

Item No.: CO4205-1J

## Course - Automotive 26: "Battery Disconnect Unit in Hybrid and all Electric Vehicles"

High-voltage battery disconnect unit (BDU)

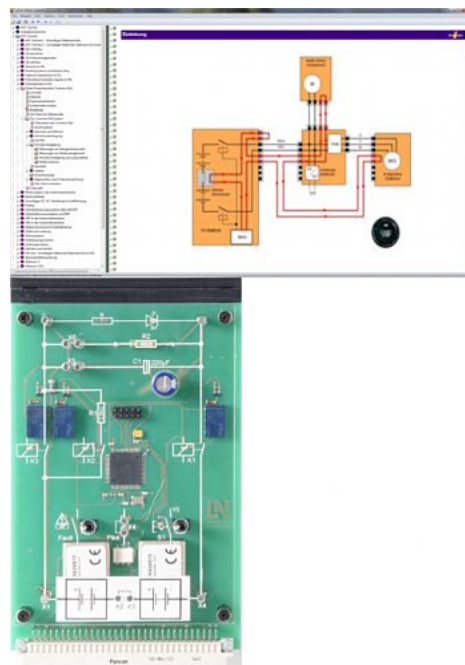
The battery disconnect unit training system allows the design and operating principle for disconnecting a high-voltage battery from the on-board network to be investigated.

### Includes

- Experiment card with circuitry for experiments in Eurocard format
- Interactive training course on CD-ROM with Labsoft browser, course software and additional virtual instruments
- Storage case
- Jumpers

### Components on experiment card:

- Electronic circuit for battery disconnect unit (BDU)
- Measuring sockets
- Fault simulation circuitry
- Two battery blocks
- Three relays
- Microcontroller-based control
- Service and maintenance plug
- Ignition switch
- Lamp to indicate when ignition is on
- High-voltage fault switch
- High-voltage fault indicator
- Pilot disconnecting bridge
- DC-link circuit capacitor
- Load for on-board network
- Display of on-board network load
- Measurement sockets for battery blocks
- Measurement sockets for on-board network



### Training contents

- Fundamentals of battery disconnect units
- Compiling repair shop orders
- Diagnostic functions
  - Reading out fault memory with a diagnostic tester
  - Classifying faults in vehicle systems
- Function and design of a pilot line
  - Design of electric circuit
  - Principle of operation
  - Control
  - Circuit variants
- Repair methods and conversations with customers
  - Selection of repair actions as specified by manufacturers
  - Working with spare part numbers
- Investigation using measuring instruments
- Effect of faults commonly seen in practice (simulated faults can be activated)
- Course duration 7 hours approx.â€â€

**Dimensions/weight:**

- 100 x 170 mm (width x height)
- 0.8 kg