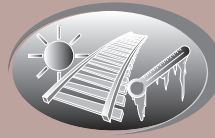




Motive Power Systems



Reserve Power Systems



Special Power Systems



Service

AquaGen[®] premium.top

Recombination system for stationary batteries

Product features

Customer benefits

■ Integrated catalyst

- Maintenance intervals are fully extended with even total freedom from maintenance
- Reduction in ventilation requirements leads to cost savings for air conditioning systems

■ Integrated bi-directional valve

- Efficiency maximised to the level of sealed batteries
- No significant escape of gases or aerosols (similar to sealed batteries)

■ Integrated flame barrier

- Reduced risk of explosion due to the battery

■ Integrated absorber

- Operating throughout the entire lifetime of the battery

Main applications:



For all flooded lead acid
and NiCd batteries



Similar to the illustration

AquaGen® premium.top

The unique recombination system

New patented technology

Functional description

By using the AquaGen® premium.top recombination system, evolving hydrogen and oxygen gases (caused by water decomposition) are fed into the AquaGen® recombination plug.

By means of an integral catalyst, these gases are recombined in the form of water vapour. This water vapour condenses on the inner surface of the AquaGen® premium.top dome. The emerged water drops flow downwards and return into the battery.

The efficiency of this recombination is up to 99%.

Because of this level of efficiency, need for water refilling is drastically reduced or even not necessary anymore.

Another benefit from the use of AquaGen® premium.top recombination plugs is a considerable reduction of the ventilation requirements according to EN 50272-2 / DIN VDE 0510 Part 2 (European standards).

Freedom from maintenance with no restrictions

The recombination of hydrogen and oxygen is an exothermal process in which heat is released.

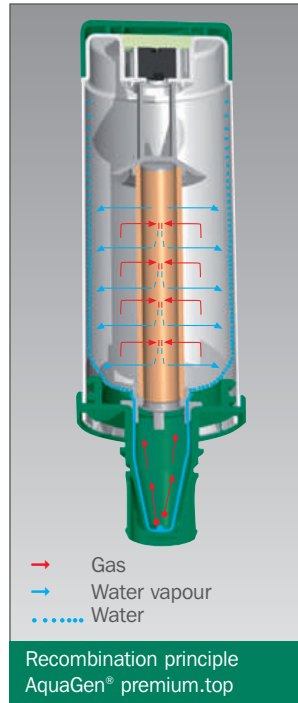
With sealed batteries, this recombination takes place internally at the negative electrodes. Thereby the increased internal temperature of sealed batteries leads to life-reducing effects, particularly at the electrodes. To minimise these negative side effects, the operation of sealed batteries is subject to various limitations.

By using AquaGen® premium.top, the recombination does not take place at active components (electrodes) and not within the battery.

The AquaGen® premium.top recombinator is fitted to the battery as an external component. This avoids any temperature rise inside the battery. The separation of the recombination process from active components of the battery significantly reduces maintenance efforts, comparable to sealed batteries. It does not reduce life expectancy and does not impose restrictions on battery operation.



AquaGen® premium.top V



Recombination principle
AquaGen® premium.top



AquaGen® premium.top H

The AquaGen® premium.top H version is available for capacities up to 340 Ah and for applications with restrictions due to dimensions (e.g. height with reference to battery installation, and depth with reference to cell size).