

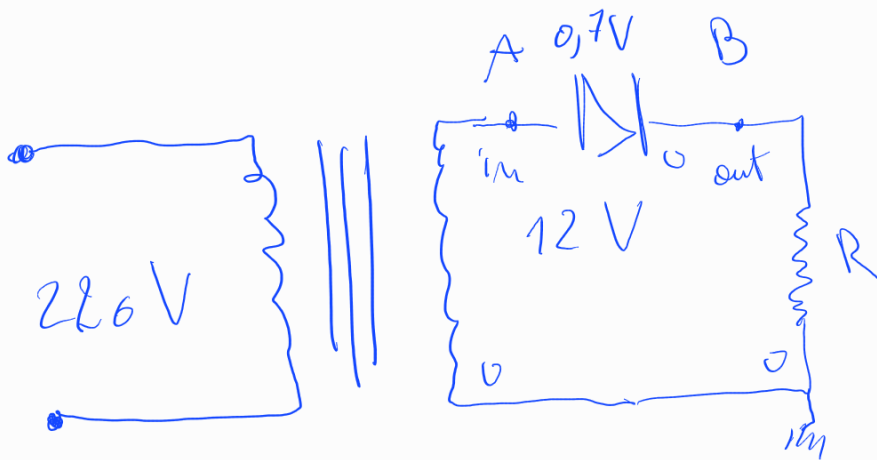
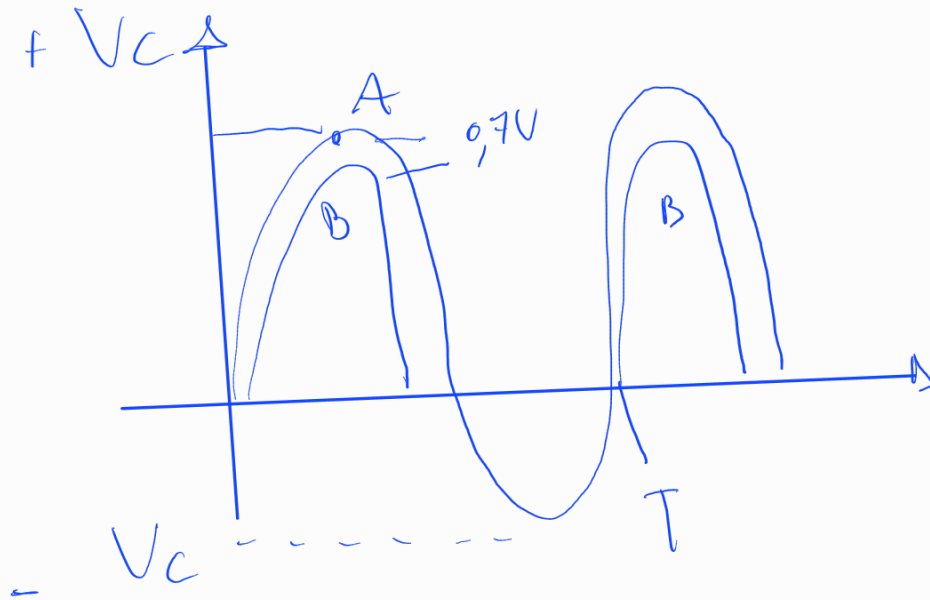
AC / DC

(Convertisseur)

1 type redressement.

Redressement simple alternance

Diode bloque courant  
dans un sens



$$V_{out} = V_{in} - 0,7V$$

$V_{ic}$  : tension inverse de crête

tension :

$$= V_c$$

$$V_{\text{mean}} = \frac{1}{T} \int_0^T V(t) dt$$

$$V_{\text{out}}(t) = V_{\text{r\ddot{u}}t\ddot{e}} \sin \omega t \quad \text{Si } 0 \leq t < \pi/2$$

$$= 0 \quad \text{Si } \pi/2 \leq t < T$$

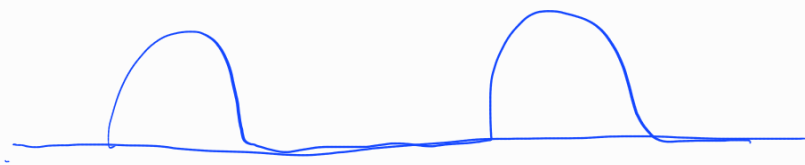
$$= \frac{1}{T} \int_0^{\pi/2} V_{\text{r\ddot{u}}t\ddot{e}} \sin \omega t dt$$

$$= \frac{V_{\text{r\ddot{u}}t\ddot{e}}}{T} \int_0^{\pi/2} \sin \omega t dt = \frac{V_{\text{r\ddot{u}}t\ddot{e}}}{T} \left[ -\frac{\cos \omega t}{\omega} \right]_0^{\pi/2}$$

$$= \frac{V_{\text{r\ddot{u}}t\ddot{e}}}{T \frac{2\pi}{T}} \left[ -\cos \frac{\omega t}{2} + \cos \omega \right]_0^{\pi/2}$$

$$\approx \frac{V_{\text{r\ddot{u}}t\ddot{e}}}{2\pi}$$

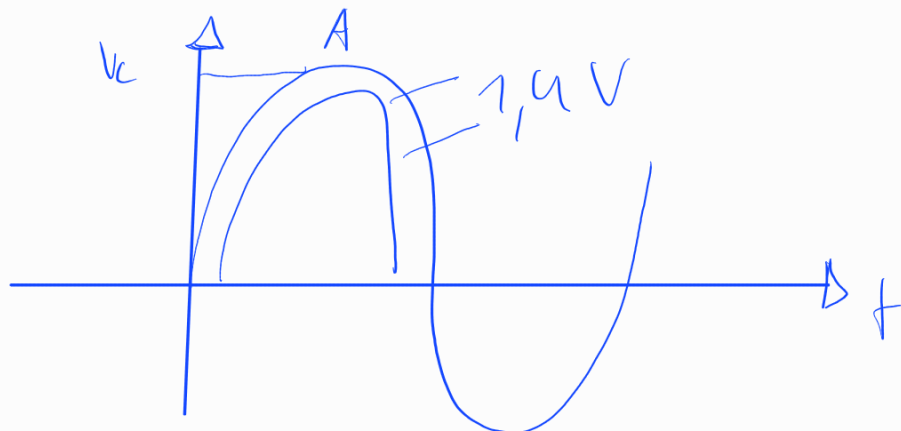
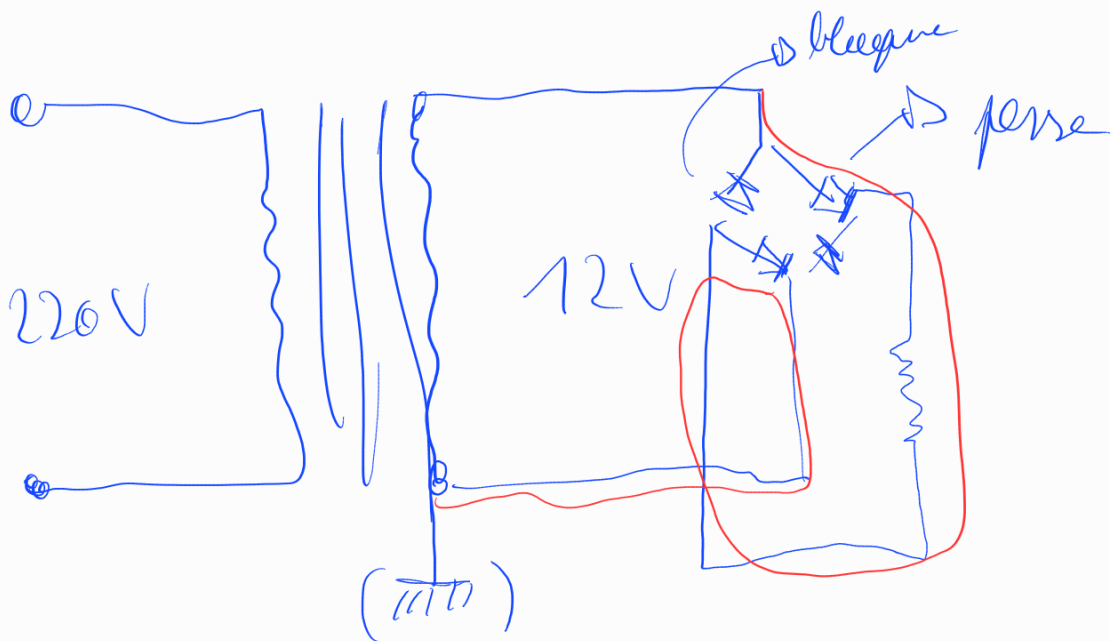
$$V_{\text{mean out}} \Rightarrow \frac{V_{\text{r\ddot{u}}t\ddot{e}}}{\pi}$$



leur période  $T/2$

$$f_{out} = 2 f_{in}$$

## Redressement double alternance



V 2V 1

$$V_{\text{moyen ent}} = \frac{2 V_c \text{ ent}}{\pi}$$

