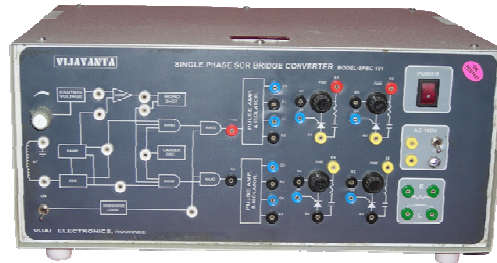


SINGLE PHASE SCR FULL BRIDGE CONVERTER, MODEL : SPBC – 101.



The phase controlled converter can operate either in rectification mode or in inversion mode. In rectification mode, AC power is converted to DC power and in inversion mode DC power is converted to AC power. The unit is capable to operate in both modes.

The Phase Controlled rectifiers using SCR's are used to obtained controlled DC output voltage from the fixed AC mains input voltage. The output voltage is varied by controlling the firing angle of the SCR's.

AC – DC converters are used extensively in industrial applications, specially in variable DC speed drives.

The Phase Controlled converters can be classified in Single Phase and Three Phase converters.

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

DESCRIPTION :

The set – up consists of :

- ** Power Circuit based on 4 SCR's configured as fully controlled bridge converter.
- ** Firing circuit for SCR's.
- ** Step Down Isolation Transformer : 230 Volt / 50 Volt – 3 Amp.
- ** Test Points.
- ** Resistive Load. (Lamp Load)
- ** Inductive Load. (Universal Motor)

Experiments :

To study the operation of full bridge controlled converter under different loading condition and at different firing angles.

- with Resistive Load (R).
- with Resistive and Inductive Load (R – L) Discontinuous current mode.
- with Resistive and Inductive Load (R – L) Continuous current mode.

Accessories Required :

- General purpose Dual Trace, Oscilloscope.
- Multimeter.

Above unit is also available in Three Phase.

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

VIJAYANTA TECHNOLOGIES PVT. LTD.

(Formerly Vijai Electronics)

Dr. Baldev Singh Marg 28/147 Civil Lines, Roorkee-247667 Distt. Haridwar, Uttarakhand

Phone No.: 01332 – 272509, 7579200827

E-Mail : vijayantatechologies@gmail.com, vijaielectronics1965@gmail.com