EXPERIMENT-6

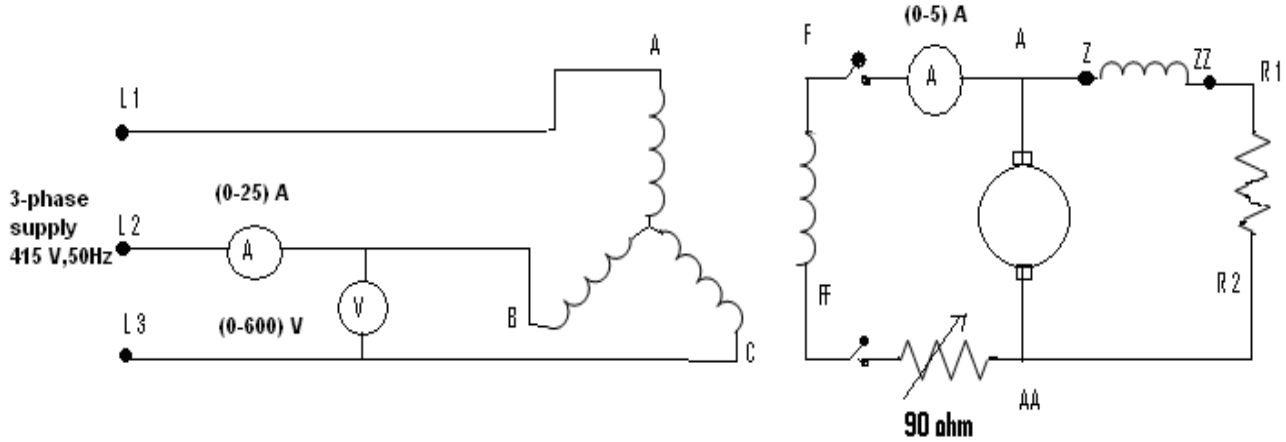
OBJECTIVE

Determination of V curves of a 3-phase synchronous Motor.

APPARARTUS REQUIRED

(i) AC ammeter -1 no. (25 A)
(ii) DC ammeter -1 no. (5 A)
(iii)Voltmeter -1 no. (600 V)
(iv)Rheostat- 1 no. (90 ohm)

CIRCUIT DIAGRAM



PROCEDURE

1. Move the switch to ON position.
2. Gradually increase the voltage, bring the main terminal to rated voltage.
3. Then switch on the DC supply to the field.
4. Make the field current so that the armature current is minimum, this minimum point corresponds to unity power factor.
5. Record the field and armature current.
6. Vary the field current in both the direction in step and note the reading.
7. This will give V-curve.

OBSERVATIONS

SL. NO.	FIELD CURRENT	ARMATURE CURRENT	W1	W2

PRECAUTIONS:

1. Loose connections are to be avoided.
2. Readings are noted without any parallox error.

RESULTS