

# 5 SERIES **EN54** Power Supplies

C-TEC's next generation 5 Series 12V and 24V digital hybrid switch-mode power supplies are among the most powerful and versatile on the market.

Third-party certified to EN54-4/A2 by the LPCB and VdS with AFNOR certification pending, they are ideal for powering beam detectors, autodial communicators, aspirating

smoke detectors, auto-open vent systems, auxiliary sounder systems or any other device performing a mandatory function of a fire alarm system.

Five versions are available, four 24V models rated at 1.5A (two types), 3A and 5A, and a 12V 2A model which has an optional STU mounting plate for housing digital communicators or STUs.

All models feature a plastic protective cover on their internal PCBs to guard against live parts offering full compliance with EN62368-1 (Information and Communication Technology Equipment - Safety Requirements).

With additional features such as deep discharge battery protection, a single pole volt-free changeover relay, a multi-function fault status LED, battery impedance monitoring, dipswitch-selectable battery charging and more, it's no wonder they're fast becoming the power supplies of choice for installers across the globe.















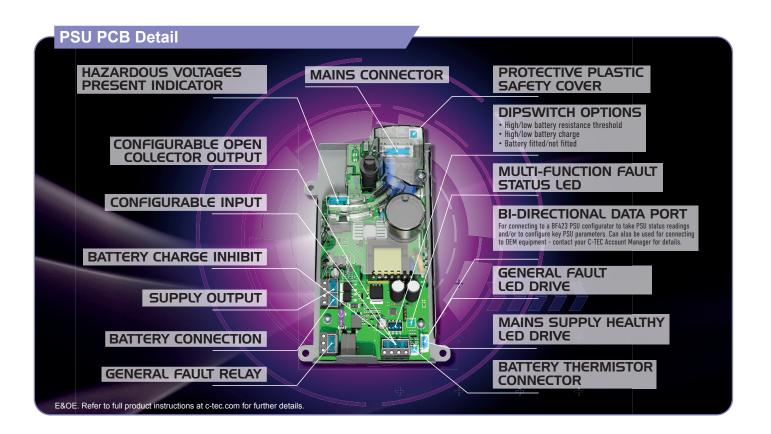
The operation of our 5 Series PSUs can be customised to suit your exact requirements using a BF423 configurator and PC. See page 6 for details.



#### **Key Features**

- Plastic cover on PSU PCB guards against touching live parts
- Low current consumption
- Deep discharge battery protection and EN54-4/A2 compliant reporting of battery impedance faults
- Single-pole volt-free changeover relay that switches for any fault condition
- Three PSU fascia indicators supply present, general fault & aux.
- Internal multi-function Fault Status indicator that can show:
  - Mains Failure
  - Battery Voltage Critical
  - Charger OK
  - Battery Resistance Fault
- Battery Voltage Low
- Charger Failure
- No Batteries Fitted
- Output Over Voltage
- Dipswitch selectable battery charging capacity.
  See tech specs for details
- ▶ Environmentally-friendly charging circuit
- Optional STU mounting plate (for 12V 2A model only)
- Improved on-board temperature sensor with optional remote sensor.

- All boxed versions third-party certified to EN54-4:1996
  + A1:2002 + A2:2006 by the LPCB & VdS (AFNOR approval pending).
- Electronic functions comply with EN50131-6 grades 1-4 for security applications.
- Meets the requirements of EN62368-1 (Information and Communication Technology Equipment - Safety Requirements).
- Can be optionally customised to suit your exact requirements using a BF423 configurator & PC. Configurable parameters include float voltage temperature compensation, battery charge rate (mA), battery impedance and configurable Input/Output settings.
- Bi-directional serial data port available for use with OEM equipment available data 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.
- ▶ Encased 'PCB-only' PSUs with exactly the same electronics as our EN54 certified PSUs also available.



## 24V 1.5A EN54 Power Supplies

#### 24V 1.5A EN54-4/A2 Switch Mode Power Supply Unit

BF560-24









Mains supply voltage (AC)	230V 50/60Hz, rated current 0.4A r.m.s
Max. battery size/type determined by cabinet size	2 x 12V 3.2Ah VRLA
Battery charge capacity	2Ah up to 12Ah
Output I.max.a:	1.3A or 0.8A selectable. A load greater than I.max.a will temporarily reduce battery charging
Output I.max.b:	1.5A, charging turned off via CONN6. Output is also customisable via a BF423 configurator - see page 6
Product customisation:	Can be customised to suit your exact requirements using a BF423 configurator & PC
Enclosure size (W x H x D):	380 x 235 x 96 mm
Weight	1.55kg without battery
IP Rating	IP30 (indoor use only)
Physical attributes:	Plastic lid and base

#### 24V 1.5A EN54-4/A2 Switch Mode Power Supply Unit

BF562-1









Mains supply voltage (AC)	230V 50/60Hz, rated current 0.4A r.m.s
Max. battery size/type determined by cabinet size	2 x 17Ah VRLA
Battery charge capacity	2Ah to 17Ah
Output I.max.a:	1A or 0.5A selectable. A load greater than I.max.a will temporarily reduce battery charging.
Output I.max.b:	1.5A, charging turned off via CONN6. Output is also customisable via a BF423 configurator - see page 6
Product customisation	Can be customised to suit your exact requirements using a BF423 configurator & PC.
Enclosure size (W x H x D):	404 x 404 x 110 mm
Weight	5kg without battery
IP Rating	IP30 (indoor use only)
Physical attributes:	Metal lid and base

#### 24V 1.5A Encased Switch Mode Power Supply PCB

BF560-24/E



An encased 24V 1.5A PSU PCB that includes the same electronics as our boxed BF560-24 and BF562-1 PSUs. It is supplied on a metal base plate to facilitate straightforward mounting inside third-party OEM enclosures. Measures 174 H x112 W x 50 D mm

## 24V 3A & 5A EN54 Power Supplies

#### 24V 3A EN54-4 /A2 Switch Mode Power Supply Unit

BF562-3





Mains supply voltage (AC)	230V 50/60Hz, rated current 0.8A r.m.s
Max. battery size/type determined by cabinet size	2 x 12V 17Ah VRLA
Battery charge capacity	2Ah to 17Ah
Output I.max.a:	2.6A or 2A selectable. A load greater than I.max.a will temporarily reduce battery charging
Output I.max.b:	3 A, charging turned off via CONN6. Output is also customisable via a BF423 configurator - see page 6
Product customisation	Can be customised to suit your exact requirements using a BF423 configurator & PC
Enclosure size (W x H x D):	404 x 404 x 110 mm
Weight	5kg without battery
IP Rating	IP30 (indoor use only)
Physical attributes:	Metal lid and base

#### 24V 3A Encased Switch Mode Power Supply PCB

BF562-3/E



An encased 24V 3A PSU PCB that includes the same electronics as our boxed BF562-3 PSU. It is supplied on a metal base plate to facilitate straightforward mounting inside third-party 0EM enclosures. Measures 143~H~x~173~W~x~66~D~mm

#### 24V 5A EN54-4/A2 Switch Mode Power Supply Unit

BF562-5









Mains supply voltage (AC)	230V 50/60Hz, rated current 1.3A r.m.s
Max. battery size/type determined by cabinet size	2 x 12V 17Ah VRLA
Battery charge capacity	4Ah to 17Ah
Output I.max.a:	4.6A or 4A selectable. A load greater than I.max.a will temporarily reduce battery charging
Output I.max.b:	5A, charging turned off via CONN6. Output is also customisable via a BF423 configurator - see page 6
Product customisation	Can be customised to suit your exact requirements using a BF423 configurator & PC
Enclosure size (W x H x D):	404 x 404 x 110 mm
Weight	5kg without battery
IP Rating	IP30 (indoor use only)
Physical attributes	Metal lid and base

#### 24V 5A Encased Switch Mode Power Supply PCB

BF562-5/E



An encased 24V 5A PSU PCB that includes the same electronics as our boxed BF562-5 PSU. It is supplied on a metal base plate to facilitate straightforward mounting inside third-party 0EM enclosures. Measures 143~H~x~173~W~x~66~D~mm

### 12V 2A EN54 Power Supplies

#### 12V 2A EN54-4/A2 Switch Mode Power Supply Unit

BF560-12

The BF560-12 is designed to combat an area of fire alarm system non-compliance that is often overlooked - their connection to remote monitoring centres via 12V security system STUs or autodiallers that typically only offer 8 hours standby, are not connected to a dedicated mains supply and do not include the features demanded by EN54-4 (such as battery impedance monitoring, temperature compensated charging and third-party EN54 certification). The BF560-12 addresses these issues and more. An optional STU Mounting Plate (order code BF360SP, right) is also available for mounting inside the BF560-12.









Mains supply voltage (AC)	230V 50/60Hz, rated current 0.3A r.m.s
Max. battery size/type determined by cabinet size:	1 x 12V 3.2Ah (with STU plate) 1 x 12V 7Ah (without STU plate)
Battery charge capacity	2Ah to 12Ah
Output I.max.a:	1.8A or 1.3A selectable. (1.8A not approved to EN54-4/A2). A load greater than I.max.a will temporarily reduce battery charging
Output I.max.b:	2A, charging turned off via CONN6. Output is also customisable via a BF423 configurator - see page 6
Product customisation	Can be customised to suit your exact requirements using a BF423 configurator & PC
Enclosure size (W x H x D):	380 x 235 x 96 mm
Weight	1.55kg without battery
IP Rating	IP30 (indoor use only)
Physical attributes	Plastic lid and base

#### 12V 2A Encased Switch Mode Power Supply PCB

BF560-12/E



An encased 12V 2A PSU PCB that includes the same electronics as our boxed BF560-12 PSU. It is supplied on a metal base plate to facilitate straightforward mounting inside third-party 0EM enclosures. Measures 174 H x112 W x 50 D mm

#### 5 Series Power Supply Configurator\*

BF423



C-TEC's 5 Series power supplies can be optionally customised to suit a site's requirements using a BF423 Configurator & a PC (Windows XP/Vista/7/8/10 compatible).

Configurable parameters include float voltage temperature compensation, battery charge rate (mA), battery impedance, Input/Output settings and more.

The software can also be used to obtain status and maintenance information relating to the condition of the PSU and its standby batteries (if fitted).

All relevant connection leads are supplied.

\*Note that changing the PSU's parameters with a Configurator is outside the scope of EN54-4/A2.

## **Miscellaneous** Power Supplies

## As well as our EN54/2 certified power supplies the following items are also available from C-TEC



BF375P

24V 250MA UNREGULATED DOOR RELEASE PSU



RE375M

24V 1A REGULATED PSU



RF377

24V 2A UNREGULATED DOOR RELEASE PSU



#### BF375PE

24V 250MA UNREGULATED DOOR RELEASE PSU C/W DETECTOR CIRCUIT



RE375DEK

24V 250MA DOUBLE GANG AUTOMATIC DOOR RELEASE SYSTEM



NC925B1

12V 1A WHITE BOXED PSU

### C-TEC don't just make power supplies!

Established in 1981, C-TEC is a leading UK independent manufacturer of quality life safety electronic equipment.

Trading in over 70 countries and with product certifications and factory process approvals from five different test bodies, whatever your life safety system requirements, You're Safe with C-TEC. In addition to the power supplies detailed in this brochure, we also manufacture the following:-





### You're Safe with C-TEC

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#### **Available from**

