Product Name:

Energy Conversion in a Wind Power Plant

Product Code:

Fluid Equipments0015



Description:

Energy Conversion in a Wind Power Plant

Technical Specification:

Energy Conversion in a Wind Power Plant

Specification Of Energy Conversion in a Wind Power Plan

- · Converting kinetic wind energy into electrical energy
- Laboratory-scale wind power plant, stand-alone operation
- Axial fan with continuously variable speed (wind velocity)
- Flow straightener for consistent wind conditions
- Generator for converting the kinetic energy into electrical energy
- · Accumulator for storing the electrical energy
- Two bulbs as electrical load (consumers)
- Measurement of wind velocity in front of and behind the rotor
- · Measurement of rotational speed of the rotor
- · Measurement of current and voltage
- Digital displays for the measured values

Technical Data

Axial fan

- Max. volumetric flow rate: 5m³/s
- Max. power: 1,5kW

Rotor

• Diameter: 510mm

Generator

- Max. output: 60W
- Voltage: 12VDC
- Max. charging current: 5A

Accumulator

• Voltage: 12VDC

• Capacity: 8Ah

Electrical load (bulbs)

• Voltage: 12VDC

• Power: 55W each

Measuring ranges

• Wind velocity: 0,3...50m/s

• Speed: 0...3000min-1

• Voltage: 0...20VDC

• Current: 0...35A

Civil Mechanical India

Website: www.civilmechanicalindia.com, Email: export@civilmechanicalindia.com

Address: 6148/6, Guru Nanak Marg, Ambala Cantt, Haryana, India, Phone: +91-0171-2643080, +91-0171-2601773