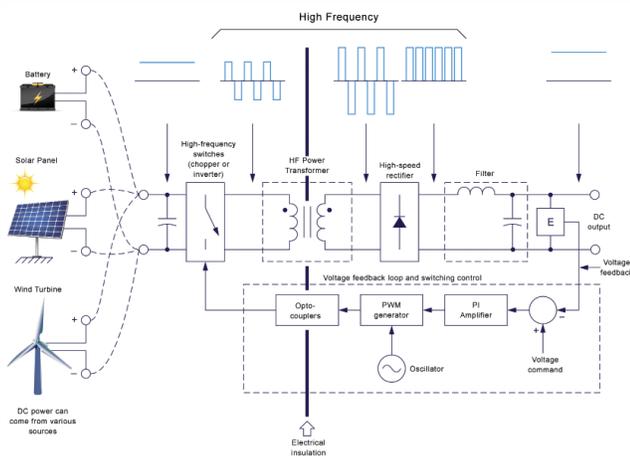


# High-Frequency Power Transformer

Course 86378

The High-Frequency Power Transformers course demonstrates how high-frequency switching can be used to increase the power handling capability of power transformers. This type of power transformer is commonly used to perform dc-to-dc conversion in switched-mode power supplies (SMPS) as well as in grid-tied inverters used for home energy production.



Low-frequency (left) and high-frequency (right) power transformers having a 250 VA power rating.

## Topic Coverage:

- » Study high-frequency power transformers.
- » Examine the effect of frequency on the power rating of transformers.
- » Explore the uses of high-frequency power transformers.
- » Analyze high-frequency power transformers in switched-mode power supplies and insulated dc-to-dc converters.

## Features and Benefits:

- » Includes an insulated dc-to-dc converter implemented with a high-frequency power transformer specially designed for student training.
- » Manual control of the duty cycle in the dc-to-dc converter makes study of converter operation easier.

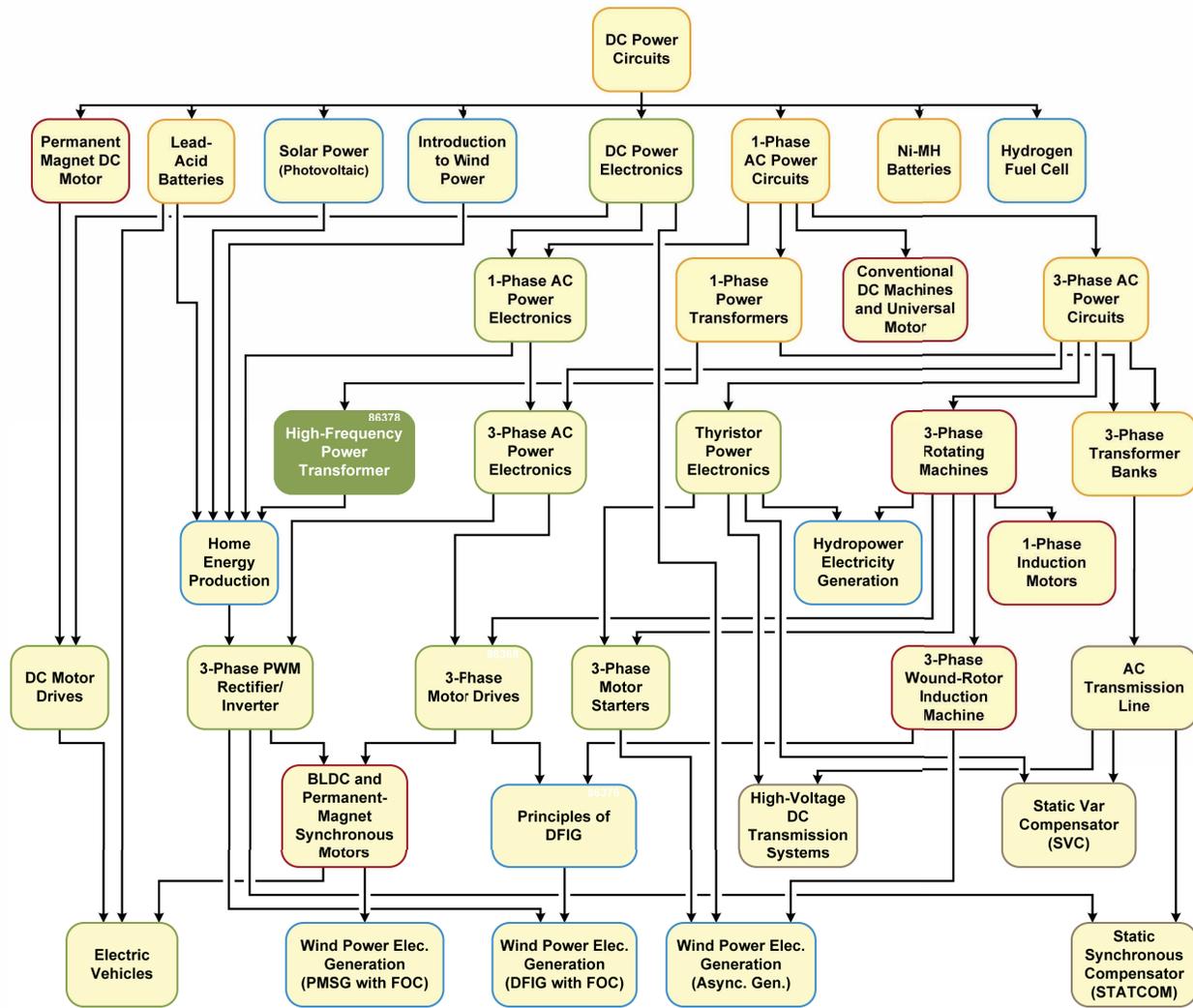


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Photo courtesy of Siemens



# Lab-Volt Electric Power Technology Training Program



## Equipment

Qty	Model	Description	Qty	Model	Description
1	8131	Three-Module Workstation	1	9063-C	Data Acquisition and Control Interface
1	8311	Resistive Load	1	30004-2	24 V AC Power Supply
1	8835	Insulated DC-to-DC Converter	1	86378/-1	Student Manual/Instructor Guide
1	8951-L	Connection Leads			
1	8960-C	Four-Quadrant Dynamometer/Power Supply			

Lab-Volt reserves the right to make product improvements at any time and without notice. **Note:** A computer is required to perform the exercises.

