Connect a 3-Phase Delta-Wye Transformer

Program: Electrician Technician

Course: EL150 – Commercial Applications

Objectives: Under the supervision of your instructor, you should be able to do the following:

- Describe transformer operation.
- Describe the operating characteristics of various types of transformers.
- Connect a control transformer for a given application
- Sketch or physically connect a dual-voltage transformer showing a high primary and a low secondary, including proper bonding

Lab Equipment:

None

Required Tools:

- Pencils
- Multiple copies of Figure 1

Materials: N/A

Safety (PPE): N/A

References: N/A

Required Time: 60 Minutes

Shop Maintenance:

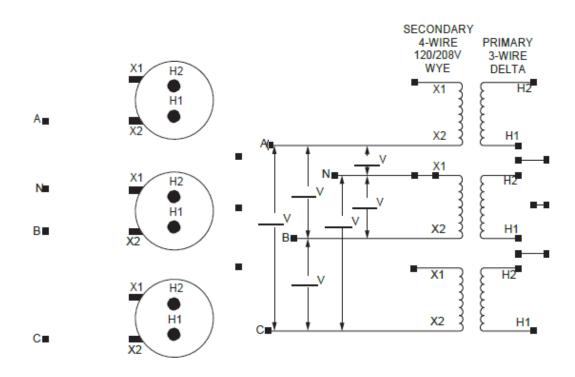
- All work will cease 20 minutes prior to the end of class.
- All work areas must be cleaned.
- Tools and equipment must be cleaned and returned to the designated areas (cage, tool room, cabinets etc.)
- Any broken or missing tools must be reported immediately.
- Tools and equipment are student's responsibility

Procedures:

This performance project requires the trainee to illustrate his or her understanding of three- phase, delta-wye transformer systems by completing both the internal and external connections of the transformer system on a drawing.

- 1. Briefly review Module 26307-17, Figure 15 in your module, then close your book.
- 2. Complete the schematic drawings for the connections on Figure 1 by interconnecting the dots representing terminal points.
- 3. Label the nominal voltages available on the secondary side of the transformer.
- 4. Complete the hardwire drawings on Figure 1 by interconnecting the illustrated transformer connections.
- 5. Have your instructor check your work.





HARDWIRE ILLUSTRATION

SCHEMATIC ILLUSTRATION

NOTE: DON'T FORGET THE GROUNDING CONNECTIONS.

Figure 1 ■ Delta-Wye Connection Illustration