



# Voith Electrical Drive System (VEDS) Now standard in the first H<sub>2</sub> truck to be built in Germany

**Voith continues to drive the mobility transformation forward at full speed through collaborations with strong partners like Paul Nutzfahrzeuge GmbH and Pepper Motion GmbH. And “driving at full speed” is a very apt description ...**

Whether for buses or trucks, the Voith Electrical Drive System (VEDS) offers all the basic components of an electric drive system for various applications in the commercial vehicle segment. It generally consists of an electric motor available in two power classes (medium-duty MD and heavy-duty HD), a traction inverter, and a corresponding ECU.

Since the beginning of 2023, the HD version of the VEDS has now also been used as standard in the first H<sub>2</sub> truck (FCEV) to be built in Germany: the Paul Hydrogen Power Truck (PH2P). The energy for the electric drive is generated in a fuel cell. The truck was developed, built and perfected by Paul Nutzfahrzeuge and Pepper Motion in close consultation with Voith to ensure optimum road performance in the final vehicle.

And with success, because the series-produced PH2P truck delivers impressive performance, efficiency and comfort. In addition, the VEDS is the first electric drive system for city

buses to be certified according to ISO 26262, thus meeting all functional safety requirements. This is without doubt yet another milestone on the path towards the mobility transformation, and naturally, in the success story of the VEDS.

## Vehicle facts, figures and data

<b>Type</b>	PH2P truck based on a Daimler Atego with VEDS HD
<b>Weight</b>	16 t
<b>Drive</b>	Voith Electrical Drive System (VEDS) HD
<b>Reach</b>	Approx. 450 km
<b>Target group</b>	Medium-range distribution trucks up to 16 t and distances greater than the electric-only range

## In collaboration with:



## The VEDS HD installed in the PH2P truck at a glance

### Technical specifications

Continuous output 310 kW

Peak output 410 kW

Max. torque 3,100 Nm

Max. speed 3,800 rpm

Peak efficiency 97.3 %

### Main benefits

- + First electrical drive system with functional safety conformity (ISO 26262)
- + High efficiency in all speed ranges
- + High power density
- + Robust and reliable design
- + Direct drive – no gearbox necessary
- + Protection class IP6K9K

## Additional information on our partners

Paul Nutzfahrzeuge and Pepper Motion have concluded a preferred partnership agreement. The purpose of the collaboration is to make greater use of synergies and profit from the respective partner's value chains in the commercial vehicle electrification segment.

Paul Nutzfahrzeuge is one of the European market leaders in special-purpose vehicle conversion and construction. In recent years, this business segment within the Paul Group has become a global player that now serves companies all over the world. Every year, the chassis experts carry out chassis rebuilds, axle modifications, frame extensions and special configurations on up to 1,000 commercial vehicles.

[www.paul-nutzfahrzeuge.de](http://www.paul-nutzfahrzeuge.de)

Pepper Motion electrifies innovative solutions for new and used commercial vehicles. With its holistic approach – from consultation and electrification to service and telematics, charging infrastructure and fleet management – the company designs readily implementable, cost efficient and flexible solution packages for a sustainable mobility transformation.

[www.peppermotion.com](http://www.peppermotion.com)

“Together with strong partners like Voith and Pepper Motion, we are striving to instigate a revolution in the hydrogen truck segment. By 2030, 45 percent of trucks are supposed to be carbon-neutral. That's where you need people who say: Let's take a radical approach to getting this done!”

**Bernhard Wasner**, CEO of Paul Nutzfahrzeuge GmbH

“We are proud to be contributing to decarbonization through the development of our fuel cell drive system, and consequently, to accelerating the mobility revolution. Partnerships like those with Voith and Paul Nutzfahrzeuge are the basis for this success.”

**Andreas Hager**, CEO of Pepper Motion GmbH

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