Lateral dynamics in precision: the performance curve of the Audi RS 3

- **Emotion and driving pleasure at the highest level**
- **Outstanding cornering performance thanks to optimized chassis setup**
- **Record holder in the compact segment on the Nürburgring-Nordschleife with 7:33.123 minutes**

Ingolstadt/Castellolí, October 28, 2024 – The Audi RS 3* is the most powerful model in its series and the gateway into the world of Audi Sport. With the upgrade of the current generation, it is even sportier, thanks in part to an optimized chassis setup. The increased agility ensures best times and immense driving pleasure on winding terrain – on the racetrack and in everyday use.

When Audi used the torque splitter in the RS 3* for the first time in 2021, the compact sports car took its driving dynamics to a new level. In combination with the renowned five-cylinder turbocharged engine, which delivers 400 hp and 500 Nm of torque, Audi Sport racing and development driver Frank Stippler equaled the then lap record in the compact class on the Nürburgring-Nordschleife. Three years and technological development later, the feat has been repeated. With identical performance data from the powerful 2.5 TFSI engine, the Audi RS 3* once again proves to be the fastest compact model on the racetrack in the Eifel – more than seven seconds ahead of the 2021 model. How did it happen? Let's discover what made it possible.

Torque splitter: a game changer since 2021

"The torque splitter, with its fully variable torque distribution between the rear wheels, has enabled us to achieve a new level of lateral dynamics. It was a game changer," says Marvin Schwätter, Technical Project Manager of the RS 3*. "We identified potential for improvement and fine-tuned the current model in detail. As a result, the RS 3* is now even more agile and performs better in bends."

And the compact sports car demonstrates this on the hairpin bends in the Spanish Montserrat mountains as well as on the Circuit Parcmotor Castellolí northwest of Barcelona, at the foot of the mountain massif. The varied layout of this four-kilometer racetrack, with its tight bends and significant differences in altitude, offers ideal conditions to experience the increased driving dynamics of the top model. Start the throaty, roaring five-cylinder engine, select the performance mode tuned for the racetrack, and experience lateral dynamics in precision.

The RS 3* *avoids understeer right at the entrance to the bend* and turns in more willingly thanks to fine-tuning – including brake torque vectoring. This means that while the torque splitter provides torque to the rear wheel on the outside of the curve, the wheels on the inside of the bend are braked slightly. Thanks to these finely dosed braking interventions, the RS 3* follows the curve radius more precisely than before and is *positioned earlier and better at the apex of the curve*. This allows the driver to accelerate sooner and achieve a *higher speed at the exit of the bend.*

The technical background

This earlier and more controlled agility is made possible by an improved algorithm that enables the chassis control systems to communicate with each other more precisely. The two control units of the torque splitter, the electronic stabilization control, the brake torque vectoring (i.e. the wheel-selective torque control), and the adaptive dampers of the RS sport suspension react even more sensitively to the respective driving situation – always depending on the selected Audi drive select mode. The interaction of these systems also ensures increased stability, for example in wet or snowy conditions.

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**The collective fuel/electric power consumption and emissions values of all models named and available on the German market can be found in the list provided at the end of this text.*

Fuel/electric power consumption and emissions values of the models named above:

Audi RS 3 Sportback
Combined fuel consumption in l/100 km: 9.5-9.3 *(24.8-25.3 US mpg)*;
combined CO_2 emissions in g/km: 217-211 *(349.2-339.6 g/mi)*; CO_2 class: G

Audi RS 3 Sedan
Combined fuel consumption in l/100 km: 9.4-9.1 (25.0-25.8 US mpg);
combined CO_2 emissions in g/km: 213-207 (342.8-333.1 g/mi); CO_2 class: G