

# Centaur Charger

www.victronenergy.com



**Centaur  
Battery Charger 24/30i**

### Quality without compromise

Aluminium epoxy powder coated cases with drip shield and stainless steel fixings withstand the rigors of an adverse environment: heat, humidity and salt air. Circuit boards are protected with an acrylic coating for maximum corrosion resistance. Temperature sensors ensure that power components will always operate within specified limits, if needed by automatic reduction of output current under extreme environmental conditions.

### Universal 90-265V AC input voltage range and also suitable for DC supply (AC-DC and DC-DC operation)

All models will operate without any adjustment needed over a 90 to 265 Volt input voltage range, whether 50 Hz or 60 Hz.

The chargers also accept a 90-400V DC supply.

### Three outputs that each can supply the full output current

Three isolated outputs to simultaneously charge 3 battery banks. Each output is capable to supply the full rated current.

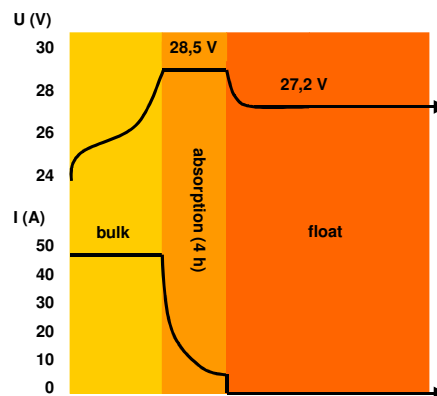
### Three stage charging, with temperature compensation

The Centaur charges at bulk rate until the output has reduced to 70 % of the rated Amps, at which a 4 hour timer begins. After the timed period the charger switches to float rate. An internal temperature sensor is used to compensate the charge voltage with  $-2 \text{ mV}/^{\circ}\text{C}$  ( $-1 \text{ mV}/^{\circ}\text{F}$ ) per cell. A dip switch is available to select the optimum charge/float voltages for Flooded Lead-acid, Gel or AGM batteries.

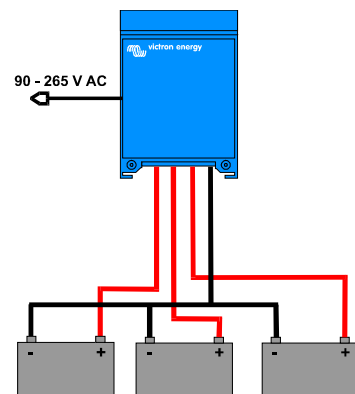
### Learn more about batteries and battery charging

To learn more about batteries and charging batteries (including the pro's and con's of multi bank charging and intelligent charging), please refer to our book 'Electricity on Board' (available free of charge from Victron Energy and downloadable from [www.victronenergy.com](http://www.victronenergy.com)).

**Charge curve**



**Application example**



Centaur Charger	12/20	12/30 24/16	12/40	12/50	12/60 24/30	12/80 24/40	12/100 24/60	24/80	12/200 24/100
Input voltage (V AC)	90 – 265								
Input voltage (V DC)	90 – 400								
Input frequency (Hz)	45 – 65								
Power factor	1								
Charge voltage 'absorption' (V DC)	14,3 / 28,5 (1)								
Charge voltage 'float' (V DC)	13,5 / 27,0 (1)								
Output banks	3								
Charge current (A) (2)	20	30 / 16	40	50	60 / 30	80 / 40	100 / 60	80	200 / 100
Total output ammeter	Yes								
Charge characteristic	IUoU (Three stage charging)								
Recommended battery capacity (Ah)	80 - 200	120 - 300 45 - 150	160 - 400	200 - 500	240 - 600 120 - 300	320 - 800 160 - 400	400 - 1000 240 - 600	320 - 800	800 - 2000 400 - 1000
Temperature sensor	Internal, - 2mV / °C (- 1mV / °F) per cell								
Forced cooling	Yes, temperature and current controlled fan								
Protection	Output short circuit, over temperature								
Operating temp. range	- 20 to 60°C (0 - 140°F)								
Ignition protected	Yes								
Humidity (non condensing)	max 95%								

#### ENCLOSURE

Material & Colour	aluminium (blue RAL 5012)								
Battery-connection	M6 studs	M6 studs	M8 studs	M8 studs	M8 studs	M8 studs	M8 studs	M8 studs	M8 studs
AC-connection	screw-clamp 4 mm <sup>2</sup> (AWG 6)								
Protection category	IP 21								
Weight kg (lbs)	3,8 (8.4)	3,8 (8.4)	5 (11)	5 (11)	5 (11)	12 (26)	12 (26)	16 (35)	16 (35)
Dimensions hxxwx d in mm (hxxwx d in inches)	355x215x110 (14.0x8.5x4.3)	355x215x110 (14.0x8.5x4.3)	426x239x135 (16.8x9.4x5.3)	426x239x135 (16.8x9.4x5.3)	426x239x135 (16.8x9.4x5.3)	505x255x130 (19.9x10.0x5.2)	505x255x130 (19.9x10.0x5.2)	505x255x230 (19.9x10.0x9.1)	505x255x230 (19.9x10.0x9.1)

#### STANDARDS

Safety	EN 60335-1, EN 60335-2-29, UL 1236								
Emission Immunity	EN 55014-1, EN 61000-3-2								
Automotive Directive	EN 55014-2, EN 61000-3-3								

1) Standard setting. Optimum charge/float voltages for Flooded Lead-acid, Gel-Cell or AGM batteries selectable by dip switch.

2) Up to 40 °C (100 °F) ambient. Output will reduce to approximately 80 % of nominal at 50 °C (120 °F) and 60 % of nominal at 60 °C (140°F).

#### Installation made easy

1. Fasten the separate mounting plate (A) to the wall where you want to place the battery charger, and simply hook up the Centaur.
2. Secure the bottom of the backside (B) to the wall.



#### BMV-600 Battery Monitor

The BMV – 600 Battery Monitor features an advanced microprocessor control system combined with high resolution measuring systems for battery voltage and charge/discharge current. Besides this, the software includes complex calculation algorithms, like Peukert's formula, to exactly determine the state of charge of the battery. The BMV – 600 selectively displays battery voltage, current, consumed Ah or time to go.



#### Battery Alarm

An excessively high or low battery voltage is indicated by an audible and visual alarm.

