



UN 38.3 Test report



Product Name: CL2003

Battery Specification: 12 V - 160Ah Li-Ion

Battery Chemistry: LiFePO4

Tested by: Haris Hujic

Reviewed by: Mads Nielsen

Unit Name	CL2003
Applicant	Clayton Power A/S
Manufacturer	Clayton Power A/S
Test Method	United Nations recommendations on the transport of Dangerous Goods UN 38.8
Test Date	5/2021
Test Items	Altitude Simulation (T.1), Thermal Test (T.2), Vibration (T.3), Shock (T.4), External Short Circuit (T.5) and Overcharge (T.7)
External Partner	EKTOS TRS A/S
Test Equipment	Altitude chamber (SN: OT2013004) Temperature chamber (SN: OT2013001) Temperature chamber (SN: OT2013002) 18X Power Supply TENMA 72-13350 Multimeter TENMA 82-7732A (SN: M2013003) Vibration sensor MTN/1100CQ (SN: 645583) Clayton power COMBI 2012-100 (SN:200321-0104) PicoScope 2204A Clamp Meter TENMA 72-6185 (SN: M2013006)
Test Conclusion	All tests are passed

DUTs used for testing according to UN38.3

No.	DUT Nr	Mass (Full assembled) kg
1	160-1	28,28
2	160-2	28,27
3	160-3	28,30
4	160-4	28,30

Test No	Test Function	Pass Criteria	Test Result	Conclusion	Remark ⁽¹⁾
T.1	Altitude simulation	UN 38.8 (5 th ed.)	See table 1	Passed	Ok
T.2	Thermal test		See table 2	Passed	Ok
T.3	Vibration test		See table 3	Passed	Ok
T.4	Shock test		See table 4	Passed	Ok
T.5	External short circuit		See table 5	Passed	Ok
T.7	Overcharge		See table 6	Passed	Ok

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

Test performed at:

Clayton Power Aps
Pakhusgården 42
5000 Odense C
Denmark

Test Start Date:

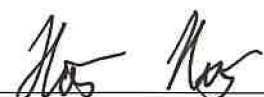
2020-10-28

Test End Date:

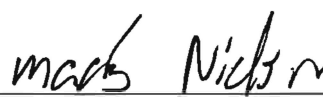
2021-06-08

Test Engineer:

Reviewed By



Haris Hujic



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2020-11-19

2020-12-01

Reviewed By



Mads Nielsen