

Battery Specification

电池说明书

MODEL

型 号: 38.4V150Ah--12S1P

Nominal Capacity

标 称 容 量: 150Ah

Project number

立项编号:

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Registered 编制	Checked 审核	Approved 批准
Customer name 客户名称	Sample confirmation 样品确认	Determine the date 确认日期

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1.Initial Size 初始尺寸



Product Size产品尺寸: mm,					
T (Total length) (长度)	520.0±2.0	W(Width) (宽度)	269.0±2.0	H(Height) (高度)	220±2.0
L (lead wire length) 引出线长	/	terminal 端子	M8	Power 功率	5760Wh
PCM Protection Board PCM 保护板	JBD-SP24S004-V1.3-L12S-200A 嘉百达-L12S-200A-软件保护板带蓝牙通讯			Electric cell 电芯	亿纬 150Ah
Appearance 外观	Orange-covered white shell- Lead acid shell 橙盖白壳-铅酸壳				

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2. Battery picture 电池图片



3. Product Specifications 产品规格参数

No. 序号	Catalog 目录	Specification Requirements 规格要求
3.1	Typical capacity 典型容量	150Ah (0.2C discharge) 150Ah (0.2C 放电)
	Minimum capacity 最小容量	150Ah (0.2C discharge) 150Ah (0.2C 放电)
3.2	Nominal voltage 标称电压	38.4V
3.3	Shipping Voltage 出货电压	39.5~41V
3.4	Standard charging voltage 标准充电电压	CC/CV,30A,43.8V (0.2Ccharging) CC/CV,30A,43.8V (0.2C 充电)
3.5	Standard discharge 标准放电	CC,30A,30V (0.2Cdischarge) CC,30A,30V (0.2C 放电)
3.6	Charge cutoff voltage 充电截止电压	43.8V
3.7	Charge cutoff current 充电截止电流	0.02C 3A (At CV mode)
3.8	Discharge cut-off voltage 放电截止电压	30V
3.9	Charge time 充电时间	5-6 hours (standard charge) 5-6 小时(0.2C)

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3.10	Fast charge/discharge current 快速充放电电流	75A (0.5C)
3.11	Maximum continuous charge/discharge current 最大持续充放电电流	150A (1C)
3.12	Recommended charge current 建议充电电流	30A (0.2C)
3.13	Maximum load/inverter power 最大负载/逆变器功率	5760W
3.14	Initial internal resistance 初始内阻	Max:≤30mΩ
3.15	Weight 重量	(约): Net weight 净重 38±0.5 Kg, Gross weigh 毛重 47.5 ±0.5Kg
3.16	Operating temperature range 工作温度范围	1: Charging 0° C~50° C (32° F~122° F) 2: Discharge -20° C~60° C (-4° F~140° F) 3: Storage -10° C~50° C (14° F~122° F) 4: Low temperature cut-off protection (charging) 0° C±4° C (32° F±39.2° F) 5: Low temperature cut-off protection (discharge) -20° C±4° C (-4° F±39.2° F) 1: 充电 0° C~50° C (32° F~122° F) 2: 放电-20° C~60° C (-4° F~140° F) 3: 存储-10° C~50° C (14° F~122° F) 4: 低温切断保护（充电）0° C±4° C (32° F±39.2° F) 5: 低温切断保护（放电）-20° C±4° C (-4° F±39.2° F)
3.17	Cycle life 循环寿命	>2000 cycles (100% DoD) 3000 cycles, 80% DoD >2000 个周期（100%DoD） 4000 个周期, 80%DoD
3.18	Waterproof rating 防水等级	IP65
3.19	Appearance 外观	No scratches, deformation, oil, leakage, breakage 无划痕、变形、油污、漏液、破损
3.20	Terminal type 端子类型	M8
3.21	Charger 充电器	输入电压: 100-240V,输出: 42.6V20A,美规接头
3.22	蓝牙	支持蓝牙功能-APP 小象电动和 VATRER, TEMGO 兼容
3.23	屏幕	型号: EYD-LCD03, 简易款显示屏, TEMGO, 无蓝牙功能

4. Basic parameters of protection board 保护板基本参数

	项目(Project)	规格(Specification)			单位 (Unit)
		最小值 MIN	典型值 TYP	最大值 MAX	
过压和欠压保护 (Over-voltage and Under-voltage protection)	过充保护电压(Over-voltage)	3.700	3.750	3.800	V
	过充保护延时(Over-voltage delay)	1000	2000	3000	mS
	过充保护释放(Over-voltage release)	3.550	3.600	3.650	V
	过放保护电压(Under-voltage)	2.100	2.200	2.300	V
	过放保护延时(Under-voltage delay)	1000	2000	3000	mS
	过放保护释放(Under-voltage release)	2.500	2.600	2.700	V
	过放保护释放条件 (Under-voltage release conditions)	60±12S 内电压自恢复, 或充电恢复 (60 ± 12S internal voltage self-recovery, or charging recovery)			
	充电过流保护值 (Over-current Charge protection value)	Refer to 3.2.1			
	充电过流延时 (Over-current Charge delay)	7	10	13	S
	充电过流释放条件 (Over-current Charge release conditions)	延时 32±7S 后自动恢复 (Automatic recover after a delay of 32±7S)			
	一级放电过流保护值 (1st Over-current Discharge value)	Refer to 3.2.1			
	一级放电过流保护延迟 (1st Over-current Discharge delay)	7	10	13	S
	二级放电过流保护电流值 (2nd Over-current Discharge value)	Refer to 3.2.1			
	二级放电过流 2 保护延迟 (2nd Over-current Discharge delay)	-	32	60	mS
	短路保护 (Short Circuit Protection)	放电过流保护恢复条件 (Over-current Discharge release)	延时 32S 后自动恢复 (Automatic recover after a delay of 32S)		
短路保护电流 (Short circuit protection current value)		Refer to 3.2.1			
短路保护延迟时间 (Short circuit protection delay time)		-	500	1000	μS
短路保护恢复 (Short circuit protection recovery)		断开负载后约 5 秒自动释放 Recover by releasing load after approximately 5s			
短路说明: 短路电流小于最小值或高于最大值可能会造成短路保护失效, 短路电流超过2000A, 不保证有短路保护, 也不建议做短路保护测试。 (Short-circuit description: The short-circuit current is less than the minimum value or higher than the maximum value, which may cause the short-circuit protection to fail, and the short-circuit current exceeds 2000A, short-circuit protection is not guaranteed, and short-circuit protection testing is not recommended.)					

温度保护 (Temperature Protection)	充电 CHG	充电高温保护值 (High temperature protection value in charging)	62	65	68	℃
		充电高温保护释放值 (High temperature protection release value in charging)	57	60	63	℃
		充电低温保护值 (Low temperature protection value in charging)	-3	0	3	℃
		充电低温保护释放值 (Low temperature protection release value in charging)	2	5	8	℃
	放电 DSG	充电高温保护值 (High temperature protection value in discharging)	72	75	78	℃
		充电高温保护释放值 (High temperature protection release value in discharging)	62	65	68	℃
		充电低温保护值 (Low temperature protection value in discharging)	-23	-20	-17	℃
		充电低温保护释放值 (Low temperature protection release value in discharging)	-13	-10	-7	℃
	MOS FET	高温保护值 (high temperature protection value)	85	90	95	℃
		高温保护释放值 (high temperature protection release value)	65	70	75	℃
均衡功能 (Balance Function)	均衡开启电压(Balance function turn-on voltage)		3.370	3.400	3.430	V
	开启压差(Difference opening voltage value)			15		mV
	均衡电流(Balance current)		40		200	mA
	均衡模式(Balance model)		静态均衡(Idle Balance)			
	均衡类型(Balance type)		脉冲模式(Pulsed model)			

注: 测试需在温度 25±2℃, 相对湿度 65±20% 的环境。
Note: Test should be at temperature 25±2℃, and relative humidity 65±20% of surroundings.

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持续电流 (Continuous current)		充电过流保护值 (Charge Over-current value)	一级放电过流保护值 (1 st discharge Over-current value)	二级放电过流保护值 (2 nd discharge Over-current value)	短路保护值 (Short circuit protection value)
Charge	Discharge				
200A	200A	220±5A	220±5A	700±140A	2800±560A

FCC Statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.