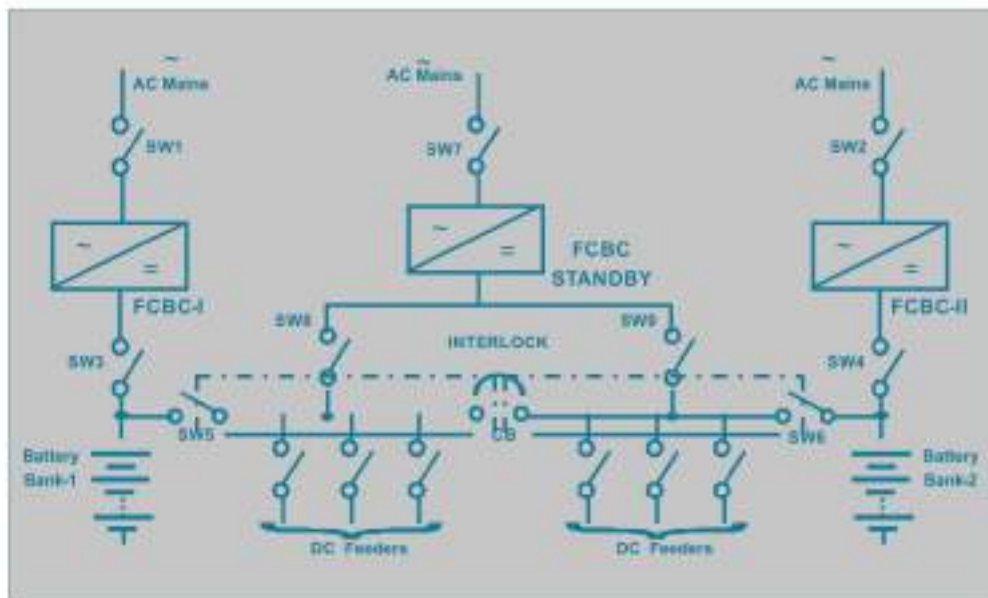


SEPL MANUFACTURING PLANT AT PILAKHUWA

Schemes # 4:- Dual Float-Cum-Boost Charger with two Battery Banks



Schemes # 5:- Dual Float-Cum-Boost Charger with Standby Charger



DC DISTRIBUTION BOARD



WE ARE REGISTERED WITH



MAJOR CUSTOMERS





STATCON ENERGIAA

Inspire + Innovate + Implement



HEAD OFFICE

B-81 Sector-63 Noida G.B. Nagar 201307 Uttar Pradesh India
Ph.: +91 120 3891600 | 11, Fax: +91 120 4308507

MANUFACTURING PLANT

STATCON ENERGIAA PVT. LTD.
Khasra No. 509, Kulich Nagar,
Chhijarsi Hapur Road, Uttar Pradesh - 245304

Email: info@statconenergiaa.com | www.statconenergiaa.com

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