

24V 1.5A Encased Switch Mode PSU to EN54-4/A2

Part No. **BF560-24/E**



Overview

A powerful switch mode/digital hybrid PSU that can be customised to suit your exact requirements - see More Information tab for details.

Plastic cover on PSU PCB guards against touching live parts (to VDE 0100-410).

Includes the same electronics as our BF560-24L PCB certified EN54-4/A2 boxed 24V 1.5A PSU.

Metal base plate facilitates straightforward mounting inside third-party OEM enclosures.

Includes a single-pole volt-free changeover relay that switches for any fault condition.

Includes a fault type & hazardous voltages present LED.

Two selectable battery charge currents.

Battery fault impedance limits can be optimised to suit load current (helps extend battery life).

Mains fail simulation mode.

Improved on-board temperature sensor with optional remote sensor.

Electronic functions comply with EN50131-6 grades 1-4 for security applications.

Optional PCB-only version (without a metal base plate) available.

More Information

PSU CUSTOMISATION

The BF560-24/E can be optionally customised to suit your exact requirements using a BF423 configurator and PC. Configurable parameters include Float voltage temperature compensation; Battery charge rate (mA); Battery impedance; Configurable Input/Output settings.

PSU STATUS LED (located on the PSU PCB)

- 1 flash - Mains Failure.
- 2 flashes - Battery Voltage Low.
- 3 flashes - Battery Voltage Critical.
- 4 flashes - Charger Failure.



5 flashes = Charger OK (Battery is either actively charging, or in float charge).

6 flashes = No Batteries Fitted (indicating DIP Switch 4 position).

7 flashes = Battery Resistance Fault (Level set by DIP Switch 2 position).

8 flashes = Output Over Voltage.

BATTERY FAULT MONITORING

The BF560-24/E monitors battery resistance to the requirements of EN54-4/A2. The fault threshold is directly related to the ability of the battery to deliver the rated current to the load. For example, batteries stored uncharged for long periods, during shipment and/or distribution, degrade leading to increased internal resistance. If a degraded battery is fitted, a fault will be shown by the PSU as mandated by EN54-4/A2.

DATA PORT

Data on the BF560-24/E's status can be extracted from the PSU's bi-directional data port. The data available includes thermistor measurements; battery terminal voltage; system voltage at load terminals; battery charge current; load current; battery impedance and ASCII text string status messages. Extracting this data requires additional equipment and permissions - contact C-TEC for details.

Technical Specifications

Approvals/certifications	Includes the same electronics as our EN54-4/A2 certified BF560-24/E PSU
Compatibility	• ** Full compliance with all relevant standards must be checked by the responsible person with the caged PSU installed in a suitable enclosure **
Application/operation	A caged Mains to regulated DC switch-mode/digital hybrid power supply providing 1.5A @ 24V DC. It includes a single pole volt-free changeover relay that switches for any fault condition. User customisable via a BF423 Configurator.
Mains supply	230V 50/60Hz.
Mains rated current	400mA r.m.s.
Total output current limited to	1.5A (Max. output current).
Output	I max.a: 1.3A or 0.8A selectable. A load greater than I max.a will temporarily reduce batt. charging. I max.b: 1.5A, charging turned off via CONN6. Output is also customisable via a BF423 Configurator*.
Battery charge capacity	2Ah up to 12Ah (battery charged to 80% capacity in 24hrs). Output is customisable via a BF423 Configurator to suit different manufacturers' batteries*.
Max battery size and type	Up to 12Ah VRLA dependent on the size of the enclosure the BF560-24/E is mounted in.
Indicators	Supply Present (Green); General Fault (Amber); Auxiliary Fault (Amber); Hazardous Voltages Present (Red).
Connections	Mains Input (CONN1); Supply Output (CONN3); Battery Input (CONN3); Fault Relay (CONN4); Charge Off Input (CONN5). Battery Charge Current Link (PLK1); Battery Monitoring On/Off Link (PLK2); High Temp. Output (PL2).
Expansion connections	A remote thermistor can be connected via PL3 terminals.
Product dimensions (mm)	103mm W x 173mm H x 53mm D.
Construction & finish	Zintec base, polycarbonate cover.
IP Rating	Dependent on mounting enclosure.
Weight	324g (without batteries).
Operating conditions/temperature	-5°C to +40°C. Max relative humidity: 95%.
Notes	• Parameters configurable via a BF423 configurator are: Float voltage temp. compensation; Batt. charge rate (mA); Batt. impedance; Configurable Input/Output settings.



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