# EN54-27-3A SERIES

**Battery Charger: 24V 3A** 





#### **Features**

- Separate load and battery charging output Load 2.4A, Battery Charger 0.6A
- Deep discharge battery protection
- Reverse battery protection
- High efficiency up to 85%
- Meets requirements of EN61000-3-2 Class A
- Meets requirements of EN55022 Class B conducted noise
- Output signals can be factory programmed to customer needs
- Vented case package
- DIN Rail mounting option

### **Specifications**

Input Voltage 240Vac (200~264)

47 ~ 63Hz Input Frequency

**Input Current** 1A

Earth Leakage <300µA @ 230Vac

**Hold Up Time** 30ms @ 230Vac input, full load and no

battery connected

**Power Factor** 0.42 @ 230Vac and full load

No load Power

Start up Time Typically 1.5 seconds

27.6V **Output Voltage** 

**Output Current** Load: 2.4A Battery: 0.6A

**Power Limit** Typically at 115%

80-85% @ 230Vac and full load Efficiency

OVP 105-125% latching. Recycle input after 30

seconds to restart

**Short Circuit** 

**Protection** 

Humidity

Hiccup mode

**Current Limit** Primary side power limited

**Thermal Protection** Primary side (non-latching)

-10°C to +70°C Operating Temp.

(Derate 2.5% / °C above 50°C)

10-95% non-condensing

Cooling Convection cooled

Load Regulation ±0.75%

±0.5%

Line Regulation 0.5% @ 230Vac, full load (BW =DC-10Hz)

Ripple & Noise

EN60950, Class I Safety

Input - Output / Case: 2200Vdc Isolation

**EMC** EN55022 Class B Conducted

EN55022 Class A Radiated

EN61000-3-2 Class A Harmonics **Immunity** 

EN61000-4-4 Fast Transients EN61000-4-5 Surge EN61000-4-11 Voltage Dips

### **Description**

The **EN54 Series** is a new generation / smart Power Supply that is designed to provide battery backed-up power in the event of either the PSU or the battery being disconnected or short circuited.

When the AC supply fails, the battery will automatically be connected and will provide power until the ac supply is restored.. If the battery has reached it's disconnect voltage, it will automatically be disconnected to prevent deep discharge damage.

Designed for powering critical loads with battery back-up, in a wide range of Industrial applications and in particular Security installations and Access Control, with separate Load and Battery Charging circuits.

A wide range of Signals, Led's and Alarms, all aimed at a providing the optimum solution for powering critical DC Loads.

An isolated Common Fault relay has been provided which will operate if any fault is found (This is a fail-safe signal so will signal a fault even if no power sources are on/connected.

# Battery & Signals (Refer to manual for complete details)

Output current limited @ 0.6A **Battery** 

Connector provided for user to add 100KΩ thermistor ( Temp

Compensation  $\beta$ =4400), suitable for standby use

Deep Discharge Protection at 21V ± 0.3V

**Signals** Mains Fail, Battery O/C, Charger Loss, Battery Low

LED's & open collector - 100mA sink, Status LED Green = Flashing = OK

Common Fault (Volt free) relay 2x Customer options - open collector - 30mA sink HiZ indication

Battery Powerfail signal = 100mS

**Alarm** Common Fault relay via voltage free contacts

LED'S Mains Fail Battery Low

Batter Open Circuit

Charger Loss

Status ON Zintec

**Case Material** 

Connector-Input Input: Barrier Strip / Screw terminal

Connector-Load & Battery: Barrier Strip / Screw terminal Output

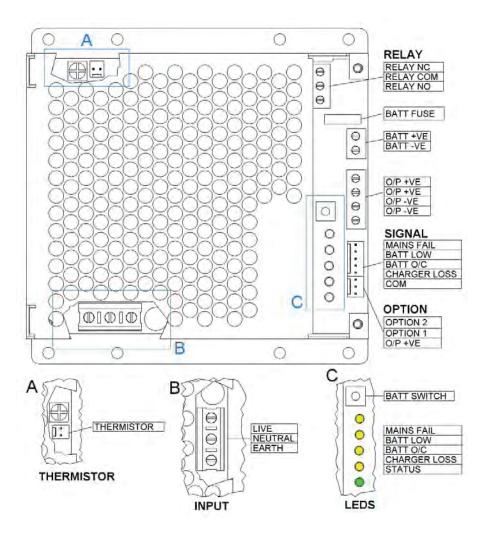
Connector-Molex 6410 vertical

**Signals** 

**Dimensions** 124 x 122 x 50mm 450gr



Fig1: Connections



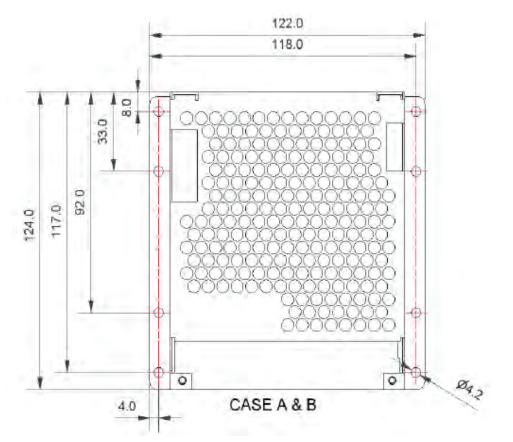


Fig2: Mounting