



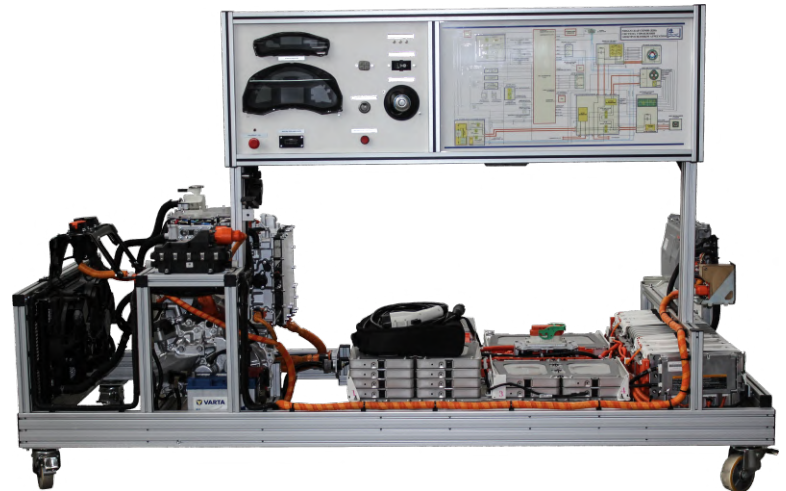
ELECTRIC VEHICLE EDUCATIONAL TRAINER

L3

Product number
MSEV01

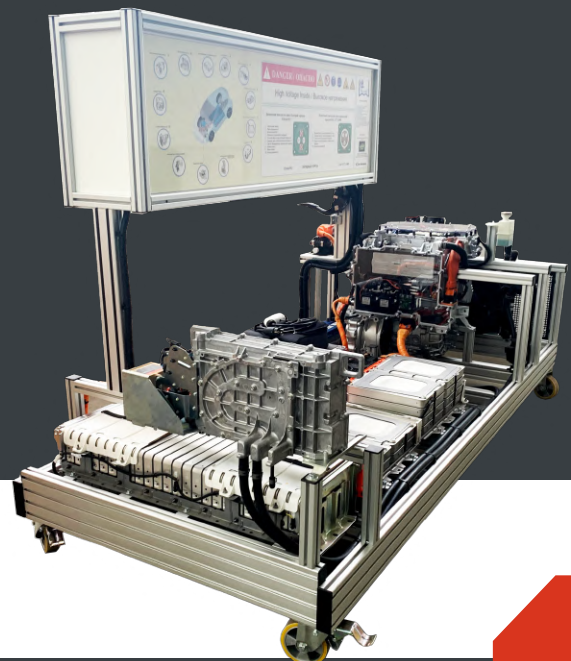


The Electric Vehicle Educational Trainer MSEV01 is equipped with a 80 kW traction motor, a high-voltage 24 kWh Li-ion battery, and a comprehensive control panel. Mounted on an aluminum frame with castors, it includes an electric controller, electric air conditioner compressor, and high-voltage cables protected by plexiglass. The trainer also features an OBD 16-pin diagnostic socket, electric interior heater, cooling radiator, DC/DC converter, and an on-board charger, providing a complete technical training setup for EV systems.



Features

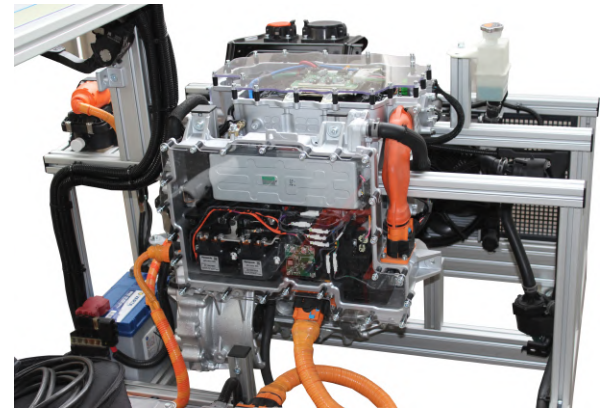
- Fully functional EV trainer based on real-world electric vehicle components.
- Electric motor, controller, and battery system, including a 24 kWh high-voltage Li-ion battery with 48 modules.
- Integrated electric air conditioner compressor and other auxiliary systems.
- Complete safety features, including high-voltage cables with plexiglass protection and a high-voltage disconnect fuse.
- Mobile aluminum frame with castors for easy classroom integration.
- Comprehensive wiring diagram showing all sensors, actuators, and data transmission lines.
- Diagnostic capabilities through OBD 16-pin connector, facilitating fault detection and data analysis.
- Real-time monitoring of battery state, including SOC, temperature, and voltage regulation via the Li-ion battery controller.





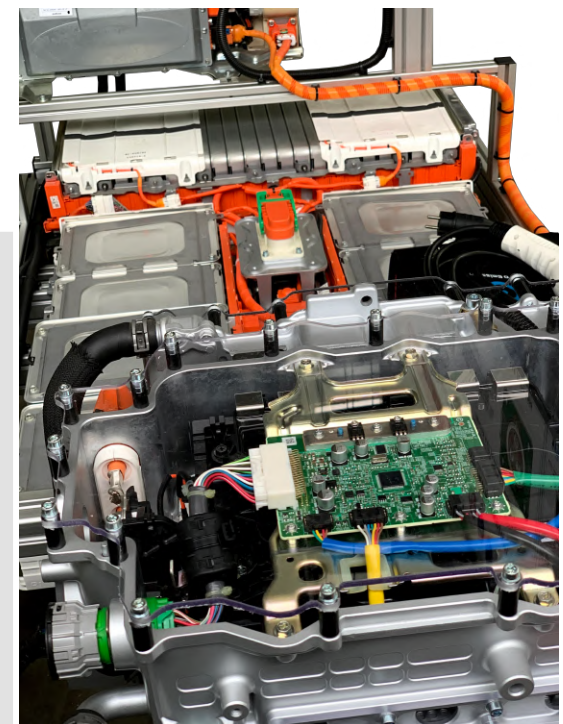
Values for students

- Obtain practical knowledge of EV systems, including the electric motor, electric controller, and battery management system (BMS).
- Develop diagnostic skills using the OBD 16-pin diagnostic connector, facilitating real-time data analysis and fault code management.
- Gain expertise in handling high-voltage components safely, with all systems connected by high-voltage cables and protected by plexiglass covers.
- Learn about the structure and operation of a high-voltage Li-ion battery, including SOC (State of Charge) management, temperature control, and cell voltage regulation.
- Understand the intricacies of EV power management, from traction motor control to battery charge and discharge procedures, ensuring comprehensive knowledge of EV propulsion systems.
- Explore the layout and function of critical EV components, such as the traction motor inverter, DC/DC converter, and onboard charger, gaining insight into their role in efficient energy conversion and power distribution.



Values for teachers

- A fully operational model to demonstrate the complete EV system, including the electric motor, controller, battery, and safety mechanisms, providing an authentic teaching experience.
- Utilize OEM parts to offer students realistic, hands-on training with actual EV components, ensuring they are well-prepared for real-world automotive environments.
- Enhance classroom integration with a mobile aluminum frame on castors, allowing easy relocation and setup in various training scenarios.
- Promote student safety during high-voltage training sessions with comprehensive safety features, including protective plexiglass covers and a high-voltage disconnect fuse.
- Simplify lesson preparation with a clearly marked control panel and wiring diagram, facilitating quick resets and efficient teaching workflows.
- Equip students with practical skills in diagnosing and troubleshooting EV systems, using industry-standard diagnostic tools and procedures.



Specifications

- Dimensions: 2505 x 1055 x 1605 mm (98.62 in x 41.54 in x 63.19 in)
- Weight: approx. 700 kg (1543 lb)
- Power supply: 12 V battery, high-voltage battery (~400 V) 24 kWh, 230 V 50 Hz household electricity network
- Motor power: 80 kW (109 HP), 280 Nm torque
- Safety equipment: protective tools set EHVS01 (recommended for safe operation)
- Made in EU
- Product number: MSEV01