SWARAJYA

www.ChargerDischarger.com

India's Most Advanced Charger Technology

In-house R&D Lab

IGBT based Charger
with
Heaterless Discharger

SWARAJYA INDUSTRIES

Plot No.114 D, Naharpur, Sector-7, Rohini, New Delhi
E mail: Charger.Swarajya@gmail.com
Srikant Uppal: 9560409195, 9968008162

Features

- Microcontroller / DSP based digital controlling
- IGBT based switching device.
- Constant Current Constant Voltage (CC CV) Charging.
- Menu driven LCD Display for setting various parameters.
- Built in Multifunction Meter to display various parameters.
- Various Operating Modes (Automatic/ Semi Automatic/ Mannual).
- 10 Sets of easily user programable Profiles/ Programs for different types batteries.
- 10 Sets of easily user programable timers in each Program (10 Timers x 10 Programs, Total 100 Timers).
- Any timer can be used as multi step charging, discharging, rest or start delay (acid cooling time).
- Built in Regenerative Discharger to smoothly transfer one battery bank charge into another battery bank to save power and electricty bill,
- Voltage based easily programable multiple Charge-Discharge cycles in Automatic mode.
- Can be connected 10 to 25 batteries per circuit (channel).
- Completely Ripple free pure DC charging to ensure long battery life, it dosnt contain AC components in charging current.
- It operates at high power factor as compared to other battery chargers to save elecricity bill.
- It takes less input current as compared to any Thyristor (SCR) based battery chargers for same output voltage and current.
- Multiple Chargers can be interconnected to share Discharging Power.
- Compact size to save space.
- Highly Reliable & Low Maintenance.

IGBT Based Regenrative Charger / Discharger

In Buit Heaterless Discharger

Technical Specifications

Charger:
Input Voltage: 400V AC 3 Phase 50Hz / 60 Hz
Output Voltage: 13V to 17V DC per battery (user settable)
Output Current: 0 to 20A DC (user settable)
Ripple: Ripple free

Discharger:
Discharger Type: Automatic Regenerative type (Heaterless)
Discharging Current: 0 to 20A DC user settable.
Discharge Cycles: Up tp 10 cycles in automatic mode.
Ripple Ripple free

Operation Modes:
Charging Method: Constant Current Constant Voltage (CC CV)
Operating Modes: 3 Modes (Automatic/ Semi Automatic/ Manual)
Programs: 10 Individual Programs can be save for 10 different types of batteries.
Timers: 10 Times x 10 Programs (Total 100 Timers)
Timer Setting: 0 to 99 Hours (Total upto 990 Hours in each Programs)
Timer Modes: Charging / Discharging/ Rest
Variable Amperes: Different Amperes can be set for different hours.

Technology:
Converter Type: High Frequency Switch Mode DC-DC Converter
Modulation Technique: High Frequency Pulse Width Modulation (PWM)
Switching Device: Insulated Gate Bipolar Transistor (IGBT)
Processor: Microcontroller/ DSP

Monitor:
Display: 20 Characters. 4 Lines Liquid Crystal Display (LCD)
Display Parameters: Battery Voltage, Circuit Voltage, Charging Current, Discharging Current, Timer Number/ Cycle Number, AH, KW, Running Time, Total Time

SWARAJYA

www.ChargerDischarger.com

India's Most Advanced Charger Technology

REGNERATIVE BATTERY CHARGER / DISCHARGER

IGBT based Regenerative Industrial Battery Charger / Discharger is a very sophisticated power converter to deliver stable & ripple free pure DC output at high efficiency. The system is specially designed to charge/discharge/recharge the lead acid batteries. The system is driven by advanced microcontroller/ DSP to generate precise high frequency PWM to remove ripples and lower order harmonic distrotion. Its output power is controlled by advanced feedback control algorithm in order to maintain constant output current and voltage (CC CV). System consumes less power than any other thyristor (SCR) based Battery Chargers.

The system has inbuilt heaterless Regenerative Discharger in order to utilize discharging power to charge the batteries in other circuits. In this way during the discharge cycle, discharging power does not waste in the heater and instead of that it utilizes to charging the batteries in other circuits to save power consumption and reduces electricity bill.

Product Range:

IGBT Based Charger / Discharger
Battery Life Cycle Tester
Battery Capacity Tester
Battery Load Tester
Formation Rectifier
Electroplating & Industrial Rectifier
APFC Relay

SWARAJYA

www.ChargerDischarger.com

India's Most Advanced Charger Technology

About us

Swarajya Industries is engaged in design, development & manufacturing of IGBT based Fully Automatic Battery Charger/ Discharger, Battery Life Cycle Tester, Battery Capacity Tester, Battery Load Tester etc. Our core strength is in house Research & Development facility.

We are the first and only company who manufactures IGBT based Regenerative Battery Charger/ Discharger in India.

Vision

Our Vision is to design, development & manufacture high quality, reliable, world class products in India to contribute and boost up Indian Economy and reduce import and dependency on other countries.

Mission

Since we are engaged in capital goods manufacturing, our mission is to develop latest technology (in our own R&D Center) to provide reliable, stable and trouble free products to battery manufacturing Industry to enhance the life of their batteries.

Quality Policy

We are committed towards continuos technological improvements, quality control and customer satisfaction. Our company believes in the concept of quality in man, material, machine and process.

Key Strength

Our Strength in-house R&D facility with high qualified engineers & technocrats team. We can provide customized solution as per industry requirements.

Achievements

Our customers satisfaction is our only & precious achievement till date.