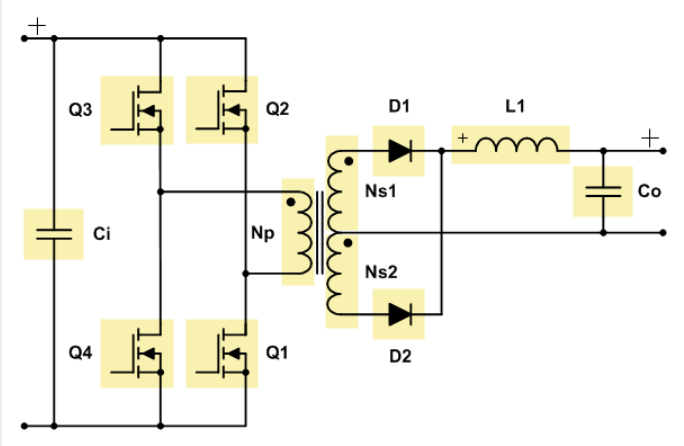


Design Values

Minimum Input Voltage: 36 V
Maximum Input Voltage: 75 V
Output Voltage: 12 V
Output Current: 60 A
Switching Frequency: 400 kHz
Diode Voltage Drop: 0.2 V
Inductor Current Ripple: 30 %
Maximum Duty Cycle: 47 %
Magnetizing Current: 10 %



Recommended Values

Turns Ratio: 2.77 : 1
Transformer Inductance: 19.56 μ H
Inductance: 0.46 μ H

Choose Values

Turns Ratio: 2.5 : 1
Transformer Inductance: 20 μ H
Inductance: 0.47 μ H

Calculated Values at Input Voltage: 48.09 V

Period: 2.50 μ s
Duty Cycle: 31.71 %
On-Time: 0.79 μ s
Off-Time: 0.46 μ s
Zero-Time: 0.00 μ s
Input Power: 732.00 W
Output Power: 720.00 W
Rectifier Diode Losses: 12.00 W

Load Current: 60.00 A
 L_{sec} : 3.20 μ H
Mag. Current: 1.91 A
7.94 %
Input Current: 15.22 A
Current Ripple: 11.87 A
19.78 %

Info

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