

NPC Series-Lead Carbon Battery for Renewable Energy Storage and PSoC Applications

The NPC series features the advanced Deep Cycle Battery technology for maximum cycle life in a space efficient, cost effective package. The Deep Cycle Battery technology coupled with an advanced CBB Nano-Carbon enhanced negative electrode provides time proven results and unmatched , industry leading cycle life ,even in partial state of charge (PSoC) operation.

Features

- **Long life cycle service design:**
 - Proven CBB DCS technology
 - Excellent PSoC and cyclic performance
 - 12V: • 60% DOD 3000
 - 80% DOD 1000
 - 2V: • 60% DOD 3000
 - 60% DOD 3000
- **Leading Charging Acceptance**
 - Maximum charge current 0.6C, 300% than normal VRLA
 - 0.2C to full charging lower than 7 Hrs
- **Compliant to major global specifications**
 - BS 6290: Part4:1997
 - IEC 60896-21/22
 - Telcordia SR-4228
 - Bellcore GR-63-CORE&GR-1089-CORE
 - UL 94 V-2/V-0 Flame Retardant Polypropylene
- **Extreme Temperature Tolerance**
 - -20°C: 16% improve capacity
 - +35°C: 60% improve cyclic life



Specifications

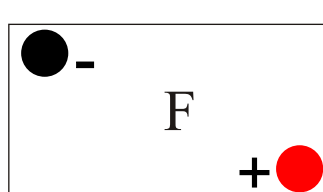
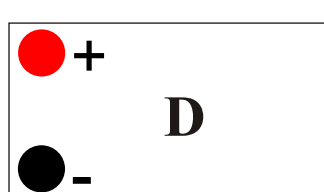
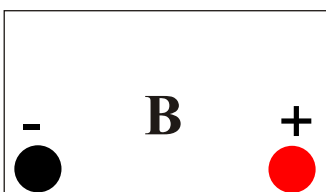
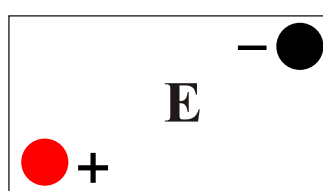
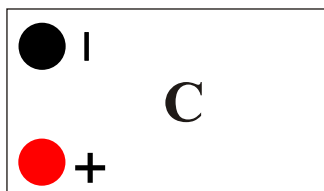
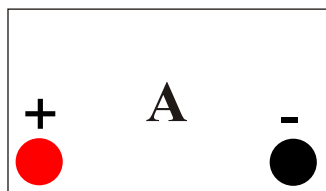
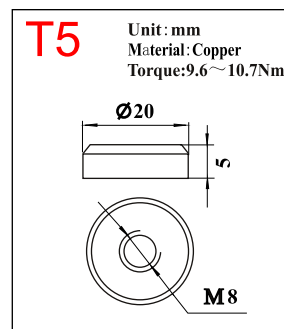
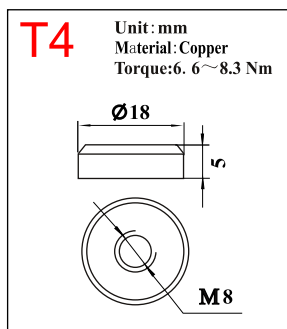
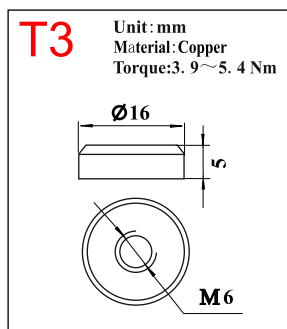
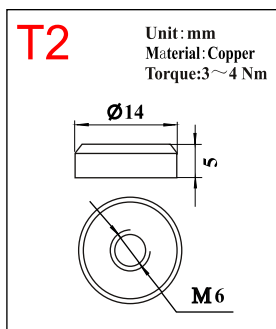
Cells Per Unit	6
Nominal Voltage Per Unit	12
Electrolyte	Absorbed H ₂ SO ₄ , SG = 1.300
Operating Temperature Range (with temperature compensation)	Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
Optimal PSoC Operation	80-40% SoC
Normal Operating Temperature Range	+68°F (20°C) to +80°F (27°C)
Recommended Maximum Charging Current Limit	30 amperes per 100 Ah @ C ₂₀
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 77°F (25°C)
Equalization and Cycle Service Charging Voltage	14.4 to 14.8 VDC/unit Average at 77°F (25°C)
Recommended Equalization for PSoC operation	Min = once every 3 months Max = once per week
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results
Self Discharge	Battery can be stored up to 6 months at 77°F (25°C) before a freshening charge is required. Batteries stored at temperatures greater than 77°F (25°C) will require recharge sooner than batteries stored at lower temperatures. See C&D bulletin 41-7272, Self-Discharge and Inventory Control for details.
Accessories	Inter-unit connectors, racks and cabinet systems are available.
Terminal	Inserted Terminal (Copper Alloy) 10-32 UNF 1/4-20 UNC bolt
Terminal Hardware Initial Torque	30 in.-lbs (3.4 N-m) 110 in.-lbs (12.4 N-m)

Applications

- Storage & Hybrid Storage System
- Solar /Wind Power Systems
- Electric Tools, Vehicles And City Cleaning Machines And Other Cyclic Service Utilities
- Smart Power Grids And Micro Power Grids
- Renewable energy applications needing PSoC
- Standby /Back-up



Terminal & Layout



Lead Carbon Battery Specification

MODLE NO	Voltage (V)	Capacity (AH)	Dimension (MM)				Weight (KG)	Terminal	Layout
			L	W	H	Total H			
NPC200-6	6	200/20HR	306	168	220	226	31.0	T5	F
NPC205-6	6	205/20HR	260	180	246	252	30	T5	F
NPC6-225	6	225/20HR	243	187	275	275	32.5	T5	F
NPC6-230	6	230/20HR	260	180	265	272	34.2	T5	F
NPC6-280	6	280/20HR	295	178	346	350	45.8	T5	F
NPC6-300	6	300/20HR	295	178	346	350	46.5	T5	F
NPC6-340	6	340/20HR	295	178	404	408	55.0	T5	F
NPC6-380	6	380/20HR	295	178	404	408	57.2	T5	F
NPC12-20	12	20/20HR	166	175	126	126	8.4	T2	B
NPC12-24	12	24/20HR	165	126	174	174	8.6	T2	B
NPC12-30	12	30/20HR	196	130	155	167	10.2	T3	A
NPC12-35	12	35/20HR	198	166	174	174	14	T2	B
NPC12-50	12	50/20HR	229	138	208	212	17.7	T3	A
NPC12-60	12	60/20HR	350	167	178	178	23	T3	B
NPC12-75	12	75/20HR	260	169	211	215	26.0	T3	A
NPC12-90	12	90/20HR	307	169	211	215	30	T3	A
NPC12-100	12	100/20HR	331	176	215	219	33.0	T4	A
NPC12-110	12	110/20HR	407	174	208	233	39	T5	A
NPC12-120	12	120/20HR	341	173	283	287	40.5	T5	A
NPC12-135	12	135/20HR	484	171	241	241	45.5	T4	A
NPC12-180	12	180/20HR	532	206	215	219	58.5	T4	C
NPC12-200	12	200/20HR	522	240	219	223	64.8	T5	C
NPC12-220	12	220/20HR	520	268	203	207	70.8	T5	C
NPC12-240	12	240/20HR	520	268	220	224	77.5	T5	C

Remarks: The above technical values are subject to changes without any notice.