

PSU

r a n g e



EN54-4
power supplies



You're safe with



EN54-4 power supplies

PSU

range

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



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



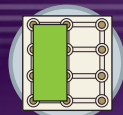
Three LED indicators - supply present, general fault & aux. fault (for optional connection to third-party equipment)



Link selectable battery charging capacity for even greater flexibility



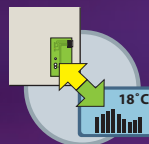
Environmentally-friendly charging circuit - dissipates just 0.35W compared to the industry norm of around 2.55W.



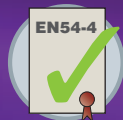
Optional STU mounting plate (for 12V 2A model only)



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



Optional handheld status reader (shows internal temperature, battery resistance, charging voltage and output voltage). Serial data link also provided for OEM equipment.



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



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: 1 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-20881

BF362-3**24V 3A EN54-4 Switch Mode Power Supply**

Max. physical battery size: 2 x 12V 17 Ah

Standard battery charging capacity: 1 Ah to 17 Ah

Output option A: 2.8A DC current, 0.2A charge current

Output option B: 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: 1.6 Ah to 18 Ah

Output option A: 4.65A DC current, 0.35A charge current

Output option B: 4A DC current, 1A charge current

Enclosure size (WxHxD): 404 x 404 x 110mm

Physical attributes: Metal lid and base



G209197



0786-CPD-20882

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: 1 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	1.8A DC current, 0.2A charge current	1.3A DC current, 0.2A charge current	1A DC current, 0.5A charge current	2.8A DC current, 0.2A charge current	4.65A DC current, 0.35A charge current
Output option B	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
Standard battery charge capacity	1Ah to 12Ah	1Ah to 12Ah	2.5Ah to 19Ah	1Ah to 17Ah	1.6Ah to 18Ah
Special order battery charge capacity	up to 30Ah	up to 22Ah	up to 22Ah	up to 45Ah	up to 52Ah
Max VRLA battery size by cabinet size	1 x 12V 3Ah (with STU plate) 7Ah (without)	2 x 12V 3Ah	2 x 12V 19Ah	2 x 12V 17Ah	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

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

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	Disabling of the battery charge, volt-free short to OV				
Battery charge current link (not fitted)	1 to 3.5Ah (0.2A)	1 to 3.5Ah (0.2A)	2.5 to 7Ah (0.5A)	1 to 3.5Ah (0.2A)	1.6 to 5.5Ah (0.333A)
Battery charge current link (fitted)	3.5 to 12Ah (0.7A)	3.5 to 12Ah (0.7A)	7 to 19Ah (1A)	3.5 to 17Ah (0.7A)	5.5 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

Panel indicators (LEDs)	Supply present (green) - indicates the supply is present at the output Fault (amber) - indicates a current fault on the PSU Auxiliary Fault (amber) - indicates a fault with an auxiliary unit (user definable)
Power supply PCB (LED) - internal	Hazardous Voltages Present (red)

Physical attributes

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

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

BF360-24	24V 1.5A EN54-4 Boxed PSU (plastic enclosure)
BF362-1	24V 1.5A EN54-5 Boxed PSU (metal enclosure)
BF362-3	24V 3A EN54-4 Boxed PSU (metal enclosure)
BF362-5	24V 5A EN54-4 Boxed PSU (metal enclosure)

12V EN54-4 BOXED POWER SUPPLIES AND ANCILLARIES

BF360-12	12V 2A EN54-4 Boxed PSU (plastic enclosure)
BF360SP	Optional STU mounting plate for BF360-12

POWER SUPPLY STATUS READER

BF360SR	Handheld PSU status reader
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EN54-4 'CAGED' POWER SUPPLIES

BF360-24/E	24V 1.5A EN54-4 Caged Power Supply
BF362-3/E	24V 3A EN54-4 Caged Power Supply
BF362-5/E	24V 5A EN54-4 Caged Power Supply
BF360-12/E	12V 2A EN54-4 Caged Power Supply



EN54-4 'PCB-ONLY' POWER SUPPLIES

BF360-24/C	24V 1.5A EN54-4 PCB-Only Power Supply
BF362-3/C	24V 3A EN54-4 PCB-Only Power Supply
BF362-5/C	24V 5A EN54-4 PCB-Only Power Supply
BF360-12/C	12V 2A EN54-4 PCB-Only Power Supply



For power supplies with a larger charging capacity than those listed, please contact our Sales Desk



Quality System Certificate No: 176
Assessed to ISO9001 : 2000



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