Use transformer MVA as base

$$IrunFullVoltage := 0.1 \cdot \left(0.8 - i \cdot \left(\sqrt{1 - 0.8^2}\right)\right)$$

$$IrunFullVoltage = 0.08 - 0.06 \cdot i$$

$$IstartFullVoltage := 0.6 \cdot \left(0.2 - i \cdot \sqrt{1 - 0.2^2}\right)$$

$$IstartFullVoltage = 0.12 - 0.5879 \cdot i$$

$$X := \frac{(1 + 6 \cdot i)}{\sqrt{1^2 + 6^2}} \cdot 0.06$$

$$X = 0.0099 + 0.0592 \cdot i$$

Huge simplifying assumption... currents don't change with voltage

"(otherwise we need load flow or a little more work)

First solution is using magnitudes

$$Vlowside := 1 - |X| \cdot (6 \cdot |IrunFullVoltage| + |IstartFullVoltage|)$$

$$Vlowside = 0.928$$

More exact solution using complex numbers

$$Vlowside := 1 - X \cdot (6 \cdot IrunFullVoltage + IstartFullVoltage)$$

$$Vlowside = 0.938 - 0.0262 \cdot i$$

$$|Vlowside| = 0.9383$$