

Product Name :
Test Stand for Single Cylinder Engines 7.5kW

Product Code :
ICE0016



Description :

Test Stand for Single Cylinder Engines 7.5kW

Technical Specification :

Test Stand for Single Cylinder Engines 7.5kW Setting up a power test stand for internal combustion engines with a power output of up to 7.5kW requires two main components: as the control and load unit and a choice of test engine: four-stroke petrol engine , two-stroke petrol engine and two four-stroke diesel engines air-cooled with direct injection, water-cooled with indirect injection). The main function of the is to provide the required braking power. This is generated by an air-cooled asynchronous motor with a regenerative feedback unit. The braking torque can be precisely adjusted using a frequency converter. It is measured indirectly using a force transducer. For this purpose, the entire brake system is mounted in floating bearings. The test engine is mounted on a vibration insulated base plate and connected to the asynchronous motor. A large steel cylinder fitted below the plate acts as a damping mass and ensures that the system is in a stable condition. The asynchronous motor is initially used as a starting mechanism for the test engine. As soon as the test engine is running, the asynchronous motor and regenerative feedback unit act as a brake unit for applying a load to the combustion engine. The braking power is fed back into the electrical system. The lower section of the mobile laboratory frame contains fuel tanks and a quietening vessel for the intake air. The control cabinet contains digital displays for the speed, torque and temperatures (one display for cooling water - inlet and outlet – and one display for exhaust gas, fuel and intake air). Pressure gauges indicate negative intake pressure and air consumption. All measuring signals are present in digital form and can be stored and processed using the PC data acquisition function supplied. Data is transmitted to the PC using a USB interface.



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