



TD SERIES

CCB 12TD-90

FOR COMMUNICATIONS
STANDY POWER APPLICATIONS
(12V90AH @ 10HR RATE)

FEATURES

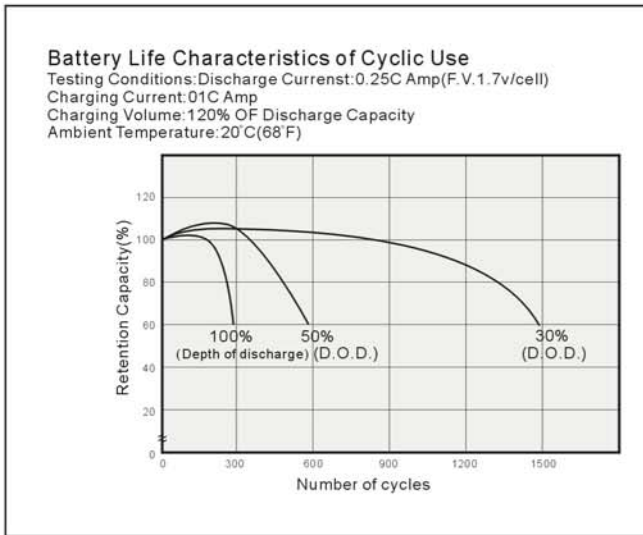
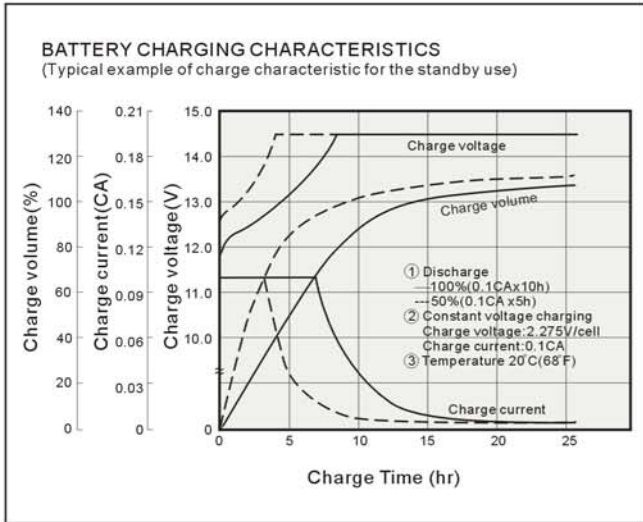
- *Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- *Computer-generated grid design optimized for high power density.
- *Float/ Cycle Use
- *Low Self Discharge Rate
- *Safety Valve
- *Lead Calcium Alloy
- *Useable In Any Position
- * Long service life. Maintenance-free operation
- *UL-recognized component



Nominal Voltage		
12V		
Dimensions	Length	509mm(20.03inches)
	Width	110mm(4.33inches)
	Height	223mm(8.77inches)
	Total Height	239mm(9.40inches)
Weight		30.5Kg(67.23lbs)
Standard Terminals and Resin	M6 SS Bolt & 16mmØ Brass	M8 SS Bolt & 18mmØ Brass

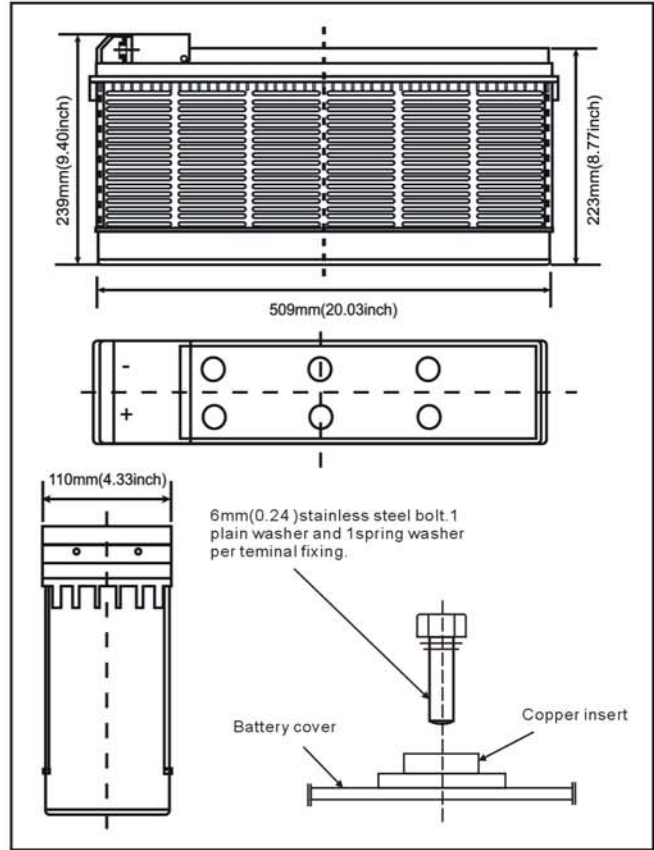
Specifications				
Nominal Voltage	Rated Capacity @20hr rate	Maximum Charge Rate	Maximum Discharge- Amps 5sec.	Internal Resistance
12V	90Ah	33Amps	750Amps(5s, 25°C)	4.8mOhm(Full charged @ 25°C)
Capacity@	101Ah @ 20hr. Rate to 1.75 volts per cell @25°C (77°F)			
	90Ah @ 10hr. Rate to 1.75 volts per cell @25°C (77°F)			
	83Ah @ 5hr. Rate to 1.75 volts per cell @25°C (77°F)			
	80Ah @ 3hr. Rate to 1.75 volts per cell @25°C (77°F)			
	53Ah @ 1hr. Rate to 1.75 volts per cell @25°C (77°F)			
Operating Temperature Range	Discharge	-40°F (-4°C) to + 160°F (71°C)		
	Charge	-10°F (-23°C) to + 140°F (60°C).(with temperature compensation)		
Recomended Operating Temperature Range	+68°F (20°C)to + 77°F (25°C)			
Self Discharge @ 77°F (25°C)	Capacity after 3 month storage		94%	
	Capacity after 6 month storage		88%	
	Capacity after 12 month storage		76%	
	CCB Battery may be stored for up to 12 months at 77°F(25°C) and then a freshing charge is required.For higher temperatures the time interval will be shorter.			
Capacity affected by Temperature (20 hour rate)	104°F (40°C)		102%	
	77°F (25°C)		100%	
	32°F (0°C)		85%	
	5°F (-15°C)		65%	
Charge Method (Constant Voltage)	Cycle use (Repeating use)	Initial current	31 A or smaller	
		Control voltage	14.5V to 14.9V (per 12V cell 25°C)	
	Float use	Initial current	13.5A or smaller	
		Control voltage	13.6V to 13.8V(per 12V cell25°C)	





Charging Procedure

Application	Charging method	Charging Voltage at 20°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/Ccell)	Max. charging current (CA)	Charging time 0.1CA, 20°C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.25~2.30	-3	0.3	24	20	0~40 (32~104°F)
For cycle service		2.40~2.0	-4	0.3	16	10	



Constant power discharge characteristics at 25°C/77°F

END VPC	Discharge time						
	5Min	10Min	15Min	30Min	1Hr	3Hr	5Hr
	Battery output power (W)						
1.75V	450	339	283	168	107	51.4	35.0
1.80V	410	318	264	155	103	49.8	33.6
1.85V	379	291	247	159	99.0	47.2	31.3

Constant power discharge characteristics at 25°C/77°F

End VPC	Discharge time						
	1Hr	2Hr	3Hr	5Hr	8Hr	10Hr	20Hr
	Battery output power (Amp)						
1.85V	50.0	33.0	24.0	15.3	10.4	8.72	4.85
1.80V	51.3	34.2	24.7	16.0	10.9	8.99	4.94
1.75V	53.0	36.4	26.7	16.6	11.2	9.14	5.05

CCB INDUSTRIAL BATTERY CO., LTD

CCB CHINA

Shenzhen, China 518001
Tel: 86-755-82297502 82297504
Fax: 86-755-82297586
E-mail: sales@battery-oem.com
WEBSITE:
http://www.battery-oem.com

CCB USA

Phoenix Arizona 85054 USA
Tel: 1-480-513-0808
Fax: 1-480-563-9264
E-mail: ccbatteries@att.net
WEBSITE:
http://www.ccbattery.com

