

# EN54-13V8-5A SERIES

Battery Charger: 12V 5A



## Features

- Separate load and battery charging output  
Load 4A, Battery Charger 1A
- 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

<b>Input Voltage</b>	240Vac ( 200~264 )
<b>Input Frequency</b>	47 ~ 63Hz
<b>Input Current</b>	1A
<b>Earth Leakage</b>	<300µA @ 230Vac
<b>Hold Up Time</b>	30ms @ 230Vac input, full load and no battery connected
<b>Power Factor</b>	0.42 @ 230Vac and full load
<b>No load Power</b>	1.5W
<b>Start up Time</b>	Typically 1.5 seconds
<b>Output Voltage</b>	13.8V
<b>Output Current</b>	<b>Load: 4A Battery: 1A</b>
<b>Power Limit</b>	Typically at 115%
<b>Efficiency</b>	80-85% @ 230Vac and full load
<b>OVP</b>	105-125% latching. Recycle input after 30 seconds to restart
<b>Short Circuit Protection</b>	Hiccup mode
<b>Current Limit</b>	Primary side power limited
<b>Thermal Protection</b>	Primary side ( non-latching )
<b>Operating Temp.</b>	-10°C to +70°C (Derate 2.5% / °C above 50°C)
<b>Cooling</b>	Convection cooled
<b>Humidity</b>	10-95% non-condensing
<b>Load Regulation</b>	±0.75%
<b>Line Regulation</b>	±0.5%
<b>Ripple &amp; Noise</b>	0.5% @ 230Vac , full load ( BW =DC-10Hz)
<b>Safety</b>	EN60950, Class I
<b>Isolation</b>	Input – Output / Case: 2200Vdc
<b>EMC</b>	EN55022 Class B Conducted EN55022 Class A Radiated
<b>Immunity</b>	EN61000-3-2 Class A Harmonics 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 )

<b>Battery</b>	Output current limited @ 1A
<b>Temp Compensation</b>	Connector provided for user to add 100KΩ thermistor ( β=4400), suitable for standby use
<b>Deep Discharge</b>	Protection at 10V ± 0.2V
<b>Signals</b>	<ul style="list-style-type: none"><li>• Mains Fail, Battery O/C, Charger Loss, Battery Low</li><li>• LED's &amp; open collector – 100mA sink, Status LED Green = Flashing = OK</li><li>• Common Fault (Volt free) relay 2x Customer options – open collector – 30mA sink HiZ indication =0.4Ω</li><li>• Battery Powerfail signal = 100mS</li></ul>
<b>Alarm</b>	Common Fault relay via voltage free contacts
<b>LED'S</b>	<ul style="list-style-type: none"><li>• Mains Fail</li><li>• Battery Low</li><li>• Batter Open Circuit</li><li>• Charger Loss</li><li>• Status ON</li></ul>
<b>Case Material</b>	Zintec
<b>Connector-Input</b>	Input: Barrier Strip / Screw terminal
<b>Connector-Output</b>	Load & Battery: Barrier Strip / Screw terminal
<b>Connector-Signals</b>	Molex 6410 vertical
<b>Dimensions</b>	124 x 122 x 50mm 450gr

# EN54-13V8-5A SERIES

Battery Charger: 12V 5A

Fig1: Connections

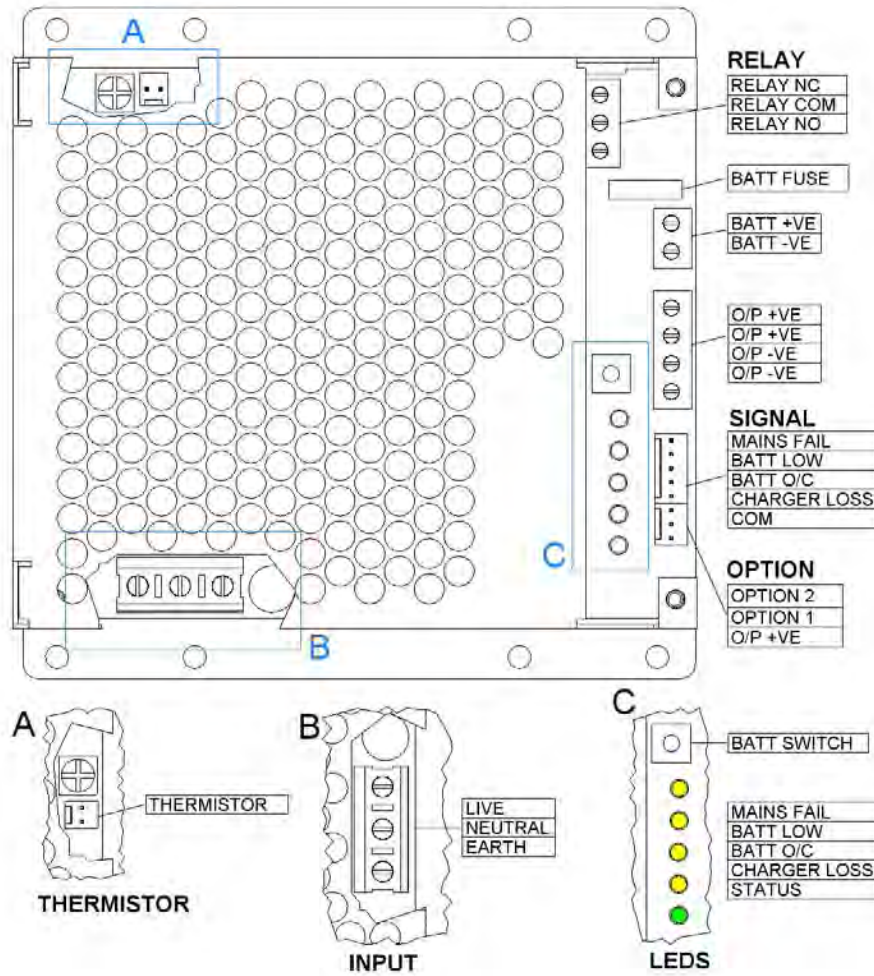


Fig2: Mounting

