

## The automotive project “HV Battery Simulator”

Tests for the development of electric and hybrid drives



Equipment used from the portfolio of Schulz-Electronic:

- Bidirectional DC power supply TC.GSS 32.500.400.S
- Koba Capacitor Bank

### The Challenge

If a sports car manufacturer enlists external support when developing a drive system, he will only do so if the partner has absolute integrity and outstanding expertise.

Schulz-Electronic has already cooperated with this automotive manufacturer on many occasions and was also brought in for the testing of innovative electric and hybrid drives. The present project concerns the commissioning of the drives and the testing of the motors; the company was looking for a compact, mobile on-board wiring simulation for this purpose.

### The Solution

In order to test how the electric motor can “boost” the combustion engine, a TC.GSS bidirectional DC power supply with 32 kW is used. The TC.GSS supplies the electric motor via an inverter. This is connected in parallel in the sports car’s powertrain and for a short time gives the vehicle a total performance of 700 hp.

The TC.GSS is used to provide this total as it is especially flexible, compact and mobile. Thanks to the flexibility of the system two TC.GSS with 500 V can be operated in parallel or in series (for applications in motor sport). The capacitor bank with 12 mF buffers performance peaks and includes a safety shutdown.



At [www.schulz-electronic.de](http://www.schulz-electronic.de) you can find out more about our projects. And of course you're welcome to get in touch with us any time you need a (special) solution – we will always be pleased to listen to your requirements!