

CONSTRUCTION ELECTRICIAN IP FORMULAS

$$E_{\text{line}} = E_{\text{phase}} \times \sqrt{3}$$

$$\frac{E_p}{E_s} = \frac{N_p}{N_s} = \frac{I_s}{I_p}$$

$$\text{Frequency} = \frac{\text{poles} \times \text{speed}}{120}$$

$$I = \frac{E}{R}$$

$$I_{\text{line}} = I_{\text{phase}} \times \sqrt{3}$$

$$I_{\text{line}} = \left(V_a / V_{\text{line}} \times \sqrt{3} \right) \times 1.25$$

$$I_{\text{short circuit}} = \frac{I_{\text{secondary}}}{\% Z}$$

$$\text{kVA} = 1.73 \times E_{\text{line}} \times I_{\text{line}}$$

$$\frac{N_p}{N_s} = \frac{E_p}{E_s}$$

CONSTRUCTION ELECTRICIAN IP FORMULAS (continued)

$$\frac{E_p}{E_s} = \frac{N_p}{N_s} = \frac{I_s}{I_p}$$

$$\text{Frequency} = \frac{\text{Poles} \times \text{Speed}}{120}$$

$$I_{\text{Short Circuit}} = \frac{I_{\text{Secondary}}}{\% Z}$$