

MIDDLE EAST TECHNICAL UNIVERSITY

Electrical & Electronics Engineering

Simulation Project #2

EE 464 – Static Power Conversion - II

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# Introduction

In our hardware project of the EE464 course, we are asked to design an Isolated Power Supply. In this project, the design and simulations are to be performed for hardware project. As Anca Inc. group, we have chosen the project designing an Isolated Flyback Converter. The specifications are as follows;

|  |  |
| --- | --- |
| Minimum Input Voltage (V) | 210 Vac |
| Maximum Input Voltage (V) | 230 Vac |
| Output Voltage (V) | 15 |
| Output Power (W) | 15 |
| Output Volt. Peak-to-Peak Ripple (%) | 5 |
| Line Regulation (%) | 3 |
| Load Regulation (%) | 3 |

Table 1: Flyback Converter Specifications

# Question-1

## a)

# References

[1] *Bridge Rectifier Ripple Voltage*. Retrieved from <https://www.electronics-tutorials.ws/diode/diode_6.html>

[2] Mohan, N., Undeland, T. M., & Robbins, W. P. (2002). *Power electronics: Converters, applications, and design*. New York: John Wiley.