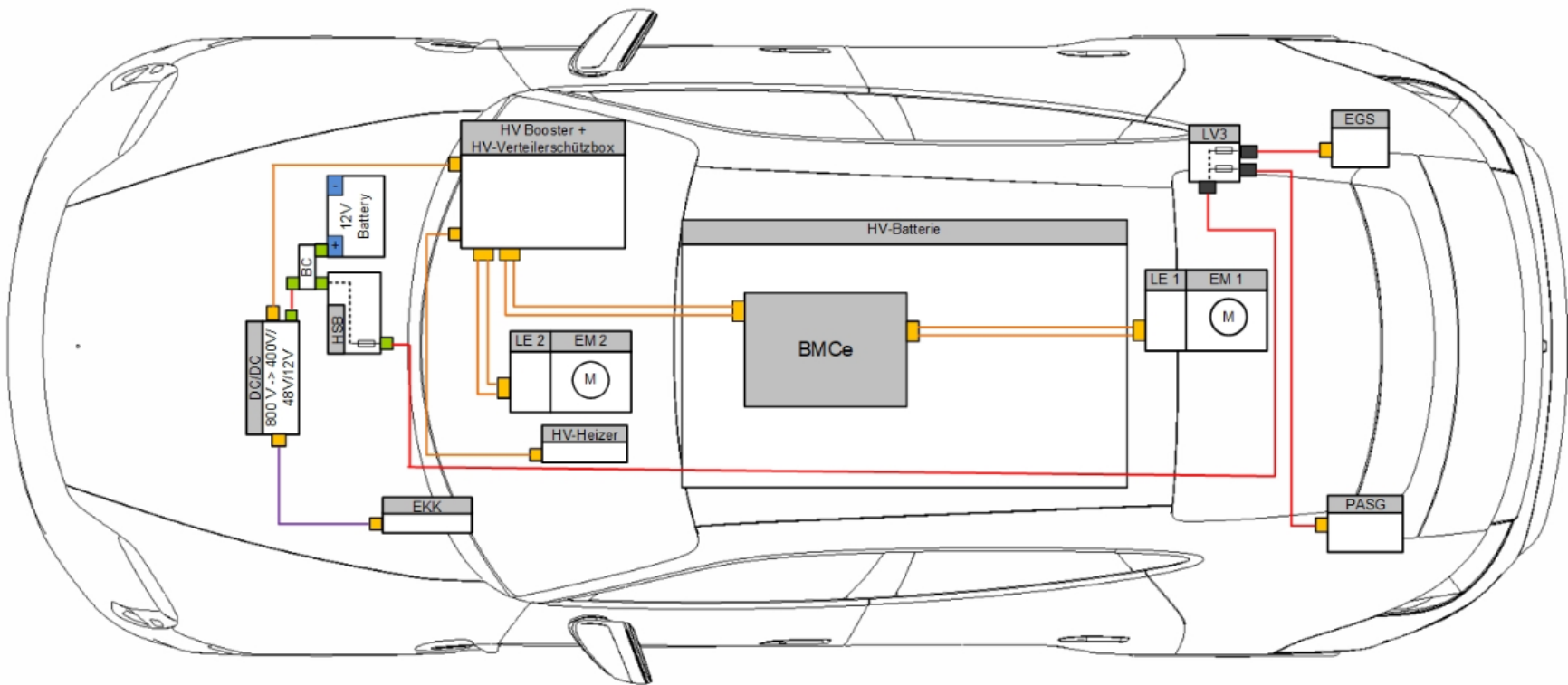


Subject component: the electrical propulsion system (High Voltage Booster, DC/DC Converter, Electronic Climate Control Compressor, High Voltage Heater, High Voltage Battery, EGS, PASG, Power Electronics-Front and Rear, Electric Motors) in the subject vehicles, including the 12-volt battery

HV Booster:
Support component for charging stations up to a voltage of max. 500 V
Voltage conversion from approx. 400 V to 800 V to recharge the HVB
→ Usage of 400V and 800V charging stations for the Porsche Taycan

DC/DC:
Energy conversion from 800V HV on-board electrical system to:
12V Low Voltage on-board electrical system for vehicle ECU supply
48V Low Voltage on-board electrical system for eAWS
400V electrical system for EKK



Power Electronics (LE = Leistungselektronik):
Energy conversion from the DC-HV on-board electrical system into 3-phase alternating current for electrical machines (EM) for propulsion

HV-Batterie/Battery + BMCe (Battery Management Controller):
Energy storage
HVB: battery body with cell modules
BMCe: electromechanics (contactor, ISO measurement, plugs, fuses, current and voltage sensor) and ECU for HV battery

EKK: elektrischer Klimakompressor (electric air conditioning compressor)
Coolant compression for interior air conditioning and vehicle components (HVB, LEs, OBC, Booster, Wandler)

HV-Heizer/Heater:
Heating of the cooling water circuit at cold temperatures

EGS (elektr. Gangsteller):
Two speed gearbox actuator

PASG (Porsche Antriebssteuergerät):
Power train controller



HSB Hauptsicherungsbox (Main Fuse Box)
LV3 Power Sub-distribution (Fuse Box)