



DEHN protects.

AC coupled and scalable Li-Ion battery storage system "scalebloc" by INTILION GmbH

Customer



INTILION GmbH

Project overview

Branch

Energy, e-mobility and industry

Application

Li-Ion battery storage system

Hardware

DEHNshield FM

Blitzductor XT

DEHNpatch

DEHNgate

External lightning protection system

DEHN protects.

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INTILION GmbH

INTILION GmbH, a wholly owned HOPPECKE Group company, deals with the development and delivery of innovative, individual lithium-ion energy storage solutions and, in this context, also offers its customers advanced business models for industrial applications.

Their focus lies on three areas of application: stationary storage systems for buffering renewable energies, motive power storage systems for industrial trucks such as forklifts, as well as high-voltage systems for powering trains, and other heavy-duty applications.

Special features

The scalebloc impresses with its holistically well thought-out concept, which includes an inverter, the energy management system and the air-conditioned housing. The 68.5 kWh lithium-ion battery system forms the basis of the storage solution. Being enclosed in special fire protection racks in 19 inch standard, the battery modules are protected against fire and explosion and damage cannot spread. By means of the integrated 30 kVA or 60 kVA bidirectional converter a stable three-phase 400 V grid can always be provided. All components are optimally operated via a self-developed EMS, controlled for the respective application and the data is provided in the cloud. Complete integration in an outdoor housing specially designed for the scalebloc rounds off the system solution.

Challenge and solution

The constant availability and functionality of battery storage systems is a decisive economic factor. The risks presented by direct and indirect lightning discharge or network-induced surges are high. Repairing the resulting damage entails sizeable costs both for materials and personnel.

That is why INTILION GmbH put their trust in a high-quality lightning and surge protection concept by DEHN which, at the same time, fulfils all international standards. An external lightning protection system is installed on the roof to prevent mechanical damage such as melting of the sheet metal ex-



terior in case of a direct lightning strike. The metal exterior is used as a natural down-conductor to discharge the lightning current to the earthing system and acts as a Faraday cage. In order to ensure complete equipotential bonding, all power and data lines are protected by lightning current and surge arresters designed to protect even the most sensitive electronics. Maximum safety!

Benefits of the DEHN solution

- ➔ Comprehensive protection solution
- ➔ DEHNshield FM, based on spark-gap technology
- ➔ Blitzductor XT, vibration and shock proof
- ➔ DEHNpatch, class E/fully shielded version
- ➔ DEHNgate: capable of remote feeding with SMA connector
- ➔ Certified protection solutions
- ➔ Quality products, made in Germany