

Lead-Carbon Battery for Home Energy System REX-C Series

Narada



■ Feature

- Combine the advantage of lead acid battery and supercapacitor
- Extra long cycle and float design life
- Special construction and formulation design
- Excellent recharge acceptance performance, super fast charge/large discharge performance
- Ideal for PSOC cycle application
- AGM Valve regulated sealed technology
- Module cabinet design, easy enlarge capacity
- Comply with IEC61427, IEC60896 etc. standard

■ Application

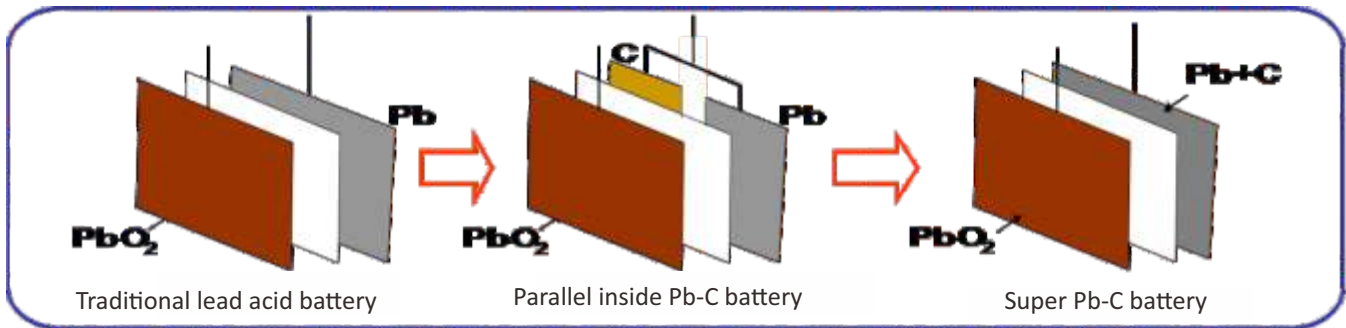
- Home energy storage system
- Hybrid energy system such as solar and wind energy
- Solar energy system
- Wind energy system
- Generator and battery hybrid energy system
- Emergency lighting system
- Other standby, cyclic system

■ Parameter

- Nominal Voltage 12V or 6V
- Charge Voltage Float use: 2.25Vpc (25°C)
Equalization and cycle use: 2.30Vpc (25°C)
- Terminal M6 or M8 copper insert
- Container ABS
- Operation Temp. Optimum temperature : 15°C to 25°C
Max. temperature: -20°C to +50°C

■ Schematic diagram of Pb-C battery

Lead Carbon battery add carbon material with high capacitance or highly conductive into the negative electrode, combine the advantages of lead acid battery and super capacitors, Lead carbon battery provide not only high energy density, but also high power, rapid charge and discharge, longer cycle life.



■ Battery Specifications

Type	Nominal voltage (V)	Nominal capacity (Ah)		Dimensions (mm)				Weigh (kg)
		$C_{10}/1.80V$	$C_{100}/1.85V$	L	W	H	Total H	
12REXC70	12	60	70	280	180	230	244	30.0
12REXC200	12	165	200	438	224	281	294	79.5
6REXC300	6	250	300	338	224	281	294	61.0



Fig.2 12REXC70、12REXC200 outside

■ Modular Cabinet for home energy storage system

Home System	Nom.Energy	Nom.Voltage	Battery Type	Pile Type	Numbers of Battery(pcs)	Modular Cabinet Dimensions(mm)			Total Weight (kg)
						Length	width	Height	
REXC pack 7.9/48	7.9KWh	48V	12REXC200	1, series	4	1121	361.5	539	361
REXC pack 6.0/24	6.0KWh	24V	6REXC300	1, series	4	1121	361.5	539	291
REXC pack 15.8/48	15.8KWh	48V	12REXC200	2, parallel	8	1121	361.5	1080	722
REXC pack 12.0/24	12.0KWh	24V	6REXC300	2, parallel	8	1121	361.5	1080	582
REXC pack 12.0/48	12.0KWh	48V	6REXC300	2, series	8	2250	361.5	539	582

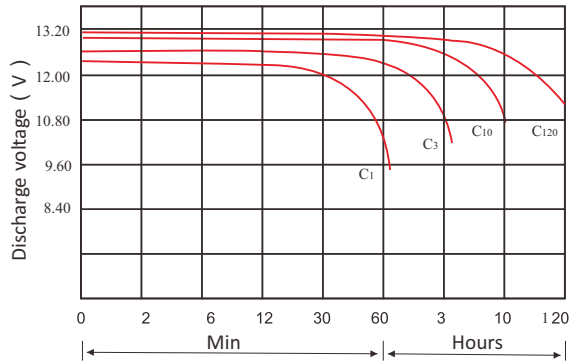


■ Modular Cabinet for home energy storage high voltage system

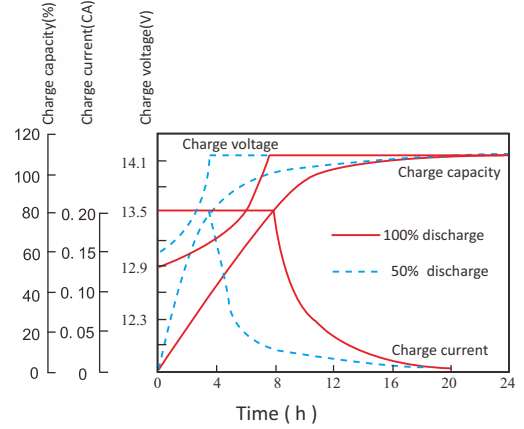
System capacity	Nominal capacity	Nomial Voltage	Battery type	Number of string	Number fo block	Battery cabinet dimensions (mm)			Total Weigh (kg)
						Length	Width	Heigh	
REXC pack 13.6/228	13.6KWh	228V	12REXC70	1, series	19	750	550	950	708



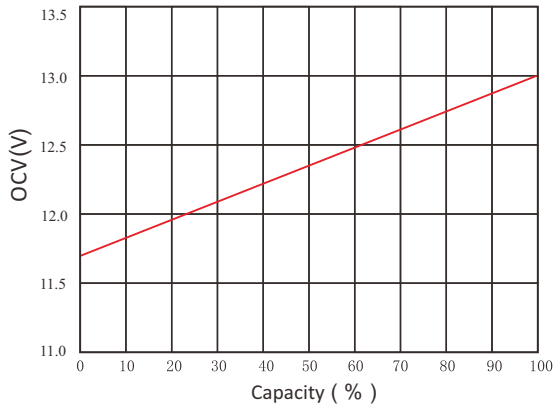
Discharge curve at different rate (25°C)



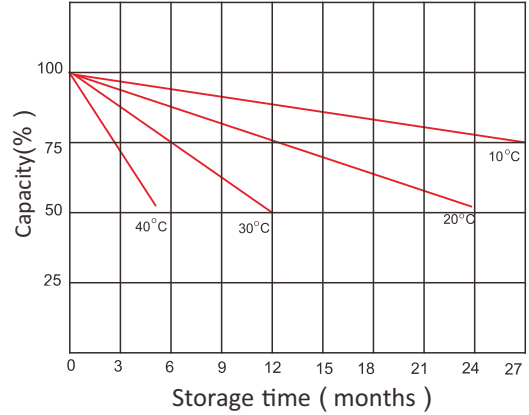
Charge curve (25°C)



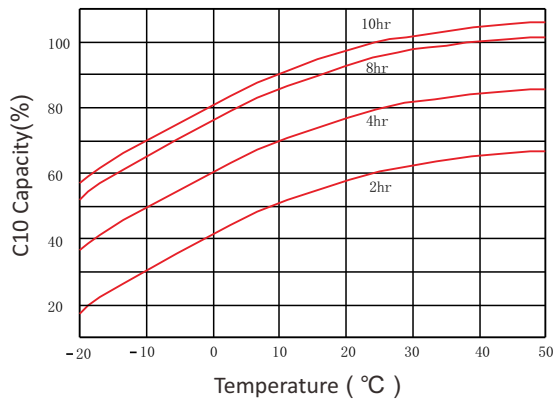
Capacity vs OCV curve



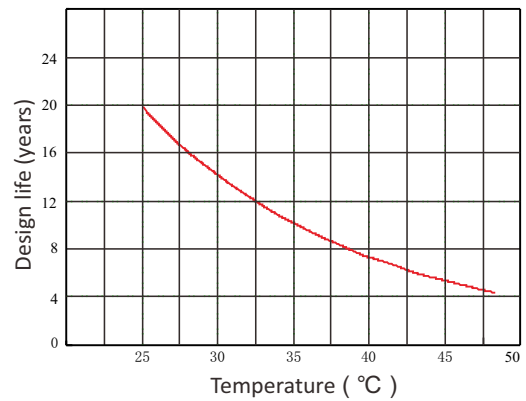
Residue capacity vs storage time



Capacity vs temperature curve



Design life vs temperature



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Subject to revision without prior notice