Punto 3

a- Determine P_T, Q_T y S_T

b- Determine el factor de potencia FP

c- Trace el triangulo de Potencia.

d- Determine If

a-

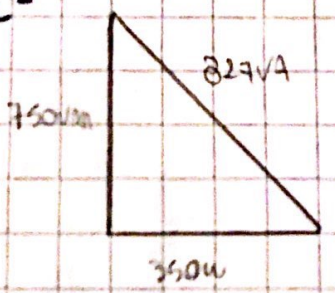
- $P_T = 100W + 200W + 0W + 50W = 350W$
- $P_Q = 50VAR + 100VAR + 500VAR + 100VAR = 750VAR$
- $P_S = 750VAR + 350W$

$|P_S| = \sqrt{750^2 + 350^2} = 827VA$

b-

$FP = \frac{350_W}{827VA} = 0,42$ $\quad \varphi_z = \cos^{-1}(0,42) = 64,5°$

c-



d- $V_{rms} \cdot I_{rms} \cdot \cos\varphi_z = P$

$V_{rms} \cdot I_{rms} = \frac{P}{\cos\varphi_z}$

$I_{rms} = \left(\frac{P}{\cos\varphi_z}\right) : V_{rms}$

$I_{rms} = \frac{350W}{\cos 64,5°} :$

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