Regera - Extreme Performance dressed in Scandinavian Cool Elegance

The Regera was created as a luxury Megacar alternative to Koenigsegg's traditional extreme lightweight race-like road cars. Even though the One:1 and Agera have surprising levels of practicality, creature comforts and features, their primary focus is, and has always been, to be the overall fastest cars on the planet – around a racetrack or elsewhere.

Regera is Swedish for "to Reign" - a suitable name for a machine that offers a never seen before combination of power, responsiveness and luxury - creating a true Dr. Jekyll & Mr. Hyde persona.

In spite of all its advanced technology and creature comforts, the Regera is comparatively light. Therefore it can still perform competitively around a race circuit. According to us, the only Hyper/Megacar that could be faster around a circuit, is another Koenigsegg. However, out in the open the Regera will reign as the king of the road, as the fastest accelerating, most powerful production car ever.

The Regera will be handcrafted in only 80 examples. Apart from being a suitable production run for Koenigsegg´s newly upgraded and refurbished production facility, the number 80 also symbolizes the principle of domination, control and achievement in Pythagorean Numerology.

With the introduction of the Regera, Koenigsegg will, for the first time ever, have two parallel models in production.

Regera – Key data:

- World's most powerful production car with a combined power output of over 1500 Bhp and 2000 Nm
- World's most powerful production car electric motor combination - over 700 Bhp
- World's fastest accelerating car to 400 km/h – under 20 seconds
- World's first combustion engine Direct Drive car
- World's first Hyper/Mega car, managing to remove the traditional transmission completely – thereby saving weight and energy losses, making the car lighter and fuel efficient
- World´s most power-dense battery-system
- Highest electric energy storage capacity of any Hyper/Megacar
- Up to 50 km of EV-range
- High flowing titanium "fish tail" exhaust with shortest/lightest possible layout and a unique sound
- World's first fully foldable, active top mounted rear wing
- World's first fully robotized car body, (Front/Rear bonnets, Doors, Mirrors, wing, charge port, etc.). All with soft close functionality and controlled from app or remote
- 3G connectivity with remote app, software upgrades and Pre-active chassis setups
- Apple Car play enabled

- Signature front end Constellation DRL´s and “Superman” Koenigsegg third brake light
- 6 way electrically adjustable lightweight carbon memory seats
- Maintains Koenigsegg signature detachable – in car – storable roof panel
- Plug in capability allowing for clean energy usage
- Koenigsegg´s first car with insulated motor and transmission, sitting on active mounts, reducing cabin sound
- Designed for worldwide homologation, including full federal emissions status and latest safety standards

The Finer Details

The heart and soul of every Koenigsegg is its Internal Combustion Engine – the ICE. The ICE of the Regera follows the path of its siblings, based on the proven and extremely reliable Koenigsegg dry-sump twin turbo, DOHC, 5.0 liter V8, which in Regera guise pumps out an incredible 1100 Bhp on regular pump gas with astonishing ease and responsiveness. The ICE of the Regera features a truly unique titanium fish tail exhaust system, envisioned by Christian von Koenigsegg and produced by Akrapovic. The fish tail exhaust layout enables the shortest most optimal routing, giving less weight and less back pressure. But most importantly a very unique and a fantastic sound!

As many of you have heard, Christian is not a fan of hybrids, as they are generally compromised when it comes to weight, complexity, cost, packaging and efficiency.

Given this the Regera is not what we at Koenigsegg would call a hybrid, as it does not have the traditional shortcomings of a hybrid. Instead the Regera is a new breed of Koenigsegg - and car for that matter.

Traditional, so called parallel, hybrids are compromised and heavy, as they have two independent propulsion systems. Alternatively, series hybrids are less compromised when it comes to weight, complexity and costs, but instead they are compromised when it comes to efficiency, as there is too much energy conversion going on.

This brings us to the Koenigsegg Direct Drive Transmission or KDD for short - invented by Christian von Koenigsegg and developed for the Regera by the Koenigsegg Advanced Engineering team.

The Patent Pending KDD system replaces the combustion engines traditional transmission and gives the added benefit of pure EV mode. What is unique is that the KDD manages to create direct drive to rear axle from the combustion engine without the need of multitude gears or other traditional types of variable transmissions, with inherently high energy losses.

During highway travel, for example, the KDD reduces drivetrain losses, compared to traditional transmission or CVT by over 50%, as there is no step up or step down gear working in series with the final drive - just direct power transmission from the engine to the wheels.

To supplement the energy from the combustion engine and to allow for torque vectoring, regenerative braking, extreme drivers response, reverse and energy conversion, there are three YASA developed electric motors. YASA´s axial flux motors are extremely power dense and allow for direct drive, making them a key-ingredient for the KDD. One YASA for each rear wheel, giving direct drive - this time electric - and one on the crankshaft, giving torque-fill, electrical generation and starter motor functionality.

The three electric motors constitute the most powerful electrical motor set-up in production car history, replacing the gears of a normal transmission while adding; power, torque, torque vectoring and yet still able to remove weight.

The battery pack and PDU for the KDD were developed and manufactured together with Electric Supercar virtuoso Mate Rimac and his engineering team. The 620 volt battery pack is of the latest fully flooded type and is the most power-dense battery pack ever created for a road going car with 9,27 kWh of energy, 67 liters of volume and 115 kg of weight. Still, a full 500 kW can momentarily be drawn during acceleration and over 150 kW can be absorbed by the battery-pack during regenerative braking and ICE power generation mode.

Every cell of the pack is carefully monitored for voltage, state of charge, health and temperature. The cells are enclosed in a fully machined aluminum casing for safety and stability. The battery is located in the most protected area of the car – the carbon-aramid chassis tunnel. The whole battery pack is actively cooled by external radiators and the Regera's all new electrical air-conditioning system, which also can pre-cool the car via the Koenigsegg app on a warm day.

The complete KDD system, including the battery, adds a mere 88 kg to the Regera´s weight, compared to what the Regera would have weighed with a traditional ICE, coupled to a 7 speed DCT transmission instead of the KDD. Presently no other hybrid Hypercar even comes close to this type of weight ratio for their electrification. This is interesting, as they all have smaller battery capacity and less electric power than the Regera.

To put it into perspective, the Regera has almost triple as many electric Bhp (700 Bhp) and over 300 Bhp more than its closest hybrid rival. Still the Regera manages to be very competitive weight wise, while including unusual features such as 6 way adjustable electrical seats and a fully robotized body work. This is no small feat and is a true testament to the meticulous nature of the Koenigsegg engineering team.

The combination of electrical and combustion power is just mind boggling. When you get up to speed, the system really comes into play -How about 3.2 seconds between 150 to 250 km/h and under 20 Seconds from 0 to 400 km/h?

Agera RS - 2015 sees the next exciting episode in the evolution of the Agera

The Agera RS pushes the boundaries and takes the Agera to all new levels of performance. With focus on track aptitude, the RS utilizes advanced technology from the One:1 program while maintaining all the features and functionalities of previous S and R models, and beholds the Agera's everyday usability, luggage compartment, rear window and detachable and storable hardtop.

Examples of available RS enhancements are; advanced lightweight sound insulation, new track optimized front splitter, front winglets, side skirts, advanced dynamic underbody flap system and a dynamically active rear spoiler for added down force, which is now up to 450 kg at 250 km/h. The RS also features improved side air outlets behind the front wheels, increased power and raised rpm limit. Even with all the additional functionality and equipment, we have managed to lower the curb weight, compared to the R and S versions, using advanced chassis and body composites and lay-up.

On top of the standard equipment, the Agera RS also offers the option to choose Koenigsegg active and self-levelling chassis package, 3G connected Pre-Active chassis setups, alternative aero package, active sound cancellation and much more.

The engine - like the previous Agera S version - has been optimized for regular pump gas and now puts out an incredible 1160 Bhp on regular petrol.

Given the 5 liter engine volume, this gives an astonishing 232 Bhp per liter with perfect reliability. On certain markets the Agera RS can also be upgraded to run on E85 with flex fuel capabilities, for even higher power levels.

The Agera RS is the ultimate track tool, while still being able to be registered for road use worldwide, as it is complies with the latest safety standards and other necessary homologation features.

The RS will be handcrafted in only 25 examples, with 10 pre-sold prior to the first showing.