

INFORMATION ON REGULATION (EU) 2023/1542  
 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
 Article 10 – Performance and Durability Requirements  
 Lithium Cylindrical Batteries



24V 65Ah GC2 Battery	Conditions @25°C±2°C				Comment
	Applied Discharge rate	Applied Charge rate	Depth of Discharge		
Rated Capacity in Ah	70.9	0.5C	0.5C	100	N/A
Capacity Fade in %	20%	0.5C	0.5C	100	N/A
Rated capacity fade (in 80%SOH)	56.7	0.5C	0.5C	100	N/A
Power (W) [mean power]	6.043 W/Cell	0.5C	0.5C	100	Beginning of Life
Power Fade in %	1.2%	0.5C	0.5C	100	After 3500 cycles
Power capability at 80% SOC at BoL	7200 W	N/A	N/A	N/A	$P4=V_{pulse} \cdot I_{max}$ (21.05V*342.06A) Beginning of Life
Power capability at 20% SOC at BoL	7197 W	N/A	N/A	N/A	$P4=V_{pulse} \cdot I_{max}$ (21.04V*324.07A) Beginning of Life
Internal Resistance (mΩ)	14.5%	0.5C	0.5C	100	N/A
Internal Resistance increase in %	16.2%	0.5C	0.5C	100	N/A
Round Trip efficiency	94.7%	0.5C	0.5C	100	N/A
Fade in Round Trip efficiency in %	3.0%	0.5C	0.5C	100	N/A
Expected Lifetime in cycles	3500	0.5C	0.5C	100	3500 cycles to 20% in SOH Approx. 8 years



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36V 45Ah GC2 Battery	Conditions @25°C±2°C			Comment	
	Applied Discharge rate	Applied Charge rate	Depth of Discharge		
Rated Capacity in Ah	47.2	0.5C	0.5C	100	N/A
Capacity Fade in %	20%	0.5C	0.5C	100	N/A
Rated capacity fade (in 80%SOH)	37.8	0.5C	0.5C	100	N/A
Power (W) [mean power]	6.043 W/Cell	0.5C	0.5C	100	Beginning of Life
Power Fade in %	1.2%	0.5C	0.5C	100	After 3500 cycles
Power capability at 80% SOC at BoL	7200 W	N/A	N/A	N/A	$P4=V_{pulse} \cdot I_{max}$ (31.57V*228.04A) Beginning of Life
Power capability at 20% SOC at BoL	7197 W	N/A	N/A	N/A	$P4=V_{pulse} \cdot I_{max}$ (31.56*228.05A) Beginning of Life
Internal Resistance (mΩ)	14.5%	0.5C	0.5C	100	N/A
Internal Resistance increase in %	16.2%	0.5C	0.5C	100	N/A
Round Trip efficiency	94.7%	0.5C	0.5C	100	N/A
Fade in Round Trip efficiency in %	3.0%	0.5C	0.5C	100	N/A
Expected Lifetime in cycles	3500	0.5C	0.5C	100	3500 cycles to 20% in SOH Approx. 8 years



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	Conditions @25°C±2°C				Comment
	Applied Discharge rate	Applied Charge rate	Depth of Discharge		
<b>48V 30Ah GC2 Battery</b>					
Rated Capacity in Ah	35.4	0.5C	0.5C	100	N/A
Capacity Fade in %	20%	0.5C	0.5C	100	N/A
Rated capacity fade (in 80%SOH)	28.4	0.5C	0.5C	100	N/A
Power (W) [mean power]	6.043 W/Cell	0.5C	0.5C	100	Beginning of Life
Power Fade in %	1.2%	0.5C	0.5C	100	After 3500 cycles
Power capability at 80% SOC at BoL	7200 W	N/A	N/A	N/A	$P4=V_{pulse} \cdot I_{max}$ (42.10V*171.03A) Beginning of Life
Power capability at 20% SOC at BoL	7197 W	N/A	N/A	N/A	$P4=V_{pulse} \cdot I_{max}$ (42.08V*171.04A) Beginning of Life
Internal Resistance (mΩ)	14.5%	0.5C	0.5C	100	N/A
Internal Resistance increase in %	16.2%	0.5C	0.5C	100	N/A
Round Trip efficiency	94.7%	0.5C	0.5C	100	N/A
Fade in Round Trip efficiency in %	3.0%	0.5C	0.5C	100	N/A
Expected Lifetime in cycles	3500	0.5C	0.5C	100	3500 cycles to 20% in SOH Approx. 8 years

