



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

Approved by AICTE • Permanently Affiliated to JNTUK • Accredited by NAAC with 'A' Grade

Recognised by UGC under sections 2(f) and 12(B) of UGC Act, 1956

Aditya Nagar, ADB Road, Surampalem - 533437, Near Kakinada, E.G.Dt., Ph:99498 76662

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Teaching Methodology

Academic Year 2020-21

Name of the Program: B.Tech

Year/Semester: III/V

Course: Power Electronics

Course Code: 191EE5T11

Teaching Method : Simulation based Learning

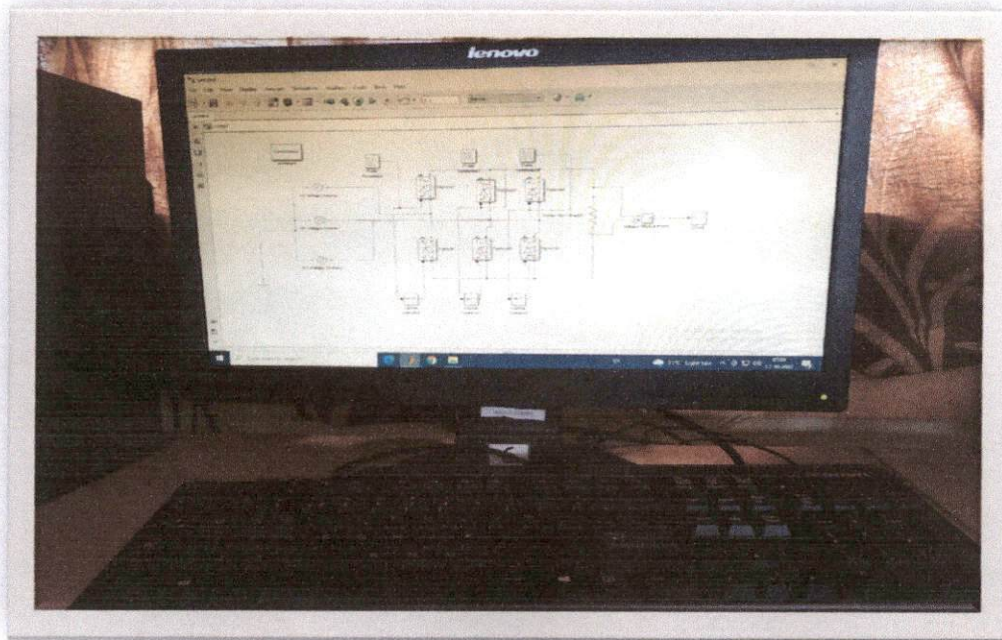
Topic : Simulation of Three phase Full Converter

Software used : MATLAB / Simulation



Simulation based learning - Simulation of Three phase Full Converter


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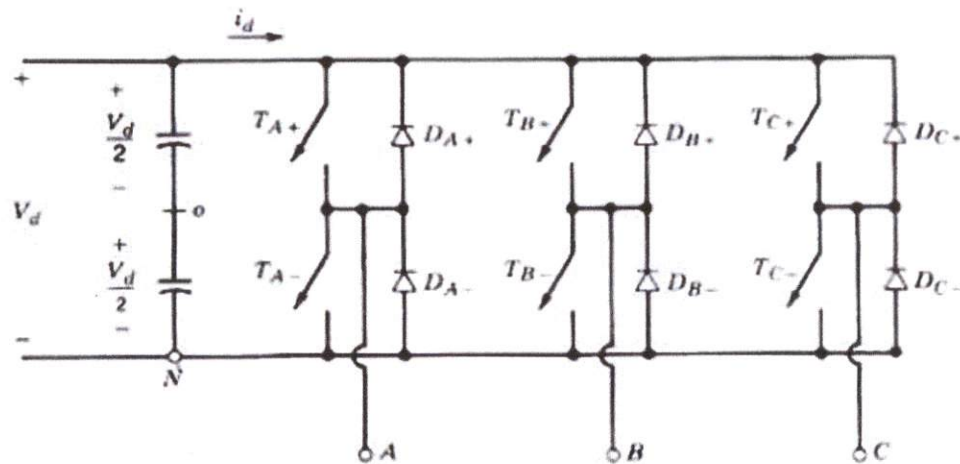
Screen shot showing the Simulation based teaching method of Three phase full converter using Matlab/Simulation software



Students learning Simulation based teaching method of Three phase full converter using Matlab/Simulation software


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CIRCUIT DIAGRAM:



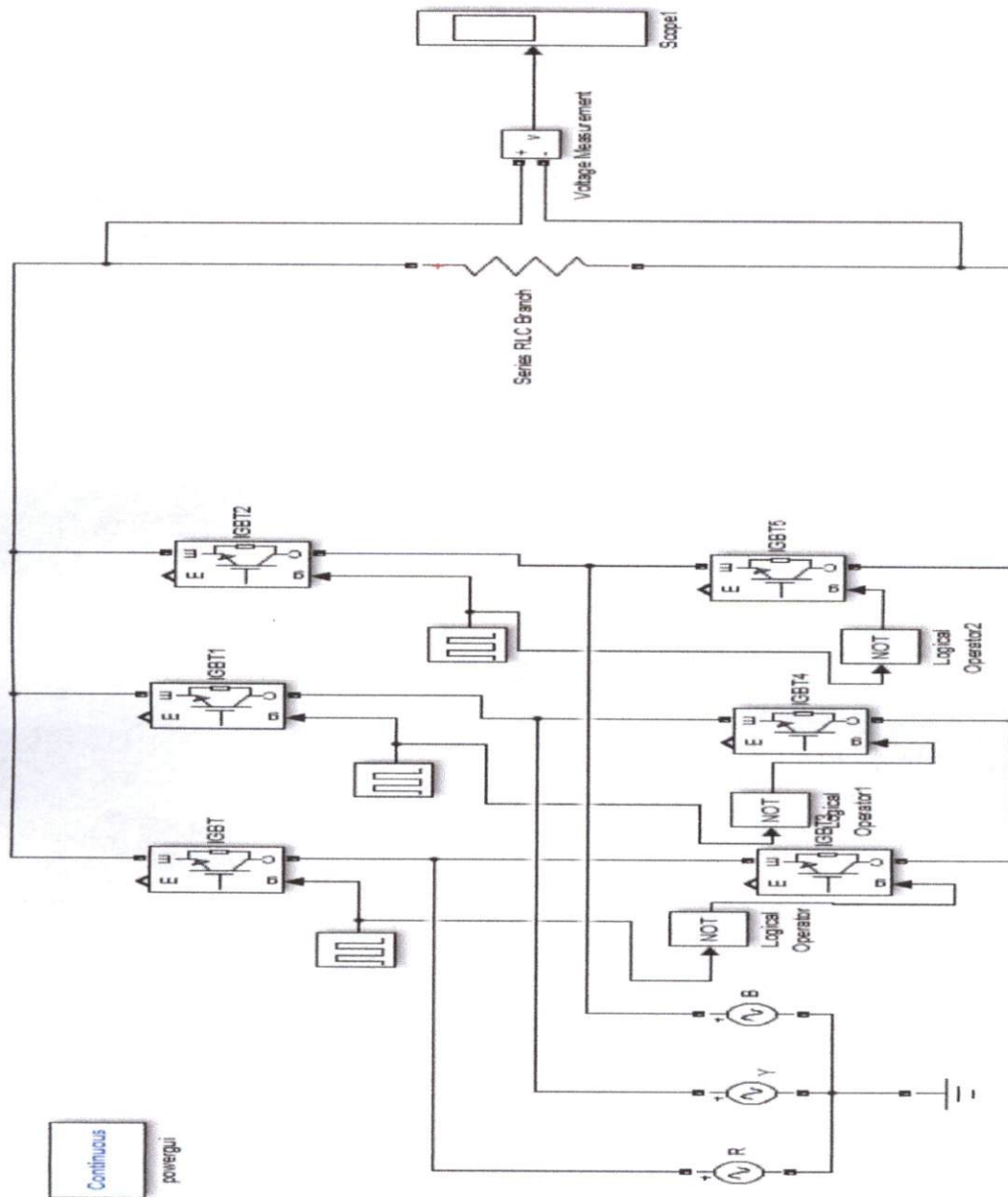
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Procedure:

- Open the MATLAB software
- Open simulink library browser
- Open a new circuit file
- Collect all the circuit elements from simpower system tool box
- Then connect the pulse generators for triggering the switches
- Browse "voltage measurement" from library and connect across the load
- Browse "scope" from library and connect to voltage measurement.
- Insert Powergui in the circuit.
- Obtain the output wave form by clicking on the scope.
- Write calculations for Time delay

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Simulation Diagram:

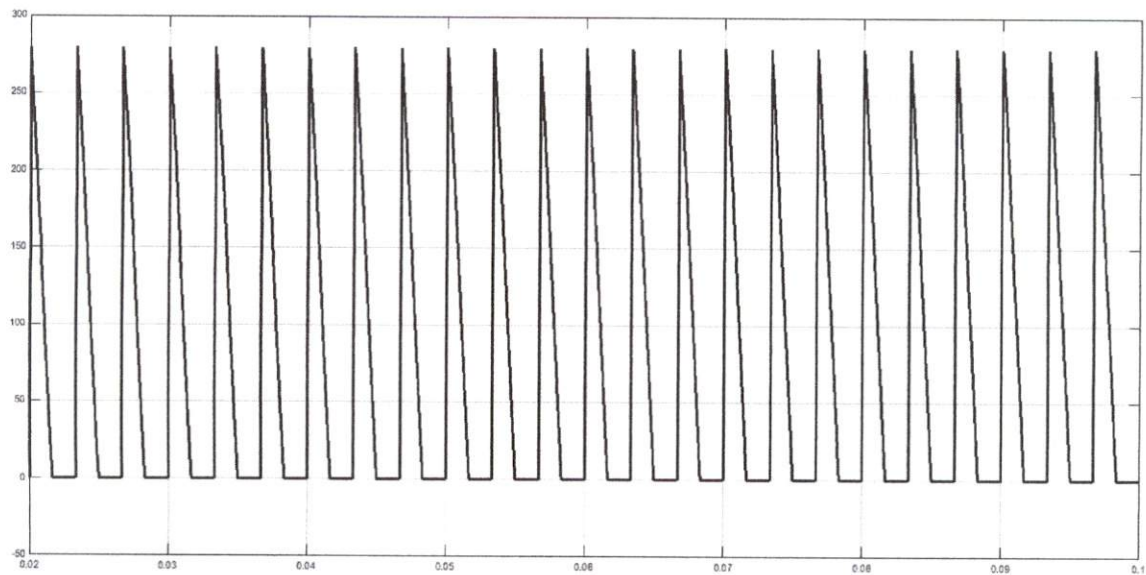


21.1 ✓

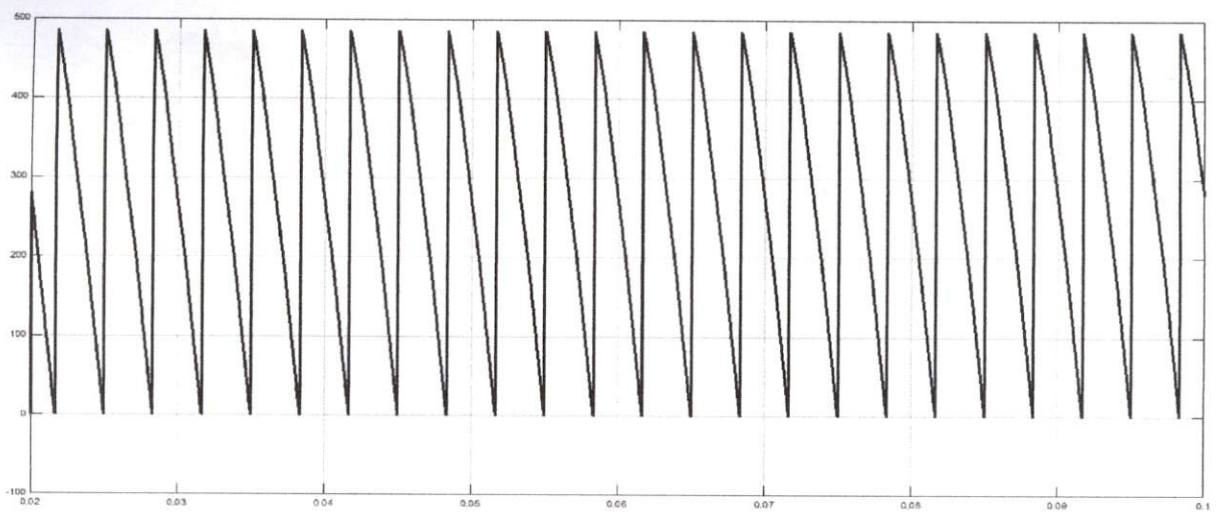
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Output:

For $\alpha=90^\circ$



For $\alpha=60^\circ$




Course Coordinator


Head of the Department


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