

ELECTRICAL DRIVES

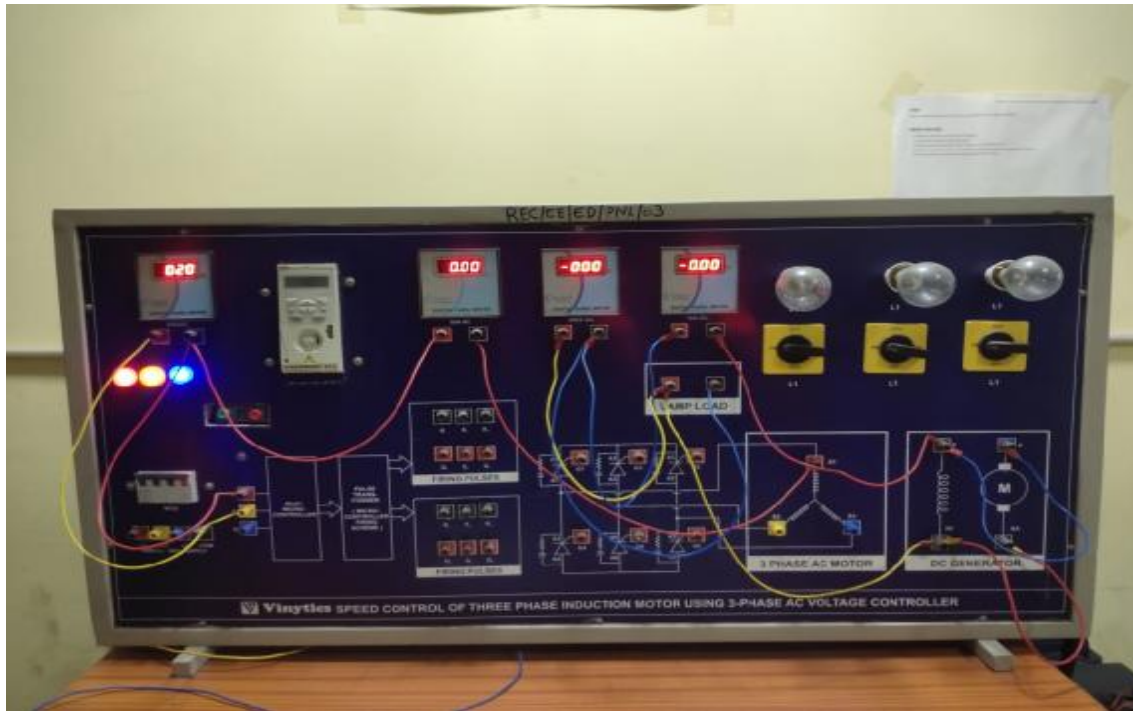
List of Experiments(A) Hardware Based Experiments:

- 1.To study the speed control of three phase slip ring induction motor using static rotor resistance control using rectifier and chopper .
- 2.To study the speed control of three phase slip ring induction motor using static scherbius slip power recovery scheme.
- 3.To study the speed control of three phase induction motor using three phase AC voltage controller.
- 4.To study the speed control of single phase induction motor using single phase Ac voltage controller.
- 5.To study the speed control of separate excited Dc motor by varying armature voltage using single phase half controlled bridge converter.
- 6.To study the closed loop control of DC motor.
- 7.To study the speed control separately excited Dc motor by varying armature voltage using single phase fully controlled bridge converter.
- 8.To study the speed control of separately excited DC motor using MOSFET/IGBT chopper.

(B) Simulations Based Experiments (using MATLAB or any other software)

1. To study speed control of separately Excited DC motor using chopper control in motoring and braking modes.
- 2.To study speed control of three phase induction motor using (a) constant V/F control (b) constant voltage and frequency.











RAJKIYA ENGINEERING COLLEGE ,AMBEDKAR NAGAR

INVENTORY SHEET

Department /Section / Hostel : Electrical engg.

Inventory of Room No./office :Electric Drives lab

Date of Inventory Preparation ; 17/12/2018

Sr.No.	Product	Product Description	Quantity	Remark
1.	Three phase induction motor using static rotor resistance control using rectifier and Chopper control panel	Induction motor	1	Working
2.	Three phase slip ring induction motor using static scherbius slip power recovery control panel	Induction motor	1	Working
3.	Speed control of three phase induction motor using three phase AC Voltage controller control panel	Induction motor	1	Not Working
4.	Speed control of single phase induction motor control panel	Induction motor	1	Working
5.	Speed control of 3 phase induction motor using voltage source inverter control panel	Induction motor	1	Working
6.	Half controlled bridge converter panel	DC Drive	1	Working
7.	Closed loop control of Dc motor control panel	DC Drive	1	Working
8.	Fully controlled bridge rectifier panel	DC Drive	1	Working
9.	Micro controller based single phase single dual converter panel	DC Drive	1	Working
10.	Speed control of three phase induction motor using current source inverter control panel	Induction motor	1	Working
11.	Chopper controller (MOSFET Based) control panel	DC Drive	1	Working
12.	Three phase slip ring induction motor	1HP	2	Working
13.	Three phase squirrel cage induction motor coupled with DC Generator	1HP	1	Working
14.	Three phase squirrel cage induction motor	0.5 HP	2	Working
15.	Single phase induction motor	1 HP	1	Working
16.	DC Shunt Generator	1 KW	1	Working
17.	DC shunt motor coupled with Tachogenerator	0.5 HP	1	Working
18.	DC Shunt motor	1 HP	3	Working
19.	Digital Tachometer	RPM/MPM	1	Working
20.	Tool kit	For lab	1	

