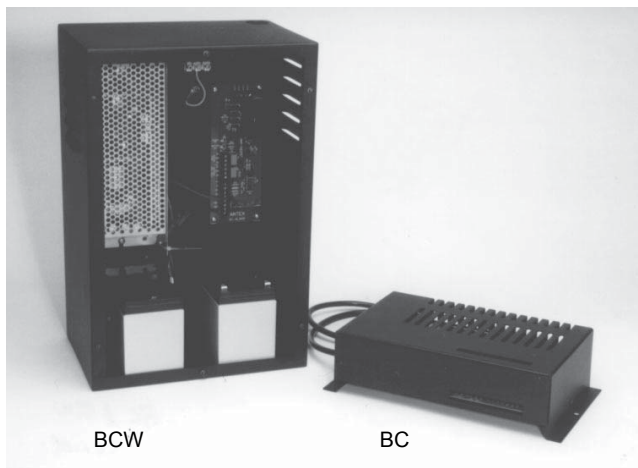


## BC / BCW SERIES

Battery Chargers 12V & 24V: 75 ~ 150 Watts



### Specifications

<b>Input Voltage</b>	90 ~264VAC
<b>Input Frequency</b>	47 ~ 63Hz
<b>Input Current</b> ( 115 / 230V )	75W: 1.0 / 0.5A 100W: 1.3 / 0.65A 150W: 1.9 / 0.95A
<b>Efficiency</b>	Model dependent typically 84-90%
<b>Output Power</b>	75 ~ 150 watts
<b>Output Voltage</b>	Refer to table
<b>Harmonics</b>	EN61000-3-2
<b>Ripple &amp; Noise</b>	150mV pk-pk
<b>Temp. Coefficient</b>	0.02% per °C
<b>Overload Protection</b>	Charger Module: Constant current with auto recovery, Battery is Fused
<b>Overvoltage Protection</b>	YES. Recycle input power to power on.
<b>Load/Line Regulation</b>	120~150mv pk-pk
<b>Parallel Operation</b>	NO ( only for N+1 Redundancy )
<b>Operating Temp.</b>	-10°C to +70°C. Derate above 50°C @ 2.5% per °C.
<b>Humidity</b>	30 – 90% RH Non Condensing
<b>Cooling</b>	Convection cooled
<b>Isolation Voltage</b>	Input-Output: 3Kvac, Input-Frame Ground: 2kVAC Output-Frame Ground: 500VAC.
<b>Vibration</b>	10-55Hz ( 1min sweep ) 16.6m/s <sup>2</sup> constant X,Y,Z 1hr.
<b>Safety:</b>	UL60950-1, EN60950-1, EN50178 approval (Internal Modules only)
<b>EMI</b>	Radiated : EN55011-A Conducted : EN55022-A
<b>Immunity</b>	IEC61000-4-2
<b>Connector</b>	Input : Mains Power Cord Output : Barrier strip terminal block
<b>Alarms</b>	<ul style="list-style-type: none"> <li>• Power Fail ( AC / Rectifier Fail )</li> <li>• Battery Fail</li> </ul> ( Battery Fail only operates on loss of AC power)
<b>Indicators</b>	<ul style="list-style-type: none"> <li>• Power Fail – LED</li> <li>• Battery Fail - LED</li> </ul>
<b>Dimensions</b>	BC Series: 259 x 148 x 70mm ( 1 ~ 1.5kg ) BCW Series: 248 x 166 x 361mm ( 3 ~ 5kg )

### Features

- Universal input 90 - 264VAC
- Three power levels 75, 100 and 150 watts
- 12V & 24V systems
- Convection cooled – No fans
- Power Fail & Battery Fail alarms.
- Output voltage adjustment
- Short circuit and OVP protection
- Battery fuse protection
- Wall mount enclosure option - **BCW models**
- Low Volt Disconnection option
- DC OK Led
- MTBF > 210,000hrs

### Description

The **BC & BCW series battery chargers** are designed for powering DC loads for battery back-up applications and available in 12V and 24V systems.

They are available in two styles.

- **BC** for panel mounting with AC Power Cord
- **BCW** designed for wall mounting and the option to hold batteries. 2 x 7AH or 2 x 12AH batteries.

The units provide two alarms via voltage free contacts, which can be used for remote monitoring.

The internal modules used are a mature power supply module that have proven extra reliable over 20 years in the field.

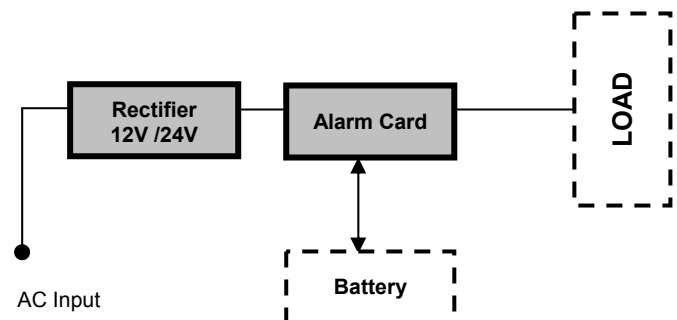


Fig 1: Block Diagram.

## BC / BCW SERIES

Battery Chargers 12V & 24V: 75 ~ 150 Watts

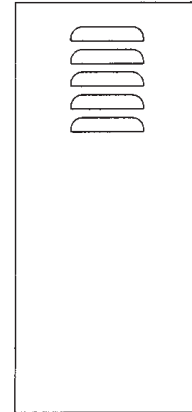
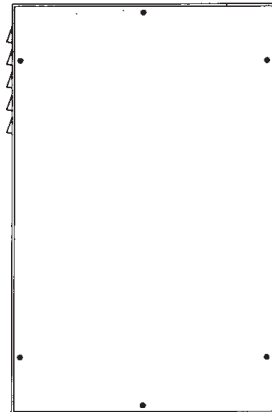
Model	Output			Power W	Case
	Nom V	Float V	A		
BC75-12	12V	13.8V	5A	75W	Panel Mount
BC100-12	12V	13.8V	7A	100W	
BC150-12	12V	13.8V	10.5A	150W	
BC75-24	24V	27.6V	2.7A	75W	
BC100-24	24V	27.6V	3.6A	100W	
BC150-24	24V	27.6V	5.4A	150W	
BCW75-12	12V	13.8V	5A	75W	Wall Mount
BCW100-12	12V	13.8V	7A	100W	
BCW150-12	12V	13.8V	10.5A	150W	
BCW75-24	24V	27.6V	2.7A	75W	
BCW100-24	24V	27.6V	3.6A	100W	
BCW150-24	24V	27.6V	5.4A	150W	

**Note:** Low Battery Disconnect option to avoid low battery discharge:  
Add "-LVD" to above part numbers....BC150-12-LVD

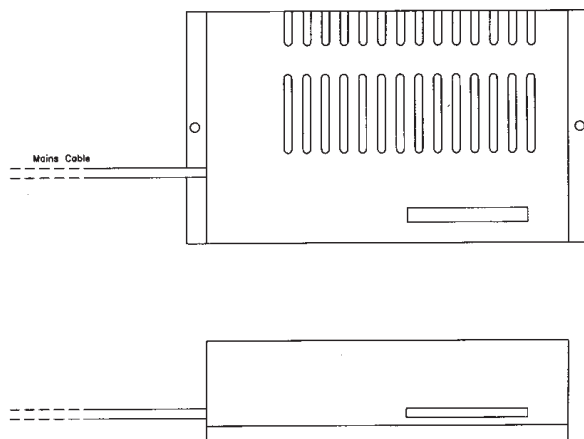
### BCW WALL MOUNTING

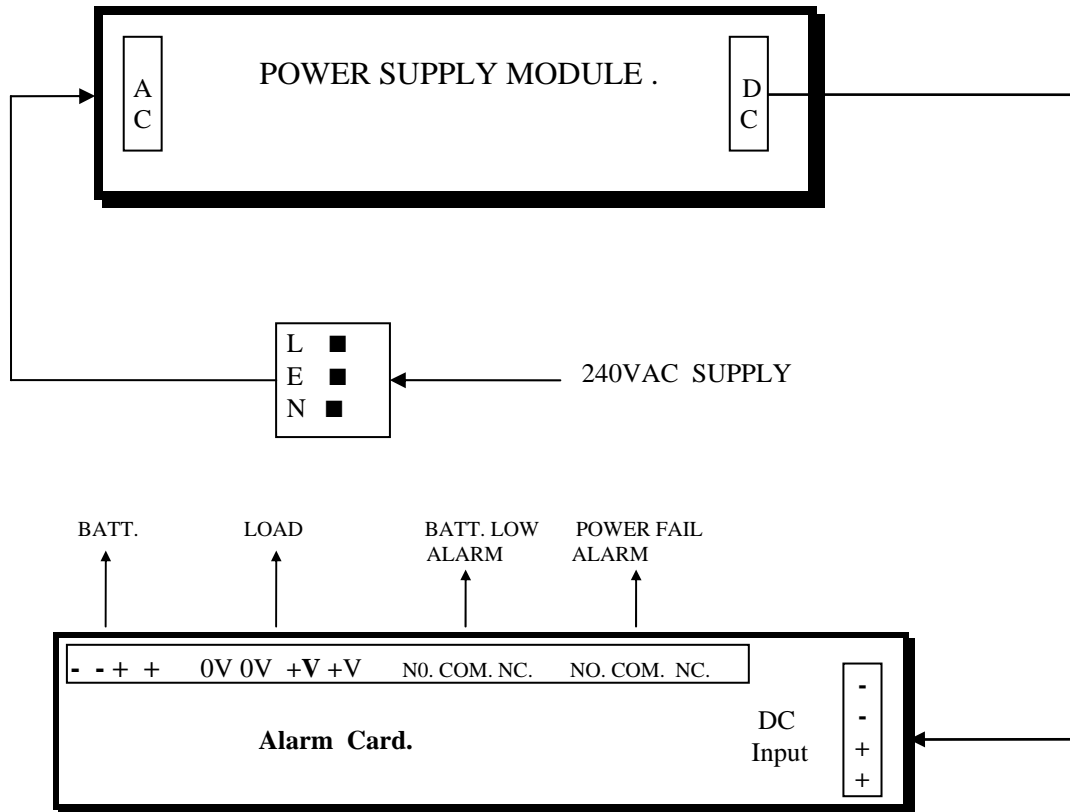
Overall dimensions:  
361 x 248 x 166mm  
Mounting hole diameter:  
6mm  
Mounting hole pitch:  
332 x 205mm

Cable entry is via 25mm holes located in the right hand rear corners of top and bottom



### BC PANEL MOUNT UNIT





### Alarm Conditions:

#### 1. Power Fail Alarm

In the event of a mains failure or rectifier module failure the:

Power OK, LED will go off

Power Fail Relay contacts will change state ( NO. C. NC )

#### 2. Battery Low Alarm

- The Battery Fail Alarm & LED will only operate in the event of Power Fail or Module Failure.

The Battery OK LED, will go off in the event Power Failure & Battery Failure / Low occur.


The Battery Low Relay contacts, will change state ( NO.C.NC) in the event Power Failure & Battery Failure / Low occur.

Battery Fail Alarm will operate at about 11.0 ~11.5V or 22.0 ~23.0V ( 12 / 24V system )

#### 3. Low Volt Disconnect ( LVD Option )

- The low volt disconnect is designed to save the battery from deep discharge and operates at approx 1.6 ~ 1.65V per cell.

- CAUTION:** Link has to be set for 12V or 24V system.

Drawing No.	BC/BCW.Rev 1	 www.amtex.com.au
Issue Date:	2 Mar 1998	
Drawn By:	Peter Mitso	TITLE: <b>BC / BCW Battery Charger Wiring Diagram.</b>