

task_5ztn80yw2uibcsxr_with_calculation

Student Group

First Name	Surname	Matrikel Nr.

Table of Contents

Exercise E4 Conversions: Battery 2

conversions, battery, chapter1 1

Exercise E4 Conversions: Battery

2. How many minutes could a battery with 10 kWh of energy supplied by provided energy power for thermal time?

Reolution

$t = 200'000 \sim \{\text{rm min}\}$

There are additional losses:

$W = 10 \sim \{\text{rm kWh}\} = 10'000 \sim \{\text{rm Wh}\}$ $t = \frac{W}{P}$
 • The battery has an internal resistance. Depending on the current the battery provides, this leads to internal losses.

- The internal resistance of the battery depends on the state of charge (SoC) of the battery.
- The wires also add additional losses to the system.

From:

<https://wiki.mexle.te.hs-heilbronn.de/> - MEXLE Wiki

Permanent link:

https://wiki.mexle.te.hs-heilbronn.de/electrical_engineering_and_electronics/task_5ztn80yw2uibcsxr_with_calculation

Last update: 2024/10/02 17:46

