4 Fevereiro 2020

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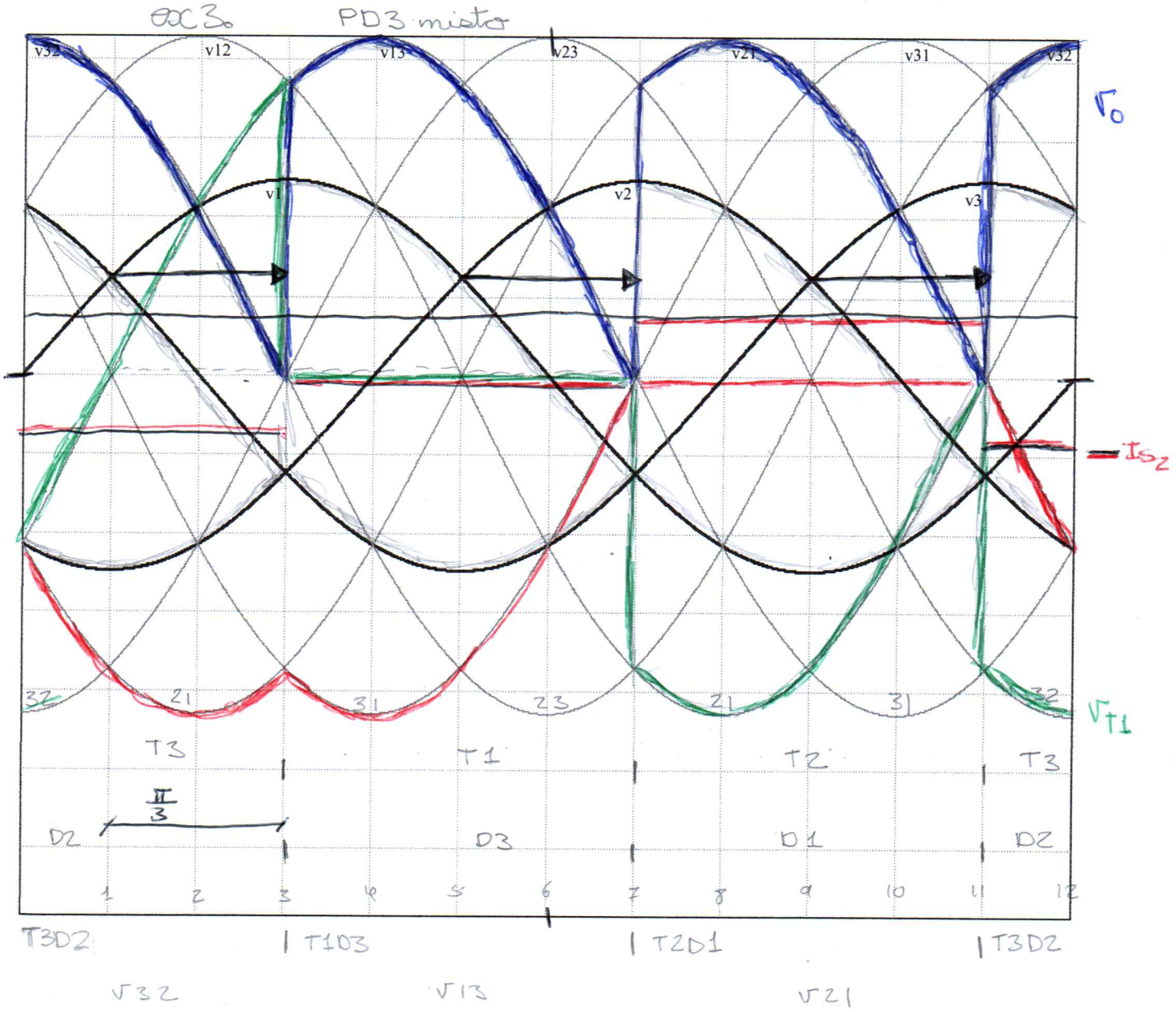


- $R = 10\Omega$; $E < 50V$; $V_{rms} = \frac{500}{\sqrt{2}}$
- $\alpha = \frac{\pi}{3}$
- C.C.C

$$V_{o(1)_{av}} = 3 \times \frac{1}{2\pi} \int_{\frac{\pi}{3}}^{\pi} 500 \sin(\theta)\, d\theta$$

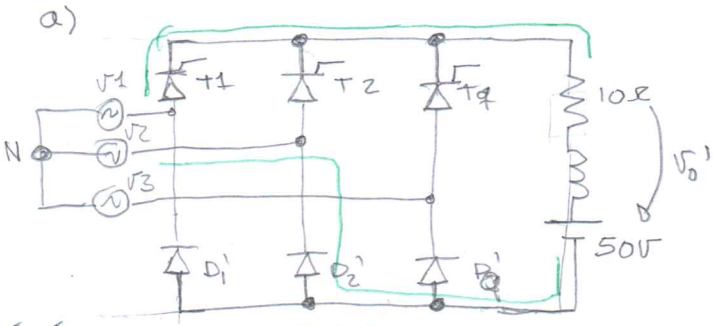
$P_1 = ?$ $\quad P_1 = \frac{P_o}{3} = \frac{\frac{1}{2\pi}\int_0^{2\pi} V_o(\theta) \cdot i_o(\theta)\, d\theta}{3}$; C.C.C

$S_1 = ?$ $\quad = \frac{V_{oAV} \times I_{oAV}}{3} =$

$$S_1 = V_{1rms} \times I_{1rms}$$

$$= \frac{500}{\sqrt{3}\cdot\sqrt{3}} \times \boxed{\frac{I_o}{\sqrt{3}\cdot 3}} = \sqrt{\frac{2}{2\pi}\int_0^{\frac{2\pi}{3}} I_{oAV}^2\, d\theta}$$

a)



C.C.C.

$$I_{oAV} = \frac{V_{oAV} - E}{R}$$