

CHARACTERISTICS **12v: 30-50A** **24v: 16-25A**

Adaptive 4-stage charge characteristic: bulk - absorption - float - storage

The Phoenix charger features a microprocessor controlled ‘adaptive’ battery management system that can be pre-set to suit different types of batteries. The ‘adaptive’ features will automatically optimise the process to the way the battery is being used.

The right amount of charge: variable absorption time

When only shallow discharges occur (e.g. a yacht connected to shore power) the absorption time is kept short in order to prevent overcharging of the battery. After a deep discharge the absorption time is automatically increased to make sure that the battery is completely recharged.

Preventing damage due to excessive gassing: the BatterySafe mode

If, in order to quickly charge a battery, a high charge current in combination with a high absorption voltage has been chosen, the Phoenix charger will prevent damage due to excessive gassing by automatically limiting the rate of voltage increase once the gassing voltage has been reached.

Less maintenance and aging when the battery is not in use: the Storage mode

The storage mode kicks in whenever the battery has not been subjected to discharge during 24 hours. In the storage mode float voltage is reduced to 2.2 V/cell (13.2v for 12v battery) to minimise gassing and corrosion of the positive plates. Once a week the voltage is raised back to the absorption level to ‘equalise’ the battery. This feature prevents stratification of the electrolyte and sulphation, a major cause of early battery failure.

To increase battery life: temperature compensation

Every Phoenix charger comes with a battery temperature sensor. When connected, charge voltage sense facility so that the battery always receives the correct charge voltage.

Battery voltage sense

In order to compensate for voltage loss due to cable resistance, Phoenix chargers are provided with a voltage sense facility so that the battery always received the correct charge voltage.

Computer interface

Every Phoenix charger is ready to communicate with a computer through it’s RS -485 data port. Together with our VEConfigure software, all parameters of the chargers can be customised. The chargers can also be connected to VENet or to other computerised monitoring and control systems.



Phoenix Charger Control



Battery Alarm



Battery Monitor



Computer controlled operation and monitoring (Victron Interface Mk2b)

PHOENIX CHARGER	12v/24v	12/30	24/16	12/50	24/25
Input voltage range			90-265VAC, 90-400VDC		
Frequency (Hz)			45-65, PF:1		
Charge voltage 'absorption' (V DC)			14.4/28.8		
Charge voltage 'float' (V DC)			13.8/27.6		
Storage mode (V DC)			13.2/26.4		
Battery bank			3		
Charge current house battery (A)		30/16			50/25
Charge current starter battery (A)			4		
Charge characteristic			4-stage adaptive		
Battery Capacity (Ah)		100-400			200-800
Temperature Sensor			Yes		
Can be used as power supply			Yes		
Forced cooling			Yes		
Protection			a,b,c,d		
Common characteristic		Temperature: -20 to 60°C (0-140°F) Max Humidity: 95%			
ENCLOSURE					
Material & Colour			Aluminium (blue RAL 5012)		
Battery Connection			M6 Studs		
230v AC-connection			Screw-clamp 4mm ²		
Protection category			IP21		
Weight (kg)			3.8		
Dimensions (hxwx) - mm			350x200x108		
STANDARDS					
Safety			EN 60335-2-29		
Emission			EN 55014, EN 1000-3-2, EN 1000-3-3		
Immunity			EN 55014-2		
Vibration			IEC68-2-6: 10-15Hz/1.0G		
Automotive Directive			95/54/EC		