IC SERIES
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 RANGE OF PRODUCTS

There are four 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.

PRODUCT CODING

The product coding is derived 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

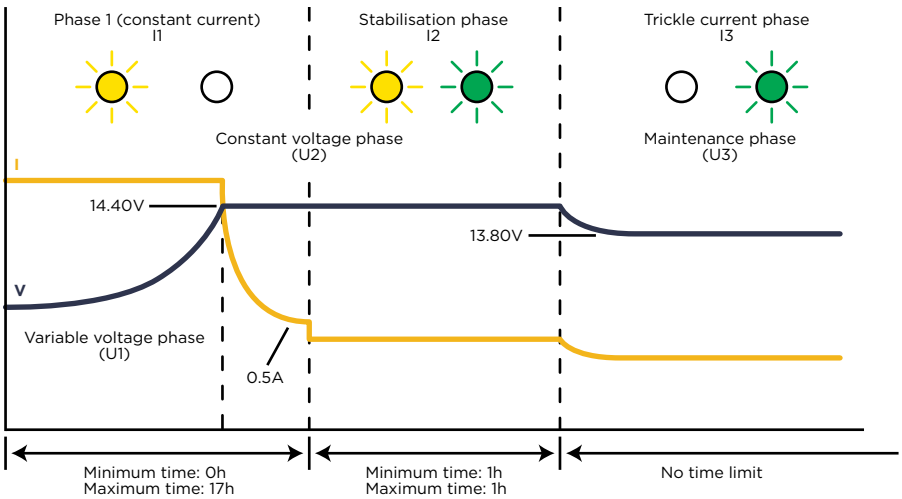
RUGGED & COMPACT

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.

- 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, fire service vehicles, larger marine craft, off road and forestry vehicles, and for use in depots and workshops.

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 stage 2 of the process. When the current is below 10% of 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.



CHOOSE YOUR IC SERIES PRODUCT

Max Load	Nominal Voltage	Part Number	Size (mm)	Weight (g)
7A	12	IC230-12 108	184 x 87 x 45	1100
3A	24	IC230-24 108	184 x 87 x 45	1100
17A	12	IC230-12 240	235 x 87 x 58	1750
12A	24	IC230-24 300	235 x 87 x 58	1750

TECHNICAL DATA

Input voltage range	180Vac – 270Vac
Input over voltage	285Vac
Output voltage (12V units)	13.5Vdc – 14.4Vdc 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 Over heat Transients Catastrophic failure	Current limited to maximum ratings of each model Internal control to reduce output in over temperature situations Protection both on input and output With fuse on output
Approvals	2014/30/EU The general EMC directive 2014/35/EU The low voltage directive 93/68/EEC The CE marking directive
Designed to	EN61204-3, EN60335-2-29, EN 55022B
Markings	CE