

Product Name :
Astra Scientific Four Stroke Four Cylinder Diesel Engines Test Bench

Product Code :
ThermalLab0007



Description :

Astra Scientific Four Stroke Four Cylinder Diesel Engines Test Bench

Technical Specification :

The Experimental four cylinder diesel engine test stand. The engine used here is a four-cylinder diesel engine. It has its own closed cooling water circuit.

A solid welded frame on rollers carries the entire setup. Hazardous areas such as hot surfaces and rotating parts are covered with perforated plates. The connection to the brake is made via a rotationally elastic coupling with a jointed shaft. The engine is attached to the load unit by fasteners.

The engine is fitted with sensors that measure the temperatures and the cooling water flow rate. The switch cabinet contains all of the electronic equipment for managing the engine (factory set). On the switch cabinet are an ignition key, an operating time counter and warning lamps. Data is transferred between the load unit and the engine via a data cable connecting the switch cabinets for the two units. A starter battery is also housed in the frame.

For safety reasons, the engine has been modified in a way that it only starts when it is connected to the load unit both mechanically and

electrically.

FEATURES:

- Engine flexibly mounted on mobile frame
- Plotting of torque and power curves
- Determination of specific fuel consumption
- Determination of volumetric efficiency and lambda (fuel-air ratio)
- Energy balances
- Overall engine efficiency
- Closed cooling water circuit
- Switch cabinet with warning lamps (oil pressure, alternator failure), operating time counter and ignition key

SPECIFICATIONS:

Engine	: Branded CRDI Version
Max.Power	: 74 BHP @ 4000 rpm
Max.Torque	:190Nm @ 2000 rpm
Fuel	: diesel
No of cylinders	: Four
Bore	: 69.9 mm
Stroke length	: 82 mm
Starting	: Self-start
Working stroke	: Four strokes
Cooling	: Water-cooled
Capacity	: 1248 cc
Battery	: 12V, 45A
Alternator	: 12V, 45A
Engine oil	: SAE 5W-30
Power required	:230V, 50Hz, 1 phase



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