

## SBC-EN54-13V8-3A0 power supply

### Features:



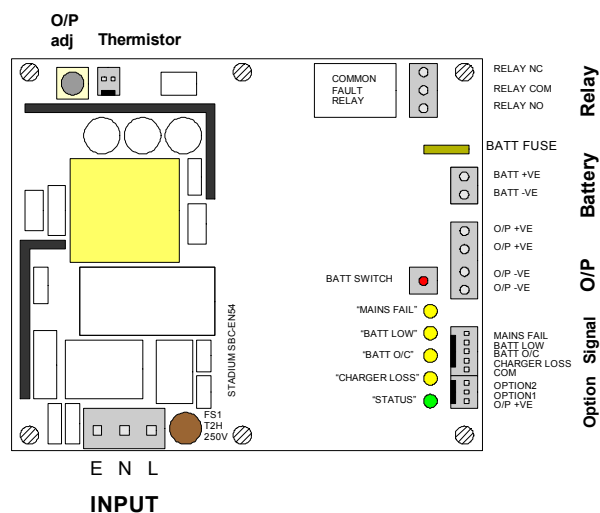
- Single output plus battery charger
- Deep discharge battery protection
- Reverse battery protection
- High efficiency
- Cased unit
- Low touch currents
- Meets requirements for EN54-4 1998 inc Amends 1&2
- Meets requirements of EN61000-3-2 PFC Class A
- Meets requirements of EN55022 'B' for conducted noise
- Signalling can be factory programmed to customer requirements
- CE marked to LVD. Certified to EN60950.

### Specification:

INPUT	
Input voltage	100 – 230 Vac +/-10%
Frequency Range	50-60Hz
Temperature Range	0 – 50°C ambient (Convection cooled, cased)
Input fuse	T2H 250V TR5
Input Current	1.1Arms (90Vacin, full load)
Hold-up Time	10mS (110Vacin, full load, no battery connected) 85mS (230Vacin, full load, no battery connected)
Power Factor	0.45 (230Vacin, Full load)
No Load Power	1.5W (230Vacin)
Start-up	Less than 3 seconds, 100Vacin
OUTPUT	
Output Voltage	13.8V (factory set for operation with thermistor)
Output Current	2.4A
Power limit	115% +/-10% (100Vacin)
Efficiency	80-85% Typ.@ 230Vacin, Full load
OVP	105-125% (latching and non dissipative) recycle input to restart
Short Circuit protection	Hiccup mode
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 =0.66l Battery Powerfail signal = 100mS
Current limit	Primary side power limit
Thermal protection	Primary side thermal protection (non-latching)
Load regulation	+/- 0.75%
Line regulation	+/- 0.5%
Noise & ripple	0.5% (230Vacin, Full load, BW = DC – 10MHz)
BATTERY	
Charger	Current limited @ 0.6A
Temp compensation	Connector provided for user to add 100KI thermistor (K=4400) Suitable for standby use
Deep discharge protection	10V +/-0.125V

**Specification:**

ENVIRONMENT	
Temperature	-10°C to +70°C (Derate 2.5% / °C above 50°C)
Cooling	Convection only
Humidity	10-95% non-condensing
Storage	-25°C to +85°C
MTBF	>80,000 hrs 25°C (MIL217F parts count method)
SAFETY & REGULATORY SPECIFICATIONS	
PSU Class	Class I:- Component part
Safety	Certified to EN60950, CE marked against LVD Designed to meet to UL60950
Flash test	Uncased units: I/p to O/p 4300V DC Cased units: I/p to O/p & E 2200V DC
Earth leakage current	<300uA rms (230Vacin 50Hz)
Output touch current	<100uA rms (230Vacin 50Hz)
EMC – Conducted	Designed to meet requirements of EN55022 "Class B"
EMC – Radiated	Designed to meet requirements of EN55022 "Class A"
EMC - Power Factor	Designed to meet requirements of EN61000-3-2 "Class A"
EMC – Fast Transients	Designed to meet requirements of EN61000-4-4
EMC – Surge	Designed to meet requirements of EN61000-4-5
EMC – Voltage Dips & Fluctuations	Designed to meet requirements of EN61000-4-11
	EMC will require re-evaluation in host equipment
MECHANICAL	
Dimensions	124mm x 122mm x 39.5mm (H)
Fixings	4x 4.2mm holes on a 109 x 114mm pitch
Case Material / Finish	Zintec
Input Connector	CAMDEN CTB0118 or equivalent
Output Connectors	Power = CAMDEN CTB0108 or equivalent Signal = MOLEX 6410 Vertical friction lock or equivalent
Pin-out	See below
Weight	400 grams
Technical specification may be subject to change – contact sales office before ordering.	

**Connection Diagram**

Data sheets are subject to change without notice

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