Clayton Power A/S

UN 38.3 Test report

Product Name: CL2103/CL2113
Battery Specification: 12 V - 160Ah Li-Ion
Battery Chemistry: LiFePO4

Unit Name	CL2103/CL2113
Applicant	Clayton Power A/S Address: Pakhusgaarden 42, 5000 Odense C, Denmark
Manufacturer	Clayton Power A/S Address: Pakhusgaarden 42, 5000 Odense C, Denmark
Test Method	UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS", Manual of Test and Criteria ST/SG/AC.10/11/Rev.7, 38.3
Test Date	2021-10-12 – 2021-11-01 (T.1-T.5) 2022-01-17 (T.7)
Test Items*	Altitude Simulation (T.1), Thermal Test (T.2), Vibration (T.3), Shock (T.4), External Short Circuit (T.5), Overcharge (T.7)
External Partner	EVE POWER CO., LTD
Test Laboratory	GUANGZHOU CUSTOMS DISTRICT TECHNOLOGY CENTER Address: Room C102, No. 1 Nanxiangzhi Road, Science City, Guangzhou, Guangdong, China (Institute of Automobile and Equipment Testing in Science City) Clayton Power A/S Address: Pakhusgaarden 42, 5000 Odense C, Denmark
Test Conclusion	The sample has passed the test items of UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS", Manual of Test and Criteria ST/SG/AC.10/11/Rev.7

*(T.1-T.5) are performed on battery level (without Battery Management System) while T.7 is performed on product (with Battery Management System).

DUTs used for testing according to UN38.3

No.	DUT Serial	Mass (Full assembled) kg
1	313000-0192	26,62
2	313000-0194	26,61
3	313000-0197	26,55
4	313000-0198	26,66

Test No	Test Function	Pass Criteria	Conclusion	Remark(1)
T.1	Altitude simulation	UN 38.8 (7th ed.)	Passed	OK
T.2	Thermal test		Passed	OK
T.3	Vibration test		Passed	OK
T.4	Shock test		Passed	OK
T.5	External short circuit		Passed	OK
T.6	Impact		Not Applicable	
T.7	Overcharge		Passed	OK
T.8	Forced Discharge		Not Applicable	

(1) L = Leakage, V = Venting, D = Disassembly, R = Rupture, F = Fire, Ok = No remarks

Test Engineer:

Haris Hujic

Reviewed By

Mads Nielsen