

› Electric Motor Test Bench for Electrical Air Conditioning Compressor

Electric motors and drives units are omnipresent throughout the automotive, machinery and aerospace industries. Installation space restrictions and specific customer requirements often lead to individual solutions for the electric drive components (motor, inverter, cooling, etc.). During development as well as during production, testing of these drive components for functionality and reliability is crucial to ensure the required quality and safety. For this purpose, adcos has specialized in product development and services around testing of electric motors and drive units.

For our customer Pierburg GmbH we developed a CE conform compact and safe high voltage climate compressor test bench, which is used for the development and test of the electronic control unit (ECU) and appropriate software as well as the development and test of the electric motor.

Main features of the test bench:

- ›› Static mechanical load torque via water-cooled Eddy current brake
- ›› Configurable speed dependent load torque profiles
- ›› Efficiency and power analysis of ECU and motor
- ›› Thermal analysis of ECU and motor windings
- ›› Burn-In and endurance testing
- ›› Test bench and DUT control via adcos-CMI or Vector CANape

