

OSM-BAT DECISION

Standard: EN 62133-1:2017 EN 62133-2:2017+ AMD1:2021	Sub clause: 5.2 5.2	Sheet No.: DSH 2036
Subject: Insulation resistance of externally exposed metal surface that is connected to cell negative electrode	Key words: Insulation resistance	Meeting: Frankfurt 2024
Question: <p><i>The standard requires insulation resistance of not less than 5 MΩ between the battery's positive terminal and externally exposed metal surfaces (excluding electrical contact surfaces).</i></p> <p><i>For batteries with metal surfaces connected to a cell's negative electrode, how should this evaluation be carried out?</i></p>		
Decision: Disconnect the cell's negative electrode from the metallic enclosure, and then measure the insulation resistance with 500 Vdc test voltage as the standard requires.		
Explanatory notes: To prevent the cell from exploding, the cell needs to be disconnected from the circuit before measurement. An informative example of the construction in question is provided below (the black wire connects the metal enclosure and negative electrode of the cell):		
		