



# GLOW ENERGY

MAKING LIVES BRIGHTER

POWERING LIVES  
EFFECTIVELY & EFFICIENTLY



POWER BACKUP &  
INDUSTRIAL SWITCHGEAR  
SOLUTIONS

[www.glow-energy.com](http://www.glow-energy.com)



## MAKING LIVES BRIGHTER

Glow is a prominent name in the power backup solutions and industrial switchgear market of Nigeria. Our product range includes a host of electric solutions- Inverter, Tubular Batteries, SMF Batteries, Solar Panels, Changeover, Fuse, Main Switch, Splitter Switch, HRC Fuse. We believe that people don't have to spend enormous amounts for products that are an integral part of basic living. We have been successfully providing our consumers with reliable products that meet their expectations at affordable prices. We are proud to say that we have earned the trust of millions of people and continue to offer them our carefully engineered products.

As we are growing, we are even more excited to solve the challenges and pain points that people face in their day to-day-lives. We are inspired to do better every day and offer cost-effective solutions that make the lives of our customers more comfortable and productive.

**GLOW ENERGY**  
MAKING LIVES BRIGHTER



 **SOLAR & INVERTER TUBULAR BATTERY**  **SMF VRLA BATTERY**

 **BOOST UPS** **PURE SINE WAVE INVERTER**  **MONO CRYSTLINE SOLAR PANELS**

 **CHANGEOVER SWITCH**  **SWITCH FUSE UNIT**

 **FUSE UNIT**  **HRC SWITCH FUSE UNIT**



## SHINING A LIGHT ON OUR STORY

Our research and development centers play an integral part in manufacturing products that bring comfort to your life. Our presence across 4 R&D facilities and a total of 12 warehouses have the capacity to manufacture top-notch products for you. Throughout our research process, we don't only think about innovation; instead, we think about sustainable innovation that's going to be long-lasting. Our priority is to create products that not only improve your life but also have a positive impact on the environment. With over 20+ years of industry experience, we continue to learn and evolve to deliver the best to our customers. All our branches are equipped with state-of-the-art and well-trained service personnel to offer our customers a seamless experience.

## POWERING THE PRESENT, EMPOWERING THE PEOPLE

With our thoughtfully-engineered products and considerate pricing, we have been able to reach people from different strata of the society. It gives us immense joy to see that everyone can make the most of power-up solutions in their lives.



## WE LISTEN TO YOU

We listen to our consumers and offer solutions that enrich their lives in a meaningful way. We believe that innovation that's not significantly changing people's lives will soon become redundant. That's why we keep observing how the market trends are changing and how consumer behavior is evolving with time.



## MAXIMIZING OUR CUSTOMERS' SAVINGS

We understand that with changing times our needs and requirements are also growing rapidly. We are keeping up with this change to meet our customers' expectations. We want you to maximize your savings when it comes to purchasing electrical products without compromising on quality. At Glow, we keep customer satisfaction at the heart of our business. For us, the journey is as important as the destination. We always prioritize achieving our company goals by keeping our customers happy and satisfied.

# INDEX

## POWER BACKUP



SOLAR & INVERTER TUBULAR BATTERIES

07



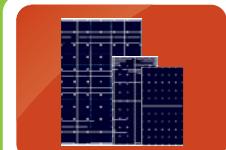
SMF VRLA BATTERIES

08



BOOST UPS  
PURE SINE WAVE

09-14



MONO CRYSTLINE  
SOLAR PANELS

15-19

## INDUSTRIAL SWITCHGEAR



CHANGE OVER SWITCH

21-22



SWITCH FUSE UNIT

23-24



HRC SWITCH FUSE UNIT

25



FUSE UNIT

26



SOLAR & INVERTER TUBULAR BATTERIES

SMF VRLA BATTERIES

BOOST UPS PURE SINE WAVE

MONO CRYSTLINE SOLAR PANELS



## SOLAR & INVERTER TUBULAR BATTERY

### FEATURES

- High rate discharge tested.
- Environment friendly.
- Improved Safety.
- High Acid Volume per ampere hour.
- Electrolyte level indicator.
- Deep Cycle design.
- Tower Type design.
- Common side venting.
- Excellent charge acceptance.

### ADVANTAGES

- Very Long Life
- User friendly
- Acid volume per ampere hour is 30% more than that of ordinary tubular batteries. It acts as a coolant and also ensures very low maintenance.
- Suited for use in areas of frequent power cuts (800 to 1000 cycles of deep discharge as against 300/400 cycles of other batteries).
- Can withstand overcharge better.
- Occupies less floor space, totally new look.
- Less pollution, environment friendly.
- Ensure consistent quality.



LOW MAINTENANCE



HIGH POWER



SELENIUM INSIDE



HIGH DURABILITY WITH  
SEALED PLASTIC  
HOUSING



TALL  
TUBULAR  
BATTERY



FACTORY  
CHARGED BATTERY  
IN READY TO  
USE CONDITION



EASY TO  
REFILL  
FACTORY  
CHARGED BATTERY  
IN READY TO  
USE CONDITION



EASY  
MAINTENANCE  
WITH LEVEL  
INDICATORS

### AVAILABLE RANGE

165AH to 220AH

## SMF VRLA BATTERY

### FEATURES

#### Cyclic grid alloy for positive plate

- Higher cycle life

#### Radial grids

- Low internal resistance • Quick recharge • High discharge performance

#### Copper alloy screw type terminals

- Better electrical conductivity • Absolute positive contact • Zero wear and tear

#### AGM Seperator

- Greater compression • Long Life

#### Deep discharge capability

- Withstands frequent & long power failures

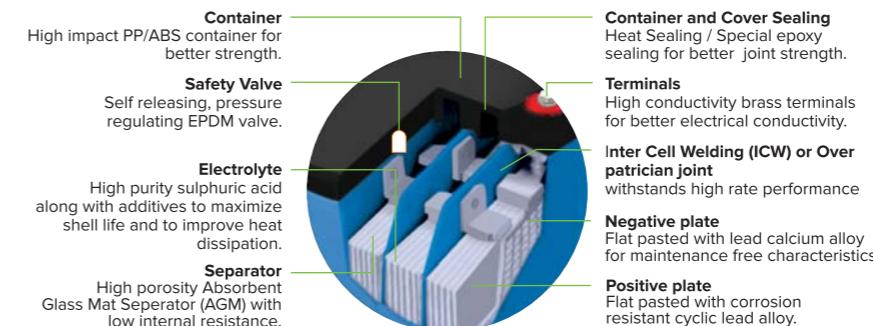
#### Low shelf discharge

- Longer shelf life

#### Product Conformance

- JIS C 8702-I

### Design and Construction Features



### APPLICATIONS

#### UPS systems

- Banking, Financial Services & Insurance
- IT / ITES

#### Telecom

- Optical Network Terminal Telecom Equipment

#### Power Back up

- CFL/LED Lamps
- Railway Emergency Lighting
- Solar Power Equipment
- Medical Instruments
- Fire & Security Alarm Systems



HIGH  
PERFORMANCE



FAST  
CHARGE



STRONGER BATTERY  
& LONG LIFE



MAINTENANCE  
FREE

### AVAILABLE RANGE

100AH to 200AH



## BOOST UPS PURE SINE WAVE

Glow Energy UPS incorporates the world's latest PWM based technology which provides you complete comfort during the failure of utility power & provides your appliance the exact replication of main power.

### FEATURES

<b>LCD Display</b>	<b>Protection</b>
• Mains on	• Battery Voltage Low
• UPS on	• Over Load
• Short Circuit	• Battery Full Charge
• Overload	• Over Temperature
• Charging	• Short Circuit
• Battery Low	
• Fuse Brown	
• MCB Trip	

	upto 30% Extra Current incase of emergency through Emergency Current Boost
	Built in Automatic Stabilizer to Boost the Mains voltage up to 30%
	Battery Charging at Low mains (90 volt) for longer Backup and Battery Life.
	Optional Monitoring and Controlling through Smart Phone & Wi-Fi

### AVAILABLE RANGE

#### LKVA SERIES

**Single Phase Inverter**  
from 1000VA to 2500VA

### TECHNICAL SPECIFICATIONS

#### BOOST UPS

Nominal Battery Voltage	12 VDC	24 VDC
-------------------------	--------	--------

#### AC Mains Mode

I/p Volt. Range (Normal Mode)	100 to 280 VAC ± 5 VAC			
I/p Volt Range (UPS Mode)	180 to 260 VAC ± 5 VAC			
Changeover Time Maximum	<= 20 ms			
Max. Charging Current (NC)	25% less than HC			
Max. Charging Current ( HC)	15A ± 1A	18A ± 1A	15A ± 1A	20A ± 1A
Boost Charging Voltage	14.4V ± 0.1 VDC	28.8V ± 0.2 VDC		
Float Charging Voltage	13.7V ± 0.2 VDC	27.4V ± 0.4 VDC		

#### Battery Backup Mode

Output Voltage at No Load	220 VAC ± 7 VAC	
Output Frequency	50.0 HZ ± 0.5 HZ	
Output Wave Form ( At No Load)	100% Pure Sine Wave	
Battery Low Alarm (VDC)	10.8 ± 0.2	21.6 ± 0.2
Battery Low Protection	10.4 ± 0.2 VDC	20.8 ± 0.2

#### Current Boost Function Mode in Normal Mode only

Charging Current at 100 V AC	8A ± 1A
------------------------------	---------

#### Protections

Short Circuit at Battery Mode	Should be functional
Mains Fuse Trip	Should be functional
Reset	Through ON / OFF Switch & Mains

# POWER BACKUP



## BOOST UPS PURE SINE WAVE

### FEATURES

#### LCD Display

- Mains on
- UPS on
- Short Circuit
- Overload
- Charging
- Battery Low
- Fuse Brown
- MCB Trip

#### Protection

- Battery Voltage Low
- Over Load
- Battery Full Charge
- Over Temperature
- Short Circuit



Battery Charging at Low mains (100 volt) for longer Backup and Battery Life.



Optional Monitoring and Controlling through Smart Phone & Wi-Fi



Enhanced Temperature Protection



Easily up-gradable to Solar UPS / PCU



Interactive Multi Color LCD Display



Pure Sine Wave Boost Technology

### AVAILABLE RANGE

#### HKVA SERIES

**Single Phase Inverter**  
from 3.8 KVA to 20 KVA

### TECHNICAL SPECIFICATIONS

Parameters	Normal Mode	UPS Mode
Mains AC Lower Voltage Limit	100 ± 5VAC	180 ± 5VAC
Mains AC Lower Recovery Volt.	110 ± 5 VAC	190 ± 5 VAC
Mains AC Higher Voltage Limit	280 ± 5 VAC	260 ± 5 VAC
Mains AC Higher Recovery Volt.	270 ± 5 VAC	250 ± 5 VAC
Output Voltage with full load in Normal Mode	220 ± 10 V	
Battery Low Cut-Off Voltage	10.4 ± 0.2 V (per Battery) Default	
Mains O/P Frequency	Same as Input	
INV. O/P Frequency	50 ± 1.0 Hz	
<b>Battery Charging</b>		
Battery Charging Volt. Range	100 to 280 V	180 to 260V
Trickle Charging Current Limit	0.5 ± 0.3A	0.5 ± 0.3A
Boost Voltage	14.4 ± 0.1 V (per Battery)	
Float Voltage	13.7 ± 0.2 V (per Battery)	
Overload	100 + 3% (with Auto reset function)	
Short Circuit Protection	> 300% Load (with manual reset function)	
Change Over Time	< 60m Sec	< 10m Sec
<b>Max. Charging Current (when battery is fully discharge)</b>		
3.8 KVA	5.5KVA (48V)	5.5KVA (96V)
20±1 A	24±1 A	16±1 A
20KVA (360V)		16±1 A

# POWER BACKUP



## BOOST UPS PURE SINE WAVE

### FEATURES

#### LCD Display

- Mains on
- UPS on
- Short Circuit
- Overload
- Charging
- Battery Low
- Fuse Brown
- MCB Trip



Battery Charging at Low mains (100 volt) for longer Backup and Battery Life.



Optional Monitoring and Controlling through Smart Phone & Wi-Fi



Enhanced Temperature Protection



Easily up-gradable to Solar UPS / PCU



Interactive Multi Color LCD Display



Pure Sine Wave Boost Technology

### AVAILABLE RANGE

#### THREE PHASE SERIES

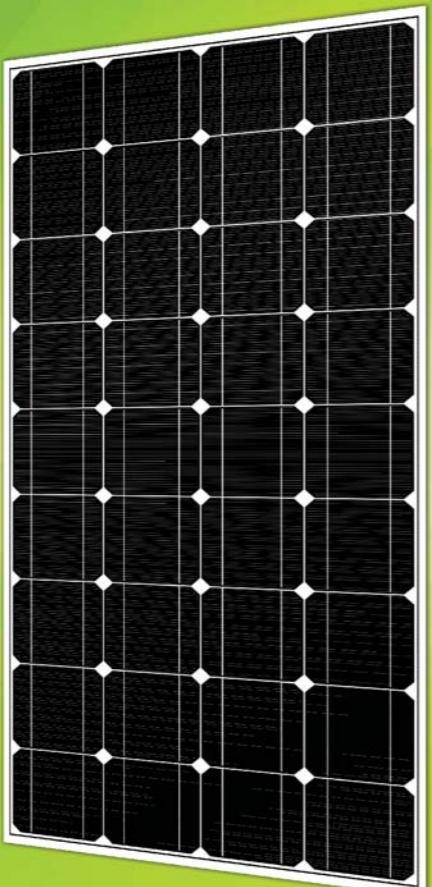
Three Phase Inverter  
from 10KVA to 50KVA

### TECHNICAL SPECIFICATIONS

Parameters/Checks	Specification					
Inv. Mode						
No Load Battery Current (NLC)		<b>2.0 ± 0.2A</b>				
O/P Voltage at No Load	R	230 ± 3%				
	Y	230 ± 3%				
	B	230 ± 3%				
O/P Voltage at Full Load	R	230 ± 3%				
	Y	230 ± 3%				
	B	230 ± 3%				
Full Load O/P Current (AC)	R	<b>10KVA 15KVA 20KVA 30KVA 40KVA 50KVA</b> 11.5Amp. 17.0 Amp. 22.5 Amp. 34.0 Amp. 45.0 Amp. 58.0 Amp.				
	Y	11.5Amp. 17.0 Amp. 22.5 Amp. 34.0 Amp. 45.0 Amp. 58.0 Amp.				
	B	11.5Amp. 17.0 Amp. 22.5 Amp. 34.0 Amp. 45.0 Amp. 58.0 Amp.				
Overload Retry		6 Times				
Overload Limit each Phase on Load	105%	105 Sec				
	125%	20 Sec				
	150%	15 Sec				
	200%	5 Sec				
Overload Frequency (Inverter Mode)	R	50 ± 1Hz				
	Y	50 ± 1Hz				
	B	50 ± 1Hz				

### Mains Mode

Input Mains	R	180 V to 260 V
	Y	180 V to 260 V
	B	180 V to 260 V
Batt. Low Buzzer (V/Batt.)	O/P Load>(R+Y+B)X10% System Continous on O/P Load>(R+Y+B)X10% System Trip after 7Sec.	
Short Circuit Retry	No Retry	
Permanent Short Circuit Protection	Should be OK	
Max. Charging Current	10+/-2A	
Charging Voltage+/-0.2V Batt.	13.7+/-0.2V/Batt.	
Phase seq. output	should be OK	



## MONO CRYSTALLINE SOLAR PANELS GLOW - 150M

### TECHNICAL SPECIFICATIONS

(STC: Irradiance 1000w/m <sup>2</sup> , module temperate 25°C. AM=1.5	
<b>Power</b>	<b>150Wp</b>
Open Circuit Voltage (Voc)	22.41V
Max. power voltage (Vmp)	18.12V
Short Circuit Current (Isc)	8.93A
Max. power current (Imp)	8.28A
Power Tolerance	±3%
Max.System Voltage	1000VDC
Operating Temp.	-40°C to + -85°C
NOCT	47 ± 2°C
Temp. Coefficient Isc	0.06%/°C
Temp. Coefficient Voc	-0.34%/°C
Temp. Coefficient Power	-0.042%/°C
Dimensions	1480x680x35mm
Module Class	Class A(GT)
Net Weight	12.4 KGS
Maximum Series Fuse Rating (A)	15A

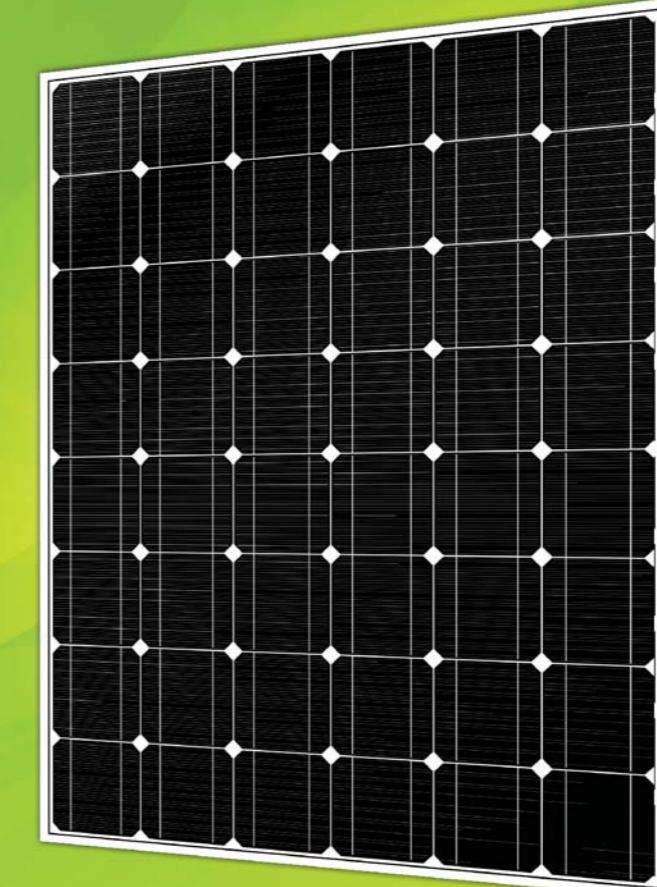
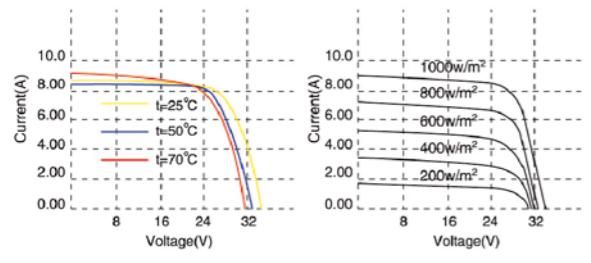
#### Mechanical Data

Cell Type : Mono 157mm x 157mm  
No. of cells : 36 in series (4 x 9)

#### Certificates

Safety Class II, IEC61215, IEC61730

#### I-V CURES



## MONO CRYSTALLINE SOLAR PANELS GLOW - 200M

### TECHNICAL SPECIFICATIONS

(STC: Irradiance 1000w/m <sup>2</sup> , module temperate 250C. AM=1.5	
<b>Power</b>	<b>200Wp</b>
Open Circuit Voltage (Voc)	29.33V
Max. power voltage (Vmp)	24.32V
Short Circuit Current (Isc)	8.80A
Max. power current (Imp)	8.22A
Power Tolerance	±3%
Max.System Voltage	1000VDC
Operating Temp.	-400C to + -850C
NOCT	47 ± 20C
Temp. Coefficient Isc	0.06%/0C
Temp. Coefficient Voc	-0.34%/0C
Temp. Coefficient Power	-0.042%/0C
Dimensions	1320x992x35mm
Module Class	Class A(GT)
Net Weight	14.5 KGS
Maximum Series Fuse Rating (A)	15A





## MONO CRYSTALLINE SOLAR PANELS GLOW - 250M

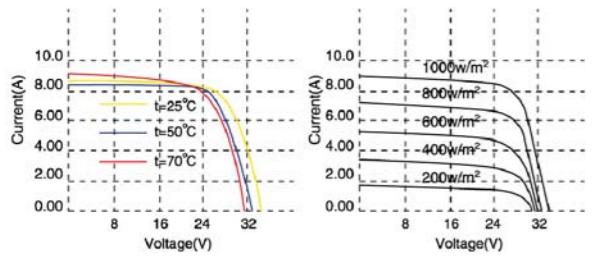
### Mechanical Data

Cell Type : Mono 157mm x 157mm  
No. of cells : 60 in series (6 x 10)

### Certificates

Safety Class II, IEC61215, IEC61730

### I-V CURES



### TECHNICAL SPECIFICATIONS

(STC: Irradiance 1000w/m <sup>2</sup> , module temperate 250C. AM=1.5	
<b>Power</b>	<b>250Wp</b>
Open Circuit Voltage (Voc)	36.91V
Max. power voltage (Vmp)	30.73V
Short Circuit Current (Isc)	9.03A
Max. power current (Imp)	8.14A
Power Tolerance	±3%
Max.System Voltage	1000VDC
Operating Temp.	-400C to + -850C
NOCT	47 ± 20C
Temp. Coefficient Isc	0.06%/0C
Temp. Coefficient Voc	-0.34%/0C
Temp. Coefficient Power	-0042%/0C
Dimensions	1640x992x35mm
Module Class	Class A(GT)



## MONO CRYSTALLINE SOLAR PANELS GLOW - 300M

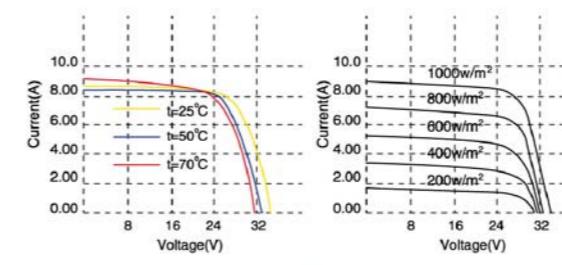
### Mechanical Data

Cell Type : Mono 157mm x 157mm  
No. of cells : 72 in series (6 x 12)

### Certificates

Safety Class II, IEC61215, IEC61730

### I-V CURES



### TECHNICAL SPECIFICATIONS

(STC: Irradiance 1000w/m <sup>2</sup> , module temperate 250C. AM=1.5	
<b>Power</b>	<b>300Wp</b>
Open Circuit Voltage (Voc)	44.63V
Max. power voltage (Vmp)	37.02V
Short Circuit Current (Isc)	9.23A
Max. power current (Imp)	8.11A
Power Tolerance	±3%
Max.System Voltage	1000VDC
Operating Temp.	-400C to + -850C
NOCT	47 ± 20C
Temp. Coefficient Isc	0.06%/0C
Temp. Coefficient Voc	-0.34%/0C
Temp. Coefficient Power	-0042%/0C
Dimensions	1956x992x35mm
Module Class	Class A(GT)
Net Weight	19.5 KGS
Maximum Series Fuse Rating (A)	15A





## MONO CRYSTALLINE SOLAR PANELS GLOW - 350M

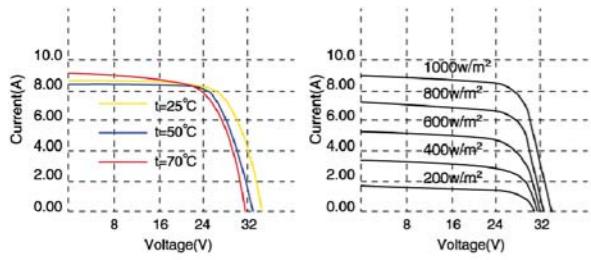
### Mechanical Data

Cell Type : Mono 157mm x 157mm  
No. of cells : 78 in series (6 x 13)

### Certificates

Safety Class II, IEC61215, IEC61730

### I-V CURVES



### TECHNICAL SPECIFICATIONS

(STC: Irradiance 1000W/m², module temperature 25°C. AM=1.5	
Power	350Wp
Open Circuit Voltage (Voc)	47.30V
Max. power voltage (Vmp)	39.80V
Short Circuit Current (Isc)	9.46A
Max. power current (Imp)	8.80A
Power Tolerance	±3%
Max. System Voltage	1000VDC
Operating Temp.	-40°C ~ 85°C
NOCT	47 ± 2°C
Temp. Coefficient Isc	0.06%/°C
Temp. Coefficient Voc	-0.34%/°C
Temp. Coefficient Power	-0.042%/°C
Dimensions	2110x992x35mm
Module Class	Class A(GT)



NIGERIA'S MOST TRUSTED  
INDUSTRIAL SWITCHGEAR  
COMPANY



## INDUSTRIAL SWITCHGEAR

CHANGEOVER SWITCH

SWITCH FUSE UNIT

HRC SWITCH FUSE UNIT

FUSE UNIT



## CHANGEOVER SWITCH

A comprehensive range of most affordable and good Changeover Switches with side handle operation find wide application in all general industries where individual system require safe and reliable transfer of power from main supply to standby supply and vice versa.

### CONSTRUCTION AND FEATURES

- Porcelain terminal blocks upto 100A rating are provided for cable termination having excellent mechanical, thermal and dielectric properties.
- Above 100A ratings are also available with knife type blade contacts
- High grade copper used for better conductivity and longer life
- Quick make & break operation
- High mechanical endurance
- Side handles operation
- Enclosed housing to avoid dust ingress
- Double break contacts per pole
- Terminals suitable for Al and copper conductors

**CONFORMS TO:** IS / IES 60947-1&3

**CONFIGURATION:** DP & FP

**RATED VOLTAGE:** 415V

### RATINGS:

- 16A to 1000A
- 16A to 100A ratings are available in Porcelain base
- 200A to 1000A ratings are available in Knife type contacts
- Above ratings are also available on request

**INSULATION VOLTAGE:** 660V



100 AMP. 415 VOLTS



32 AMP. 415 VOLTS



63 AMP. 415 VOLTS

## SWITCH FUSE UNIT

Hausstrom Group Company manufacturers complete range of GLOW Rewireable Switch Fuse units are offered to suit varied power distribution applications. The heavy duty Switches are fully tested with short circuit breaking capacity of 2kA 7 4kA at 240V & 415V suitable for utilization category AC-22 / 23A & B. Four deep drawn frame sizes covered the rating from DP/TP/TPN/FP-16A to 32A and other ratings in fabricated frames.

### CONSTRUCTION AND FEATURES

- Quick make and break operation
- Complete range ISI marked
- Enclosure made of CRCA Sheet Steel duly pretreated and powder coated
- Hard bright tin plated contacts for high conductivity and longer life
- Terminals suitable for Al & Cu conductors
- Knock-outs are provided at the top, bottom & rear side
- All live parts are fully shrouded with porcelain material
- Door interlocking facility available
- Also available iron clad switches rating from 16A to 63A

**CONFORMS TO:** IS / IEC 60947-1&3

**CONFIGURATION:** SPN & TPN

**RATING:** 16A to 400A

**RATING VOLTAGE:** 240 / 415V

**RATED INSULATION VOLTAGE:** 660V

**SWITCH FUSE RANGE:** 32 A to 400 A in TPN & FP Execution

# INDUSTRIAL SWITCHGEAR



400 AMP. 415 VOLTS



200 AMP. 415 VOLTS



## HRC SWITCH FUSE UNIT

Hausstrom Group Company manufacturers complete range of GLOW HRC Switch Fuse units are offered to suit varied power distribution applications. The heavy duty Switches are fully tested with short circuit breaking capacity of 2kA 7.4kA at 240V & 415V suitable for utilization category AC-22 / 23A & B. Four fabrication frame sizes covered the rating from TPN 100 to 400 A and other ratings in fabricated frames.

### CONSTRUCTION AND FEATURES

- Quick make and break operation
- Complete range ISI marked
- Enclosure made of CRCA Sheet Steel duly pretreated and powder coated
- Hard bright tin plated contacts for high conductivity and longer life
- Bras Parts suitable for Al & Cu conductors
- All live parts are fully shrouded with DMC material
- Door interlocking facility available
- Also available iron clad switches rating from 100A to 400A

**CONFORMS TO:** IS / IEC 60947-1&3

**CONFIGURATION:** TPN

**RATING:** 100A to 400A

**RATING VOLTAGE:** 240 / 415V

**RATED INSULATION VOLTAGE:** 660V

**SWITCH FUSE RANGE:** 32 A to 400 A in TPN & FP Execution

## FUSE UNIT

Glow Energy rewireable (Porcelain Fuse Carrier & Base) is a most affordable with best quality in its class Fuses from Hausstrom. Hausstrom Group company is one of the largest manufacturers of high quality, reliable performance and low maintenance of Rewireable type Porcelain Fuse Unit ( Kit-Kat). We get our range checked and tested on various parameters as per Indian Standard with the help of our technical professionals to ensure best quality of products.

### CONSTRUCTION AND FEATURES

- Complete range available
- Hard bright in tin plated contacts for high conductivity & longer life.
- Terminals suitable for Al & Cu Conductors
- All live parts are fully shrouded with porcelain material
- Base and carrier made of electrical grade porcelain material for longer life

**CONFORMS TO:** IS : 2086

**RATING:** 16A-500A

**RATED VOLTAGE:** 240 / 415V

**RATED INSULATION VOLTAGE:** 660V



**SOLAR & INVERTER TUBULAR BATTERY** **SMF VRLA BATTERY**

**BOOST UPS** **PURE SINE WAVE INVERTER** **MONO CRYSTLINE SOLAR PANELS**

**CHANGEOVER SWITCH** **SWITCH FUSE UNIT**

**FUSE UNIT** **HRC SWITCH FUSE UNIT**



## DUBAI

### HEAD OFFICE :

Mazaya Business Avenue BB2,  
3901, 39th Floor, Near JLT,  
Dubai- PO Box 337629  
Tel.: + 971 55 894 0054

### WAREHOUSE :

Store S-3, Plot 242-0377,  
19 Street, Al Qusais Industrial Area-1  
Al Qusais, Dubai, U.A.E

### SHOWROOM 1 :

Satelite Market, Near Homa Hotel,  
Deira, Dubai, U.A.E

### SHOWROOM 2 :

Abraj Center, Near Sabkha Bus  
Station, Deira, Dubai, U.A.E

**CUSTOMER CARE : + 971 55 894 0054**

A PRODUCT OF  
**HAUS STROM** GROUP COMPANY  
Energizing Your Home & Business

AN ISO 9001:2015 CERTIFIED MANUFACTURED PRODUCTS

[info@glow-energy.com](mailto:info@glow-energy.com) [www.glow-energy.com](http://www.glow-energy.com)

## NIGERIA

**HEAD OFFICE :**  
Mushin Lagos, Nigeria

**BRANCH OFFICES:**  
Kano, Abuja, Maiduguri,  
Kaduna, Sokoto, JOS,  
Ibadan, Benin, Onitsha and Port Harcourt



**CUSTOMER CARE : + 234 700 111 1010**