

Technical Information

Handling and Warehousing 14S1P BTR

**Products: Batteriemodul 4.8-1C-LV48 with Active Battery Optimizer (ABO)
Batteriemodul 4.8-1C-HV1000 with Active Battery Optimizer (ABO)**

TESVOLT Article numbers: 103509, 103194

Specification / Typ-No.: IMP47/175/127/[14S]E/-20+60/90 / Model: MS4843E102A

Cell type specification: MODEL CS0940RT022A

Handling - Advice on safe handling

- Protection against fire and explosion are recommended.
- Keep modules away from open flames, hot surfaces, sources of ignition and high fire risk objects. Do not heat modules and avoid direct sunlight.
- Do not wear or use metal objects that could cause short circuits on the positive and negative terminals.
- Use tools with an insulated handle in order to prevent inadvertent electrical shock or short circuits.
- Do not put tools, metal parts or other devices on top of the battery modules.
- Avoid a short-circuit of the module; Avoid mechanical damage of the module.
- Use appropriate handling and transport tools when moving the battery modules. Wear safety clothing and protective gears that comply with the PPE rules.
- Installation of the battery system involves heavy cargos, follow safe lifting techniques and guidelines.
- Keep the site as clean and dust-free as possible when installing, servicing, and operating the battery system.
- The battery system must not be disposed arbitrarily. Use an authorized recycler for the retraction of the battery modules or contact TESVOLT AG.
- Installation and maintenance of the battery system must be performed by authorized personnel. Unauthorized personnel are not allowed to access or handle the battery system.
- Do not remove the covers of the modules. Disassembly or modification of modules is strictly prohibited.
- Damaged or deformed modules or modules which shock sensor was triggered, must not be used. Store them safely and contact TESVOLT AG.
- Do not insert foreign substances into modules.
- Do not expose modules to water or highly humid environments.
- Do not smoke within 20 meters of the battery system.
- Do not eat or drink near the battery system.


Warehousing - Requirements for storage rooms and vessels

- Store at room temperature from -10 to 50 °C for maximum 6 months (recommended 28°C).
- Humidity must be less than 85% and there must be no condensation.
- The recommended storage capacity is from 15 to 28 % of the nominal capacity (OCV approx. 50,0 +/- 0,1 V).
- Keep the battery module in the original packaging box.
- When storing or transporting the module in its packaging box, keep the box upright. Do not keep the box upside down or on its side.
- Do not stack more than 6 boxes.


Transport Information

Proper shipping name:	Lithium-ion batteries
ID Number:	UN3480
Hazard Class or Division:	9
Packing group:	-
Label:	9A


Land transport (ADR/RID)

UN number:	3480
ADR/RID class:	9
Classification code:	M4
Hazard label:	9A
	
ADR/RID packing group:	-
Limited and excepted quantity:	-
Tunnel restriction code:	0 / E0
Description of the goods:	E Lithium ion batteries
Other applicable information (land)	
Transport category:	2

Marine transport

UN number:	3480
IMDG code:	9
Marine pollutant:	No
Hazard label:	9A
	
IMDG packing group:	-
EmS:	F-A, S-I
Limited and excepted quantity:	0 / E0
Description of the goods:	Lithium ion batteries
Other applicable information (marine)	
Storage and segregation category	A. SW 19

Air transport

UN/ID number:	3480	IATA-max. quantity - Passenger:	Not allowed
ICAO/IATA-DGR:	9	IATA-max. quantity - Cargo:	35 kg net
Hazard label:	Miscellaneous Lithium batt	Description of the goods	Lithium-ion batteries
		Other applicable information (air)	
ICAO packing group:	-	Lithium equivalent:	395 g
Limited quantity Passenger:	-	Wh-rating per cell:	345 Wh
IATA-packing instructions Passenger:	-		
IATA-packing instructions Cargo:	965		