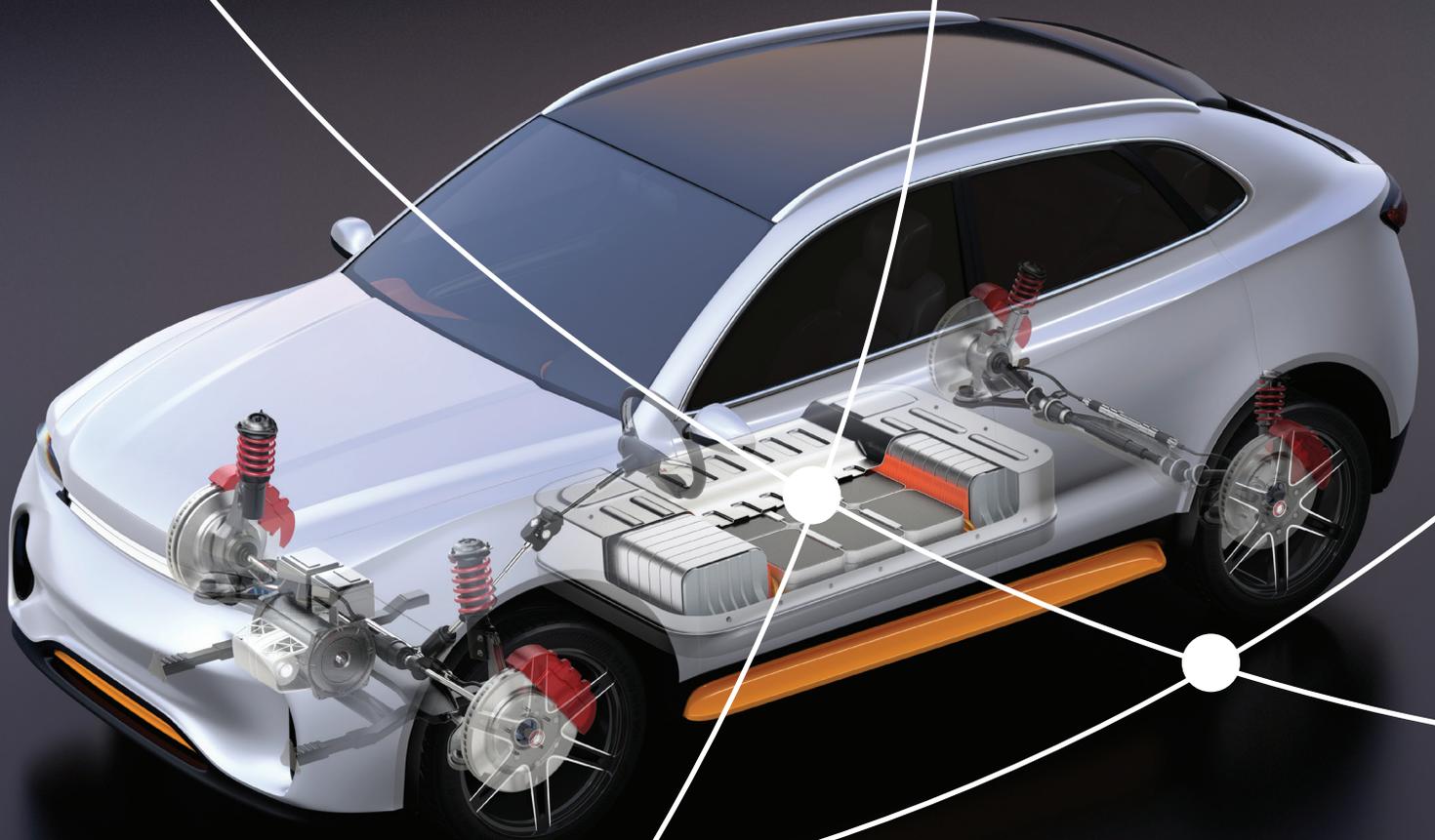
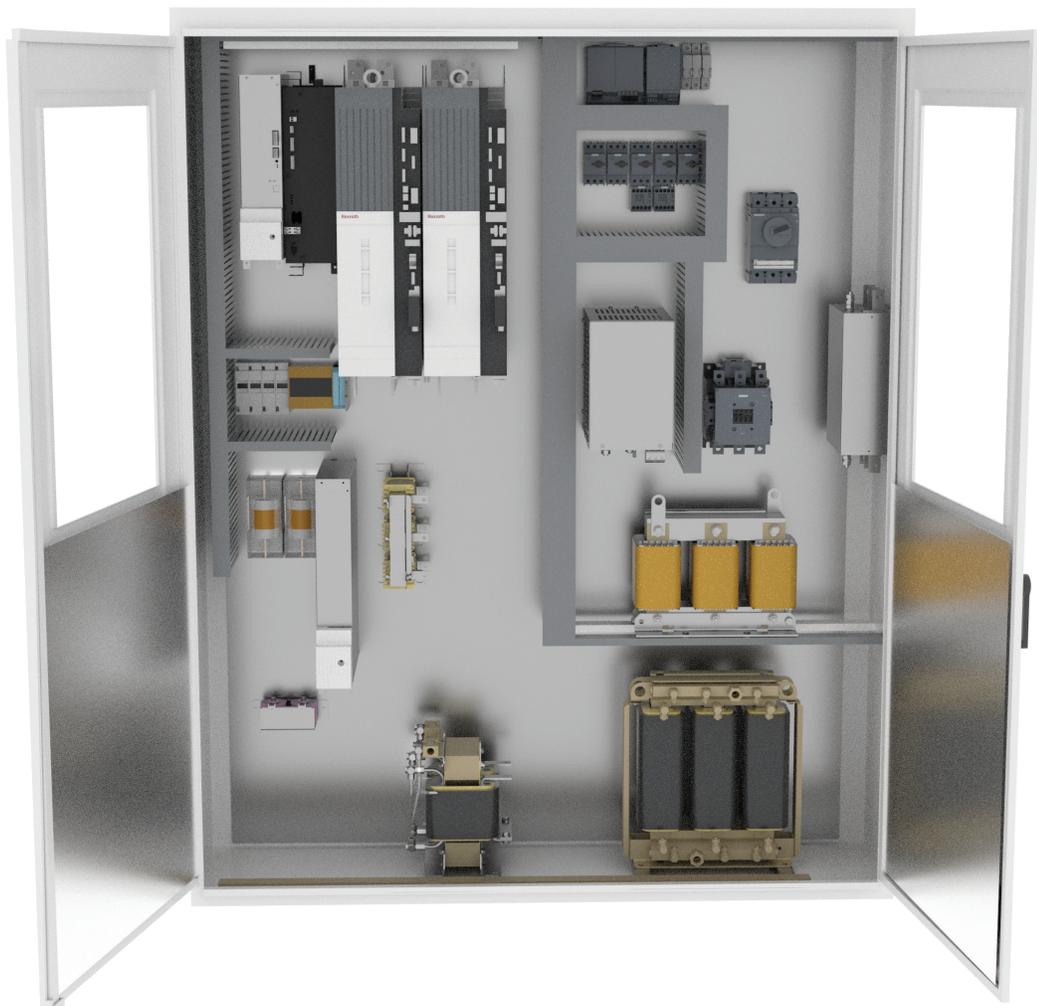


Battery Cycling DC Testing Solution



Battery Cycling—DC Testing Solution

As the electric vehicle industry grows, so does the demand for a more efficient and reliable production process. Manufacturers desire production-ready, end-of-line testing equipment, and research and development test equipment. The Battery Cycling—DC Testing Solution provides clean DC voltage and highly dynamic current with a modular, future-proof design for your evolving testing needs. This custom solution utilizes industry-leading components from Bosch Rexroth to provide accurate DC voltage and current.



Modular Platform and Open Core Engineering

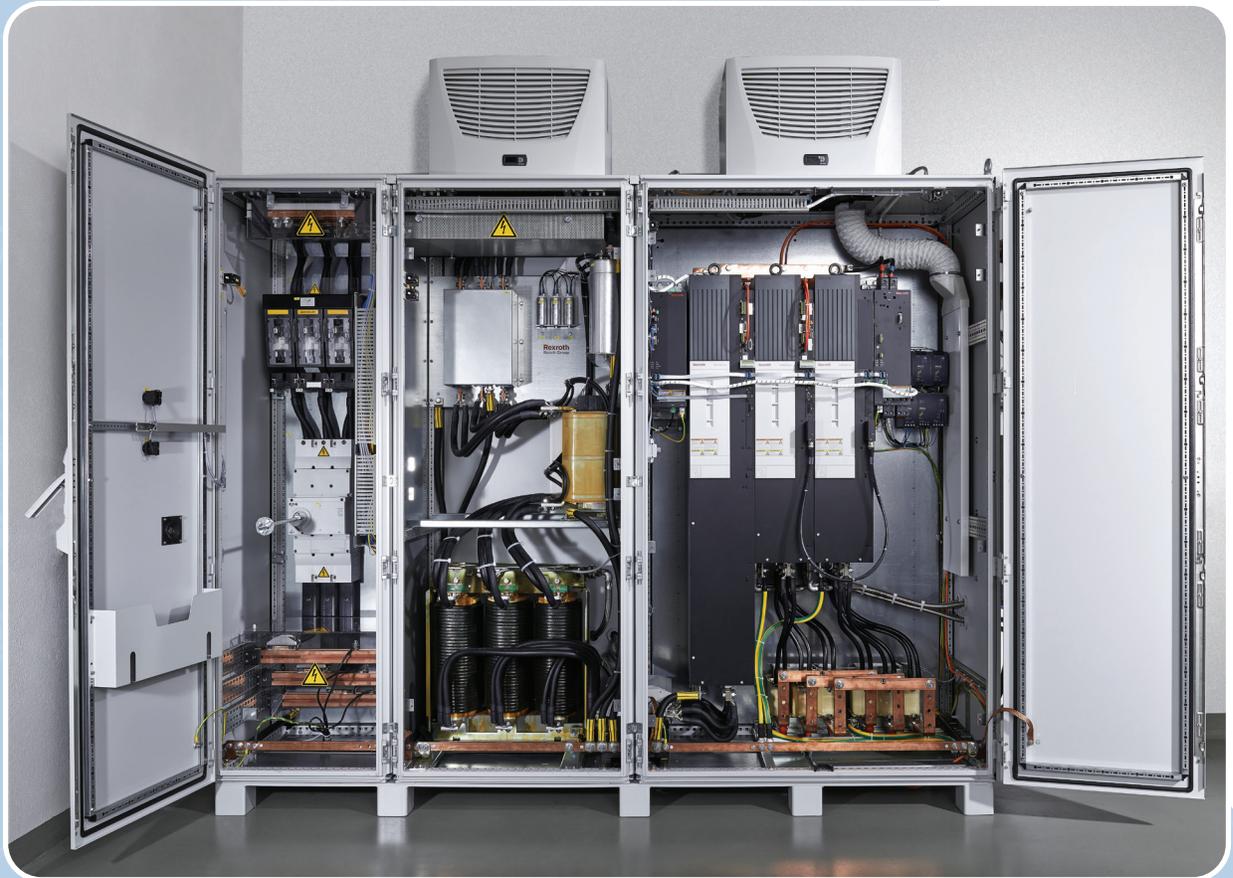
The modular platform and open-core engineering enable quick adaptation to changing application requirements, providing future cost savings. The Battery Cycling—DC Testing Solution is flexible in its configuration, allowing communication to any testing equipment. It can also supply multiple battery cyclers, simulators, and motor inverters by simply changing the power supply and adding inverters, which provides maximum flexibility while reducing spare parts and the power required overall, all leading to additional cost savings.



Turnkey Solution from Evolution Motion Solutions

Evolution's turnkey solution includes an intelligent cooling system and an isolation transformer. We offer several approved models according to CE and UL/CSA standards. Our panels undergo a hot test before shipment to ensure they meet our high quality and performance standards. We also provide expert startup assistance and communications testing to ensure a smooth integration process.





Key Features and Benefits

Best-in-Class DC Converter Voltage and Current Accuracy

Superior DC voltage control and DC regulation is made possible by Bosch Rexroth's innovative ML drive technology in a custom package to fit your application. The Battery Cycling—DC Testing Solution is a high-power density solution thanks to efficient cooling and high-quality filter components. High PWM frequency is standard in all standard sizes.

- Laminated bus bar technology keeps inductance extremely low
- Wide Voltage Range: 380-500 V AC = 780V DC; 501-690 V AC = 1100V DC
- Voltage ripple $< \pm 0.03\%$
- Control Accuracy: Voltage - $< \pm 0.05\%$; Current - $< \pm 0.44\%$
- Current ripple $< \pm 0.32$ Arms

High-Quality Components and Construction Provide Exceptional Performance

The Battery Cycling—DC Testing Solution is an economical solution for simple, maximized performance for high-end servo applications. The innovative Bosch Rexroth components provide clean incoming power and superior DC bus voltage for common bussing of all axis. Choosing between basic and advanced control units enables scalable performance and interface options.



- Reduced electrical noise thanks to high-quality windings
- Incredibly low EMC noise throughout the system
- Compact and thoughtful layout to optimize space and further reduce EMC noise
- Intelligent drive functions

Compact and Powerful Solution

The Battery Cycling—DC Testing Solution is the smallest high-power drive package on the market, yet it is flexible and powerful enough to support an individual or multiple stations. The intelligently designed components are naturally smaller, and users can further decrease their size with our innovative cooling concepts. This testing solution can also support parallel power stacks, reducing components required on the production floor.

- Supports a wide voltage range: 380 - 500 V AC and 501 - 690 V AC
- Cover a broad range of power supply needs up to 4 MW with standard components
- Easily configurable for any application using standard industrial components
- Decreased size with optional liquid cooling for drives and chokes (air cooling also available)
- Universal inverter type used as a motor inverter, power supply, or DC converter

System Designed for Energy Savings

DC-Bus Coupling

- Common DC bus for multiple axis coupling or the coupling of automation axis around a test system
- Energy exchange of drives, which operates in generator and motor modes
- Decreased size of the mains connection components, saving critical factory floor space
- Reduce energy consumption
- Connection with smaller drives possible



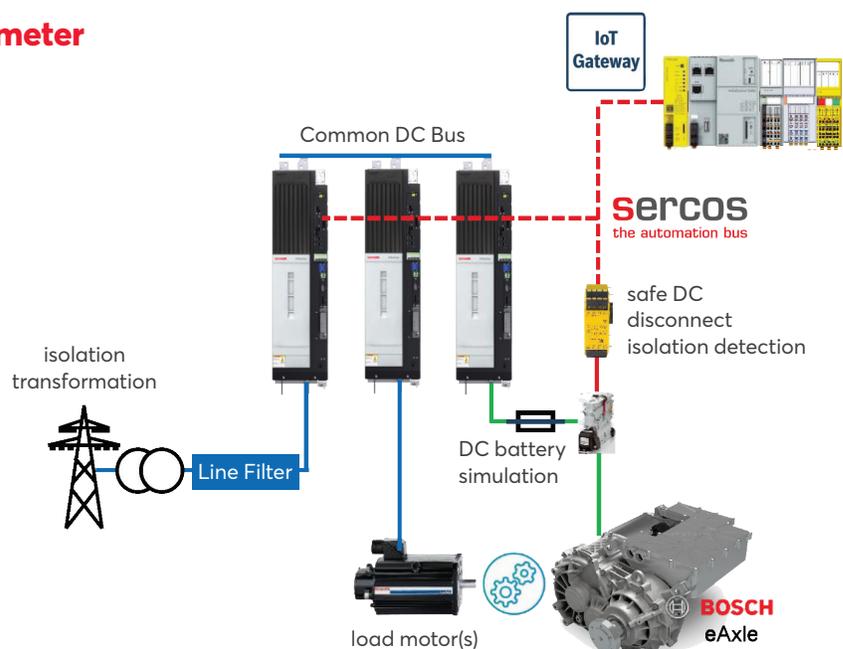
motors operate in generator and motor modes

4EE
ENERGY
EFFICIENCY

System Topology

EV Powertrain Tester and Dynamometer

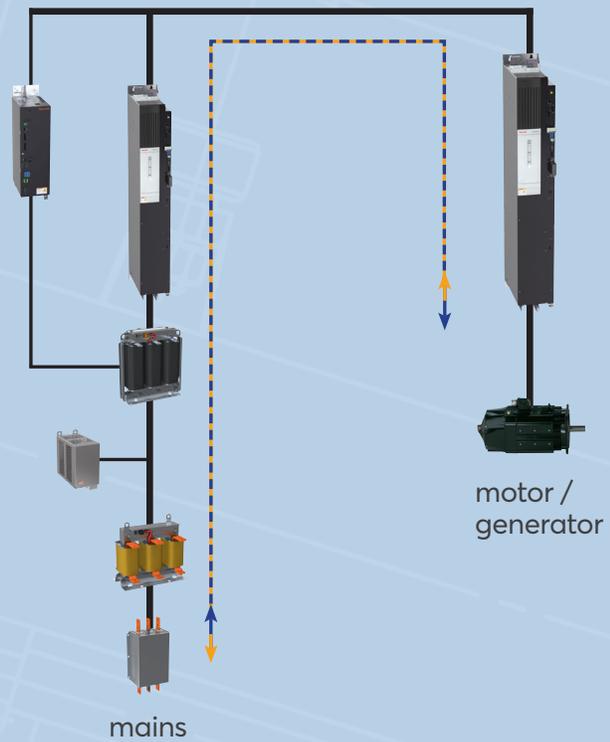
- Green power supply
- High dynamic drive
- Clean DC supply
- Modular power conversion
- Global AC grid supply
- High-performance load and battery simulation
- Open standard control
- Safe operation



Energy Recovery Back to the Mains

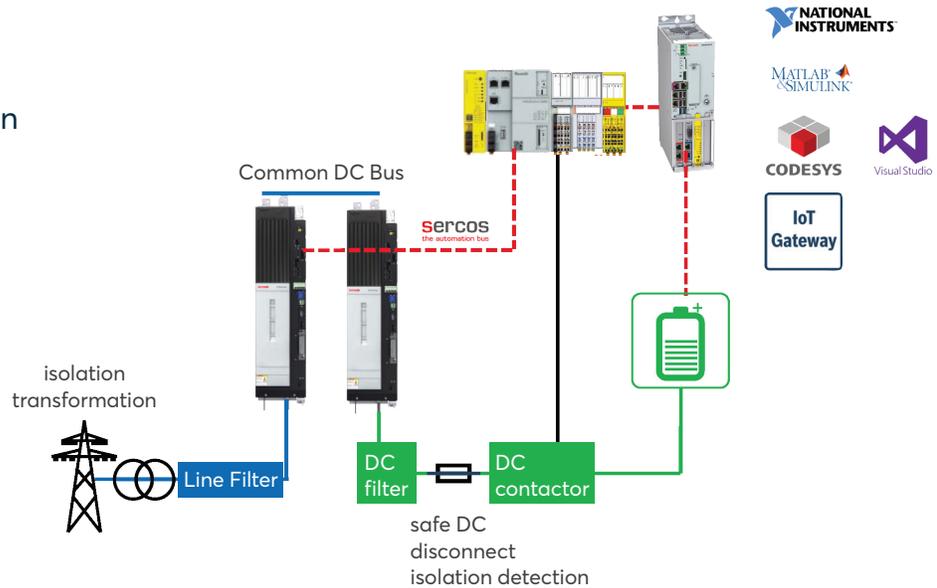
- Regeneration of excessive energy in the mains supply
- High mains supply quality with the least amount of harmonic distortion
- Decrease in energy consumption, especially in cases of long regenerating periods
- Energy savings from reduced consumption and reduced number of components

4EE
ENERGY
EFFICIENCY



Battery Testing Unit

- Identical power units
- Modular power conversion
- Global AC grid supply
- Open standard control
- Safe operation
- Industrial PC battery interface





 **Warehouse & Sales**
 **Sales Offices**



Head Office

13835 Senlac Drive, Farmers Branch, TX 75234 (800) 569-9800

Local Offices

ALABAMA

511 Mineral Trace,
Suite 100
Hoover, AL 35244
(205) 417-4177

ILLINOIS

340 Windy Point Dr.
Glendale Heights, IL 60139
(630) 858-4600

INDIANA

9589 E. 153rd Street
Noblesville, IN 46060
(317) 849-7007

MASSACHUSETTS

90 Research Dr.
Wilmington, MA 01887
(248) 373-1600

MICHIGAN

3333 Bald Mountain Rd
Auburn Hills, MI 48326
(248) 373-1600

408 Broadway Ave NW, Suite C
Grand Rapids, MI 49504
(616) 583-9390

7131 W. Drew Rd
Weidman, MI 48893
(866) 644-8622

MISSOURI

171 English Landing Dr.
Suite 230
Parkville, MO 64162
(800) 569-9800

OHIO

1705 Indian Wood Circle,
Suite 104,
Maumee, OH 43537
(419) 365-3111

OKLAHOMA

5114 S. 95th East Ave.
Tulsa, OK 74145
(800) 569-9800

3445 West Memorial Rd,
Suite J
Oklahoma City, OK 73134
(800) 569-9800

TEXAS

8707 Fallbrook Dr.
Houston, TX 77064
(800) 569-9807

1803 W. County Rd 114
Midland, TX 79706
(800) 569-9800

2090 N Interstate
35 Frontage Rd
Suite 4101
New Braunfels, TX 78130
(800) 569-9800

UTAH

5575 West 1730 S,
Suite 102
Salt Lake City, UT 84104
(801) 566-4333

CANADA

2775 Kew Dr.
Windsor, Ontario
Canada N8T3B7
(519) 944-3877