

IC Series **AC to DC** Intelligent Battery Chargers

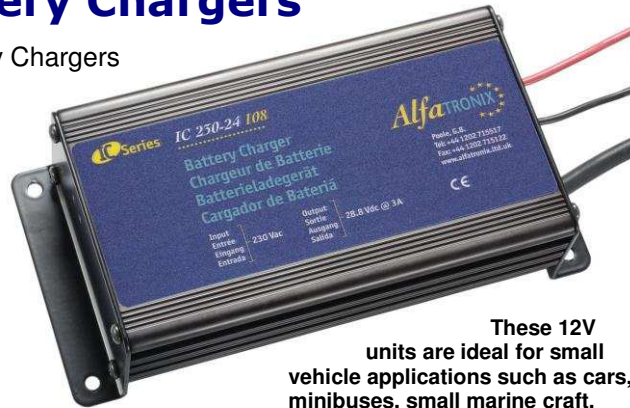
Intelligent Battery Chargers

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 (IP65) can be used in a variety of applications including on trucks, off road vehicles, boats, caravans and in depots and workshops.

A Wide Product Range

There are 4 products in the range, all accepting the standard European 230Vac inputs.

The products are available for charging either 12Vdc or 24Vdc systems. They use the latest manufacturing techniques and are cool running with high efficiency. Like the other products in our range, they use switchmode technology.



These 12V units are ideal for small vehicle applications such as cars, minibuses, small marine craft, caravans and motorhomes and a variety of industrial uses.



24V units are ideal for heavy vehicle applications such as HGVs, larger marine craft, off road and forestry vehicles and for use in depots and workshops



Rugged & Compact

The chargers are enclosed in a rugged, anodised aluminium extrusion protected from dust, damp and impact to IP65. The units can be installed practically anywhere, on boats or vehicles, on road and off, at depots and garages.

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 indicating that the battery is fully charged. Should the voltage level fall below the nominal values during the maintenance stage, the charger will go back to step one and repeat the process.



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



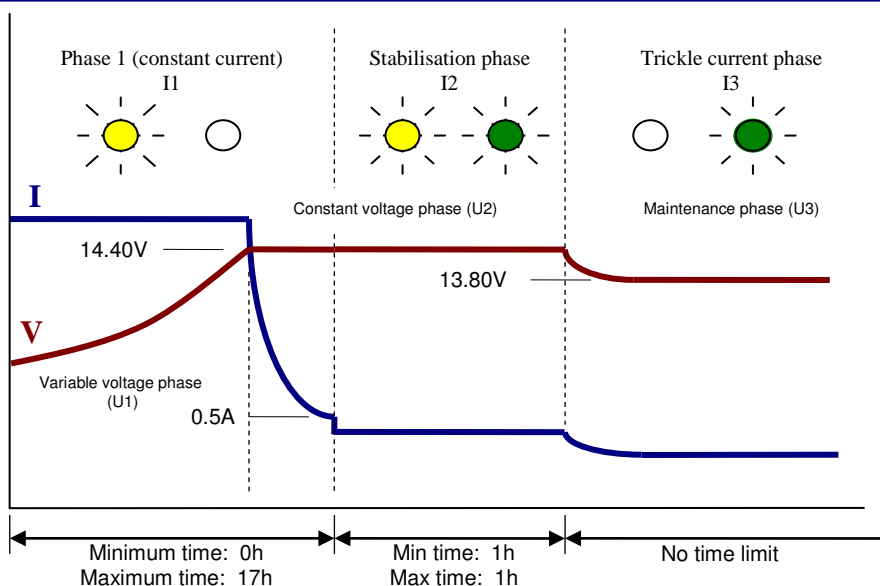
for use on **vehicles, vessels and aircraft**

Choose your IC Series Intelligent Charger

Max Load	Nominal Voltage	Part Number	Size	Weight
7A	12	IC 230-12 108	155 x 80 x 43mm	1100g
3A	24	IC 230-24 108	155 x 80 x 43mm	1100g
17A	12	IC 230-12 240	192 x 98 x 47mm	1600g
12A	24	IC 230-24 300	192 x 98 x 47mm	1600g

Technical Data

Input voltage Range	180Vac - 270Vac
Input over voltage	285Vac
Output voltage (12V units)	13.5Vdc - 14.5Vdc according to charge cycle (STD 14.4)
Output voltage (24V units)	26.8Vdc - 29.0Vdc according to charge cycle (STD 28.8)
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 IP65
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 control to reduce output in over temperature situations
Transients	Yes, protection both on input and output
Wrong polarity protection	Yes, with fuse on output
Approvals	EN 55022B, EN 61000, EN 60335-2-29
Markings	CE



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