

COMMANDER GEL *Deep Cycle Sealed Batteries*



Battery Use:	Deep Cycle Applications
Battery design:	Valve regulated / Sealed
Capacities:	31 - 232Ah 12V blocs
Guarantee:	1 year

40 years experience in lead acid battery manufacture has culminated in Century NZ introducing a brand new range of completely sealed, valve regulated batteries ideally suited for the rigours of all cyclic applications. The unique method of electrolyte immobilisation creates a completely non-spillable battery, protecting you, your equipment and the environment from potential harm.

The Commander Gel Series has been specially designed to meet the growing demand for primary and auxiliary power supply for marine vessels of all sizes, electric mobility vehicles and field equipment applications where safety in handling and use is paramount.

Typical Applications

Requiring virtually no maintenance, Commander Gel is perfect for a host of applications including:

- **Water craft auxiliary equipment**
- **Marine beacons with solar charging**
- **Portable Electronic Devices**
- **Field testing equipment**
- **Mobility Wheelchairs and Scooters**
- **Golf trundlers and Carts**
- **Electric Vehicles**
- **Remote area Power Systems**

Technical Features

- **Internal Construction** – gelled electrolyte, optimised grid design and paste formulation maximise performance for deep cycle service
- **Carrying Convenience** – pre fitted carry handles or lifting receptacles ensure easy placement and transportation
- **Sealed Design** – hermetically sealed with electrolyte immobilised in a specially formulated gel mixture along with low pressure safety valves gives a safe, non-spillable cyclic battery
- **Maintenance Free** – gas recombination technology transforms generated gas into water during normal operation, therefore no topping up is required throughout battery life
- **Use in Any Position** – gel immobilised electrolyte allows fitting upright or on its side giving greater placement options in confined spaces
- **Battery Life** - heavy duty lead calcium plates with anti-corrosive construction give up to 1600 cycles dependant on duty cycle and operating parameters
- **Insert Connectors** – high quality female brass inserts allow ease of connection and secure links to minimise terminal resistance
- **Strong Case Material** – high strength ABS case and lid resist wall distortion from plate growth avoiding premature failure common with polypropylene cases

COMMANDER GEL *Specifications*

Specifications		Battery Model				
Product ID	GDC31	GDC40	GDC78	GDC110	GDC150	GDC232
Type of application	Cyclic					
Voltage	12V					
Nominal 20hr Capacity	31Ah	40Ah	78Ah	110Ah	150Ah	232Ah
1hr rate	15Ah	22Ah	42Ah	59Ah	81Ah	125Ah
5hr rate	24Ah	31Ah	60Ah	85Ah	116Ah	180Ah
10hr rate	28Ah	36Ah	70Ah	99Ah	135Ah	209Ah
Physical dimensions						
Length (mm)	194	196	259	327	480	521
Width (mm)	130	164	166	171	171	269
Height O/A (mm)	167	171	214	214	240	205
Weight	12kg	14kg	28kg	33kg	47kg	75kg
Battery Materials						
Terminal Type	Female Brass Insert with SS Bolt Set (M6)					(M8 Bolt)
Torque Requirement	3.5Nm	3.5Nm	3.5Nm	3.5Nm	4.5Nm	5.5Nm
Body & Cover	Grey ABS Plastic					
Self Discharge Rate 25°C	<3% per month					
Recommended Charging	2 Stage Constant Voltage Charger - Tapering Current (Smart Charger)					
Stage 1	Bulk Charge up to 14.7V					
Stage 2	Trip to Float Charge of 13.7V Constant					
Initial Charging Current	For Bulk Charge Portion					
Recommended	3A	4A	8A	11A	15A	23A
Maximum	6A	8A	15A	22A	30A	46A
Fully Charged Float Current	~30mA	~40mA	~80mA	~110mA	~150mA	~230mA
Maximum Discharge (5sec)	300A	450A	720A	950A	1200A	1900A
Cycling Ability						
10% DOD	~1600 cycles					
30% DOD	~1100 cycles					
50% DOD	~ 700 cycles					
70% DOD	~400 cycles					
Storage Time (Without use)	Less than 20°C		20°C – 30°C		30°C - 40°C	
Recharge Interval	9 months		6 months		3 months	
Discharge Voltage Cutoff	11.2V					
Operating Temperatures	5°C – 40°C (Battery Temperature)					
General Information	Clean Battery only with a water dampened cloth - Do not use solvents. Store battery in a cool place only once fully charged. Do not fit batteries into a sealed container. Recharge battery immediately after use. Discharges below allowable limit will result in reduced battery life. Ripple current must not exceed 0.05C Amps. Due to continuous improvement, specifications are subject to change.					