

Power failure? Don't panic!

# **DIAN**

### **EMERGENCY BATTERY OPERATED POWER SUPPLY**

# (EBOPS)



**OPERATION AND MAINTENANCE MANUAL** 

#### I/ GENERAL

THE EMERGENCY BATTERY OPERATED POWER SUPPLY (EBOPS) is specially designed for Lighting and Ventilation of the passenger lift in the event of power failure.

The EBOPS is a complete, enclosed unit assembly arranged for permanent connection consisting of a rechargeable battery, a battery charging facility and an inverter. It enables the batteries to be charged through the rectifier and at the same time provide supply to the loads during normal condition. The battery will restore its energy in the from of DC current to the inverter and inverter to an AC supply to loads when AC Mains supply failed.

#### **II/ TECHNICAL SPECIFICATION**

**MODEL: AN19-12** 

- 12V system

- 230V 50Hz 1P

Motor-roomless EBOPS

#### 1. CHARGER

Input Voltage 230VAC  $\pm$  10%, Single Phase

Frequency 50Hz

Charging Method Constant Voltage, Current limiting Charging Current 3.5A (for Battery 12V – 33AH)

Float Charging Voltage 13.5 – 13.8V Output Ripple Less than 0.3%

Meter Charging Current, Battery Voltage

Protection Input MCB

#### 2. INVERTER

Output Voltage $230VAC \pm 6\%$ Frequency $50Hz \pm 1\%$ Discharging CurrentMax 13.5A

Wave Form Modified Sine Wave

Overshoot Less than 6% at rated resistive load Meter Discharging Current & Voltage

Rate load 100W

Backup Duration Not less than 2 hours

Protection Output MCB

Battery low voltage auto cut-off Battery high voltage auto cut-off

#### 3. PHYSICAL

Led Indicator Mains ON, Inverter ON, Low DC, High DC

Ambient Temperature 40°C Max

Humidity 0-90% non – condensing Dimension  $600(H) \times 400(H) \times 180(D)$ mm

Weight with Battery 32Kg

4. BATTERY

Nominal Voltage 12V

Type & Capacitor Sealed Lead Acid Maintenance Free 12V – 33AH

Brand LEOCH, MARSTECH

#### **III/ OPERATION AND MAINTENANCE INSTRUCTION**

- 1. Check all external wiring are correctly and properly connected to the respective terminals.
- 2. Check and ensure that the mains supply and battery voltage are the same as the system rating.
- 3. Switch on the AC supply (Input MCB) and Switch on the Maintenance Switch, The Green LED on the control panel will light up indicating the mains supply is present.
- 4. The charging current and voltage will be shown on Ammeter and Voltmeter respectively on the control panel.
- 5. When the batteries is fully charged ,the charging current should not exceed 0.5 Amp and Mains light should light up.
- 6. Switch off AC supply (Input MCB) ,the Red LED will light up if the Inverter is in operation.lt is recommended to test the Inverter with the loads present.
- 7. Ensure that the Batteries Terminals are tightened properly .The batteries must be kept dry and clean.

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## **PARTS LIST**

1.Main Transformer

Marking: "DIAN"

Pri:NMLPS Sec: ABOBA

Marking: MB 3506

2. Bridge Rectifier (SID)

3. SCR

Marking: BT152

4. Power and Control Board

Marking: AN12-01

5. HRCFuse (HF) Marking: DIXSEN

20Amps

6. LED Display Board Marking: AN12-03

7. Terminal Block (TB) - 12Ways

Marking: TEND TB25-12

600V 25A

8.Heatsink H120xW180xD35

9. Test Switch (non)

10. Output mcb (mcb2)

**Marking: MERLIN GERIN** 

Model number: Multi 9 C60N

11.MaintenanceSwitch(SW)

Marking: MEGAMAN

CB25A

12. Voltmeter (V)

Marking: Flash Star SD -80

0-20V

Class 2.5

13.Ammeter (A)

Marking: Flash Star SD -80

+/- 20A

Class 2.5

14.Input mcb (mcb1)

**Marking: MERLIN GERIN** 

Model number: Multi 9 C60N

15.Lock&key

**Marking: NYLEX** 

Model number:

16.Metal cubicle **Powder Coating** 

H600xW400xD180

