



STUDY OF SINGLE PHASE HALF WAVE CONTROLED



A single phase half wave controlled rectifier which is similar to half wave diode rectifier except that the diode has been replaced by a thyristor. The input transformer enables a change in voltage level to suit the requirements. The thyristor can be triggered at any angle α (Generate by internal firing circuit pulse) in the positive half cycle and thus the output voltage can be controlled. The thyristor blocks during the negative half cycle. It is also known as half controlled rectifier.

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

DESCRIPTION :

The set – up consists of :

- ** Power circuit based on one thyristor.
- ** Firing circuit for thyristors.
- ** Step down isolation transformer.
- ** Test point for observations.
- ** Resistive Load. (Lamp Load)
- ** Inductive Load. (Optional : D.C. Motor)
- ** Builtin power supply.
- ** Complete with working manual and patch cords for interconnections.

EXPERIMENTS :

To study the operation and determination of single phase half controlled rectifier 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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