

## C27DC-US



Century Deep Cycle Industrial batteries have the strength and durability needed to provide tough, ultimate, long lasting power in recreational and industrial applications. The flooded lead-acid range features thicker, heavier battery plates, heavy duty internal connections and high density paste to provide superior current flow & exceptional vibration resistance.

**Application:** Marine, floor sweepers / scrubber & multi-purpose  
Wherever Deep Cycle 12-volt batteries are needed

**Dimensions:** 324L x 171W x 238H

**Type:** Flooded Lead Acid (FLA) non-sealed

**Case material:** Polypropylene / Heat Sealed

### C27DC-US SPECIFICATIONS

BCI Group Size	Model	1 hr Rate	2 hr Rate	5 hr Rate	6 hr Rate	10 hr Rate	20 hr Rate	48 hr Rate	72 hr Rate	100 hr Rate	Voltage	Standard Terminal Type	AMP HOURS (20 HR. RATE)	MINS @ 75 AMPS	MINS @ 56 AMPS	MINS @ 25 AMPS	L	W	H	Total Height	wet Weight (kg)
27	C27DC-US	69	78	89	91	97	105	111	114	117	12	TWIN	105	54	77	205	324	171	202	238	26.6

### TERMINAL



### Recommended Terminal Torque and Connection Hardware

Battery Terminal Type	Recommended Torque (mm-kg)	Recommended Connection Hardware
Twin	2413-48	<sup>1</sup> SS Hexnut with Lock Washer
Proper connection is to position a lock washer between the nut and the connector (never between the connector and lead terminal) and apply the recommended torque or enough torque to completely compress the lock washer without deforming the lead terminal.		
<sup>1</sup> Stainless Steel Hexnut with Stainless Steel Split-Ring Lock Washer (5/16" Positive & Negative)		
<b>Note:</b> The use of flanged nuts and other types of nuts with captive washers or other hardware not listed above is not recommended and their use may void the battery warranty.		

### CHARGING INSTRUCTIONS:

Following is the charging recommendation and charging profile using 2 stage chargers for deep cycle products.

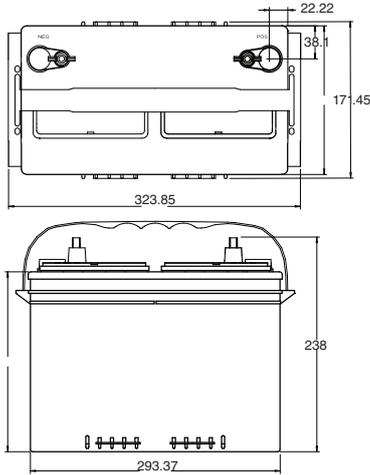
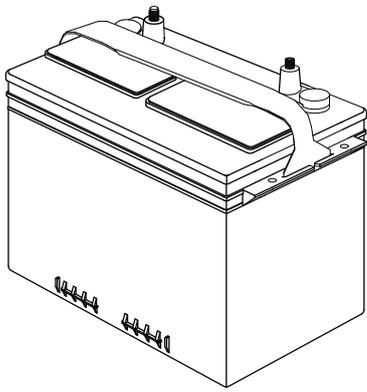
\*Equalisation and float charge modes are not considered to be one of the stages in a charging profile.

- Bulk Charge** Constant current @~10% of C/20 Ah in amps to 2.45+/-0.05 volts per cell (e.g. 7.35 volts +/-0.15 volts per 6 volt battery)
- Absorption Charge** Constant voltage (2.45+/-0.05 vpc) to 3% of C/20 Ah in amps then hold for 2-3 hours and terminate charge  
Charge termination can be by maximum time (2-4 hr) or dV/dt (4 mv/cell per hour)
- (Optional Float Charge)** Constant voltage 2.17 vpc (6.51 volts per 6 volt battery) for unlimited time
- Equalisation Charge** Constant voltage (2.55+/-0.05 vpc) extended for 1-3 hours after normal charge cycle (repeat every 30 days)

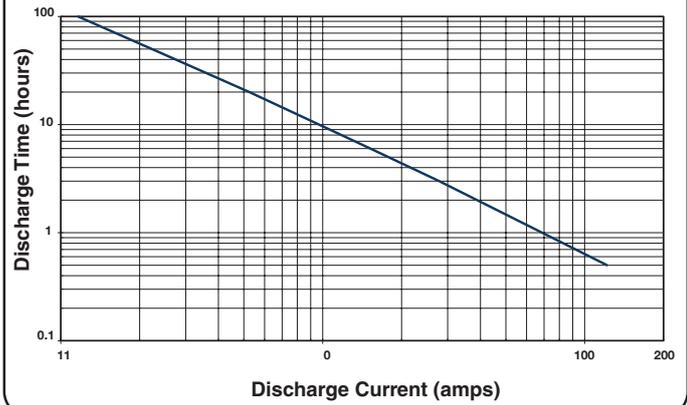
**Notes:** Charge time from full discharge is 9-12 hours.  
Absorption charge time is determined by the battery but will usually be ~3 hours at 2.45 volts per cell.  
Float time is unlimited at 2.17 volts per cell.  
Specific gravity at full charge is 1.270 minimum.

**Battery temperature adjustment:** Reduce the voltage by 0.028 Volts per cell for every 5.5°C above 27°C, increase by the same amount for temperatures below 27°C

Deep cycle batteries need to be equalized periodically. Equalizing is an extended, low current charge performed after the normal charge cycle. This extra charge helps keep all cells in balance. Actively used batteries should be equalized once per month. Manually timed chargers should have the charge time extended approximately 3 hours. Automatically controlled chargers should be unplugged and reconnected after completing a charge.



C27DC-US DISCHARGE TIME VS. CURRENT @27°C



**Operating Temperature Guidelines**

**For charging**, we recommend staying within -18 to 49°C to avoid charging frozen batteries at low temperature or going into thermal runaway at high temperature.

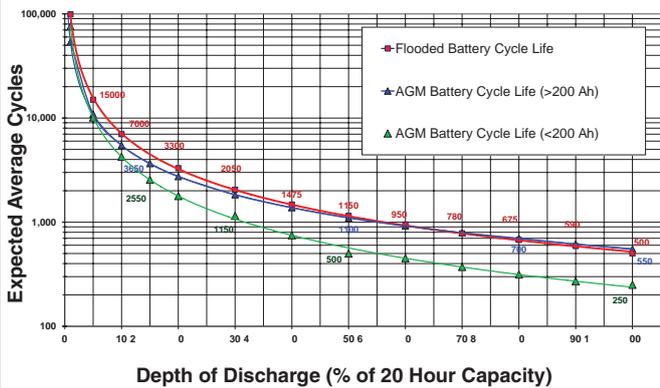
**For discharging**, we recommend -29 to 49°C. Batteries discharged at temperatures below 0°C should be recharged immediately to avoid freezing.

**Batteries discharged at temperatures above 49°C should be allowed to cool before recharging.**

Extreme temperatures can substantially affect battery performance and charging. Cold reduces battery capacity and hinders charging. Heat increases water usage and can result in overcharging. Very high temperatures can cause “thermal run-away” which may lead to an explosion or fire. If extreme temperature is an unavoidable part of an application, consult a battery/charger specialist about ways to deal with the problem.

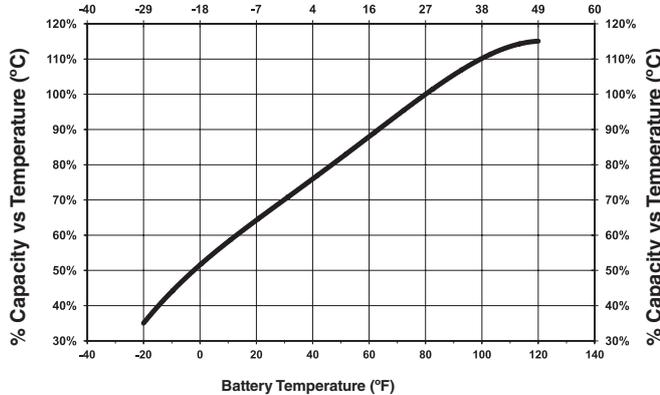
Data references within this publication are nominal and should not be considered or construed as maximum or minimum values for specifications or for final design. Data for this product type and model may vary from what is shown in this publication

EXPECTED LIFE CYCLES VS. DOD



Depth of Discharge (% of 20 Hour Capacity)

BATTERY % CAPACITY VS TEMP  
Battery Temperature (°C)



Century Industrial Deep Cycle batteries are dedicated deep cycle batteries and should not be used for cranking applications.



**Battery Disposal**

This battery is 98% recyclable. Help create a cleaner New Zealand, return your used battery to the original place of purchase or your nearest CenturyYuasa approved Battery Recycling Centre.

Visit [cyb.co.nz](http://cyb.co.nz) or call 0800 93 93 93 to find the nearest centre to you.