

**Innovolutions
for Electric Vehicles
BEV / HEV**

Welcome to an Innovation Driven World

We always strive
for excellence
and innovation



Carbon Zapp is dedicated in manufacturing Automotive Injection Service Solutions, providing a worldwide sales network, investing constantly in R&D and offering efficient support. With today's exponential increase in the automotive industry, Carbon Zapp offers solutions for a healthier, less polluted environment, specializing in designing and manufacturing Diesel and Gasoline Injector Service Benches, that have become a standard for major OE's and general workshops.

As a global supplier to diverse users, with broad knowledge in the automotive industry and through teamwork and skillful personnel, Carbon Zapp is able to support your corporate vision and fulfill your market's needs.

Let's make together the first step towards future and success!

Nikolaos Pantazis
Managing Director
International Business

Dimitrios Pantazis
Managing Director
Manufacturing

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“We have earned our position to the global market because of our commitment to quality products and well known customer service. If we fail to provide satisfaction to our customers, we forfeit our right to their business. Carbon Zapp’s Management and staff loyalty to this business makes it a win-win situation”

**Bill Pantazis,
Founder of Carbon Zapp**



Our Company

Carbon Zapp was founded in 1989 by Bill Pantazis. As a leading manufacturer of Automotive Injection Service Equipment and Tools, Carbon Zapp has its production plant in Athens, Greece and a constantly growing global network in every continent. Recently, the company expanded in Germany by establishing its global headquarters and business administration.

Through a wide range of innovative products, including injector test benches for Diesel and Gasoline injection systems, Engine service equipment and tools, Carbon Zapp offers high quality equipment and customer service to automotive dealers, workshops and educational institutions, as well as for specialized developers, remanufacturers and most major automotive OE's. Carbon Zapp uses over 35% of its profits to update existing products with newer technological advancements and aims to provide simpler methods and tools for a safer environment.

Carbon Zapp today is the **VDO Authorized** global partner for Diesel Specialists to Diagnose and Service CRDi systems, holding the unique technology to correctly control with Energy and accurately test VDO EU5 Common Rail Injectors.

Our Mission

Carbon Zapp aims to provide user friendly, compact and time saving solutions to a wide range of operators, focusing in the automotive injection systems.

Innovation Driven Company

"Innovation" is the key to continuous growth and competitive advantage. Carbon Zapp "Drives" its research team to keep a high ambition level and work on their research, development and technical skills.

On an annual basis, the company invests more than 35% of its profits on research and development for upgrading existing and implementing new products. Carbon Zapp has fostered an extensive group of intellectual property and talented personnel throughout the years. Strategic agreements and world-class component suppliers have contributed in developing advanced technologies and products. in developing advanced technologies and products.

Our Customers

- Diesel Service Centers
- Auto Workshops /Dealerships
- Automotive Aftermarket OEM's
- Parts Remanufacturers
- Automotive OE's
- Developers

Innovation is the key to continuous growth and competitive advantage





Support

At Carbon Zapp, customer satisfaction is a major priority. The staff offers the best service to increase customer trust, earn their loyalty and built their respect. The key to this success is to acknowledge the customers' needs and listen to them.

Global Sales Network

With a logistics center in Athens, Greece, Carbon Zapp can effectively export its products globally in all 5 continents and over 65 countries. The products are trusted internationally for their world class quality. Carbon Zapp takes pride in consistently delivering premium products and reliable customer services.







Innovations for Electric Vehicles BEV / HEV

Carbon Zapp evolves in e-mobility.
Innovative Service and Consumer Solutions
for BEV and HEV vehicles are made Easy and
Safe to use.

BRSEV

eBoostEV



BRSEV

The BRSEV, is able to thoroughly test the complete HV circuit of a EV / HEV battery for safety and diagnostic purposes, charge and discharge single cell modules and finally check their air tightness.

1 High Voltage Potential & Diagnosis

Functions

All-Pole Voltage Test (lack of voltage)

Insulation Resistance Test (Insulation-R as a function of V and A)

SAE J1766 Insulation Resistance Test (under load with parallel resistance)

Full measurement (Voltage, HV insulation R and SAE J1766 tests done semi-automatically)

Equipotential bonding check

Resistance measurement (Ohm)

Diode test

Capacity measurement

Insulation monitor check



Safety-Ware

cloves, goggles, boots, clothes

EV Tools required

battery lift, HV-Safe handtools, etc.

Features

Editable Test Voltage: 250-1000 V @ 1 mA

Generation of high voltage only at press of a button

Automatic discharge of transient current and voltage after the high-voltage insulation resistance test

High-voltage safety circuit (automatic switch-off)

Single Phase Power supply 100-250VAc @ 50/60Hz

Interface: USB 2.0 or later (galvanic insulated)

Function indicators (LED)

Printing Results Protocol

Database (Continuously Updated)

Expected
Production 2019



2 Battery Repair & Module Balancing

To guarantee an overall equal load of all cell modules on a HV-battery, the new cell module has to be charged / discharged to meet this load of the whole battery. The balanced cell module replaces the defect cell module of the battery.

3 Battery Leakage Test

Finally the battery tightness is very important to assure optimum operation of the battery out in the field. Dust and other particles can be very dangerous for the health of the battery of an EV/HEV.



Functions

Module Charging / Discharging

Safety test of the module and battery assembly

Self-test of system for accurate measurements and charging

Digital Leakage Testing -50... +50mbar

Digital Cooling System Testing for large volume battery housings

Reporting

NOTE: The BRSEV, is designed to be used in advanced workshops and dealerships which have been trained to work safely with HV battery repairs. To use this device, you must have a special qualification and training



Smartphone app & Bluetooth

The eBoostev AZO app provides extended control from your smartphone. In this way charging costs and CO2 savings can be evidenced.



- 230V 1-phase Schuko 2.3 kW
- 230V 1-phase CEE 3.7 kW
- 400V 3-phase CEE 11 kW
- 400V 3-phase CEE 22 kW



3-phase charging enables a charging power of up to 22 kW.

eBoostEV

charge fast anywhere

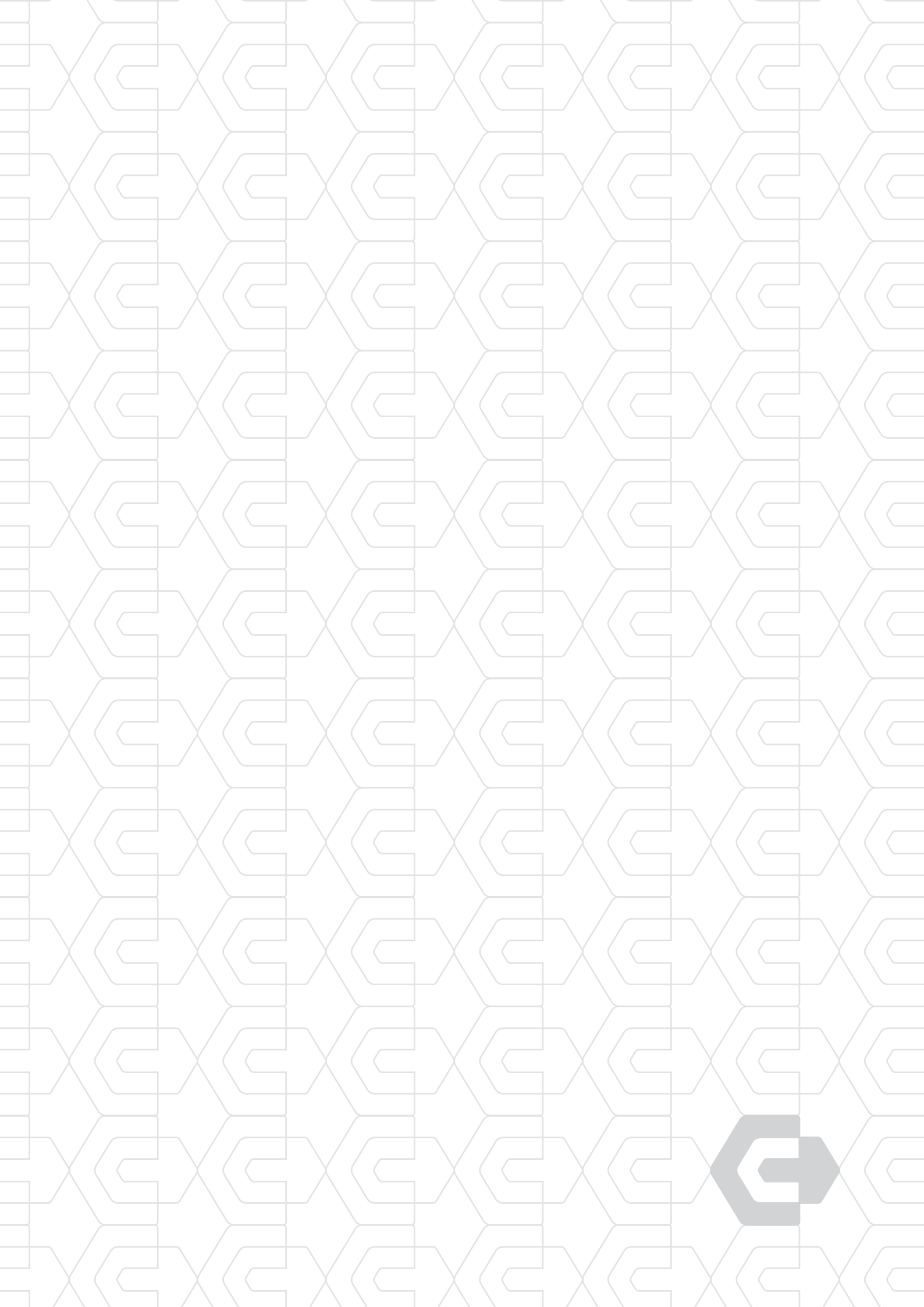
eBoostEV – Adapter-Set

With eBoostEV plug adapters, any power socket gets e-car safe and a stationary wallbox becomes unnecessary!

- Displays current, voltage and charging power**
- Phase detection**
- Monitoring of frequency and temperature**
- Adjustable energy quantity and current**
- Charging costs and CO2 savings can be evidenced**
- Theft-Protected and Waterproof**
- Compact and convenient**
- Quality Product**

Dimensions 215 x 90 x 84mm
Total weight 2,4kg to 4kg incl. cable
Nominal voltage 230V/400V 50Hz
Nominal current 16A, 32A
Max. charging power 11kW, 22kW
Residual current detection (RCD) AC 30mA, DC 6mA (EN 62752)
IP protection class IP66
Charge mode 2 acc. to EN 62752
Ambient conditions -30°C...+50°C (standard: +45°C), 5%-95% humidity
Vehicle plug Type 2 (IEC62196) or Type 1 (SAEJ1772)
Bluetooth connection Bluetooth Low Energy (BLE) **
Integrated energy meter for measuring of current, voltage, energy and power at all phases







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