

## EXPERIMENT NO: 2

### ELECTRICAL ENGINEERING

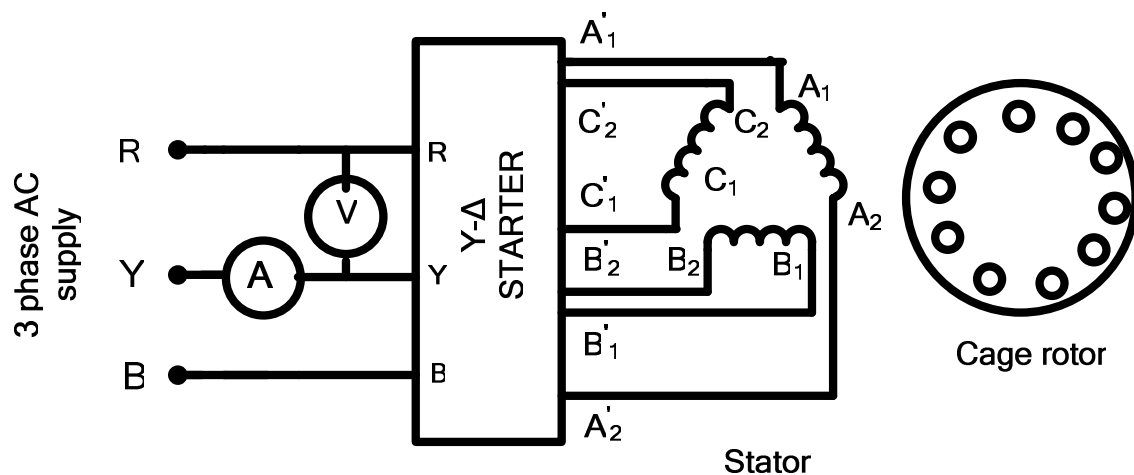
**OBJECT:** Study of a Squirrel cage induction motor.

**AIM:** To start the given cage machine using a star-delta starter and to run it on no load.

#### **APPARATUS REQUIRED:**

- 1) The given squirrel cage motor
- 2) One Voltmeter(0-600V) ac
- 3) One Ammeter(0-10amp) ac
- 4) Star-delta starter

#### **CIRCUIT DIAGRAM:**



#### **PROCEDURE:**

Connect as shown in the figure. Switch on the mains. See the voltmeter readings. Bring the handle of starter to 'start' position and allow the motor to pick up speed. When it has picked up sufficient speed, change over the starter handle to 'run' position and leave the handle. Allow the motor to run for some time. The no load current (about 30-40% of full load current) will be indicated by the ammeter. Measure the no load speed. Change the direction of rotation of the motor by reversing the phase sequence i.e. interchanging the connections of L<sub>1</sub> and L<sub>2</sub> (say) after switching off the mains. Observe that the motor direction has reversed.

**OBSERVATIONS:**

V	A	Speed

**RESULT:**

**PRECAUTIONS:**