CNFJ-600 2V/600Ah

the power of tomorrow

CLEAN ENERGY DEFINES THE WORLD THAT WE LIVE IN TODAY AND TOMORROW. LEAD CRYSTAL® TECHNOLOGY CREATES POWER THAT IS CLEAN SAFE AND HIGH PERFORMING FOR A BETTER FUTURE

LEAD CRYSTAL® BATTERIES

POWERED BY
Betta Batteries

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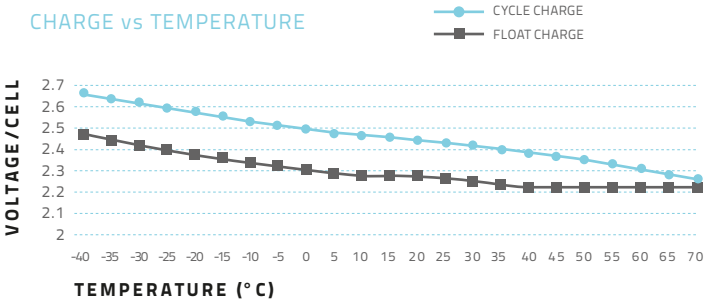
DISCHARGE CURRENT AND END VOLTAGE

Discharge current (A)	End voltage (V)
0.05C or below or Intermittent discharge	1.9
0.05C of current close to it	1.85
0.1C of current close to it	1.8
0.2C of current close to it	1.75
From 0.2C to 0.5C	1.7
From 0.5C to 1C	1.6
From 1C to 3C	1.5
Current in excess of 3C	1.3

CHARGE vs TEMPERATURE



SPECIFICATION

Nominal Voltage		2V
Rated Capacity (10 hour rate)		600 AH
Dimension	Total Height (top of terminal)	335 mm 13.19"
	Height	330 mm 12.99"
	Length	301 mm 11.85"
	Width	175 mm 6.89"
Weight		Approximately 38 kg / 83.77lbs
Capacity 25°C	120 hour rate (6.0A)	720 AH
	20 hour rate (33A)	660 AH
	10 hour rate (60A)	600 AH
Internal Resistance	Fully charged Battery (25°C)	0.3mΩ
Self-Discharge 25°C	Capacity after 3 month storage	95%
	Capacity after 6 month storage	85%
	Capacity after 12 month storage	80%
Max Discharge Current 25°C	6000A (5S)	
Terminal	Standard	F4
	Optional	
Charging (Constant Voltage)	Cycle	Initial Charging Current 180A 2.45V/ (25°C)
	Float	2.27V/ (25°C)

CHARGE vs TEMPERATURE CHART

temperature	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27
Float Charge (voltage/cell)	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23	2.23	2.23	2.23	2.23

CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES (25°C)

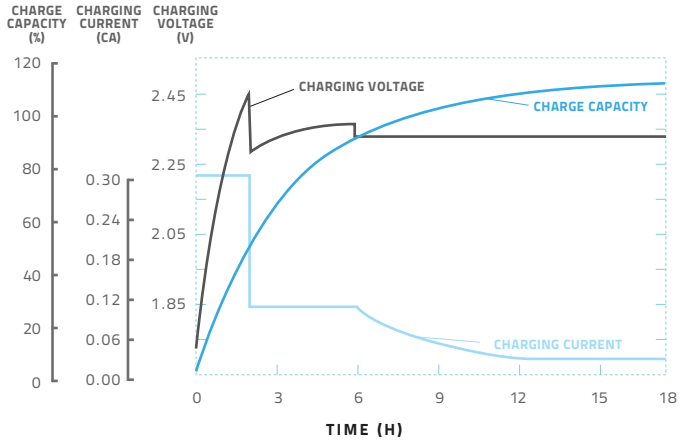
End Voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	1621.44	1034.4	681.60	513.00	419.40	250.20	181.80	141.30	120.00	103.20	78.00	63.00	53.10	33.18	27.80
1.67V	1395.58	937.80	631.80	486.00	406.20	238.80	172.80	139.80	114.00	102.00	76.80	61.80	53.10	33.18	27.80
1.70V	1333.22	909.00	612.00	480.00	392.40	235.20	169.20	138.60	113.40	101.40	76.20	61.20	53.10	33.12	27.72
1.75V	1211.98	850.80	588.00	461.40	379.80	226.20	164.40	135.00	109.80	99.00	75.00	60.60	52.62	33.12	27.66
1.80V	1071.58	779.40	565.80	444.60	363.60	218.40	162.00	132.60	107.40	96.60	73.20	60.00	51.48	33.00	27.54
1.83V	935.42	712.20	522.60	413.20	343.80	208.80	156.00	127.20	102.60	93.00	70.80	58.20	50.10	32.88	26.76
1.85V	799.78	645.00	480.00	382.20	324.60	199.80	150.00	122.40	98.40	90.00	68.40	56.58	48.66	32.82	25.98

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL (25°C)

End Voltage per cell	5min	15min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	2688.58	1810.21	1239.00	944.40	782.40	477.60	348.00	270.59	230.40	202.20	153.00	124.70	104.40	64.80	54.36
1.67V	2401.78	1687.80	1159.80	903.60	762.00	462.72	339.60	269.40	223.20	199.80	149.97	121.80	104.40	64.80	54.36
1.70V	2324.33	1643.97	1128.01	894.00	740.39	450.60	325.80	267.60	219.00	198.60	149.48	120.60	104.40	64.80	54.30
1.75V	2145.61	1545.58	1090.80	866.41	720.00	435.63	318.00	263.40	213.60	195.60	146.40	119.38	104.40	64.80	54.24
1.80V	1945.19	1424.40	1053.59	838.79	692.99	421.20	314.40	258.61	208.20	192.60	144.00	118.20	101.40	64.20	54.12
1.83V	1717.82	1318.78	983.99	786.00	658.20	405.60	303.60	250.20	201.00	187.20	139.20	115.20	99.00	64.20	52.74
1.85V	1490.40	1213.16	914.40	733.20	624.00	389.99	292.80	241.20	193.20	181.80	134.40	112.20	96.60	63.60	51.42

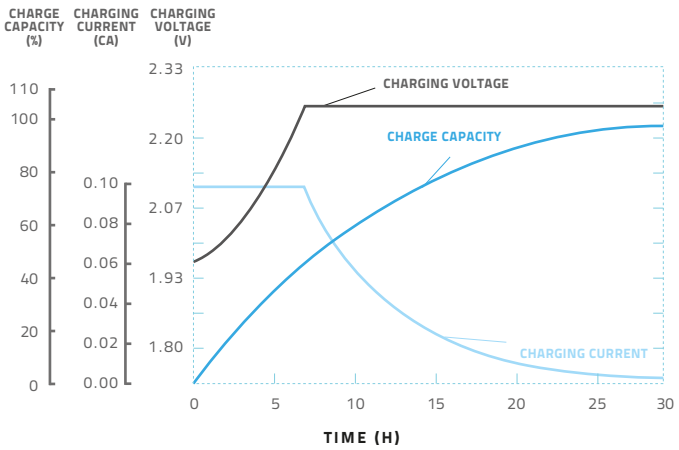
CYCLE CHARGE CHARACTERISTIC (25°C)

REGULAR CYCLE CHARGE CHARACTERISTICS 77°F (25°C)



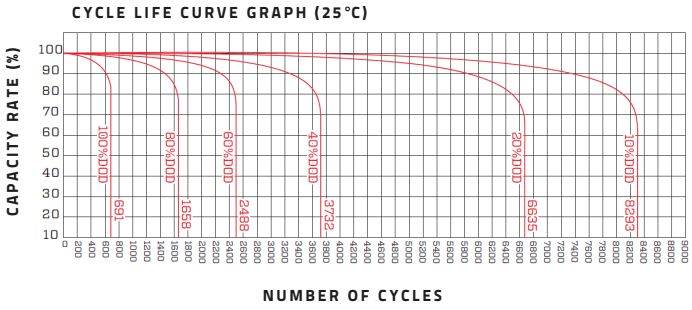
FLOATING CHARGE CHARACTERISTIC (25°C)

FLOATING CHARGE CHARACTERISTICS 77°F (25°C)

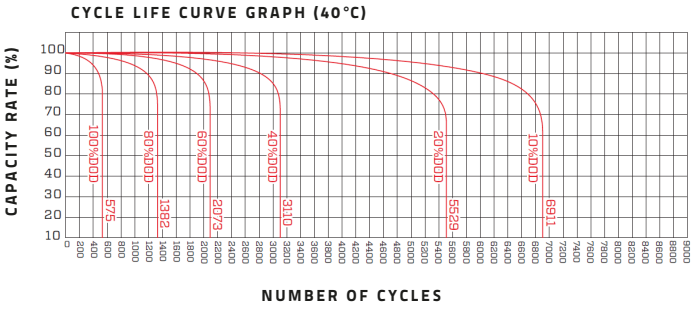


CYCLE LIFE CURVE GRAPH

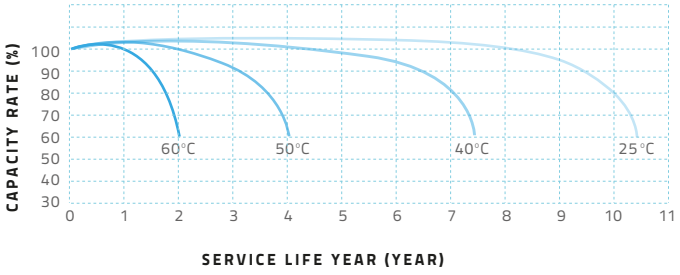
CYCLE LIFE CURVE GRAPH (25°C)



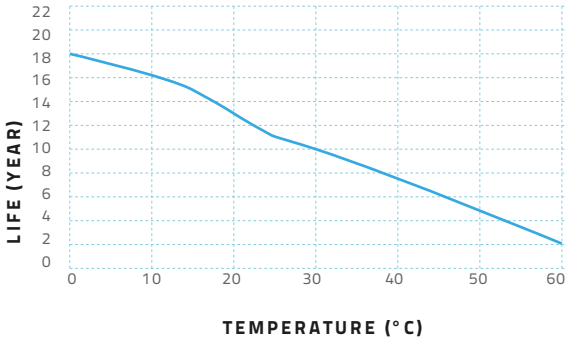
CYCLE LIFE CURVE GRAPH (40°C)



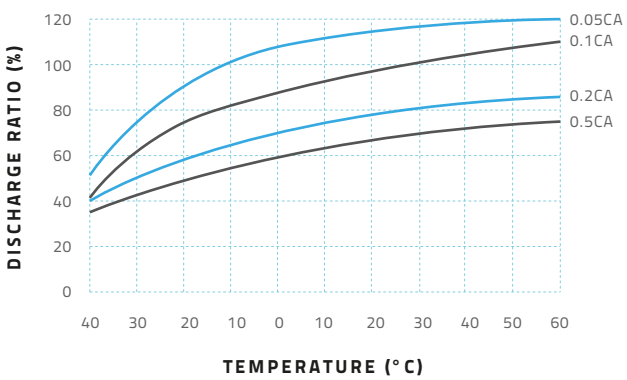
TEMPERATURE & FLOAT SERVICE LIFE



FLOAT SERVICE LIFE CURVE GRAPH



TEMPERATURE & DISCHARGE CAPACITY



CNFJ-600 2V/600Ah

LEAD CRYSTAL®: CHANGING THE FUTURE

Performance Robust, resilient, high performing. Lead Crystal® batteries can be discharged deeper, cycled more often (also in extreme temperatures) and have a longer service life. They recover to full rated capacity over and over again.

Technology A unique micro-porous high absorbent mat (AGM), high-purity lead calcium selenium plates, safe SiO2 electrolyte solution that solidifies into a white crystalline powder when charged/discharged.

Cleaner & safe Less acid, no cadmium, no antimony. Lead Crystal® batteries are up to 99% recyclable and are classified as non-hazardous goods for transport.

Markets Lead Crystal® batteries are being used in telecoms, ups, petrochem/marine, defence, renewable energy, health care, manufacturing, transportation and electric motion (wheelchairs, golf carts & trolleys).

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