

Specification and Measurements

<u>Equipment</u>	Name Date Comment		
<u>Equipment Functions</u>	ROTHENBERGER specified Values	Measured Values Customer	Measured Values ROTHENBERGER
Over current cut-off	I cutoff < 90A/30s < 140A/1s < 280A/0,1s		
Over temperature cut-off	T cutoff < 75°C, R NTC > 1.000Ω (Sensor NTC 6,8k / B3950)		
Under temperature cut-off	T cutoff > -40°C, R NTC < 270KΩ (Sensor NTC 6,8k / B3950)		
Under voltage cut-off, under Load	U cutoff > 12,5V after 1s		
Startup protection in Undervoltage	U startup > 15V		
No Battery wakeup in Idle or Error mode, NTC+ & Datapin	V < 0.5V after 5 minutes		
Quiescent Current when in Undervoltage (U<11V)	I q < 5μA		
Current into Battery	8A / max. 4s, max. 21,15V		

Certification

Battery is certified regarding UN Transportation 38.3 and IEC 62133

Transportation

Shipping of the battery must guarantee according ZVEI-EPTA-IVG-guidelines

<http://www.zvei.org/Verband/Fachverbaende/Elektrowerkzeuge/Seiten/Neue-Merkblaetter-Transport-von-Lithium-Ionen-Batterien.aspx>

Hazard Class

UN-no.: 3480

IATA DGR Pack-Instr.: Documentation IATA Shipping Declaration

Approval

For the complete battery system approval, the costumer have to send a sample device including functional description. The reference sample stay at ROTHENBERGER.

Application

Battery used together with equipment:

Equipment Name / Description

Place / Date

Signature / Customer