

IC Series *AC to DC* Battery Chargers

Intelligent Battery Chargers

The IC Series Intelligent Battery chargers offer an ideal way of charging any type of lead acid battery safely and reliably.

The rugged fully protected unit (IP67) can be used in a variety of applications including on trucks, off road vehicles, fire vehicles, boats, caravans and in depots and workshops.

A Wide Product Range

There are 4 products in the range, all accepting standard European 230Vac inputs. The products are available for charging either 12Vdc or 24Vdc systems. They use all the latest manufacturing techniques and are cool running with high efficiency. Like the other products in our range, they use switch mode technology.

Intelligent Charging System

The Alfatronix IC Series is suitable for all types of lead acid batteries. Charging is through a 3 stage system. The first stage is the bulk charging phase. This state is indicated when the yellow LED is illuminated and continues through to stage 2 of the process. When the current is below 10% of the maximum output, the



charger automatically adjusts to reduce the output voltage to reliably top up the battery. At this stage the green LED is illuminated. After around 2 hours, the yellow LED goes out while the green LED remains illuminated indicating that the battery is fully charged. Should the voltage level fall below the nominal values of 12.7V (12V systems) and 25.4V (24V systems) during the maintenance stage, the charger will go back to step one and the yellow LED is illuminated once more.

Tamper Proof

There are no ventilation holes to permit stray objects, dust or water droplets to enter the case. The chargers are protected by an in line waterproof fuse between the charger and the battery. In the event of repeated fuse failure, the unit should be returned to Alfatronix for repair.

Product Coding

The product code is developed as follows, taking the IC 230-12 108 as an example:

IC	Intelligent Charger
230	230Vac Input
-12	12V nominal – suitable for charging 12V lead acid batteries
108	108W Capacity unit

Rugged and Compact

The battery chargers are enclosed in a rugged, anodised aluminium extrusion. The low mass Surface Mount Technology components are less prone to damage

AlfaTRONIX



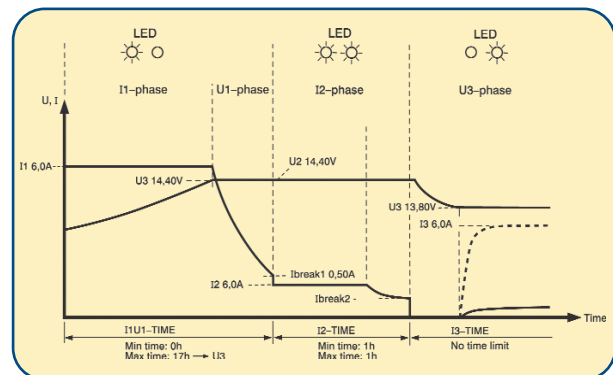
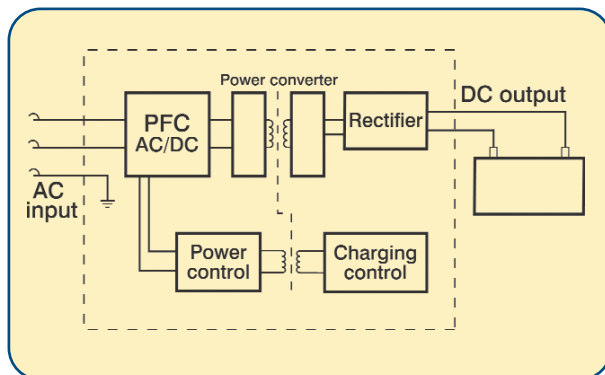
for use on **vehicles, vessels and aircraft**

Choose your IC Series Intelligent Charger

Max Load	Nominal Voltage	Part Number	Size	Weight
7A	12	IC 230 -12 108	185 x 87 x 45mm	850g
3A	24	IC 230-24 108	185 x 87 x 45mm	850g
17A	12	IC 230 -12 240	235 x 87 x 57mm	1450g
12A	24	IC 230-24 300	235 x 87 x 57mm	1450g

Technical *data*

Input voltage range	90Vac – 270Vac (Reduced output below 170VAC)
Input over voltage	285Vac
Output Voltage (12V units)	13.5Vdc – 14.5Vdc according to charge cycle (STD 14,4V)
Output Voltage (24V units)	26.8Vdc – 29.0Vdc according to charge cycle (STD 28,8V)
Power Conversion Efficiency	Typically 88-91%
Off load current	<2mA
Operating Temperature	-30°C- +55°C
Storage Temperature	-55°C - +85°C
Casework	Anodised aluminium. Dust, water and impact protected to IP67
Connections	Input IEC lead, Output flying lead
Output indicators	Yellow and Green LEDs according to cycle
Mounting Method	By 4 Screws
Safe area protection: Over current	Yes, current limited to maximum ratings each model
Over heat	Yes, internal tempcontrol reduce output in overheatsituations
Transients	Yes, both on input and output
Wrong polarity protections	Yes, with fuse on output
Approvals	EN 55022B, EN 61000, EN 60 335-2-29
Markings	CE and E



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