



### Features

- Universal input 100-240VAC
- Output Power: 72-168W
- Aluminium Enclosure
- Approved to UKCA, CE
- LVD & EMC Class B Certified, RoHS & REACH compliant
- 24V Lead Acid 3 Stage Control (Fast/Normal/Float)
- OVP, OCP, OTP & Short Circuit
- Dimensions: Dependent on Model
- Weight: Dependent on Model
- Six-Sided Shielding



Ideal Power's 31ACXX24A Range of 24V 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.

AC – DC

Models	31AC0324A	31AC0424A	31AC0524A	31AC0724A
Input Voltage	115V / 230V Auto Switch			
Input Frequency	47Hz ~ 63Hz			
Output Max Current	3Amp	4Amp	5Amp	7Amp
Output Power	72W	96W	120W	168W
Output Equalizer	29.2V +/- 0.2V (Can be order specific)			
Output Float	27.4V +/- 0.2V (Can by order specific)			
Battery Application	Lead Acid Battery			
LED - Power	Red			
LED - Charging	Orange			
LED – Fully Charged	Green			
Mains Lead	1.8M EURO Plug + 1.8M UK fuse Plug			
DC Cable	SPT2 2C 18AWG at 1.2M Mount clips			
Dimensions	180 x 88 x 47 (LxWxH) mm			
Weight	0.8 (Kgs)			

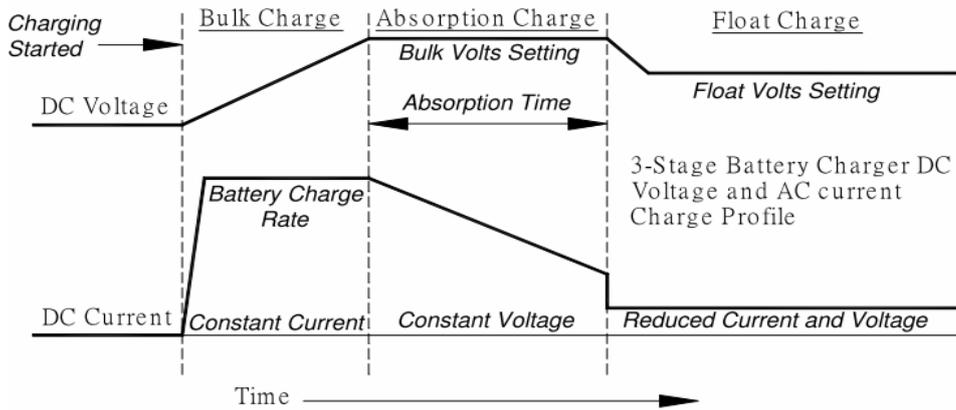
Specifications subject to change without notice.

### 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               |                          |



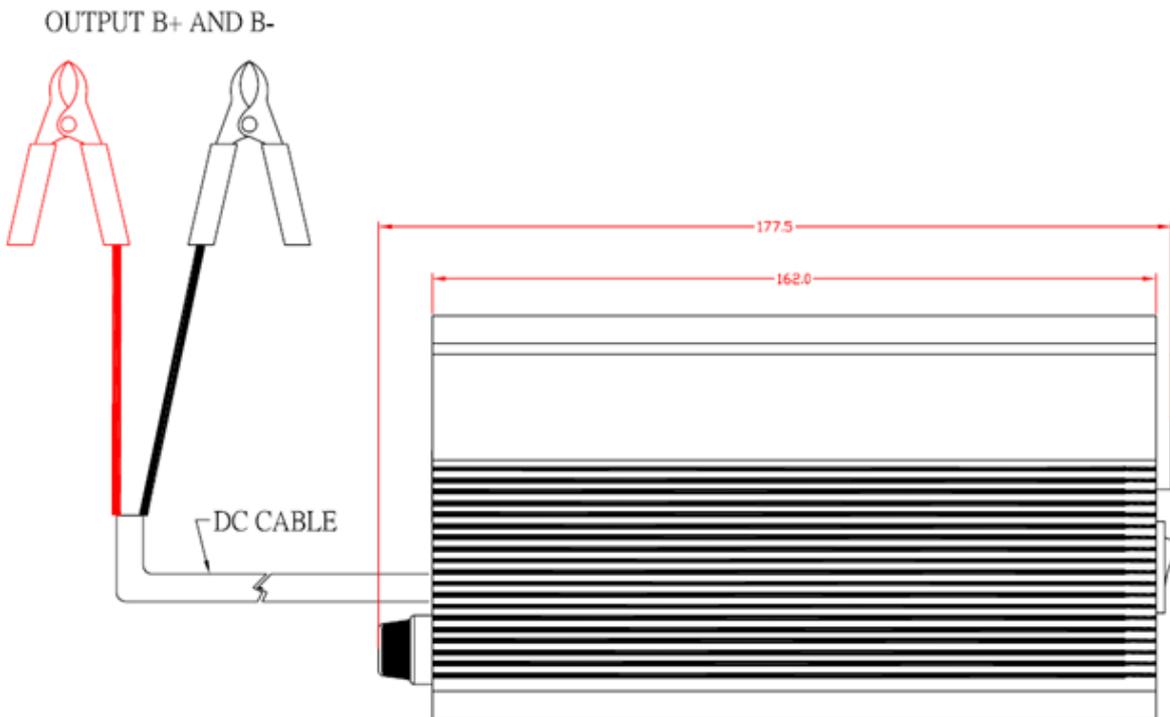
**Three Steps of Charging & Charge Curve**



3-Stage Battery Charger DC Voltage and AC current Charge Profile

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.

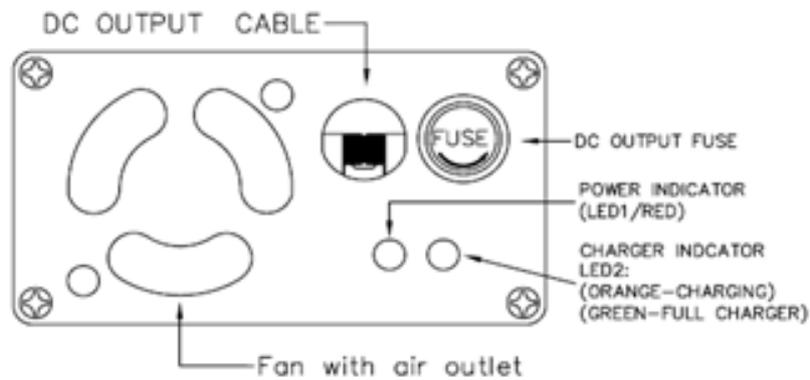
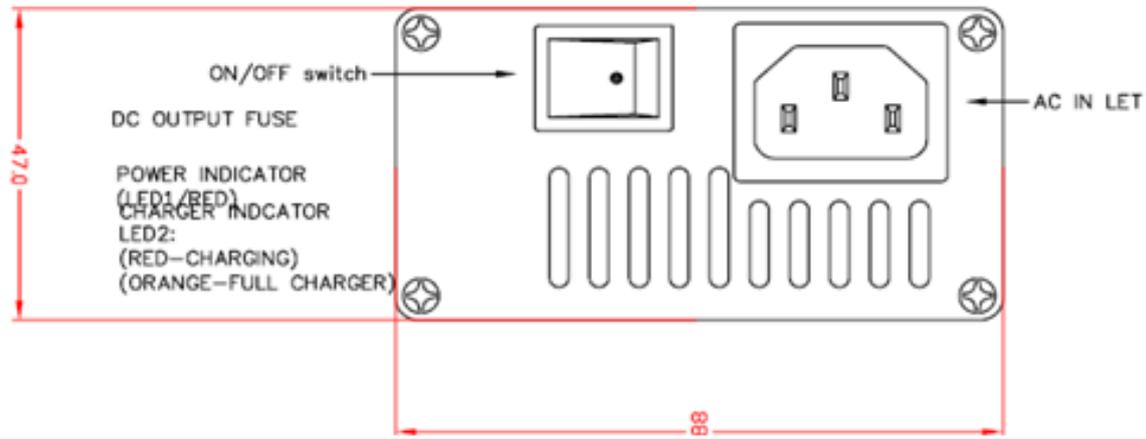
**Case Drawing**



AC – DC



Case Drawing (continued)

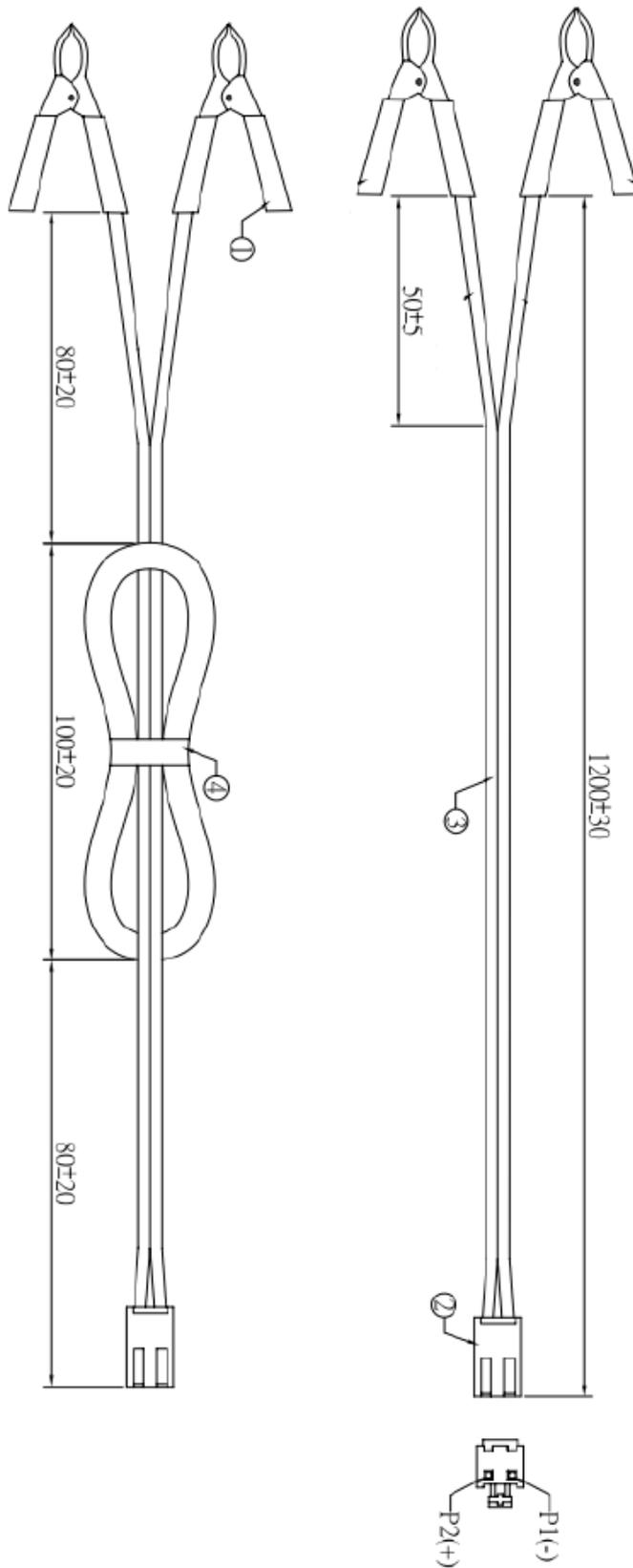


AC - DC



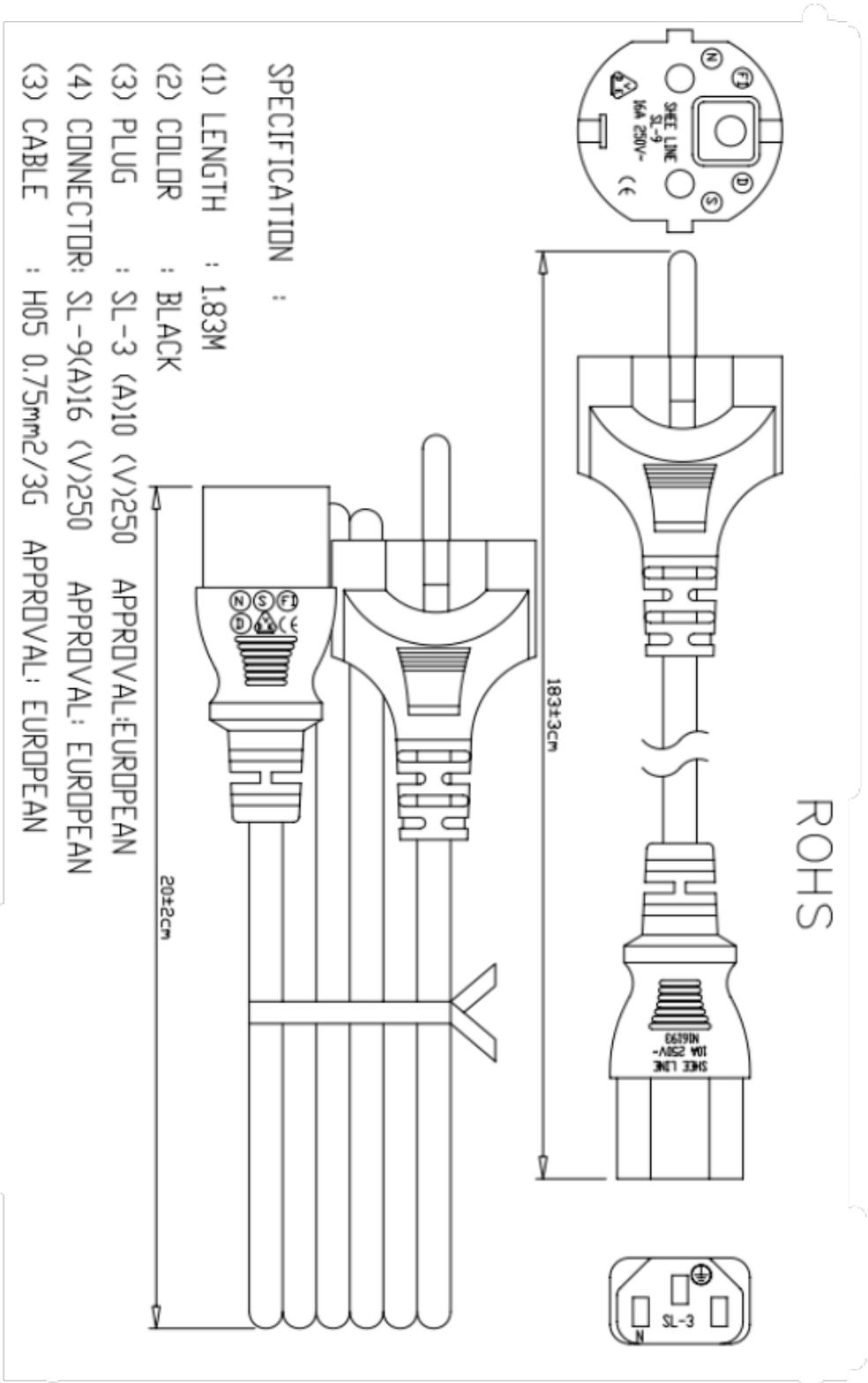
Cables

AC – DC





Cables (continued)



AC – DC

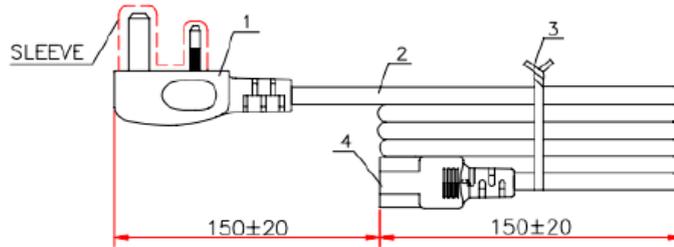
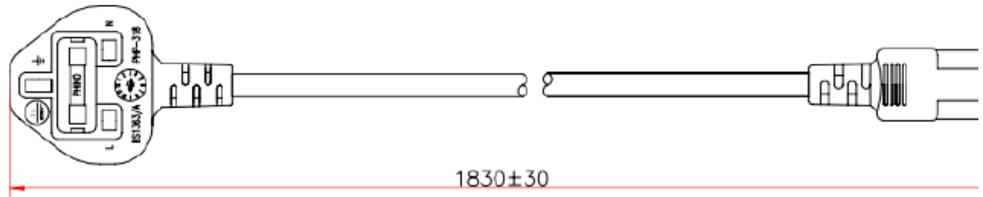


### Cables (continued)

#### PLUG MARK

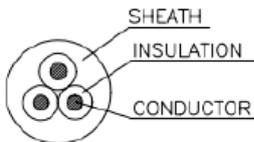


#### CONNECTOR MARK



- 1. PVC MOLDED PLUG: PHP-318 (FUSE=3A; BLACK)
  - 2. PVC FLEXIBLE CORD: H05W-F 3X0.75MM<sup>2</sup> (BLACK)
  - 3. ELLIPTIC TIE (BLACK)
  - 4. PVC MOLDED CONNECTOR: PHS-301 (BLACK)
- NOTE: ALL MATERIALS ARE RoHS COMPLIANCE

#### CORD SECTION:



#### CORD MARKING:

PHINO Cabo H05W-F 300.75mm<sup>2</sup> <VDE> KEMA-KEUR IEMMEQU +++++ <VDE>  
 CEPEC (S) (N) (D) (F) SABS SANS 60227-5 60227 IEC 53 300/500V CE Cn -LF-  
 ROLL NO.:1,2,3...  
 CHINA FACTORY

AC - DC