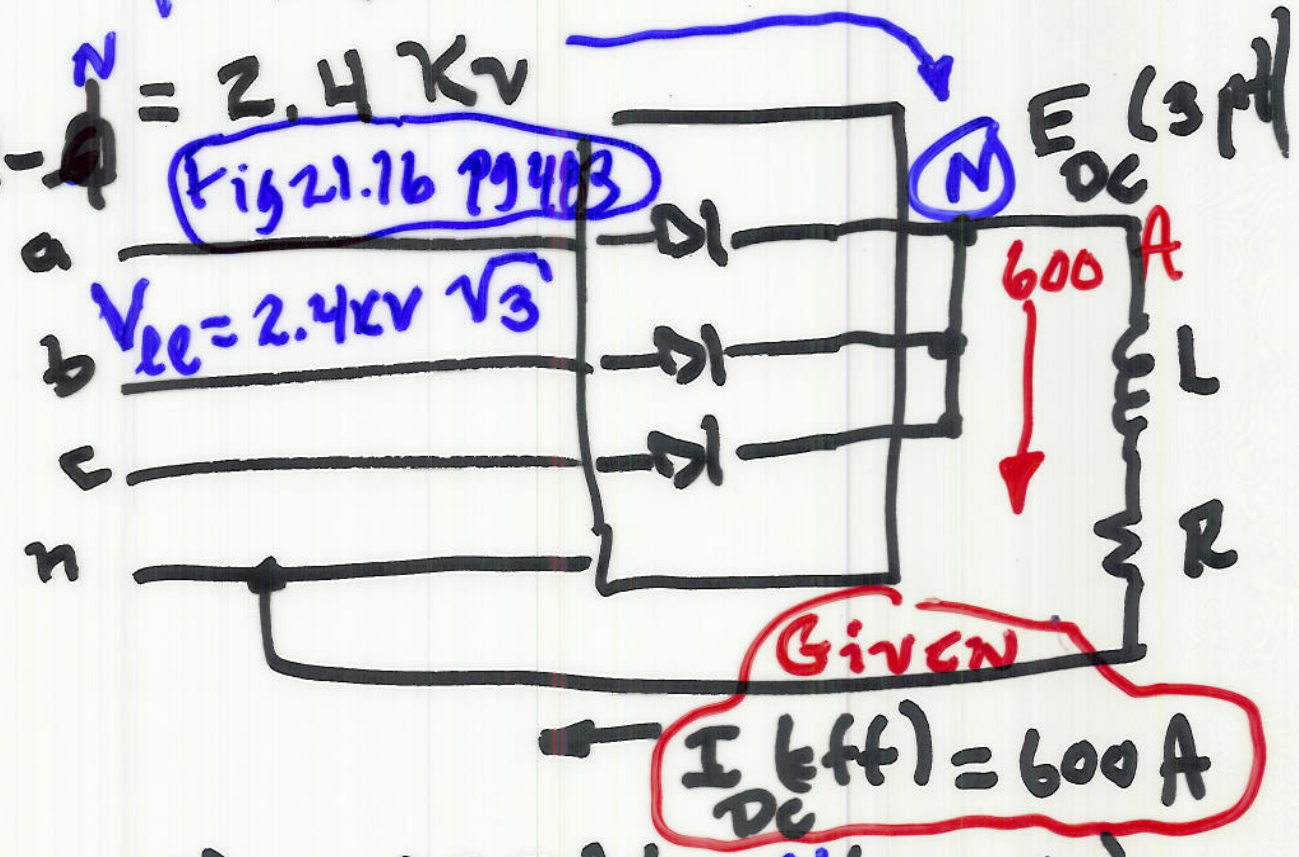
For 3 pulse rectifier

$V_{LN(Y)} = 2400$

$V_{l-N} = 2.4\ Kv$



Given

$I_{DC}(eff) = 600\ A$

$E_{DC}(3\,ph) = .675\ V_{l-N}(rms)$

$V_{l-N} = 2400$ (3 point $\frac{1}{2}$ wave rectif relations via)

$E_{DC} = 1620\ V$

Each diode carries $I_{DC}/3 = 200\ A$ (out)

Peak diode current

Max diode current = ?

I_{eff}

Worst case 600 A = $I_{Diode\ peak}$

600 @ $\frac{1}{3}$ duty cycle

$\Rightarrow$ 200 A DC = I_{AV}

AV current not peak