

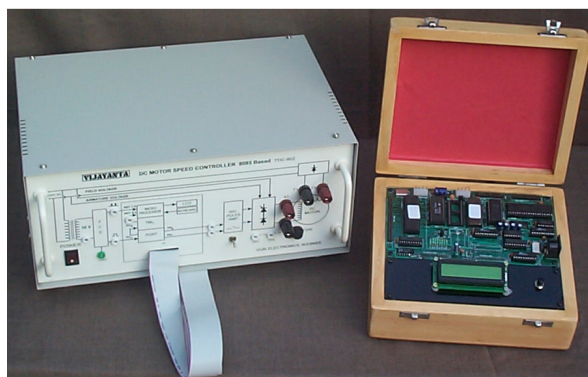
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STUDY OF THYRISTORISED SPEED CONTROL OF D.C. MOTOR TRAINER (8085 BASED), MODEL – TDC – 902.

The D.C. Motor Speed Control unit is specially design to study D.C. Motor Speed control and calculate the firing angle of thyristor with respect to load (input and output). This unit is controlled by Microprocessor (8085). The microprocessor kit trigger the thyristor at different firing angle. A fixed D.C. voltage of field and variable voltage of armature are provided on panel, can measure the current and voltage for observation. This unit is fully isolated. All test points are provided on panel with respect to ground including high voltage. These speed controllers are used extensively in heavy industries and domestic application. Specially in variable speed drive and measurement with respect to ground can be done identify high voltage.



DESCRIPTION :

The set – up consists of :

1. Microprocessor (8085).
1. Power circuit based on 2 SCR's configuration as half wave.
2. Test Point to measure the waveform.
3. Isolation circuit.
4. D. C. Speed Motor. Capacity : 1 HP. (Optional)

EXPERIMENTS :

To study the D.C. Motor Speed Control by controlling firing angle of thyristor through 8085 Microprocessor.

ACCESSORIES REQUIRED :

1. A general purpose C.R.O.
2. Digital Multimeter.
3. Ammeter.