



Product Code . JL-HTFAPF-7374

Heat Transfer From Pin - Fin Apparatus

Description

Heat Transfer From Pin - Fin Apparatus

To study the temperature distribution along the length of a pin fin in natural & forced convection.

Calculate Re , Pr & Nu number in forced convection.

To calculate Gr , Pr & Nu number in natural convection.

Calculate the value of m & obtain the temperature at various locations along the length of the fin in natural & forced convection.

The experiments can be conducted at various values of input & calculation can be made accordingly.

Calculate the values of heat transfer rate from the fin & the fin effectiveness in natural & forced convection.

Experimental Setup:-

Band Heater Assembly.

Duct in which fin is fitted.

Pin type Fin.

Blower Unit with orifice & manometer arrangement for measurement.

Set of thermocouples.

Control Panel:-

12 Channel Digital Temperature Indicator

Voltmeter : 0 - 250 V.

Ammeter : 0 - 3 A.

Dimmerstat : 0 - 2 A.

Main's On/Off Switch.

Blower On/Off Switch.
