

Engineered Motion Control Systems for Test Stands and Dynamometers



Parker's Electromechanical and Drives Division offers efficient, green solutions for test cells and dynamometer applications. A four quadrant line regenerative system allows full control of induction or permanent magnet AC motors and generators, both in motoring and absorbing modes. Active Front End technology allows full braking torque on a continuous basis with negligible harmonic distortion. Our reliable, high quality solutions provide manufacturers and OEM's with the latest AC/DC Drives technology. Though Parker is a global company, we take pride in working with customers in an unassuming way, engineer to engineer.

Applications:

Engine Dynamometers

Chassis Dynamometers

Transmission Dynamometers

EV/HEV Specialty Rigs

EV Charger Testers

Battery Simulators

Pump Test Stands

Clutch and Brake Test Stands

Wind Tunnels

Gearbox Test Rigs

Universal Joint Test Rigs

Save Energy!

Many test cell designs are energy wasters. Older technologies like water brakes, fan brakes, or eddy current devices for example, convert kinetic energy from the testing process to heat. Replacing these methods with a regenerative system can allow this wasted energy to be recaptured and returned to the power grid. In addition to reducing your carbon footprint, a solid state system will quickly pay for itself in power bill savings. Smart ventilation in the AC890PX series senses internal temperature and adjusts fan speed to save energy when the unit is lightly loaded, or in cooler ambient temperatures. Ask your local territory manager for a free payback analysis.

Clean, Controlled Power

Our Active Front End regenerative systems are kind to your power lines. With unity power factor and total harmonic distortion of less than 3%, the installed system easily meets IEEE519 requirements. In addition, peak current demands will be under your control, unlike systems that start motors across the line. If you pay penalties to your power utility for low power factor and peak demand, consider the monetary benefits of our Active Front End design.



**AC Systems through 1500 HP
DC Systems through 2000 HP**



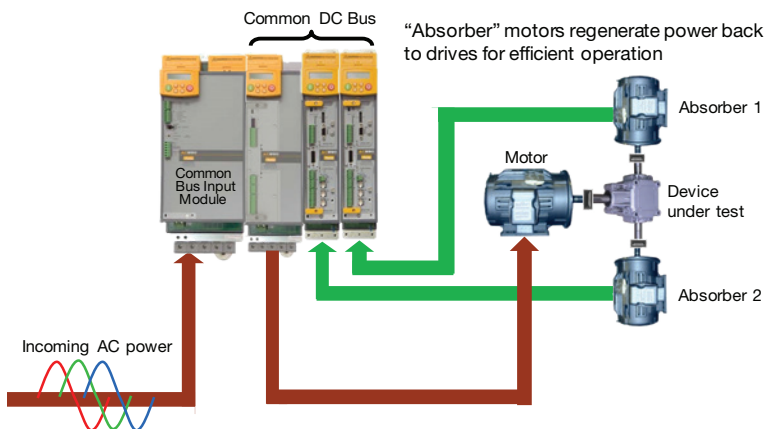
ENGINEERING YOUR SUCCESS.



Retrofits

If you have an existing test cell using DC motors as prime movers or absorbers, and do not wish to upgrade to AC technology, Parker has an attractive option. The DC590+ digital DC series is a flexible and economical solution for test rigs through 2000 HP. Replace your obsolete SCR units with the latest in digital DC to eliminate costly repairs and down-time. The DC590+ series shares a common keypad and menu structure, and programming software with our AC units, making startups and maintenance simpler and more intuitive.

Example of configuration for cross-drive dynamometer



Global Support

Parker Hannifin is an international company with sales exceeding \$13 billion and over 400,000 customers worldwide. With more than 8,600 authorized Parker distributors, across the globe, you can be assured of local support wherever you are, 24/7.

High Performance AC Drives: AC890/AC890PX Series

The AC890 Series is a range of modular AC drives, designed to minimize space and maximize performance in multiple axis applications. AC890 can provide torque, speed, and position control and can be configured to control permanent magnet AC or AC induction motors. Available as standalone or common bus DC modules. With power output to 2000 HP, air cooled or liquid cooled variants available. Available at 380, 460, 575, and 690 VAC.



Human-Machine Interface (HMI)

Parker's HMI panels offer many of the features found only on PC based SCADA systems and provides an easy to use development environment for creating custom screens for any application. **IIoT capable**...Data collected on this device can be quickly and easily shared with your facility SCADA system over an Ethernet network or a variety of other networks like Firewire, CANopen, Profibus, DeviceNet.



Have an application or want to learn more?

Feel free to call or email to discuss with our applications team. Find out how Parker can help make your testing processes more efficient and more productive with our proven innovative solutions!

Parker Hannifin

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