



# SINGLE PHASE HALF CONTROLED BRIDGE CONVERTER

Model: SPHB - 102



A semi-converter is also a bridge circuit but in these configurations two thyristors are replaced by power diode and can be connected in either arm of the bridge. It is also known as half controlled converter or one quadrant converter because the operation is limited to first quadrant only. Half controlled means that control is possible in one half cycle only or on half the number of components. The circuit diagram is printed on front panel and all test points are brought out on banana socket material on that panel for observation. The kit is housed in sheet – metal cabinet.

- Weight : 6.5Kg Approximately
- Dimension : 250mm × 350mm × 150mm

## **DESCRIPTION** :

The set – up consists of :

- \*\* Two thyristors and two power diodes are used in bridge.
- \*\* Firing circuit for thyristors.
- \*\* Step down isolation transformer.
- \*\* Test point for observations on panel.
- \*\* Resistive Load.
- \*\* Inductive Load.
- \*\* Builtin power supply.
- \*\* Complete with working manual and patch cords.

### **EXPERIMENTS**:

To study the operation of single phase half controlled bridge converter at different firing angles.

- (a) With Resistive Load.
- (b) With Inductive Load.

### **ACCESSORIES REQUIRED :**

- 1. Power Scope.
- 2. Digital Multimeter.

Note: There may be any change in specification due to continuous R & D without notice.

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