

Free and Forced Convection Apparatus

(EDC-HT-010)

EXPERIMENTAL DATA:

- Study of free convection.
- Study of forced convection.
- Study of air flow and heat transfer.
- Study of Transient Heating process.



DESCRIPTION:

Convection is one of the heat transfer forms. In this apparatus two types of convection occur; one is free and other is forced convection. Apparatus contains a duct, which contains a fan and heater. Different type of heating surfaces is provided with the apparatus.

Optional Software is available for Data Acquisition and Control Function.

SPECIFICATIONS:

- Study of free and forced convection.
- Air Duct with axial fan.
- Heating Element.
- Heat transfer in Air Duct by forced air.

TECHNICAL DATA:

- Air Duct:
 - Area:120mm x 120mm.
 - Height: 900mm.
- Adjustable Heater:
 - 0 to 40W.
- Heating surfaces:
 - \circ Tube bundle.
 - Finned type.
 - Plate type.
- Axial Fan:
 - o Adjustable speed.
 - Max. Power 90W.
 - Max. flow $500m^3/h$.
- LCD display.
- 230V AC 50Hz.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 600 X 400 X 1500 approx.
- Weight: 30 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-HT-010.
- 1 x Instructional Manual.

