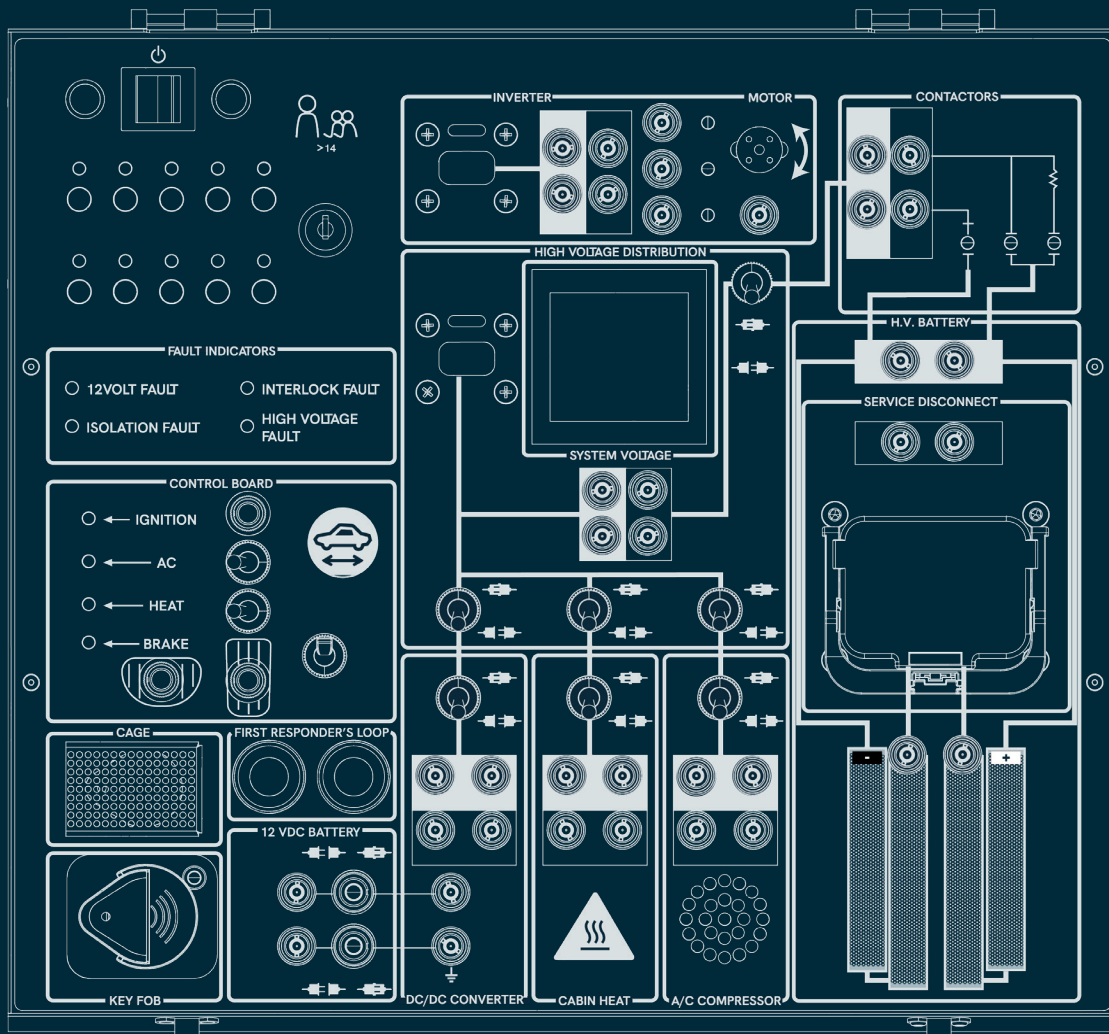




EV High-Voltage Safety Trainer





The EV-400 Automotive High-Voltage Safety Trainer represents a fully functional battery electric vehicle (BEV) in a compact classroom sized package. It provides an intuitive, hands-on experience for high-voltage testing, Personal Protective Equipment (PPE) use including gloves and insulated tools, high voltage isolation testing with a mega-ohmmeter, high voltage interlock circuits, first responders' loops, three phase motor control, high voltage power distribution, and much more. The product has a fault box and a faulty component, allowing diagnostic practice. The system reacts as a real BEV, demonstrating functions of various scenarios and components. All in a completely safe, controlled, classroom environment.

EDUCATIONAL ADVANTAGES

The ConsuLab EV-400 High-Voltage Safety Trainer includes student assignments and practical exercises that (when combined with the required prerequisites) prepare a technician or instructor to successfully complete the [CSA Group Automotive Electric Vehicle Technician Certification](#).

- Students experience the full power of EV systems with real-world voltage, completely safeguarded for student interaction.
- Comprehensive Simulation: From start to drive motor, the EV-400 replicates the full functionality of an EV, providing an immersive learning experience.
- With blinking lights, a spinning motor, a ready light, accelerator and brake pedals, the product encourages and creates student attention and motivation.
- EV-400 transcends the limitations of traditional trainers. It's not just about demonstration; it's about active engagement, hands-on learning, and real-world application. This innovative tool is perfect for:
 - Technical training programs: automotive, electrical engineering, emergency response.
 - Educational institutions: motive power trades, vocational schools, community colleges, and high schools.
 - EV manufacturers and repair shops: upskilling technicians and ensuring safety protocols.
- Engaging Educational Outcomes: Comprehensive exercises, complete with answer keys, allow educators to gauge student competencies effectively.
 - Understanding & Usage of Personal Protection Equipment (PPE)
 - Identification of High-Voltage Components
 - High-Voltage Measurements Verification
 - Circuit Insulation & Isolation Testing
 - Lockout/Tagout Demonstrations with Faraday Cage
 - 3 Phase Motor Functionality via Oscilloscope
- Builds student confidence in working with high voltage systems.



**FEATURES**

- Fault box with 10 faults + 1 faulty component
- Measurable 400V DC and 3 phase motor signals.
- Includes a printed paper copy of operation manual with schematics, and access to PDF files for student activities and instructors guide.
- Live loss of isolation (LOI) detection
- 4 different fault indicator lights (12v, high voltage, isolation, interlock).
- Compact & Portable: This unit easily stores and transports, making learning accessible anywhere.
- Available as a single unit, or as a classroom set with mobile, locking storage cabinet.
- Includes High Voltage gloves and PICO Insulation Tester

**TECHNICAL
INFORMATION**

- Voltage 100-240 VAC Amps 0.8 Phase 1
- Plug type NEMA Detachable, CEE 7/4 (220V) and NEMA 1-15P (120V)
- **Dimensions:** 16.75 x 18 x 5.25 inch (42.5 x 47.72 x 13.3 cm) / 22 x 20 x 10 inch (55.9 x 50.8 x 25.4 cm) with packaging.
- **Weight:** 26 lbs (11.8 kg) / 29 lbs (13.2 kg) with packaging.

