

**Product Name :**  
Window Air Conditioner Test Rig

**Product Code :**  
NLAB-ENGINEERINGLB34011



**Description :**

Window Air Conditioner Test Rig

**Technical Specification :**

**PRODUCT DESCRIPTION:**

The Window AC test rig is designed and manufactured such that the students can understand construction and working of a window type air conditioner and conduct the trial on it to evaluate performance of the same. The window AC is fixed in a rigid angle frame, with its cover cut half open to reveal the internal parts of the AC. The required pressure and temperature tapings are drawn for measurement of pressures and temperatures at salient points. Energy meter is provided for recording compressor energy consumption. A sling psychrometer is provided for measurement of inlet and outlet Dry-bulb & wet bulb temperature. With the help of manometer, velocity of air and consequently the flow rate of air can be determined.

**TECHNICAL SPECIFICATIONS**

--

Capacitor	Rated test conditions	
Compressor	Hermetically sealed.	
Condenser	Convection air cooled	
Cooling fan		
Evaporator	Convection air cooled.	
Exp. device	Capillary tube	
Moisture filter	Sieve type.	
Expansion device		
Refrigerant		
Temp. measuring device	Thermometer for air temperatures & Digital Indicator for refrigerant temperatures.	
Pressure measuring device	U-tube manometer	
Pressure gauges	2 Nos at suction & discharge	
Supply	220-240 Volts, 50 Hz, 1 phase.	
Input power		
Refrigerant		
Pressure measuring device	Pressure transducer	
Material	1.2 mm thick CRCA	
Paint	Anti-rusting	

**LIST OF EXPERIMENTS:**

- To determine Tonnage capacity of the Window type Air Conditioner by enthalpy difference method.
- To determine actual C. O. P & theoretical C. O. P of the cycle.
- To plot operating cycle on P-H chart.

## **Naugralabequipments**

**Website:** www.naugralabequipments.com, **Email:** sales@naugralabequipments.com

**Address:** 6148/6, Guru Nanak Marg, Ambala Cantt, Haryana, India. **Phone:** +91-9896600003