

Jain Laboratory Instruments







Product Code . JL-PLE-7961

Stefan Constant Kit

Description

Stefan Constant Kit

Apparatus:-

The kit contains two black copper radiation plates with a heater element in between, three thermometers, built-in power supply, Ac. voltmeter, Ac. Ammeter and their controls.

The kit is self-contained and needs no additional equipment.

Theory:-

The electricity fed to the heater element is radiated by radiating disc whose steady state temperature gives the total power radiated.

If E is the total amount of heat radiated per unit area of the body per unit time and T is the absolute temperature of the body.

Salient Features:-

(1) There is practically no loss of heat energy from heating element by conduction, convection or radiation, Therefore, entire heat energy of the heating element is transferred to the discs.

As the efficiency of the heating element is nearly equal to one, almost entire electrical energy pplied to the heater will be converted into heat energy.				