

# PSU

range



## EN54-4 power supplies



*You're safe with*



EN54-4 power supplies

# PSU

r a n g e

Fire legislation in most European countries now states any power supply performing a mandatory function of a fire alarm system must comply with EN54-4/A2. As such, any power supply controlling a beam detector, auto-dial communicator, aspirating smoke detector, auto-open ventilation system or auxiliary sounder system must comply with this standard.

C-TEC's range of cost-effective, third-party approved EN54-4 switch-mode power supplies include a host of user and installer friendly features, as detailed below.

Five boxed 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 auto-dial applications. 'Caged' and 'PCB only' versions are also available for use with OEM equipment.

All boxed versions are certified to EN54-4:1997/A2:2006 by the VdS or LPCB and are therefore fully compliant with all relevant European directives including the EMC, LVD and CPD (Construction Products) directives.



## Features



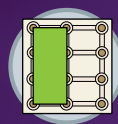
Low current consumption



Environmentally-friendly charging circuit - dissipates just 0.35W compared to the industry norm of around 2.55W.



Deep discharge battery protection and EN54-4/A2 compliant reporting of battery impedance faults



Optional STU mounting plate (for 12V 2A model only, see page 3 for details)



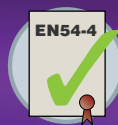
Single-pole volt-free changeover relay that switches for any fault condition



Optional high-temperature output (activates when internal box temperature reaches 55°C, for connection to ventilation fans, etc.)



Three LED indicators - supply present, general fault & aux. fault (for optional connection to third-party equipment)



All boxed versions third-party certified to EN54-4 (1997/A2:2006) by the VdS or LPCB



Link selectable battery charging capacity for even greater flexibility



Optional 'Caged' and 'PCB only' PSUs also available with exactly the same electronics as our certified PSUs (PSUs with higher charging capacities available to special order)

### BF360-24

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



Max. physical battery size: 2 x 12V 3 Ah  
 Standard battery charging capacity: 2 Ah to 12 Ah  
 Output option A: 1.3A DC current, 0.2A charge current  
 Output option B: 0.8A DC current, 0.7A charge current  
 Enclosure size (WxHxD): 380 x 235 x 96mm  
 Physical attributes: Plastic lid and base



G208156



0786-CPD-20672

### BF362-1

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



Max. physical battery size: 2 x 12V 19 Ah  
 Standard battery charging capacity: 2.5 Ah to 19 Ah  
 Output option A: 1A DC current, 0.5A charge current  
 Output option B: 0.5A DC current, 1A charge current  
 Enclosure size (WxHxD): 404 x 404 x 110mm  
 Physical attributes: Metal lid and base



G209196



0786-CPD-20681

### BF362-3

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



Max. physical battery size: 2 x 12V 12 Ah  
 Standard battery charging capacity: 7 Ah to 12 Ah  
 Output: 2.3A DC current, 0.7A charge current  
 Enclosure size (WxHxD): 404 x 404 x 110mm  
 Physical attributes: Metal lid and base



PENDING



CPD PENDING

### BF362-5

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



Max. physical battery size: 2 x 12V 18 Ah  
 Standard battery charging capacity: 7 Ah to 18 Ah  
 Output: 4A DC current, 1A charge current  
 Enclosure size (WxHxD): 404 x 404 x 110mm  
 Physical attributes: Metal lid and base



G209197



0786-CPD-20682

### BF360-12

#### 12V 2A EN54-4 Switch Mode Power Supply (with optional STU mounting plate)

The BF360-12 is specifically 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.

At present, fire alarm systems that require such monitoring are typically connected to 12V security system STUs already fitted on site. Unfortunately, the power supplies used to power these STUs normally 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, independently audited Factory Process Control, CPD compliance, etc). The BF360-12 aims to make this practice obsolete by allowing the use of 12V STUs (which are typically 25% cheaper than 24V STUs) with a cost-effective EN54-4 compliant PSU thereby facilitating compliance with BS5839-1 (or European equivalents).

An optional STU mounting plate is also available (order code BF360SP).



The world's first  
 12V EN54-4/A2 third party  
 certified boxed PSU

Max. physical battery size (with STU plate): 1 x 12V 3 Ah  
 Max. physical battery size (no STU plate): 1 x 12V 7 Ah  
 Standard battery charging capacity: 2 Ah to 12 Ah  
 Output option A: 1.8A DC current, 0.2A charge current  
 Output option B: 1.3A DC current, 0.7A charge current  
 Enclosure size (WxHxD): 380 x 235 x 96mm  
 Physical attributes: Plastic lid and base



G208155



0786-CPD-20671

# EN54-4 PSU Range Technical Specifications

Power Supply Specification	BF360-12 12V 2A	BF360-24 24V 1.5A	BF362-1 24V 1.5A	BF362-3 24V 3A	BF362-5 24V 5A
Mains supply voltage	230V ac 50/60 Hz	230V ac 50/60 Hz	230V ac 50/60 Hz	230V ac 50/60 Hz	230V ac 50/60 Hz
Max. continuous output current (incl.charging)	2A	1.5A	1.5A	3A	5A
Output option A (link not fitted)	1.8A DC current, 0.2A charge current	1.3A DC current, 0.2A charge current	1A DC current, 0.5A charge current	Not applicable	Not applicable
Output option B (link fitted)	1.3A DC current 0.7A charge current	0.8A DC current 0.7A charge current	0.5A DC current 1A charge current	2.3A DC current 0.7A charge current	4A DC current 1A charge current
VdS tested with VRLA batteries up to	1 x 12V 3Ah (with STU plate); 7Ah (without)	2 x 12V 3.4Ah	2 x 12V 19Ah	Pending	2 x 12V 18Ah
Minimum VRLA battery size	1 x 12V 2Ah	2 x 12V 2Ah	2 x 12V 2.5Ah	2 x 12V 7Ah	2 x 12V 7Ah
Maximum VRLA battery size	1 x 12V 3.4Ah (with STU plate); 7Ah (without)	2 x 12V 3.4Ah	2 x 12V 19Ah	2 x 12V 12Ah	2 x 12V 18Ah
Batteries monitored for disconnection & failure	Yes	Yes	Yes	Yes	Yes
Batteries protected against deep discharge	Yes	Yes	Yes	Yes	Yes
Quiescent current on mains fail	12mA approx	12mA approx	12mA approx	12mA approx	12mA approx

Fuses	BF360-12 12V 2A	BF360-24 24V 1.5A	BF362-1 24V 1.5A	BF362-3 24V 3A	BF362-5 24V 5A
Mains supply fuse (F1):	1A HRC 20mm ceramic	1A HRC 20mm ceramic	1A HRC 20mm ceramic	1A HRC 20mm ceramic	2A HRC 20mm ceramic
Battery fuse (F2):	3.15A F 20mm glass	3.15A F 20mm glass	3.15A F 20mm glass	5A F 20mm glass	5A F 20mm glass

Power Supply PCB Connections	BF360-12 12V 2A	BF360-24 24V 1.5A	BF362-1 24V 1.5A	BF362-3 24V 3A	BF362-5 24V 5A
Mains input	Three mains supply input terminals, Live, Neutral and Earth				
Supply Output	12V dc	24V dc	24V dc	24V dc	24V dc
Battery Input	Connection to the VRLA battery				
Fault Relay	Isolated relay output rated 1A@50V				
Charge off Input	Disablement of the battery charge, volt-free short to OV				
Battery charge current (link not fitted)	2 to 3.5Ah (0.2A)	2 to 3.5Ah (0.2A)	2.5 to 7Ah (0.5A)	Not applicable	Not applicable
Battery charge current (link fitted)	3.5 to 12Ah (0.7A)	3.5 to 12Ah (0.7A)	7 to 19Ah (1A)	7 to 12Ah (0.7A)	7 to 18Ah (1A)
Battery monitoring link	Fitted if batteries not used				
Display connector	4-way connector from power supply PCB to display card				
High temperature output	Operates at approx. 55°C internal box temp, 200mA @ 30V max. current sink				

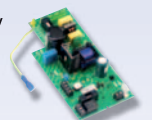
Indicators	BF360-12 12V 2A	BF360-24 24V 1.5A	BF362-1 24V 1.5A	BF362-3 24V 3A	BF362-5 24V 5A
Supply present indicator (green)	Indicates the supply is present at the output				
Fault indicator (amber)	Indicates a current fault on the PSU. 10 to 30V, 6 to 7mA.				
Auxiliary fault indicator (amber)	Indicates a fault with an auxiliary unit (user definable) 10 to 30V, 6 to 7mA		Indicates a fault with an auxiliary unit (user definable) 19 to 30V, 3.5 to 6mA		
Power supply PCB (LED) - internal	Hazardous Voltages Present (red)				

Physical attributes	BF360-12 12V 2A	BF360-24 24V 1.5A	BF362-1 24V 1.5A	BF362-3 24V 3A	BF362-5 24V 5A
Dimensions (W x H x D) mm:	380 x 235 x 96	380 x 235 x 96	404 x 404 x 110	404 x 404 x 110	404 x 404 x 110
Weight (without batteries):	1.55kg	1.55kg	5kg	5kg	5kg
Construction	Plastic lid and base	Plastic lid and base	Metal lid and base	Metal lid and base	Metal lid and base
Enclosure finish	RAL7035 textured	RAL7035 textured	RAL7035 textured	RAL7035 textured	RAL7035 textured
IP rating	IP30	IP30	IP30	IP30	IP30

Certification details	BF360-12 12V 2A	BF360-24 24V 1.5A	BF362-1 24V 1.5A	BF362-3 24V 3A	BF362-5 24V 5A
Approval number	VdS (G208155)	VdS (G208156)	VdS (G209196)	LPCB/VdS Pending	VdS (G209197)
EC (CPD) Certificate of Conformity number	0786-CPD-20671	0786-CPD-20672	0786-CPD-20891	CPD pending	0786-CPD-20892

Order Codes	24V EN54-4 BOXED POWER SUPPLIES AND ANCILLARIES	EN54-4 'CAGED' POWER SUPPLIES	EN54-4 'PCB-ONLY' POWER SUPPLIES
BF360-24	24V 1.5A EN54-4 Boxed PSU (plastic enclosure)	BF360-24/E	24V 1.5A EN54-4 Caged Power Supply
BF362-1	24V 1.5A EN54-4 Boxed PSU (metal enclosure)	BF362-3/E	24V 3A EN54-4 Caged Power Supply
BF362-3	24V 3A EN54-4 Boxed PSU (metal enclosure)	BF362-5/E	24V 5A EN54-4 Caged Power Supply
BF362-5	24V 5A EN54-4 Boxed PSU (metal enclosure)	BF360-12/E	12V 2A EN54-4 Caged Power Supply
BF360-12	12V 2A EN54-4 Boxed PSU (plastic enclosure)		
BF360SP	Optional STU mounting plate for BF360-12		

*For power supplies with a larger battery charging capacity than those listed, i.e. 12V 2A PSUs with up to 30Ah capacity, 24V 1.5A PSUs with up to 22Ah capacity, 24V 3A PSUs with up to 45Ah capacity and 24V 5A PSUs with up to 52Ah capacity, please contact our Sales Desk.*



Quality System Certificate No: 176  
Assessed to ISO9001 : 2000



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