# **Rimac Helps Bring World’s Most Powerful Production Car to Reality**

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**Rimac Automobili supplies the world’s most power-dense battery-system and other systems for the Koenigsegg Regera – the world’s most powerful production car.**

Koenigsegg has always been known for extreme performance and innovation. In their pursuit to push the limits even further, Koenigsegg invented a radically new powertrain concept, called Koenigsegg Direct Drive Transmission or KDD.

KDD enhances performance by combining the advantages of an electric powertrain with Koenigsegg’s cutting-edge combustion engines and thereby removing the traditional gearbox from the equation. As the expert for high-performance electric powertrains, Rimac was the obvious partner to assist Koenigsegg in this ambitious endeavor.

Koenigsegg’s KDD system, invented by Christian von Koenigsegg, uses power-dense electric motors and an innovative coupling system to replace the vehicle’s gearbox. This setup takes advantage of the characteristics of electric motors – high power density, instantaneous throttle response, full torque available from 0 RPM and wide power-band. Additionally, this configuration enables Torque Vectoring, regenerative braking (KERS) and 50 km of emission-free full electric drive.

The Rimac battery-pack is able to deliver 500 kW of power and to absorb 150 kW during regenerative braking. A standard battery-pack would weigh more than half a ton to deliver those kind of performance figures. Of course, this is not acceptable for a Koenigsegg so Rimac developed a complex Fully Flooded Thermal Management System and a fully machined structural housing in order to fulfill Koenigsegg’s radical requirements. This way, Rimac managed to develop a 9,27 kWh battery-pack consisting of over 3.000 individual parts that is able to deliver 4,35 kW per kilogram in a package that weighs 115 kg and takes only 67 liters of volume in the center of the vehicle.

The result is a staggering 1500 hp combined ICE+E power output, 2000 Nm of torque, under 20 second acceleration from 0 to 400 km/h and only 88 kg added weight compared to a powertrain with a 7-speed DTC transmission. The Regera will be handcrafted in 80 units in Koenigsegg’s newly upgraded and refurbished production facility.

“Never meet your heroes. You will be disappointed. That saying doesn’t apply to Christian von Koenigsegg, who was and still is on the top of my hero list. His work and achievements are a great inspiration and his support and friendship are invaluable for me. To work on such an ambitious and forward-thinking project together with Koenigsegg, is a dream come true for us as a company and for me personally. The Koenigsegg Regera combines Koenigsegg’s engine technology with an innovative electric powertrain in a perfect way to enhance performance. It is a perfect example how technology can improve driving dynamics and enhance performance without compromises, while reducing emissions at the same time.”

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**Mate Rimac**
Founder and CEO of Rimac Group

*“Rimac acted quickly and efficiently and managed to create a suitable battery pack that fitted our demanding needs, specification and packaging constrains. As we enjoy working together and appreciate each other’s technology, Rimac is also looking at integrating technologies developed by Koenigsegg. In a sense, two Davids working together against Goliaths of the automotive world – back to back.*

**Christian von Koenigsegg**
Founder and CEO of Koenigsegg Automotive

Working with Koenigsegg is an incredible opportunity for Rimac Automobili to learn from one of the best and most innovative companies in the industry. Both companies hope to further expand their collaboration in various fields.