PRESS RELEASE

HVR®210: Rosenberger Redefines the High-Voltage Connector for 800-V and 1,200-V Electric Vehicles

Compact, automation-ready high-voltage connector for up to 208 A / 1,200 V – a single platform for the entire next vehicle generation

Fridolfing, September, 2026 – Rosenberger introduces the HVR®210, a compact high-voltage connector developed specifically to meet the requirements of modern electric vehicles. With an operating voltage of up to 1,200 V DC, a current-carrying capacity of 208 A at 85 °C, and a short-time current-carrying capacity of 437 A for 100 seconds, the HVR®210 is designed for both today's 800-V architectures and future 1,000- and 1,200-V vehicle platforms. It builds on the proven platform of the HVR®280 in a significantly more compact form factor, thereby opening up a new performance range for wiring harness manufacturers and OEMs.

The Transition to 800 V and Beyond

The automotive industry is currently making the shift from 400-V to 800-V vehicle architectures, with a clear trend emerging toward even higher voltage levels of up to 1,000 V and 1,200 V. Higher voltages make it possible to transmit the same power at lower currents. This allows for smaller cable cross-sections, and aluminum conductors become an attractive, cost-effective alternative to copper. At the same time, demands for compactness, weight reduction, and manufacturing-friendly design are increasing.

The HVR®210 was specifically developed to bridge this gap: as a compact, cost- and space-saving connector solution that combines the performance of modern 800-V systems with future-proofing for 1,200-V architectures.

Compact, Lightweight, and Designed for Automation

At the heart of the HVR®210 concept is the consistent reduction of installation space, weight, and system complexity while maintaining high electrical performance. By minimizing the number of components to only the essentials, the HVR®210 ranks among the most compact and, at the same time, most flexible high-voltage connector solutions in its performance class. The automation-ready assembly concept significantly shortens production times for wiring harness manufacturers while simultaneously reducing costs, material consumption, and installation space.

The connector supports shielded single-conductor cables with cross-sections of 16 mm², 25 mm², and 35 mm², as well as unshielded cables with cross-sections of 16 mm², 25 mm², 35 mm², and 50 mm² – for both copper and aluminum conductors. Right-angle and straight versions of the cable connectors can be mated to the same header. The locking mechanism with a lever and CPA (Connector Position Assurance) ensures a secure connection. HVIL (High Voltage Interlock) is available as an option.

Technical Features at a Glance

- Shielded single-conductor cables: 16 mm², 25 mm², 35 mm²
- Unshielded single-conductor cables: 16 mm², 25 mm², 35 mm², 50 mm²
- Current-carrying capacity: 208 A at 85 °C; short-time current-carrying capacity: 437 A for 100 seconds
- Operating voltage: 1,200 V DC
- Vibration class V2 per DIN/TS 70214:2025-11 PG 17

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- Temperature range: −40 °C to +140 °C
- Copper and aluminum conductors
- HVIL available as an option
- RoHS-compliant, local-for-local production

Applications in Electric Mobility

The HVR®210 represents the next generation of connector solutions for low-emission electric vehicles. Typical applications include battery packs, power distribution units (PDUs), inverters, and eAxles. Thanks to its combination of compact design, high electrical performance, and robustness under demanding environmental conditions, it meets the specifications of global OEMs.

“With the HVR®210, we’re bringing the proven reliability of the HVR® platform to a more compact design – without compromising on performance or future-proofing. The system is precisely designed for the power range required by modern 800-V architectures and is simultaneously designed for the next generation of voltages up to 1,200 V. This gives our customers the planning certainty they need for their vehicle platforms,” says Thomas Jäkel, Global Sales Director E-Mobility at Rosenberger.

For more information, visit: https://www.rosenberger.com/product/hvr210/

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	Rosenberger HVR®210 Productportfolio
	HVR®210 Application PDU
	HVR®210 Application PDU Comparison

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	HVR®210 – Designed for Automation

About Rosenberger

Rosenberger is a globally renowned manufacturer of electronic components and systems, recognized for cutting-edge technologies, engineering excellence, and uncompromising quality. Headquartered in Germany, the Rosenberger Group operates worldwide with numerous sales and production locations, offering a broad range of standardized and customized connectivity solutions in RF, high-voltage, and fiber optic technologies.

Rosenberger ensures the reliable transmission of signals, data, and power in the most demanding application areas. Leading high-tech companies across sectors such as mobile communications and telecommunications, industrial measurement technology, automotive electronics, medical and industrial electronics, data centers, and aerospace rely on Rosenberger products for their precision and outstanding reliability. The CNC machining division manufactures precision parts for a variety of industries, including the automotive and commercial vehicle sectors, shipbuilding, and conventional mechanical and plant engineering.

Since its founding in 1958, Rosenberger has been family-owned and currently employs more than 15,500 people worldwide. The company’s employees are known for their dedication, innovative spirit, and commitment to quality, all firmly rooted in the values of a traditional family business.

For more information, please visit: www.rosenberger.com

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