



**BCM Range**  
**12 VOLT** Switched Mode  
 Battery Charger



**Technical data**

Model	BCM1215/2	BCM1230/3	BCM1250/2
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**INPUT**

Input voltage	180V AC – 270V AC		
Input frequency	47Hz to 63Hz		
Input current	1.8 amps. max	3.6 amps. max	6 amps. max
Efficiency	>80% @ full load	>80% @ full load	>80% @ full load

**OUTPUT**

Float voltage	13.8V +/-0.01V DC		
Boost voltage	14.4V +/- 0.1VDC		
Boost – float changeover	When charging current drops to		
	3A +/- 0.75Amps	6A +/- 1.5Amps	10A +/- 2.5Amps
Load regulation	< 0.4% ( 0 to full load )		
Line regulation	< 0.1% ( 180 – 270V AC )		
Charging current @ 12 Volt output	15A +/- 0.8 Amps	30A +/- 1.5 Amps	50A +/- 2.5 Amps
Number of outputs, (Common Negative)	2 ( built in diode splitters, sensing off one output )	3 ( built in diode splitters, sensing off one output )	2 ( built in diode splitters, sensing off one output )
100Hz ripple	< 0.6% RMS		
High frequency ripple	< 1% pk – pk (100kHz)		
High frequency noise	< 3% pk – pk (10MHz bandwidth)		

**GENERAL**

Ambient temperature range	-10°C to +45°C		
Cooling	Convection Cooled	Low speed fan	Variable speed fan
Size : high(h) x wide(w) x deep(d) [mm]	170 x 155 x 65	220 x 170 x 65	350 x 165 x 65
Weight	1.2kg	1.8kg	3kg
Input connections	2m. 3 core mains cable	2m. 3 core mains cable	Standard IEC Inlet
Output connections	3 way screw terminal block for 4mm <sup>2</sup> max cable	4 way screw terminal block for 6mm <sup>2</sup> max cable	4 way screw terminal block for 10mm <sup>2</sup> max cable
Remote sensing facility for positive output	n/a	n/a	Yes

**PROTECTION**

Reversed Battery	Blows an internal fuse
Over-temperature	Unit shuts down if internal heatsink temperature exceeds the normal maximum level. Automatic re-start.
Over-voltage	Unit shuts down if the output voltage exceeds the normal maximum level. Automatic re-start.
Under-voltage	If the battery voltage is less than 5 volts, the average current reduces until the voltage rises to approx 25% of full current rating.
Over-charge	After 4 hrs at boost voltage, the output is switched to the float voltage regardless of charging current