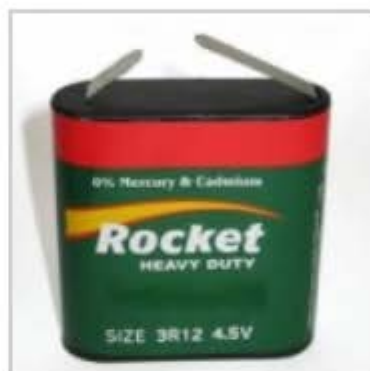
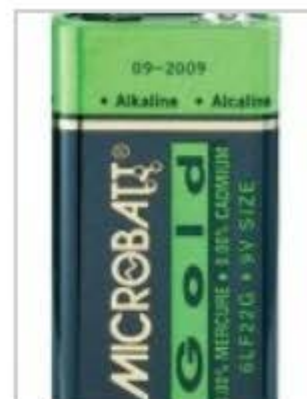
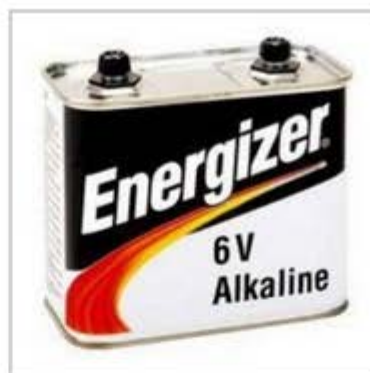


$$I = I_1 + I_2$$



- Piles : 1,5 V ; 4,5 V ; 9 V

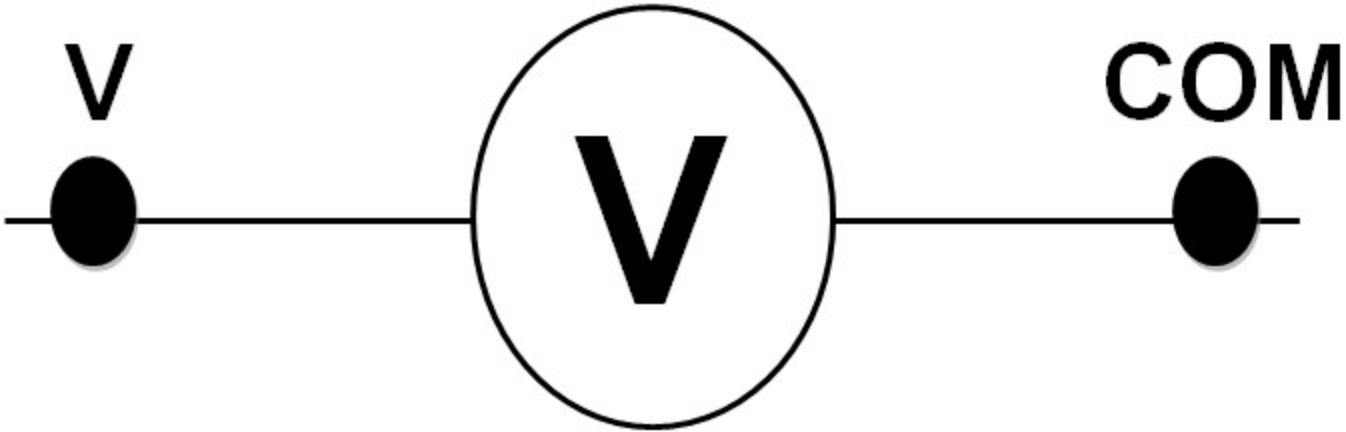


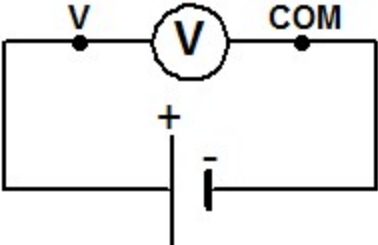
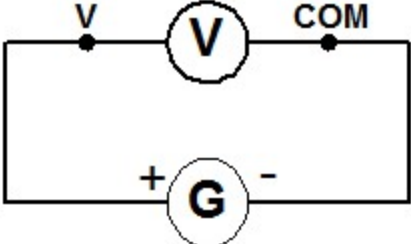
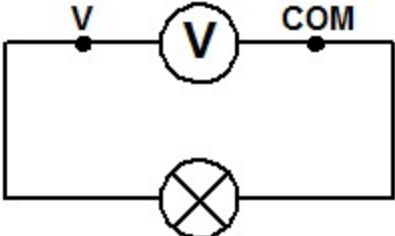
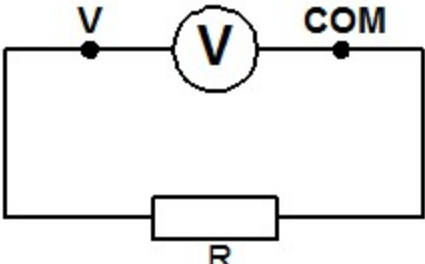
- Lampe : 3,5 V ; 6 V ; 230 V

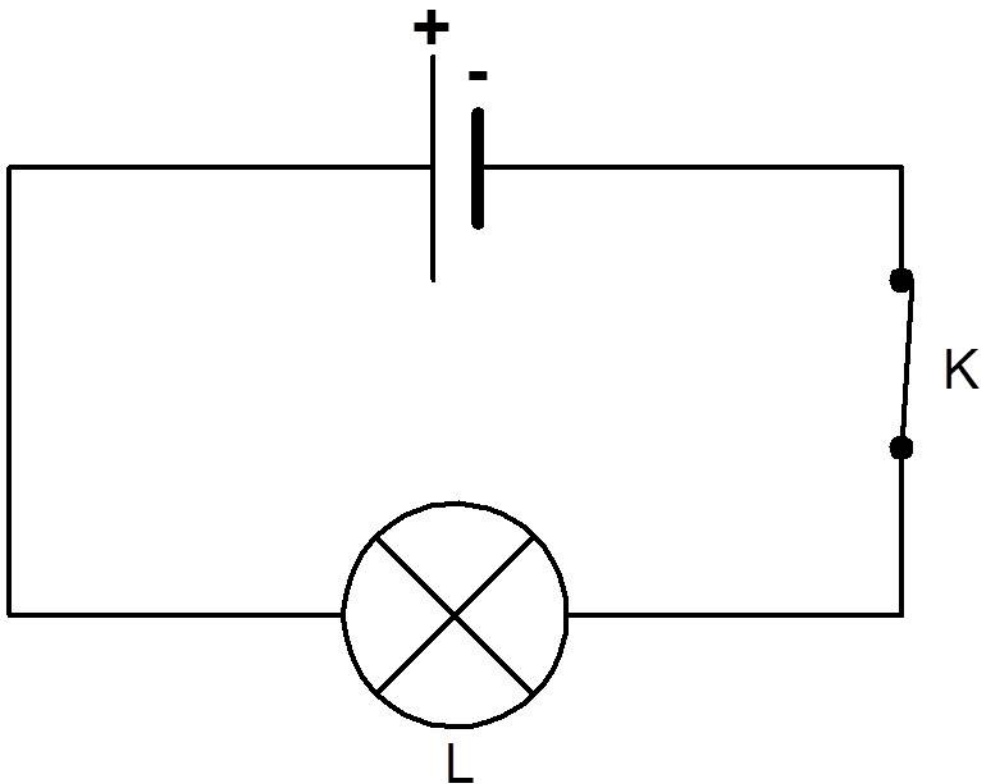


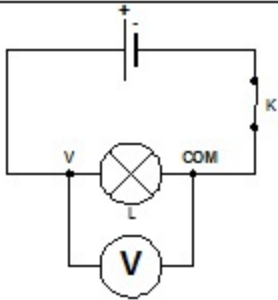
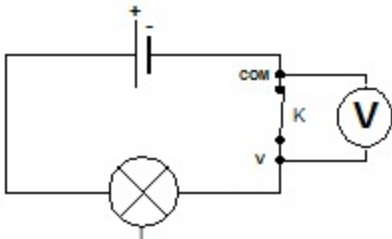
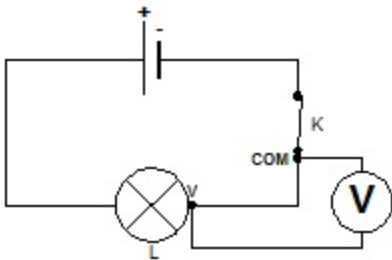
- Appareils électroménagers : 230 V...

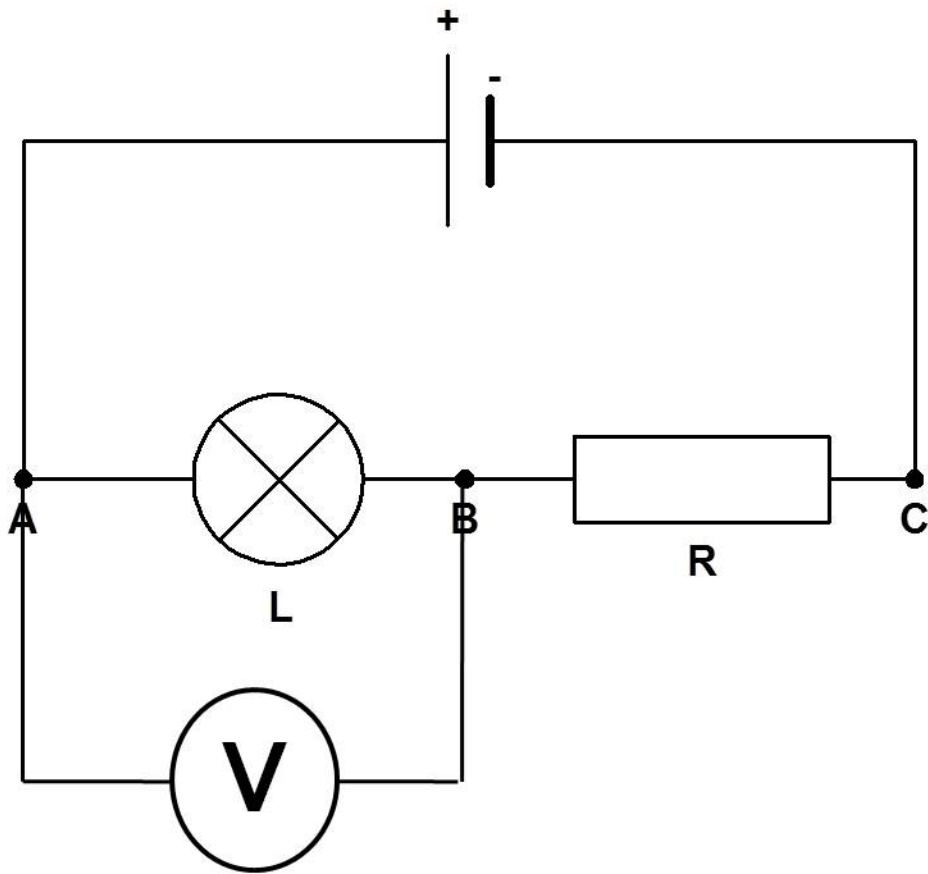




DIPOLE	SCHEMA ELECTRIQUE	TENSION MESUREE
Pile plate		$U = 4,5 \text{ V}$
Générateur variable		$U_{\min} = 3 \text{ V}$ $U_{\max} = 12 \text{ V}$
Lampe		$U = 0 \text{ V}$
Résistance		$U = 0 \text{ V}$



MESURE DE LA TENSION	MONTAGE	RESULTAT DE LA MESURE
Entre les bornes de la lampe		$U_L = 6 \text{ V}$
Entre les bornes de l'interrupteur fermé		$U_K = 0 \text{ V}$
Entre les bornes d'un fil de connexion		$U_{\text{fil}} = 0 \text{ V}$



**Tension aux bornes de L**

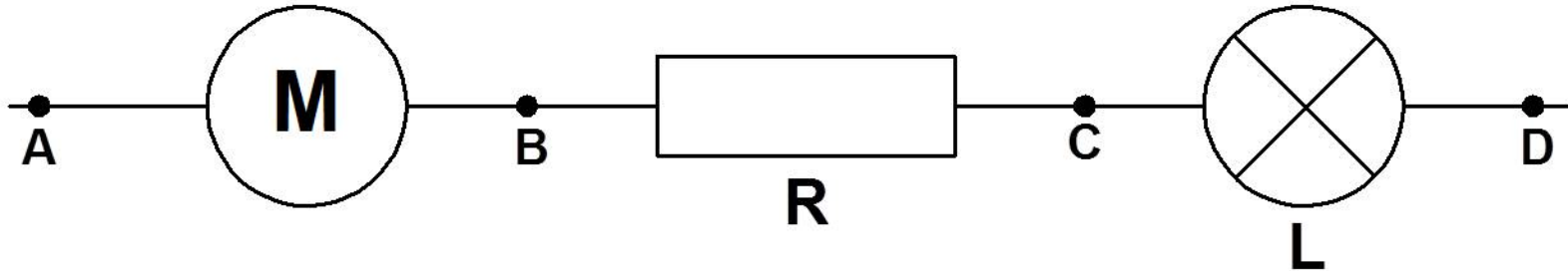
$$U_L = 8 \text{ V}$$

**Tension aux bornes de R**

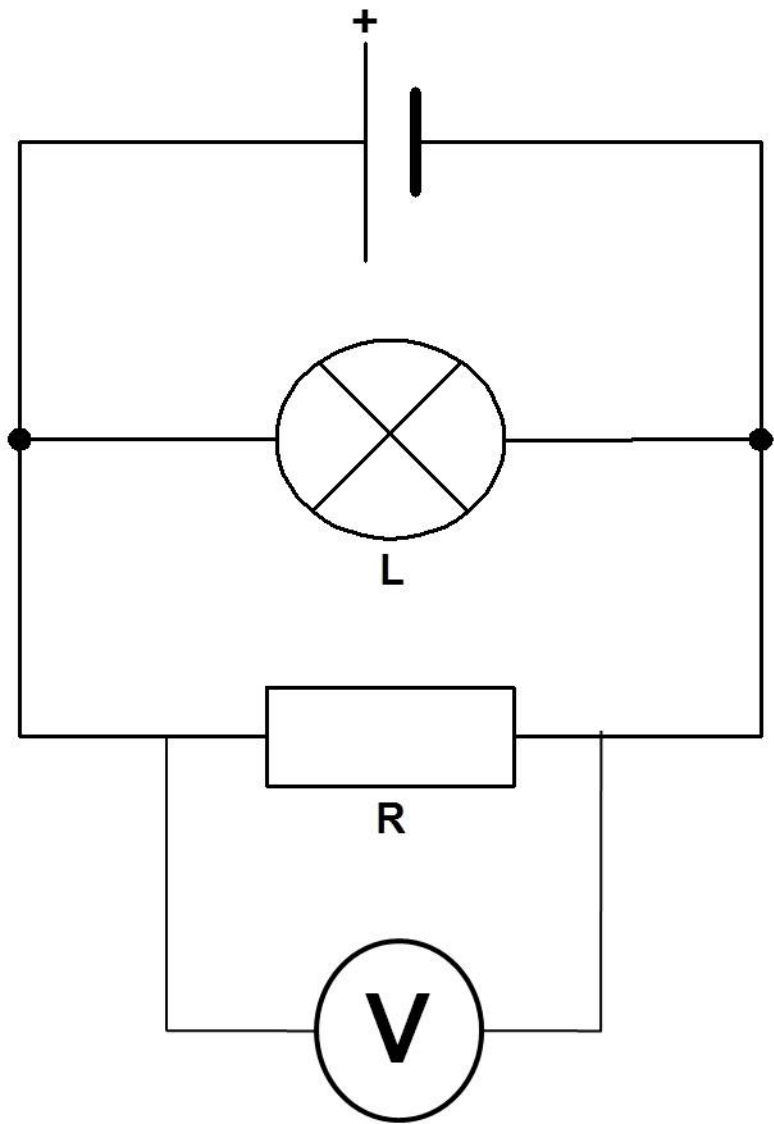
$$U_R = 4 \text{ V}$$

**Tension aux bornes de la pile**

$$U_{\text{pile}} = 12 \text{ V}$$







**Tension aux bornes de L**

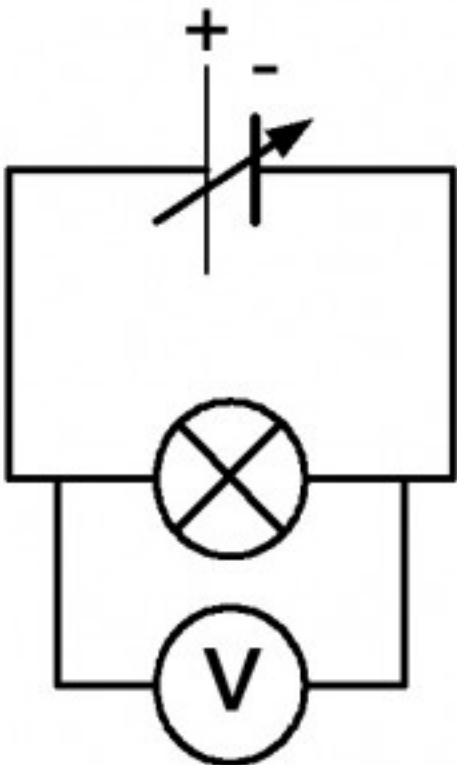
$$U_L = 6 \text{ V}$$

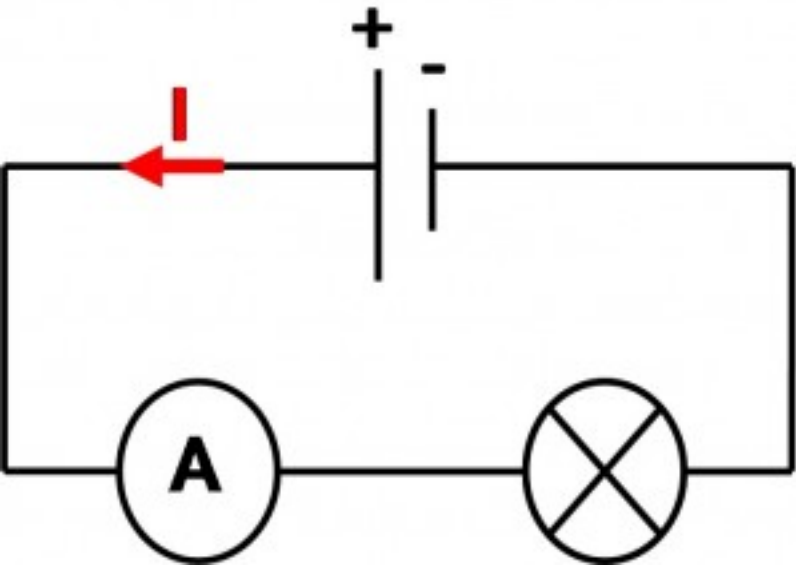
**Tension aux bornes de R**

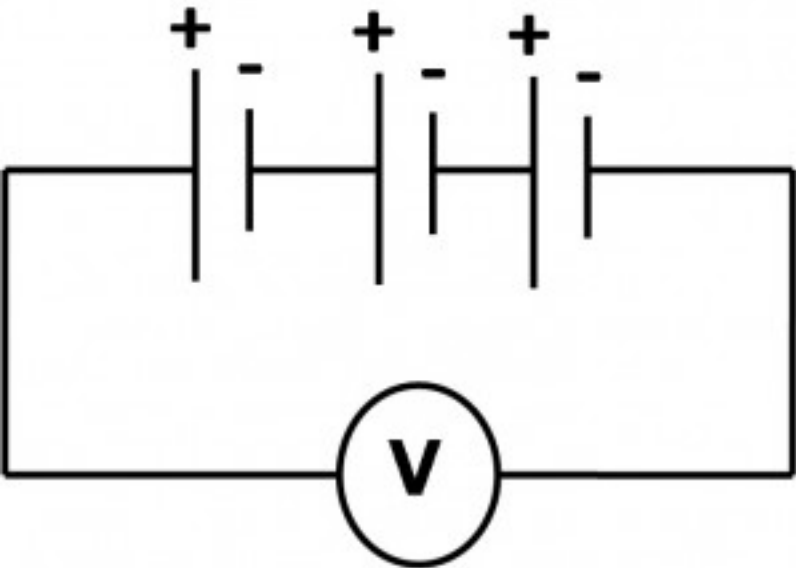
$$U_R = 6 \text{ V}$$

**Tension aux bornes de la pile**




$$U_{\text{pile}} = 6 \text{ V}$$

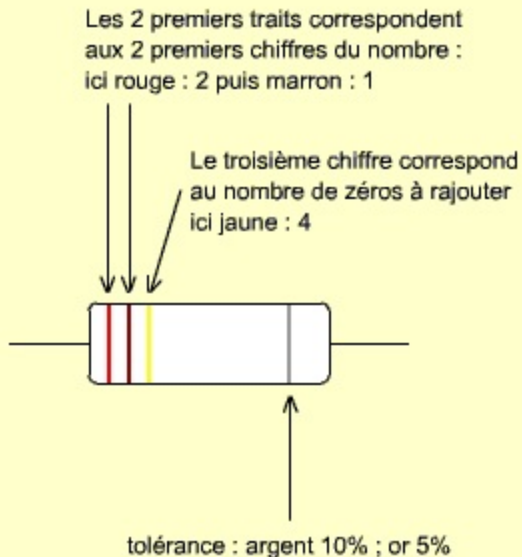






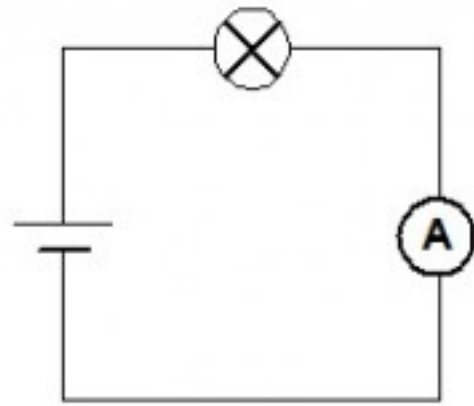


	0
	1
	2
	3
	4
	5
	6
	7
	8
	9

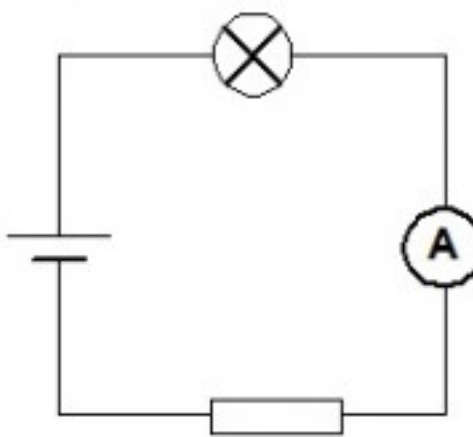


Ici R = 210000 Ohm à 10% près



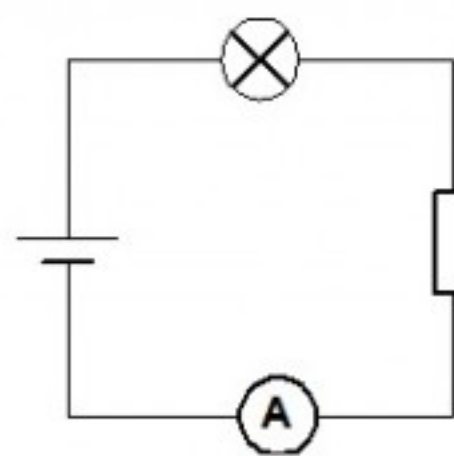


$$I = 0,25 \text{ A}$$



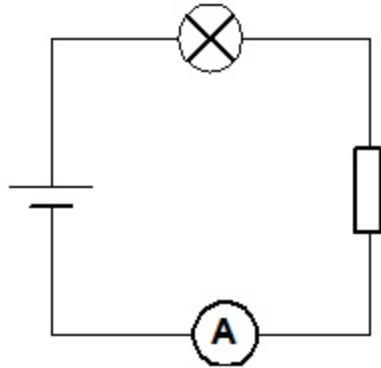
$$I = 0,10 \text{ A}$$

$$R = 100 \, \Omega$$



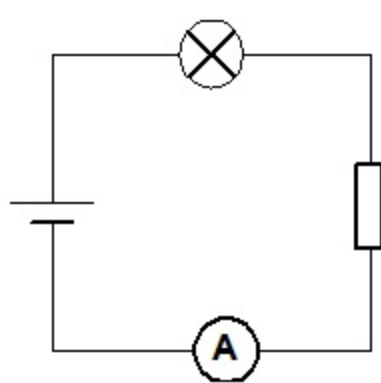
$$I = 0,10 \text{ A}$$

$$R = 100 \, \Omega$$



$$I = 0,10 \text{ A}$$

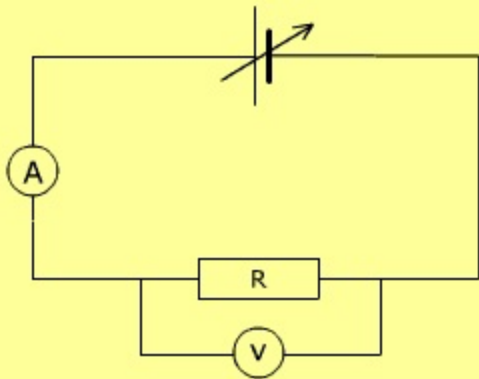
$$R = 100 \, \Omega$$



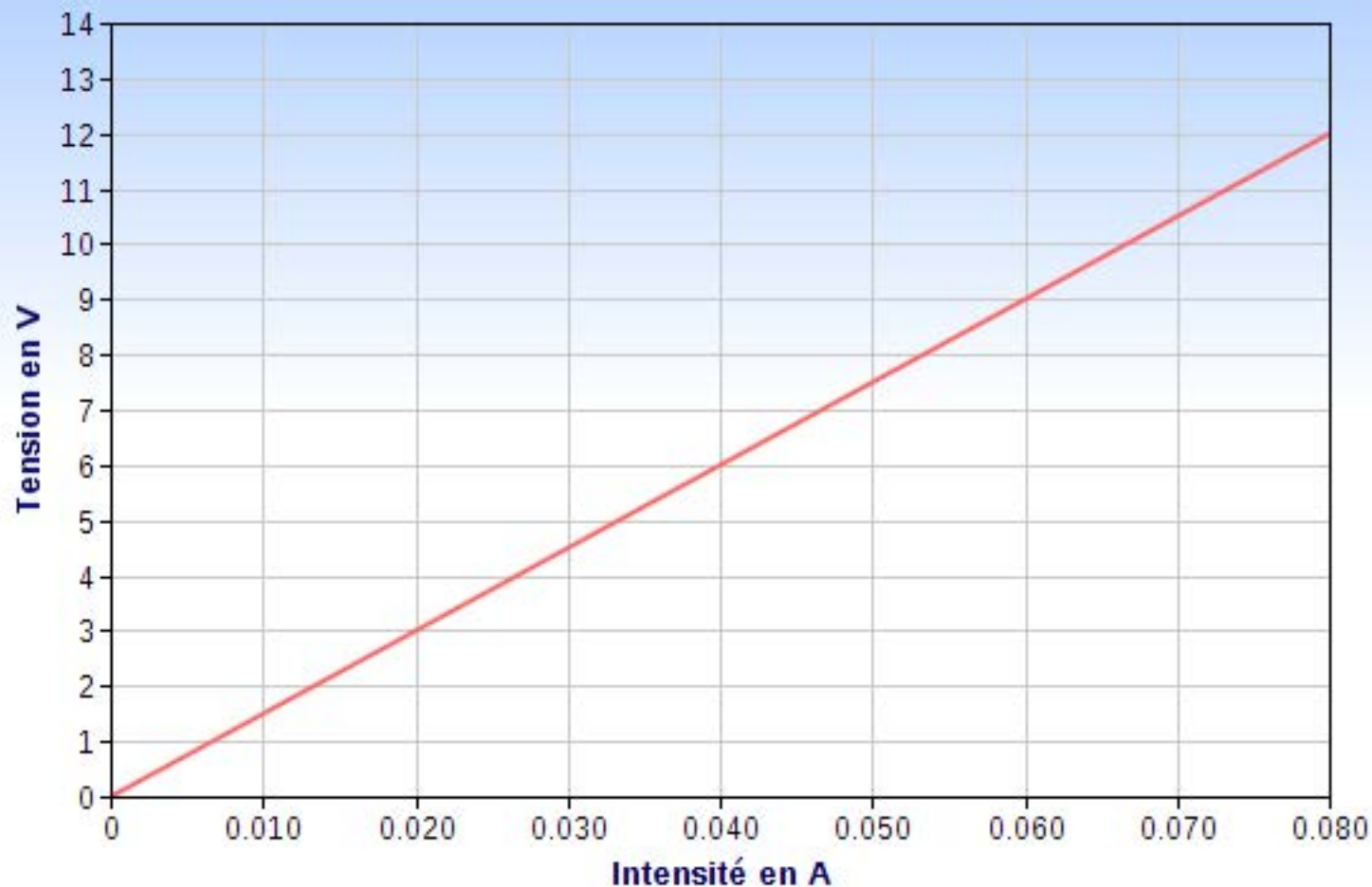
$$I = 0,06 \text{ A}$$

$$R = 200 \, \Omega$$





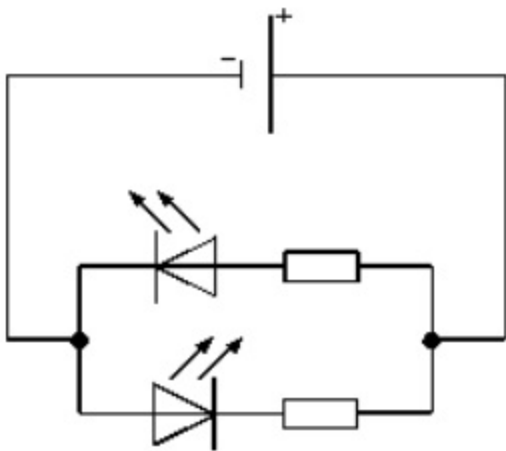
## Evolution de la tension en fonction de l'intensité



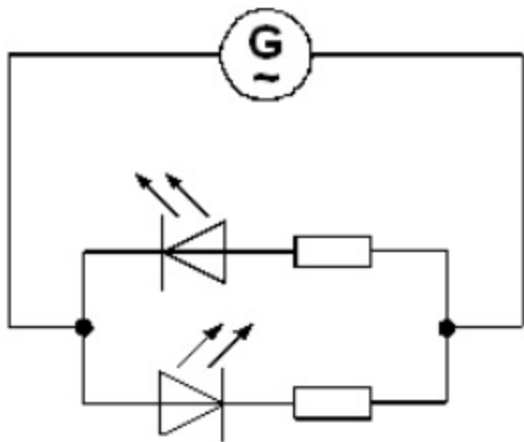




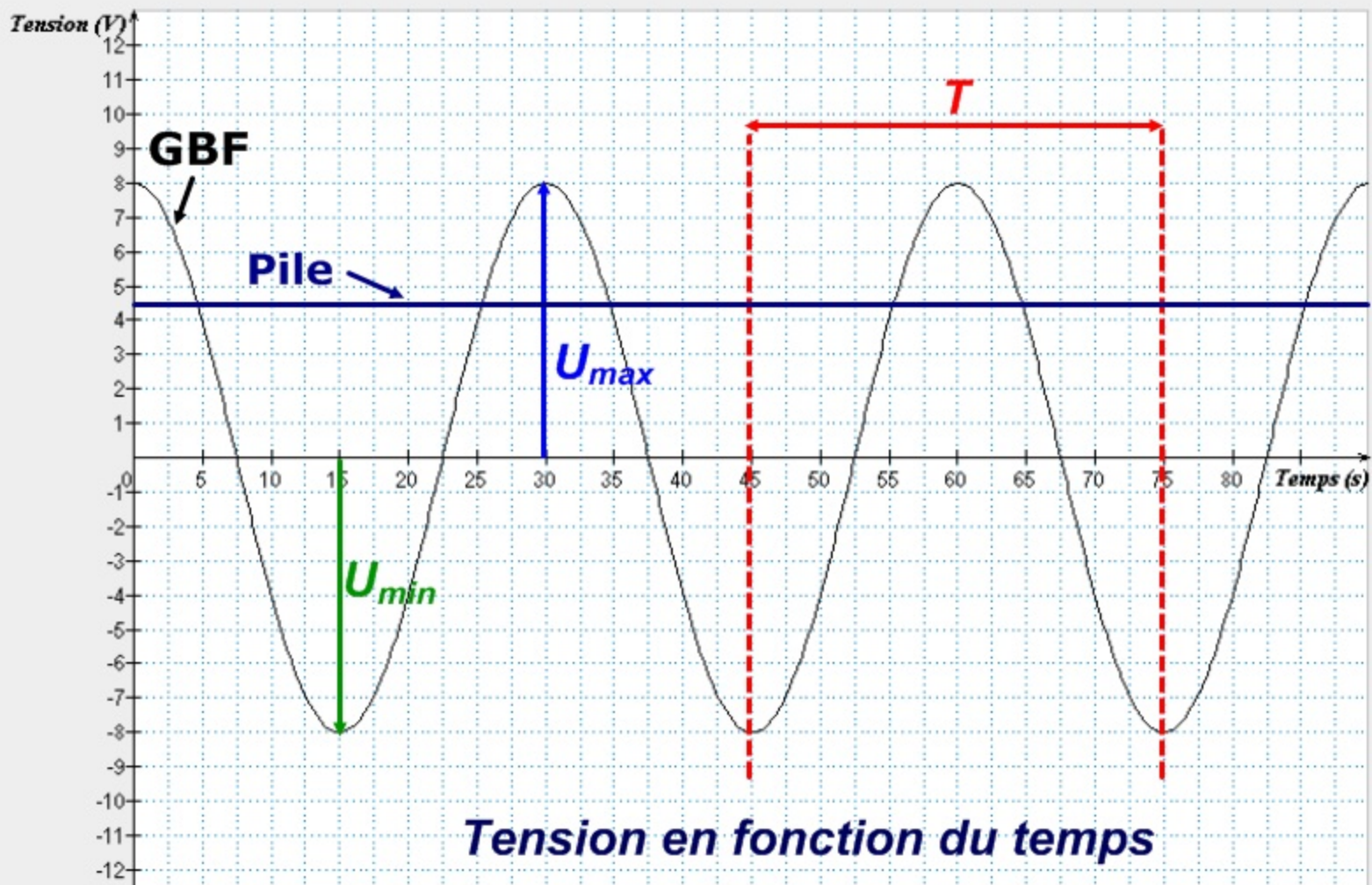


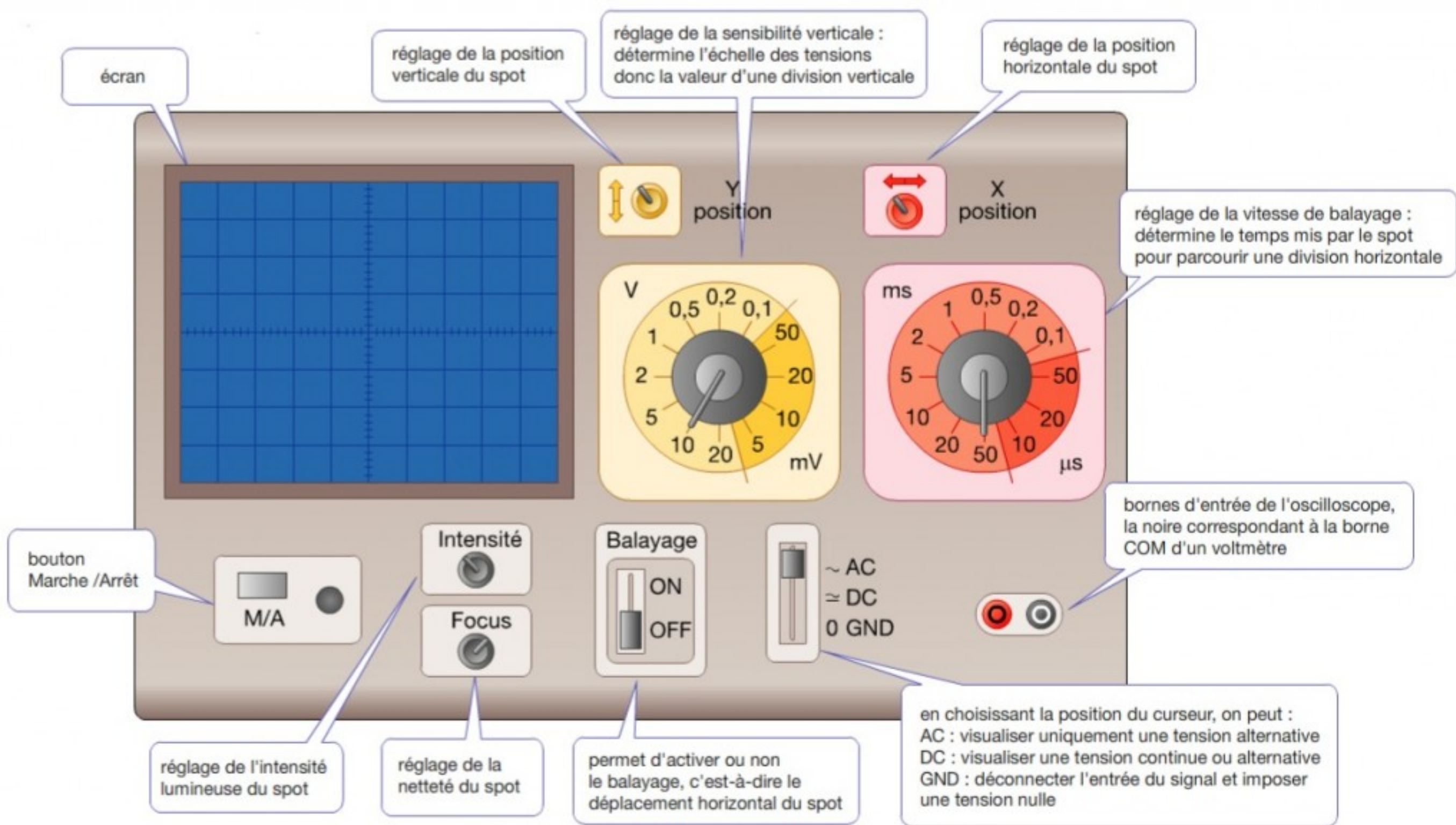






Tension $U$ (en V)	8	4	-4	-8	-4	4	8	4	-4	-8	-4	4	8	4	-4	-8	-4	4	8
Temps (en s)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90



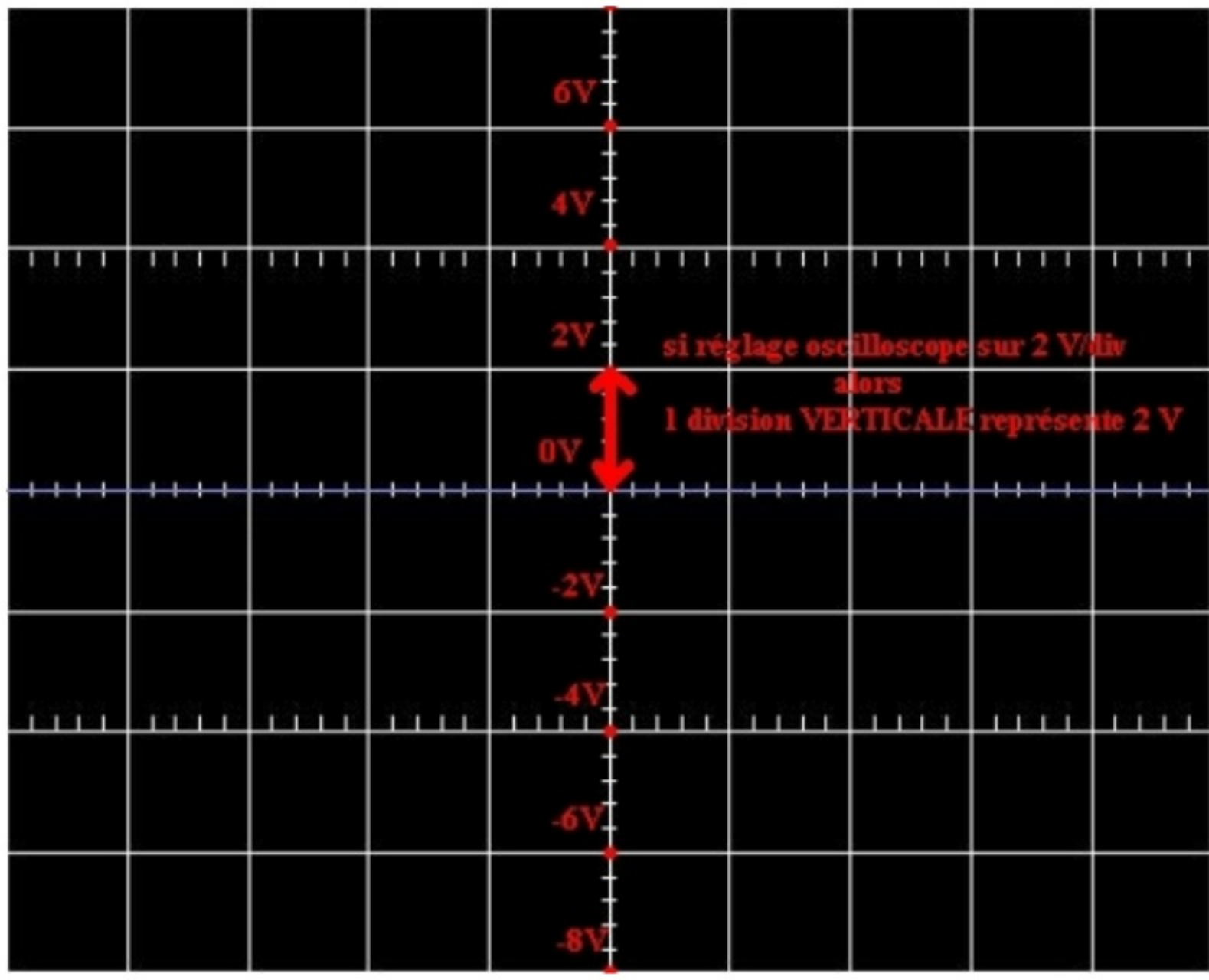


**V/DIV**

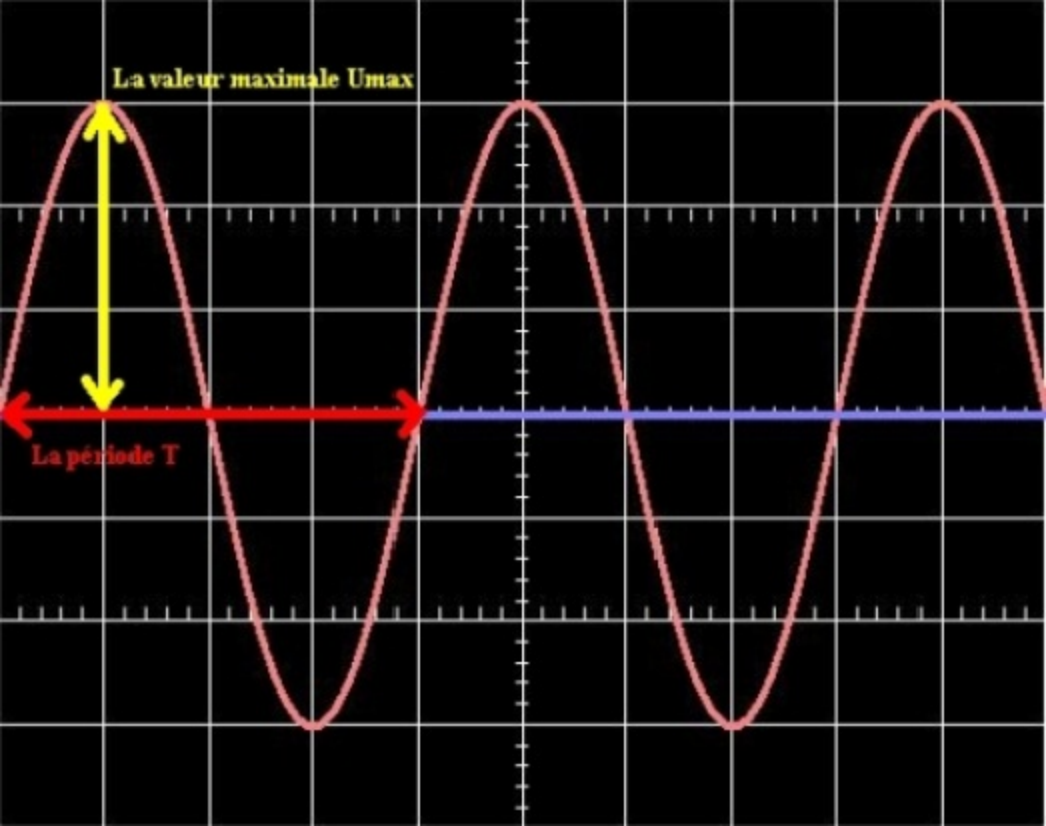
5 2 1 0.5 0.2 0.1 0.05

A rotary switch with a yellowish, semi-transparent plastic cover. The cover is circular with a central hub and a radial slot. A thin, light-colored pointer is attached to the hub, pointing towards the '0.1' mark on the scale. The scale is marked with numbers 5, 2, 1, 0.5, 0.2, 0.1, and 0.05, arranged in a semi-circle. Each number is accompanied by a small, white, trapezoidal icon.

**VERTICAL**



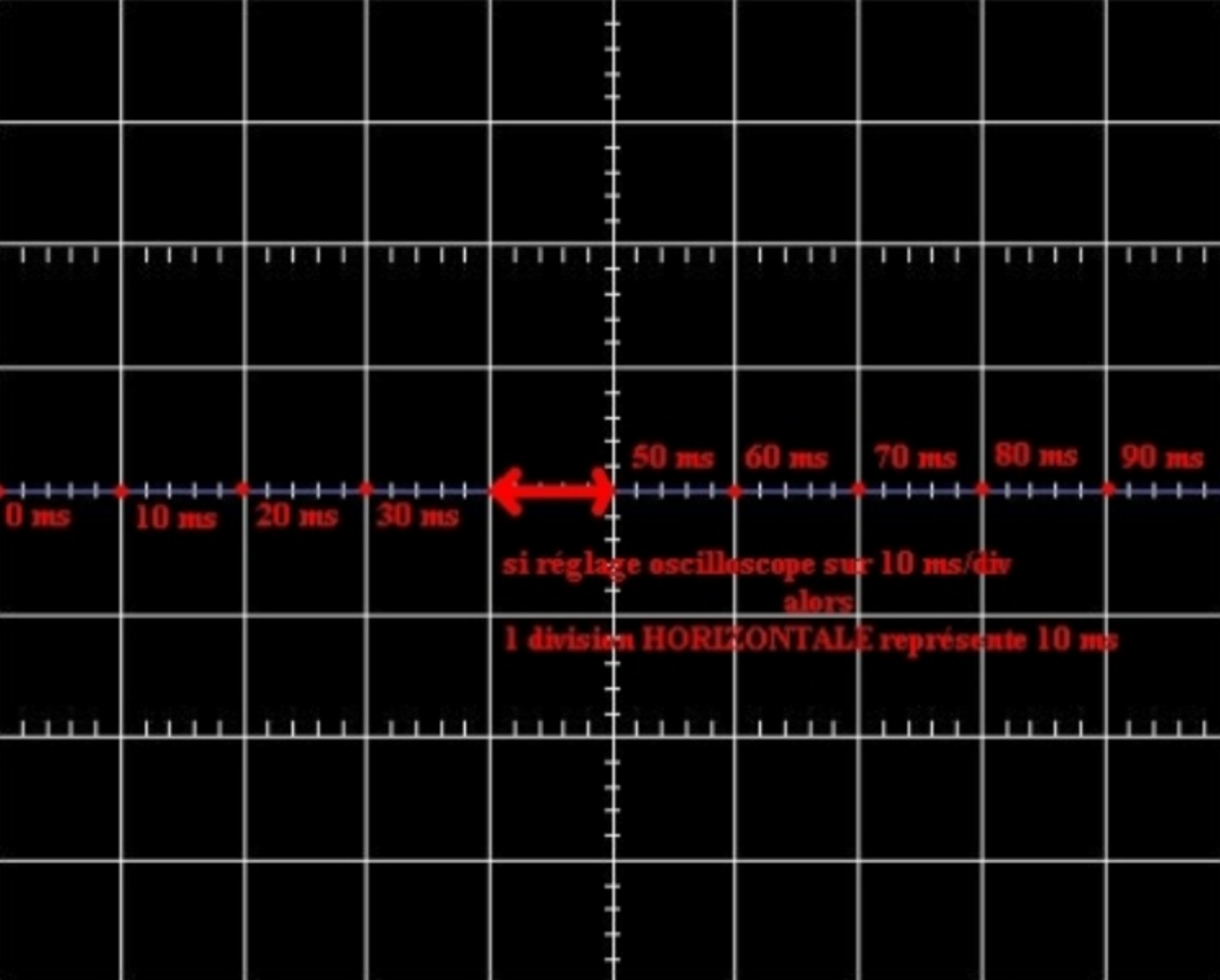




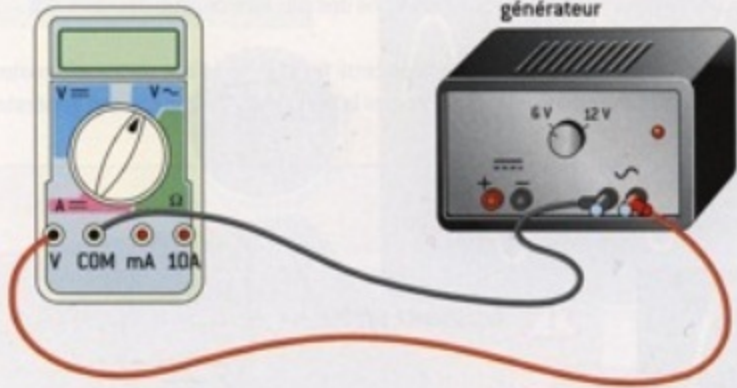
**T/DIV**

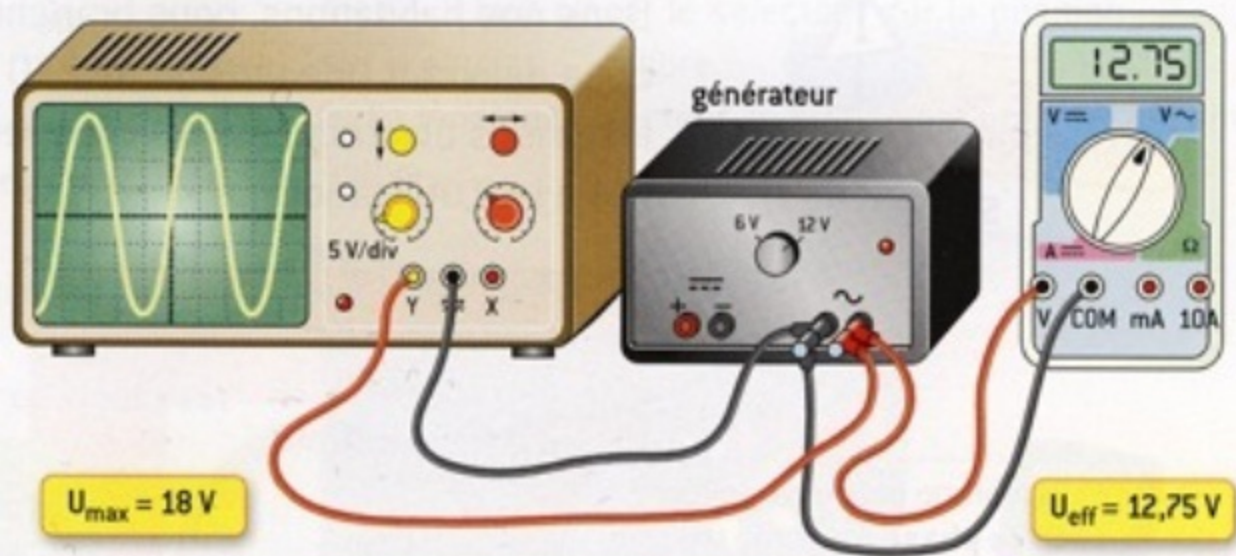


**HORIZONTAL**



générateur





	Générateur sur 6V	Générateur sur 12V
$U_{\text{eff}}$ (V)	6 V	12 V
$U_{\text{max}}$ (V)	8.5 V	17 V
$U_{\text{max}} / U_{\text{eff}}$	1,4	1,4

Type : / 7

**7400**

CE



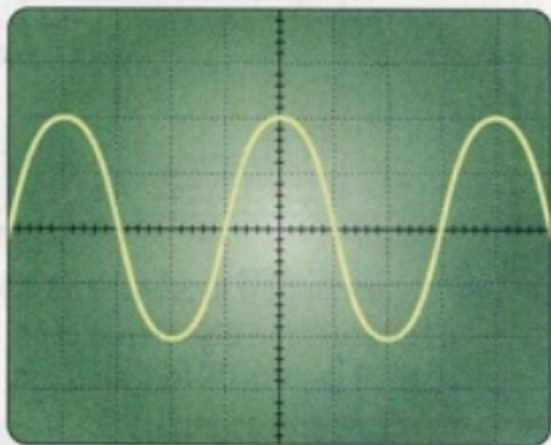
**230 V~**

**50 HZ**

**240 W**

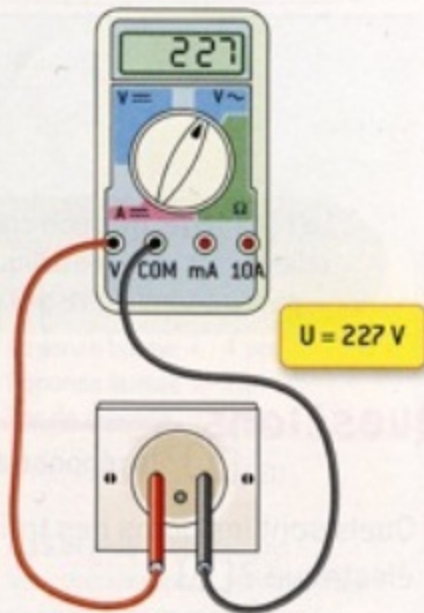
Serie Nr .

**08 / 04 / 119338**



réglage du balayage : 5 ms/div

$T = 20 \text{ ms}$  ;  $f = 50 \text{ Hz}$





4- puissance nominale

3- intensité nominale

11Watt

96mA

220-240V~

50/60Hz

FRC02

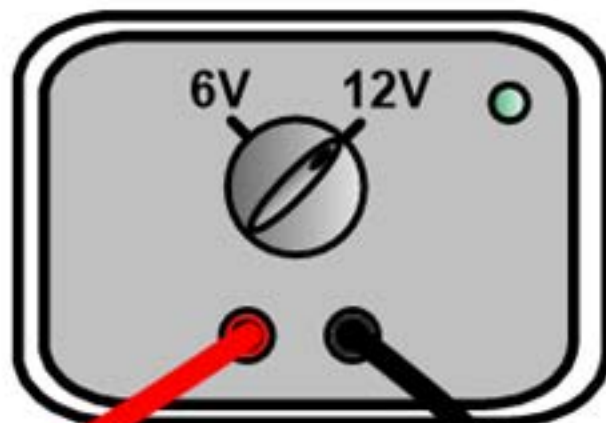
247035

CE

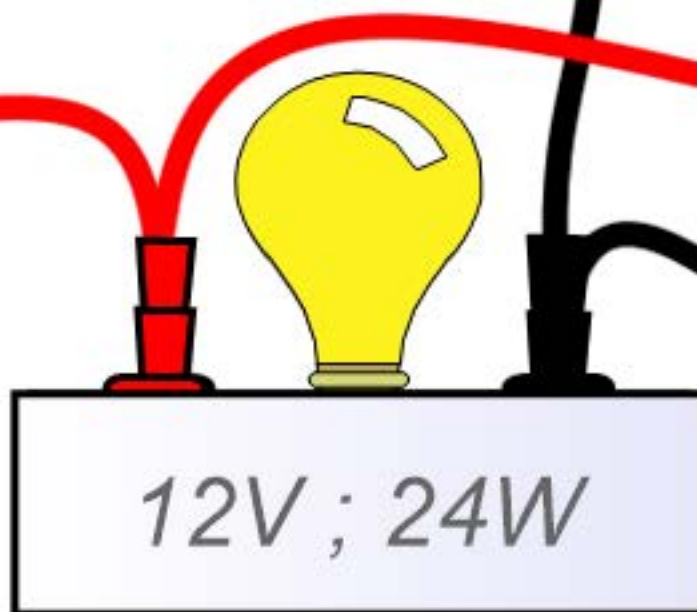
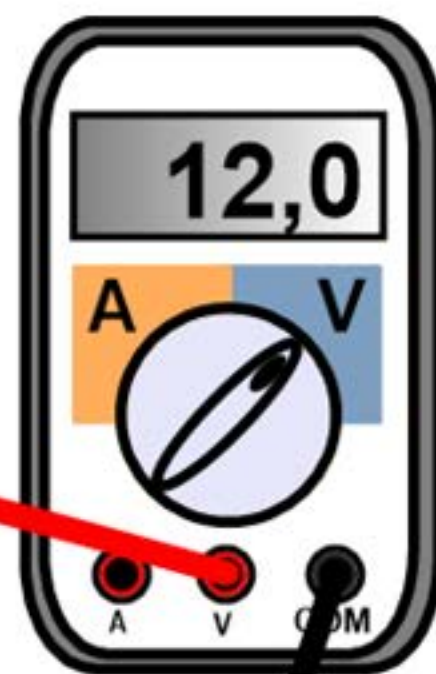
1- tension nominale

2- fréquence d'utilisation

$$I = 2 \text{ A}$$



$$U = 12 \text{ V}$$



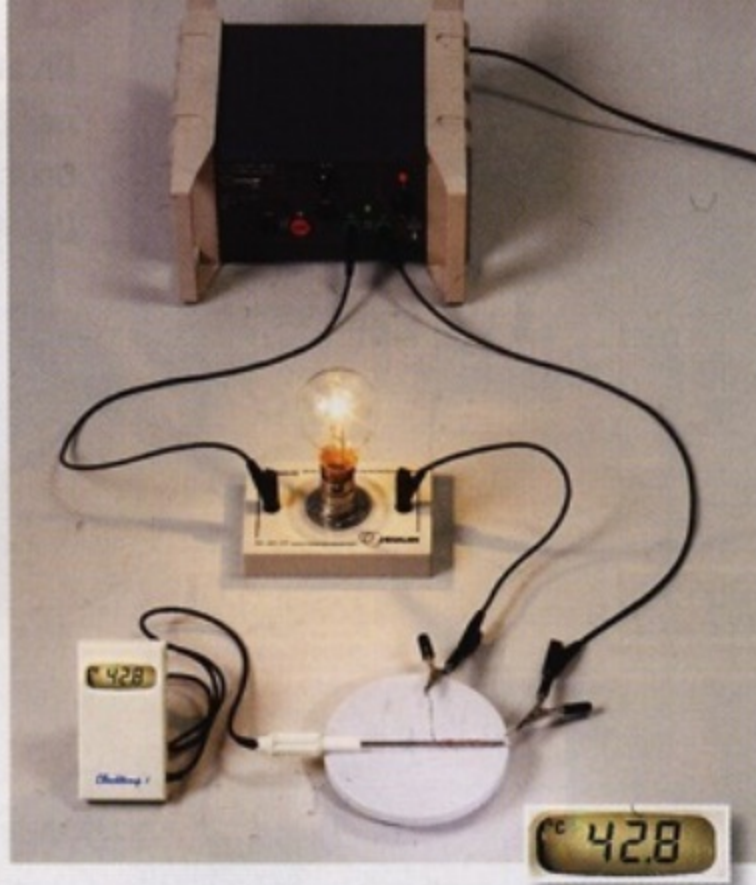
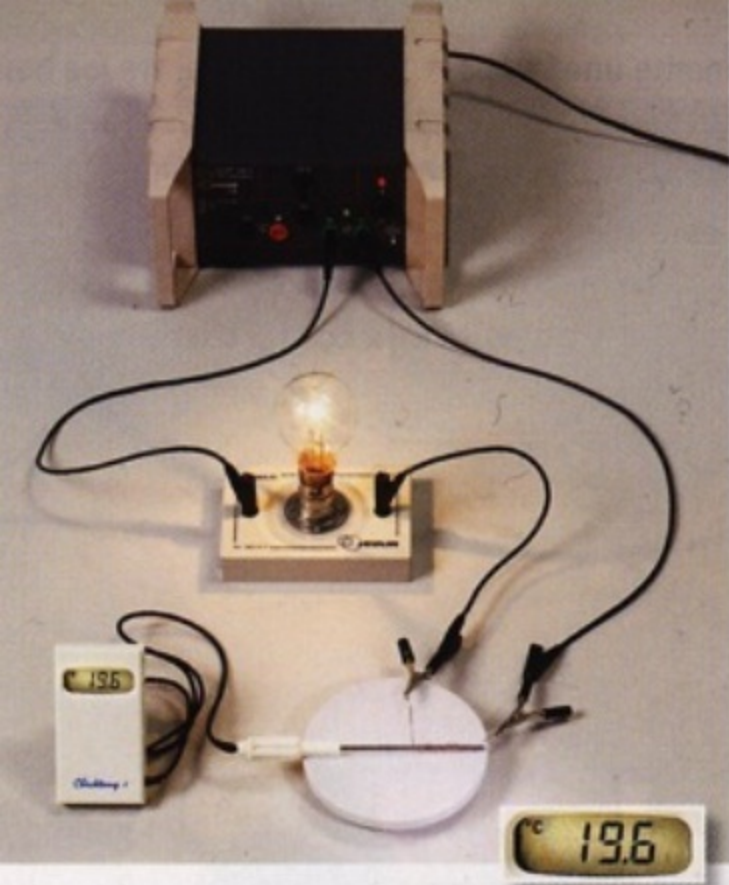
$$P = U \times I = 12 \times 2 = 24 \text{ W}$$

$$P = U \times I$$

En watt (W)

En Volt (V)

En Ampère (A)



coupe-circuit



16 A

phase

neutre

L'intensité efficace  
du courant qui traverse  
l'ensemble des appareils  
est supérieure à 16 A :  
le coupe-circuit  
fonctionne.



lave-linge  
2 500 W

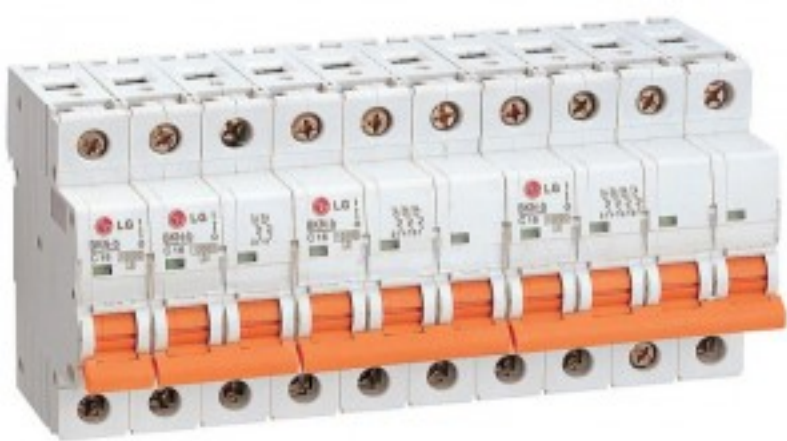


sèche-linge  
2 600 W



radiateur  
électrique  
1 500 W



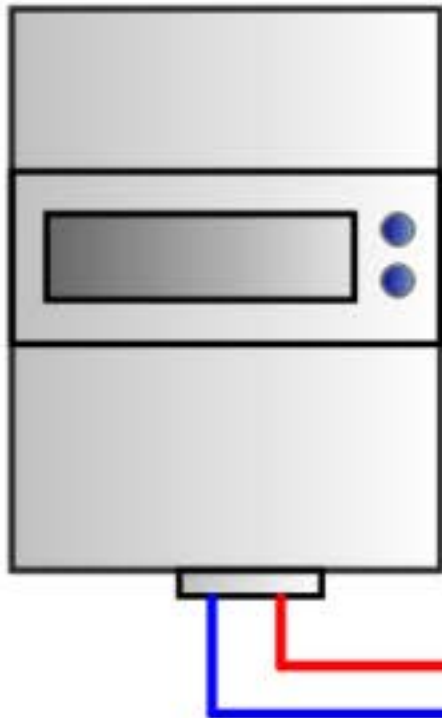




Compteur

Disjoncteur de  
branchement

Disjoncteurs  
divisionnaires



Pièce 1

Pièce 2

Pièce 3

Appareil 1

Appareil 2

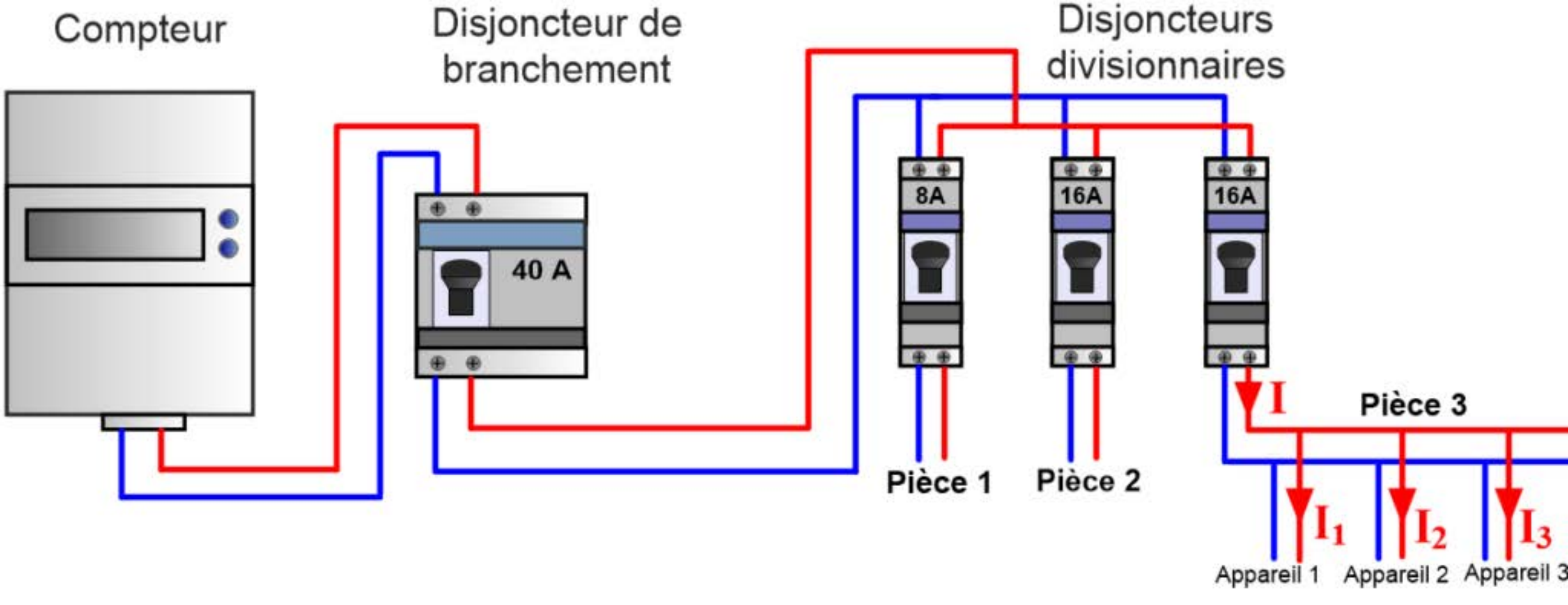
Appareil 3

$I$

$I_1$

$I_2$

$I_3$



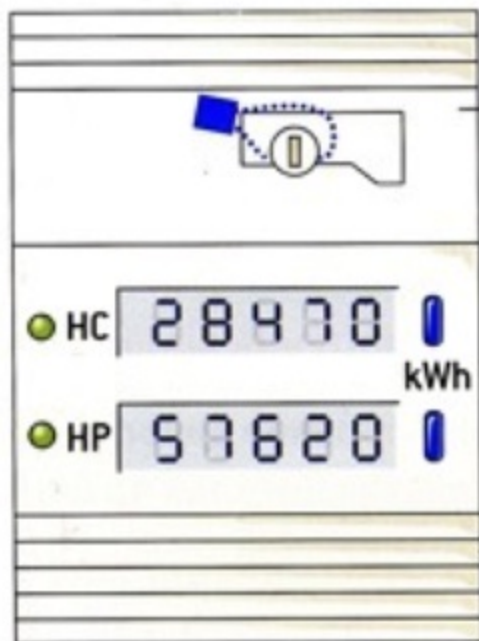


$$E = P \times t$$

En joule (J)

En Watt (W)

En seconde (s)



compteur électrique

$$E = P \times t$$

J

kWh

W

ou

kW

s

h



V $\overline{\text{---}}$

1000

0

500

V $\sim$

200

200

20

2M

2

200k

1.5V

20k

9V

BATT

2k

2m

200

20m

10A

200m

mA $\overline{\text{---}}$

$\Omega$



V $\Omega$

COM

mA

10A

1000VDC  
750VCA  
MAX

500V MAX

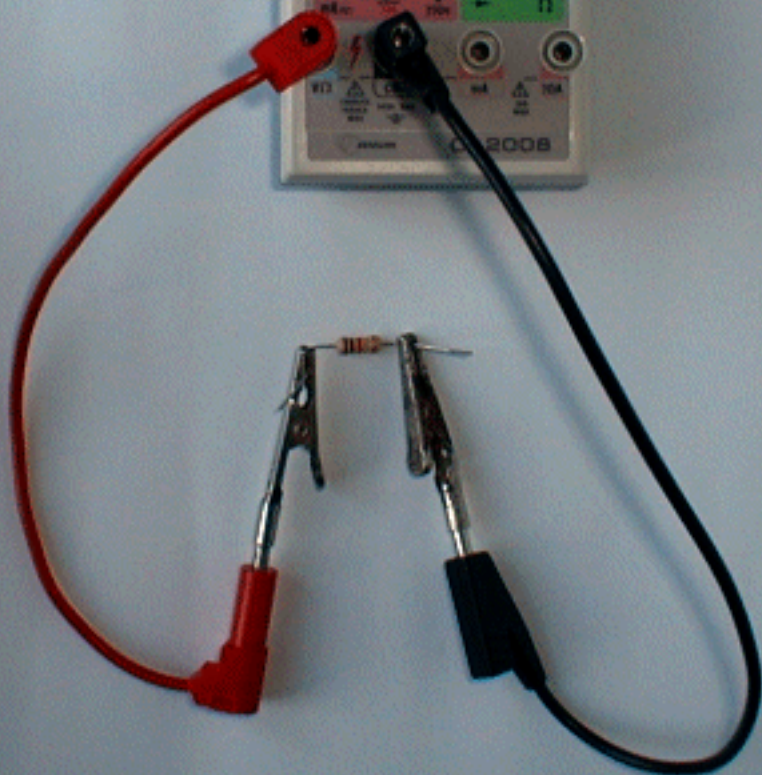
250mA  
MAX

10A  
MAX



JULIN

CL2008





9.93

V  $\equiv$

1000

0

500

V  $\sim$

200

200

20

2M

2

200k

1.5V

20k

9V  
BATT

2k

2m

200

mA

20m

10A

200m

$\Omega$



1000V  
750VCA  
MAX



1000V  
750VCA  
MAX

mA



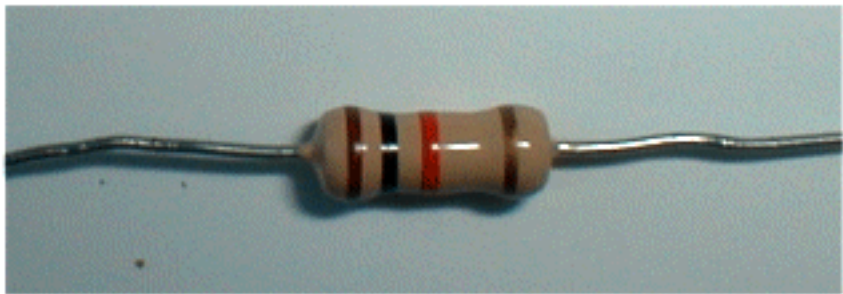
10A  
MAX

10A



J&M

CE 008



0	1	2	3	4	5	6	7	8	9