



Alfen TheBattery

Health & Safety

Safety Precautions of TheBattery

Fire Alarm

- In case of a fire alarm (caused by temperature measurement) The Battery Connect will send a (text/mail) message to Alfen and its customer
- TheBattery will switch itself into safe mode following the process stop process (see also slide 3,4 and 6)
- Immediately the alarmed people should look into TheBattery Connect and follow trend of the temperature in Energy Storage Container, in case temperature is increasing rapidly immediately the fire brigade needs to be informed. In case of uncertainty please inform the fire brigade immediately.

Safety Precautions of TheBattery (1/3)

Fire Alarm

- Always leave TheBattery in case of a fire alarm and call for the fire brigade at once
- Never try to extinguish the fire yourself. The batteries are flammable with the risk of explosion
- Stay away from TheBattery while the fire is extinguished by the fire brigade
- In case of a terminal run away the fire brigade should keep the system cool with water to avoid further escalation



Safety Procautions of TheBattery (2/3)

PROCESS STOP buttons

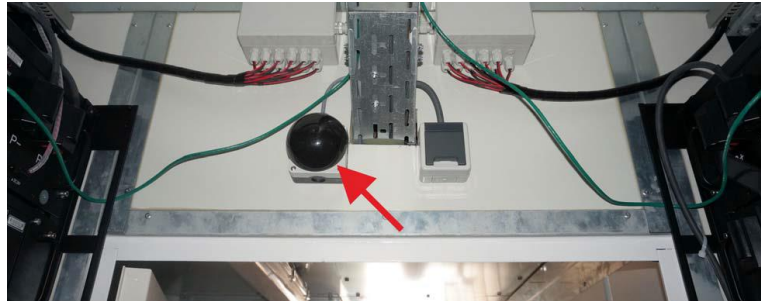
- Press one of these PROCESS STOP buttons to stop the process immediately in case of hazardous situations. As soon as one of the PROCESS STOP buttons is pressed, the PLC will stop all processes of the system to switch the TheBattery to a safe state. In that case, all contactors, all ESI's and all batteries connectors are switched off.



Note that a process stop is not an emergency stop that will isolate TheBattery from electric supply. The AC bus bars in the ESI cabinet are still connected to the grid and energized!



Process Stop Button in ESI Room



Process Stop Button in Battery Room

Safety Procautions of TheBattery (3/3)

Safety Doors and Covers

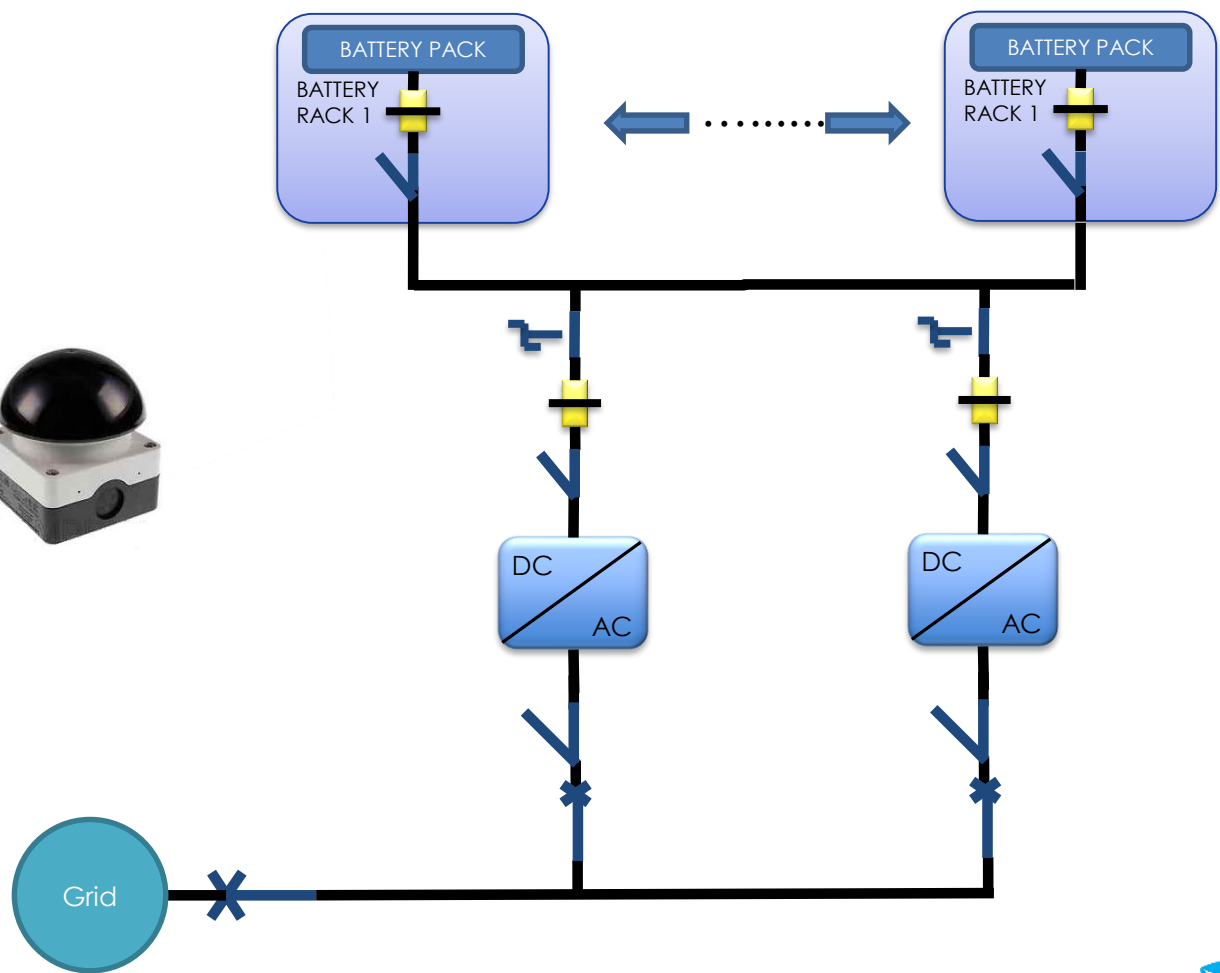
- Protecting from electrical voltages in both the inverter and the battery room.
- All safety doors must be closed and all safety covers must be secured under normal operating circumstances; without exception.
- The safety interlock switches may never be bypassed or removed.
- As soon as one of the ESI cabinet doors is opened during operation, the ESI leg will trip.



Note: this does not mean that the ESI-cabinet is completely de-energized. Hazardous voltages are still present on the AC bus and DC bus!



Sample of Safety Doors and Covers



Safety Precautions of TheBattery

Other precautions of Battery supplier Samsung

- Batteries switch themselves or complete string off when temperatures are too high, alarm is being submitted via BatteryConnect
- Below some tests of Samsung

Voorbeeld sticker veiligheidsdiensten

