

## Features

- Universal input 100-240VAC
- LED Charge Indicators Included
- Approved to UKCA, CE
- LVD & EMC Class B Certified, RoHS & REACH compliant
- 6V Lead Acid 3 Stage Control (Fast/Normal/Float)
- OVP, OCP, OTP & Short Circuit
- Comes with fused UK Mains Lead
- 1A ~ 12A Models Available



Ideal Power's 31ACUU06A Range of 6V Lead Acid Battery Chargers Series are certified to UKCA, CE, RoHS, REACH & EN 62368-1 Standards and comply with the relevant Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

Models	31AC0406A
Input Voltage	90V / 264V Auto Switch - 100-240Vac +/- 10%
Input Frequency	47Hz ~ 63Hz / 50-60Hz +/- 5%
Input Current	1.3~2.6A - 115Vac / 230Vac
Output Max Current	4A (1A~12A Models available)
Output Power	24W
Output Voltage	6.8~7.3V DC
Isolation	Input isolate Chassis : 500M OHM
Battery Application	Lead Acid Battery
LED - Power	Red
LED - Charging	Orange
LED - Fully Charged	Green
DC Cable	1.2M Mount clips
Dimensions	180 x 88 x 47 (LxWxH) mm
Weight	0.8 (Kgs)
MTBF	30,000hrs

Specifications subject to change without notice.

## Applications

⊙ Communication devices	⊙ Power generators	⊙ UPS	⊙ Power Inverters
⊙ Vacuums Pumps	⊙ Sailing boats	⊙ Fork-lift	⊙ Ambulance
⊙ Fire trucks	⊙ Emergency vehicles	⊙ Electrical car & bicycles	⊙ Mobile command centres
⊙ Household items	⊙ Communication Equipment's	⊙ Automobiles	

**Environmental Data**

	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	0		45	°C	
Storage Temperature	0		70	°C	
Operating Humidity	20		90	°C	
Storage Humidity	10		95	°C	

**EMC Emissions (2014/30/EU)**

	Standard	Test Level	Criteria	Notes
Conducted	EN 55032	Pass	B	
Radiated	EN 55032	Pass	B	
Harmonic Current	EN 61000-3-2	Pass	A	
Voltage Flicker	EN61000-3-2	Pass		

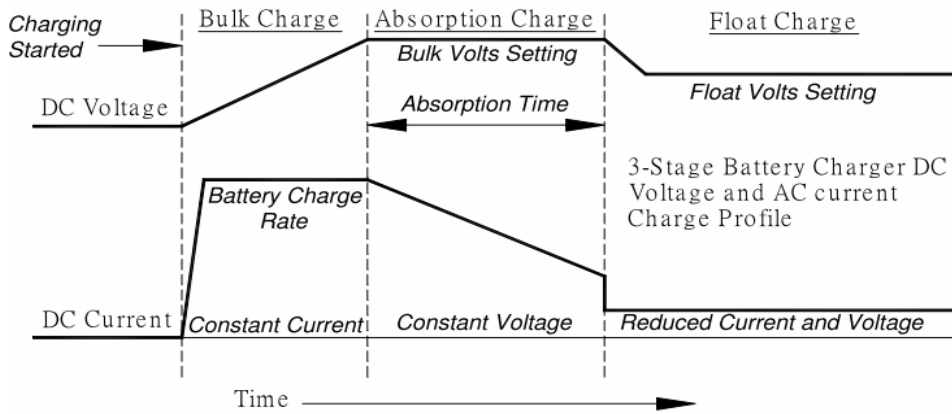
**EMC Immunity (2014/30/EU)**

	Standard	Test Level	Criteria	Notes
EMS	EN 55035	Pass	A	
ESD	IEC 61000-4-2	Pass	B	Contact: +/- 4KV; Air: +/- 8KV
RS	IEC 61000-4-3	Pass	A	Frequency: 80-1000MHz; Field Strength: 3V/M ' 80% AM
EFT	IEC 61000-4-4	Pass	B	1.0KV on input AC power ports
Surges	IEC 61000-4-5	Pass	B	Line to Line: +/- 1KV (peak); Line to F.G: +/- 2KV (peak)
Conducted	IEC 61000-4-6	Pass	A	150KHz to 80MHz 3Vms
PFMF	IEC 61000-4-8	Pass	A	50Hz, 60Hz, 1A/m
Dips and Interruptions	IEC 61000-4-11	Pass	Complies	0%, 70%, 0% of UT

**Safety Approvals**

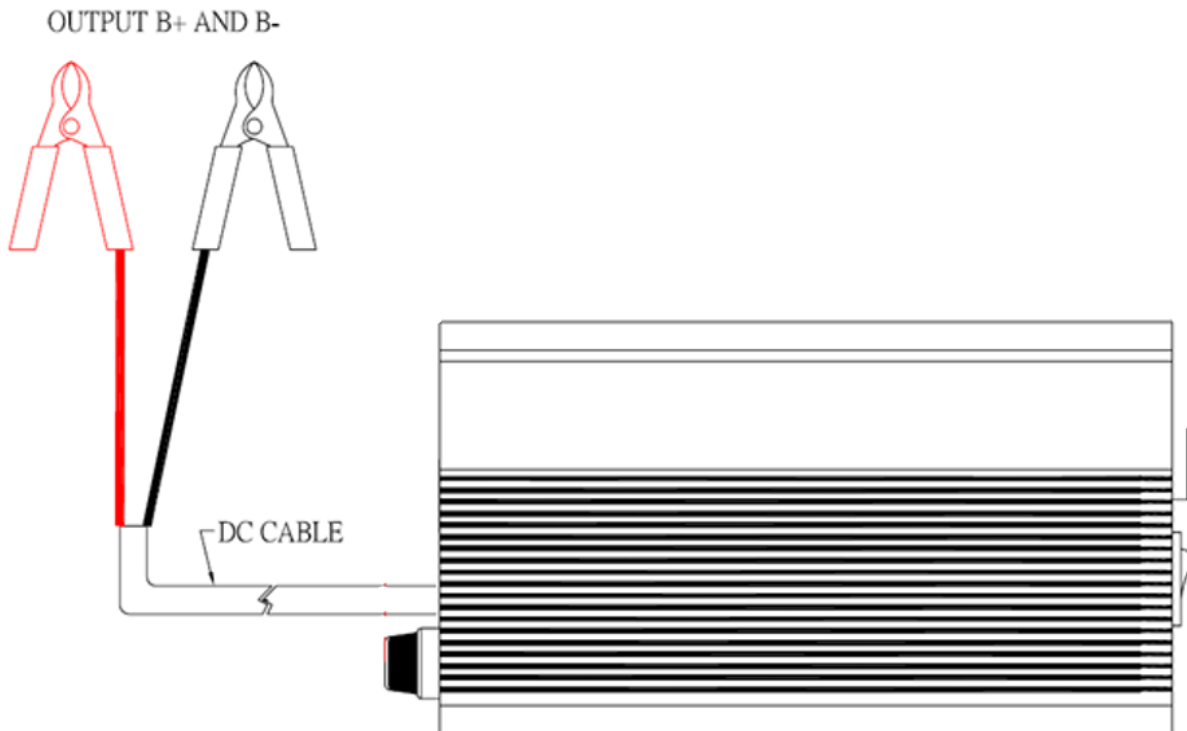
	Safety standard
CE	EMC Directive 2014/30/EU, LVD Directive 2014/35/EU, RoHS Directive RoHS (EU) 2015/863

## Three Steps of Charging & Charge Curve



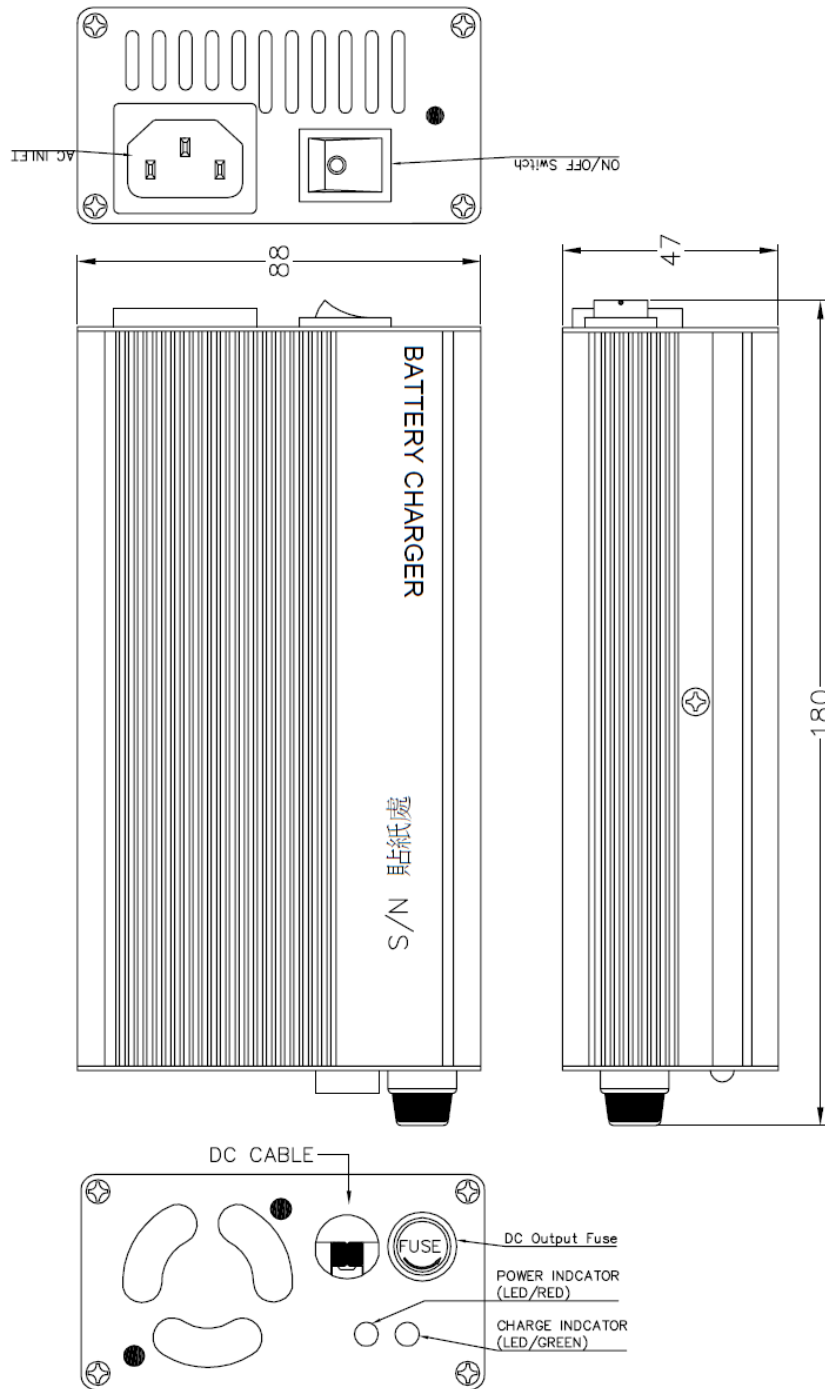
Step 1	Bulk charge – bring batteries to 75% capacity fast. During this stage charging occurs at full power, which means maximum current, until the battery voltage reached the set limit.
Step 2:	Absorption Charge, boost – slow the current flow, adjusting for maximum efficiency and gently topping off batteries. During absorption charging the current decreases as the battery approached full charge.
Step 3	Trickle Charge – for longer period, maintains fully charged batteries without harmful effects of overcharging and cooking. Trickle charge is intended to keep the battery in a fully charged state and compensates for self-discharge. When the current reaches setting point the battery switches to a maintenance charge at a constant voltage. Should the battery be in use and the charge current Subsequently exceed setting point the charger will automatically return to the beginning of the three-step charge characteristic.

## Case Drawing



AC – DC

Case Drawing (continued)



AC - DC