

BCM Range

48 VOLT Switch Mode Battery Charger



Technical data

Model	BCM4812/2	BCM4825/2
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INPUT

Input voltage	180V AC – 270V AC	
Input frequency	47Hz to 63Hz	
Input current	6 amps. max	12 amps. max
Efficiency	>80% @ full load	>80% @ full load

OUTPUT

Float voltage	55.2V +/-0.02V DC	
Boost voltage	57.6V +/- 0.2VDC	
Boost – float changeover	When charging current drops to	
	3A +/- 0.75Amps	5A +/- 1.2Amps
Load regulation	< 0.4% (0 to full load)	
Line regulation	< 0.1% (180 – 270V AC)	
Charging current @ 48 Volt output	12A +/- 2.4 Amps	25A +/- 1.2 Amps
Number of outputs, (Common Negative)	2 (built in diode splitters, sensing off one output)	2 (built in diode splitters, sensing off one output called +M)
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 ⁰ C to +45 ⁰ C	
Cooling	Variable speed fan	Variable speed fan
Size : high(h) x wide(w) x deep(d) [mm]	350 x 165 x 65	350 x 220 x 65
Weight	3kg	5kg
Input connections	Standard IEC Inlet	Standard IEC Inlet
Output connections	4 way screw terminal block for 10mm ² max cable	M6 Studs (+M, +2, common –ve)
Remote sensing facility for positive output	Yes	Yes
Current indication by 5 segment bar graph	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 10 volts, the average current reduces until the voltage rises to approx 25% of full current rating.
Over-charge	After 4 hrs above the float voltage, the output is switched to the float voltage regardless of charging current