eWorX Electric Power Take-Off System

Electrifying hard work the smart way
Plug’n’work solution to drive implements installed on electric commercial vehicles

This silent and smart solution with zero local CO2 emissions* enables a wide variety of use cases for electric commercial vehicles. The innovative and fully electrified power take-off system comes as a standardized, modular and intelligent plug-and-work one-box-solution to drive a broad range of work equipment such as hook lifters, skip loaders or loading cranes installed on electric commercial vehicles.

Value to Customers

- Provides body manufacturers with a known mechanical interface to equip electric vehicles with a variety of work tools
- Releases body manufacturers from the need to deal with the electrified high-voltage vehicle driveline
- Allows for simplified plug-and-work integration
- Enables optimized operating efficiency for minimized energy consumption
- Helps to increase productivity of vehicle and work equipment
- Offers a range of value-adding intelligent functionalities, e.g., smart state-of-charge (SoC) integration
- Benefits from ZF’s worldwide service network

*A pure electric commercial vehicle has no local CO2 emissions. A holistic neutral CO2 balance is only achieved if the electricity is generated with low emissions.
Technical Features

- Integrates components including e-motor, inverter and electronic control unit with application-specific software modules
- Comes with inverter technology for 650V nominal voltage
- Modular design allows for easy system extension with hydraulic pump and cooling system
- Connects vehicle and body through smart CAN interface to ensure bidirectional communication
- Provides seamless integration into the vehicle’s energy management
- Can work during standstill, driving and charging
- Comes with customizable operation-on-demand philosophy
- Offers application-specific designed work cycle profiles

The ZF Difference

- Builds on ZF’s automotive expertise in driveline, e-mobility, software and mechanical PTO technology
- Developed in close collaboration with OEMs and body manufacturers
- Designed in line with latest automotive standards such as functional safety, commercial vehicle and electric power train requirements
- Comes embedded into technology roadmap with strong innovation pipeline
ZF is a global technology company supplying systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. ZF allows vehicles to see, think and act. In the four technology domains of Vehicle Motion Control, Integrated Safety, Automated Driving, and Electric Mobility, ZF offers comprehensive product and software solutions for established vehicle manufacturers and newly emerging transport and mobility service providers.

ZF electrifies a wide range of vehicle types. With its products, the company contributes to reducing emissions, protecting the climate and enhancing safe mobility. With some 157,500 employees worldwide, ZF reported sales of €38.3 billion in fiscal 2021. The company operates 188 production locations in 31 countries.

ZF’s Commercial Vehicle Solutions (CVS) division is helping shape the future of commercial transportation ecosystems. Our mission is to be the preferred global technology partner to the commercial vehicle industry. Powerfully combining ZF’s commercial vehicle systems expertise, extensive technology portfolio and global operations, the division serves the full commercial vehicle industry value chain. As the automotive industry progresses towards an increasingly autonomous, connected, and electrified (ACE) future, ZF’s CVS division innovates, integrates, and supplies components and advanced control systems that help make commercial vehicles and fleets operate more safely and sustainably. CVS unites ZF’s former Commercial Vehicle Technology and Commercial Vehicle Control Systems divisions, the latter being formed following ZF’s acquisition of WABCO in Spring 2020.