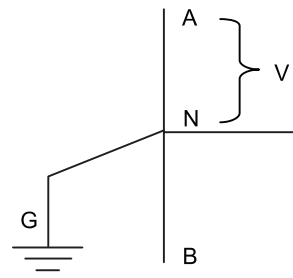


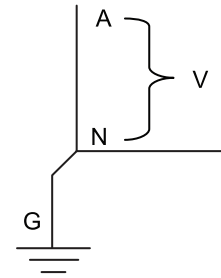
WHAT ELECTRICAL SYSTEM IS IT?

- The electrical system is based on the secondary side of upstream transformer, NOT by how the load is connected
- Most SPD mis-orders are misunderstandings related to grounding or neutrals
- Grounded system means that the system is referenced to ground, NOT that there is a safety ground
- By convention, ground wires are not counted as one of the wires (3-wire, 4-wire, etc.)



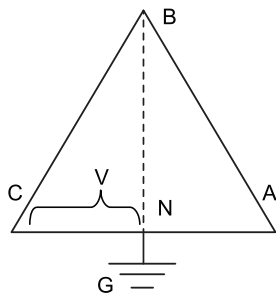
Split-Phase 'Single-Phase'
Neutral bonded to ground
Neutral usually pulled into facility

Order Code	Voltage
240S	120/240V
480S	240/480V



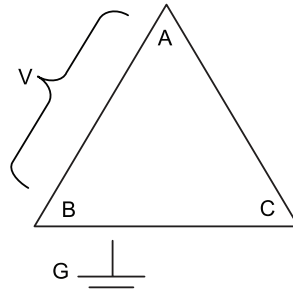
Single-Phase
Neutral bonded to ground and normally pulled into facility

Order Code	Voltage
120P	120V
240P	240V
277P	277V
347P	347V



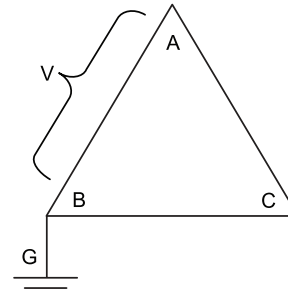
Hi-Leg Grounded Delta
One transformer winding is center-tapped with the neutral. The neutral is bonded to ground and is often pulled into the facility. Voltage from the high-leg to neutral is half the line to line voltage multiplied by $\sqrt{3}$

Order Code	Voltage
240H(N)	120/240V
480H(N)	240/480V



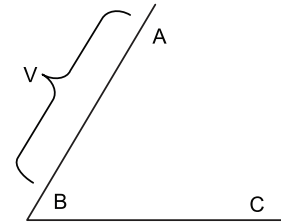
3-phase 3-wire Ungrounded Delta
System has no reference to ground, L-L voltages are fixed by the transformer but L-G voltages can vary

Order Code	Voltage
240D	240V
480D	480V
600D	600V



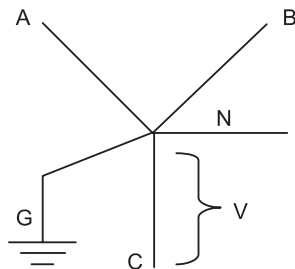
3-phase 3-wire Corner Grounded Delta
System has reference to ground because B-phase is grounded

Order Code	Voltage
240D	240V
480D	480V
600D	600V



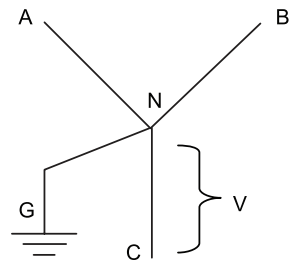
Open Delta
3-phase 3 or 4-wire. Could be ungrounded, corner grounded or high-leg.

Order Code	Voltage
Consult Factory	



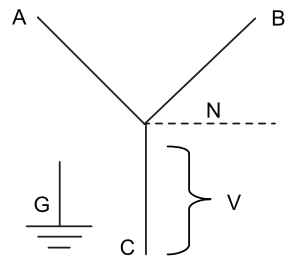
3-phase 4-wire Grounded Wye
3-phase 4-wire Grounded Wye Neutral is bonded to ground and normally pulled into facility

Order Code	Voltage
208Y(N)	208Y/120V
380Y(N)	380Y/220V
480Y(N)	480Y/277V
600Y(N)	600Y/347V
690Y(N)	690Y/400V



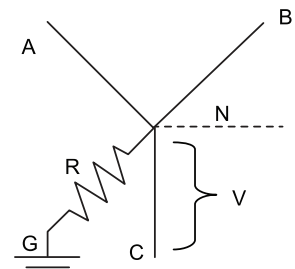
3-phase 4-wire Ungrounded Wye
Neutral bonded to ground but not pulled into facility

Order Code	Voltage
208Y	208Y/120V
380Y	380Y/220V
480Y	480Y/277V
600Y	600Y/347V
690Y	690Y/400V



3-phase 4-wire Ungrounded Wye
Neutral not bonded to ground and may or may not be pulled into facility

Order Code	Voltage
208Y(N)	208Y/120V
380Y(N)	380Y/220V
480Y(N)	480Y/277V
600Y(N)	600Y/347V
690Y(N)	690Y/400V



Resistive or Impedance Grounded Wye
Neutral bonded to ground via grounding resistor. Neutral may or may not be pulled into facility

Order Code	Voltage
240D	208Y/120V
480D	480Y/277V
600D	600Y/347V