

PRESSE INFORMATION XELECTRIX POWER GMBH

Proton Motor delivers self-sufficient fuel cell power plant for Shell in combination with xelectrix Power Battery Storage

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Together with Proton Motor Fuel Cell GmbH, a German expert for emission-free hydrogen fuel cells, the Austrian company xelectrix Power GmbH developed a revolutionary complete system that combines fuel cell and battery storage technologies. The system delivers 100% GREEN energy with 0% CO₂ emissions.

This unique product in the power class of over 200 kW shows the potential when cutting-edge technologies are brought together. Both xelectrix Power and Proton Motor are extremely proud to have developed this world premiere.

The PM-H/LFP-240 system will enable the replacement of diesel generators - an increasingly important aspect with regard to the challenges of climate protection. This unit is designed as a stand-alone system, so that high-performance energy can be provided far away from the public grid but will also be used in Commercial and Industrial applications, especially where back-up is required.

The system has a fuel cell output of max. 129 kW and a system output of 240 kW. Battery packs with LFP cells with a maximum capacity of 240 kWh covering the corresponding peak load coverage and respective autonomy times.

Components of the hybrid system mounted on the transport platform

The core components of the hybrid system „HyShelter 240“ are three Proton Motor fuel cell systems „PM Frame S43“ and an energy storage system of xelectrix Power GmbH. The energy storage system builds up the stand-alone grid and supplies the changing power requirements of the consumers with an extremely fast response time.

„With our fuel cell power plants, we are making a decisive contribution to the success of a sustainable energy transition“, says Manfred Limbrunner, Proton Motor Director of Sales and Marketing, commenting on the trend-setting product novelty for Shell New Energies. It has been possible to combine the hydrogen fuel cell technology with the battery storage technology into a functional unit that produces 100% GREEN energy in this island application.

Fuel cell plant as a power plant with 240 kW output in a 20-foot container

The energy supply for the off-grid H₂ refueling unit is provided by Proton Motor's containerized hydrogen fuel cell power plant with a peak output of up to 240 kW and an integrated energy storage system for 400 VAC grid connection. Three proprietary fuel cell systems are used in the format size "PM Frame S43" with an installed fuel cell output of 43 kW each. The "PM Frame" systems can be operated individually or together to provide power in the range from 6 kW to 129 kW and, via the combined battery system, up to 240 kW of power to the consumers.

In combination with the electrical energy storage from xelectrix Power GmbH, which is also housed in the container, the necessary power and energy for the electrical consumer is generated. The cooler for dissipating the heat of reaction is located on the trailer directly behind the 20-foot container.

After the delivery of the self-sufficient energy arrangement, follow-up orders are planned for the "HyShelter 240" as a hydrogen-based fuel cell power plant respectively for other output variables.





xelectrix Power GmbH

Austrian based xelectrix Power GmbH is an internationally operating company specialized in energy storage, optimization and control. The product range developed by xelectrix Power today provides energy storage solutions for both on- and off-grid applications, which are easy to install as a complete system (Plug & Play) and provide solutions for a variety of industries, including renewable energies, e-mobility, energy suppliers, network operators and especially, for the construction industry.

The brothers Dominik and Alexander Hartl recognized early that energy storage is a key technology necessary for a successful energy transition and in 2016 xelectrix Power GmbH was founded. The rapid change in the energy industry, visionary thinking and, above all, the fact that diesel generators on construction sites are not only operated inefficiently and have high emissions, but are also a significant cost factor, motivated the two brothers to devote themselves to the development and innovation of new types of energy storage solutions.

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