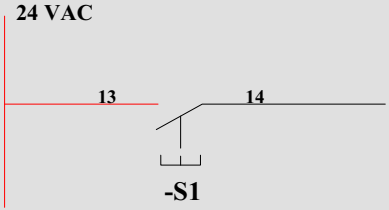
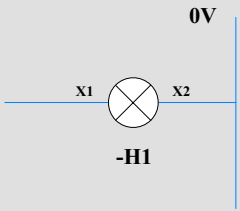
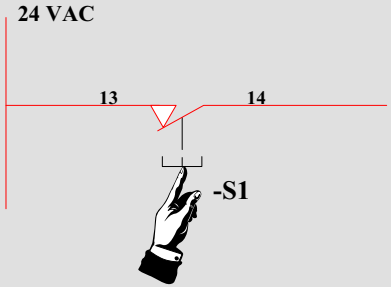
Règles logiques

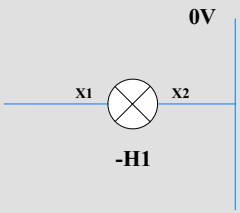
PRODUIT LOGIQUE

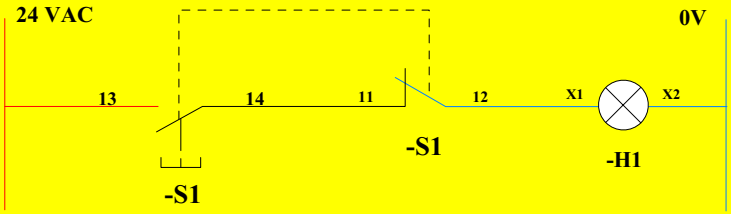




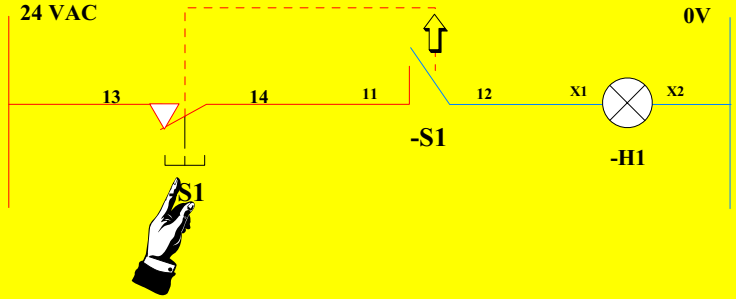
S1 et 0 =0 ou S1.0 =0





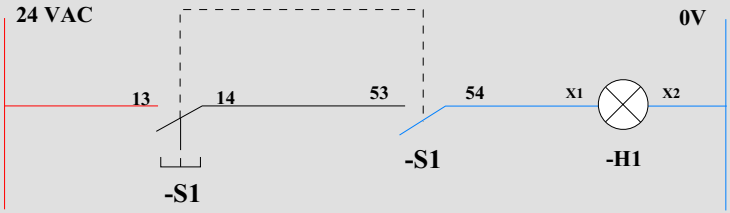


$S1 \text{ et } \overline{S1} = 0 \quad \text{ou} \quad S1.\overline{S1} = 0$



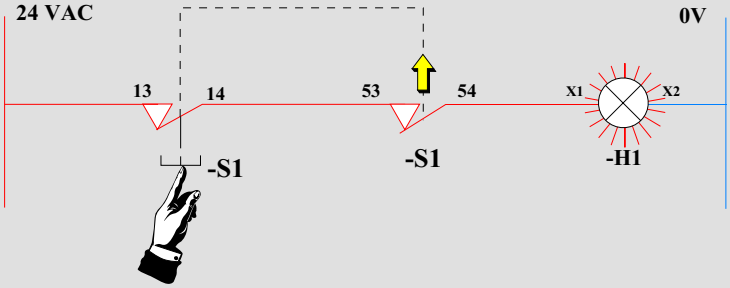
Complémentarité

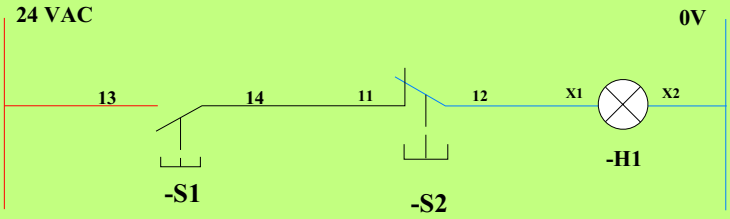
La complément de a est $\overline{a}$ "a barre"



Idempotence

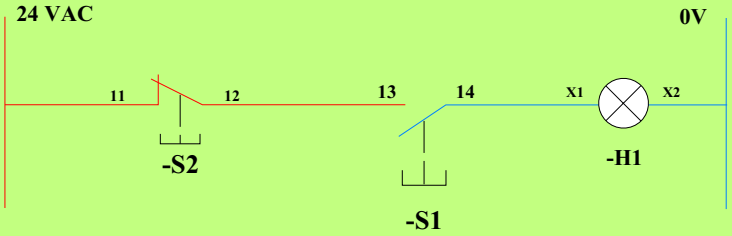
S1 et S1 = S1



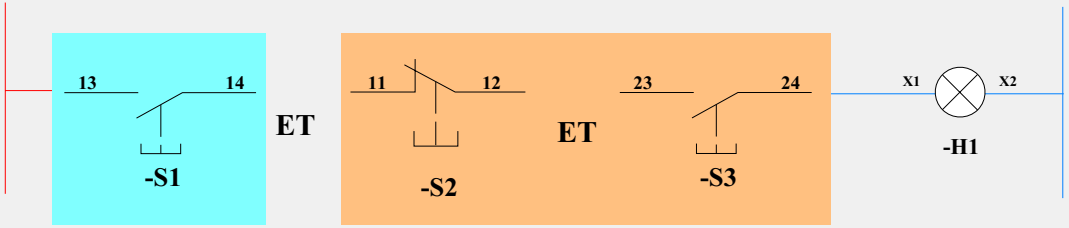


$S1 \text{ ET } \overline{S2} = \overline{S2} \text{ et } S1$

$S1 \,.\, \overline{S2} = \overline{S2} \,.\, S1$



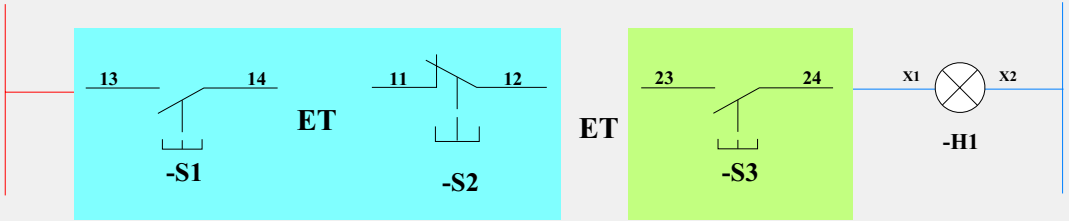
Commutativité



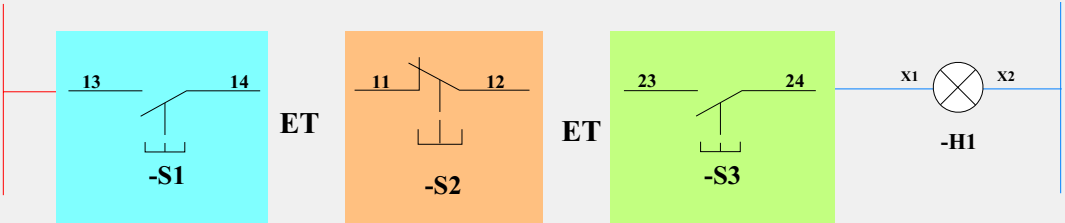
$S1 . \overline{(S2 . S3)}$

Associativité

$S1 . \overline{(S2 . S3)} = \overline{(S1 . S2)} . S3 = S1 . \overline{S2} . S3$



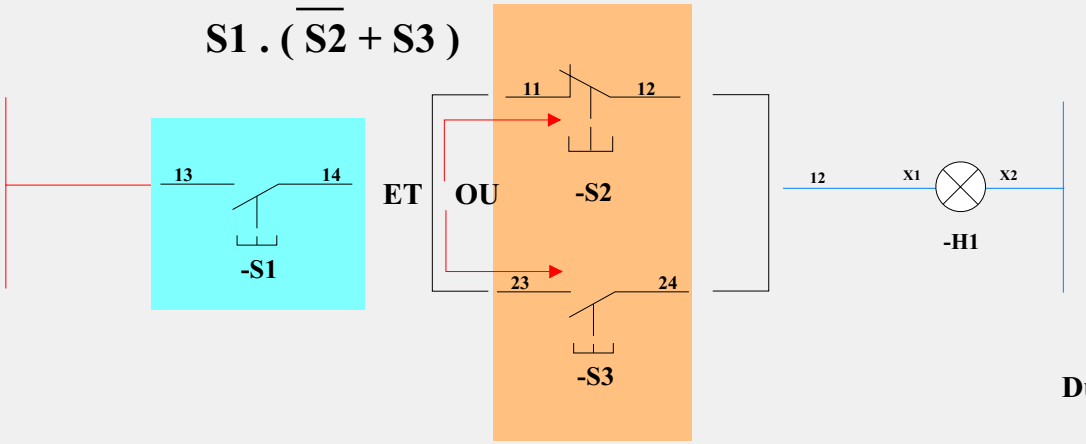
$\overline{(S1 . S2)} . S3$



$S1 . \overline{S2} . S3$

Distributivité

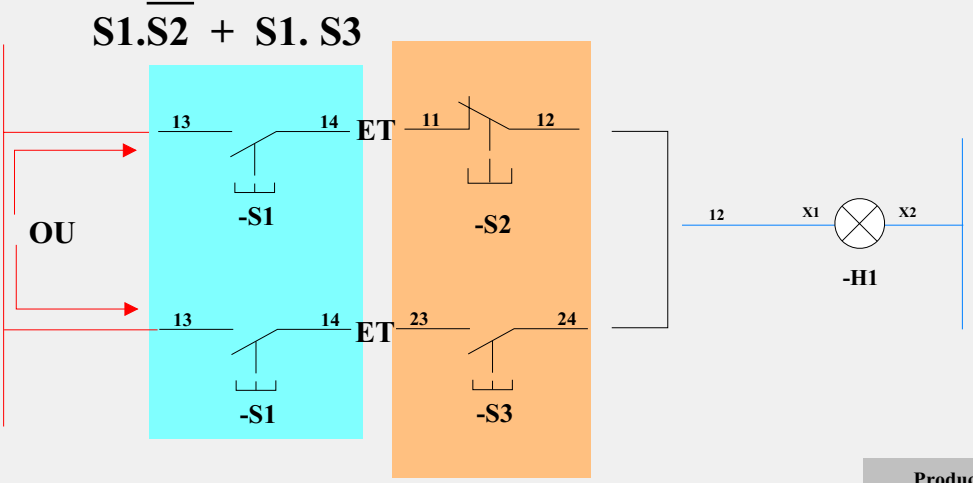
$S1 . (\overline{S2} + S3)$



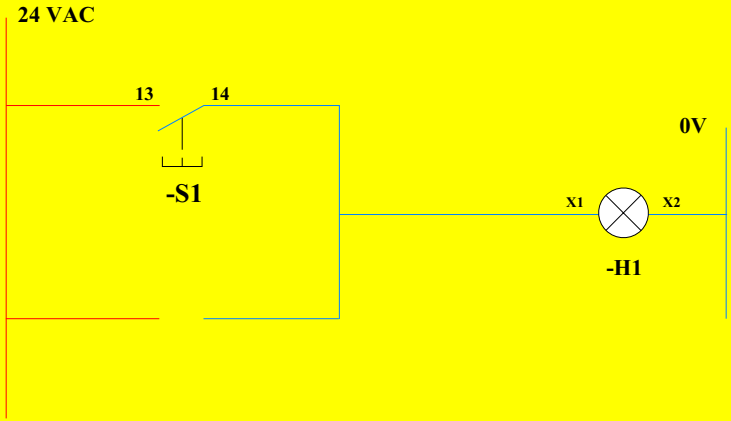
Du produit par rapport à la somme

$$S1 . (\overline{S2} + S3) = S1.\overline{S2} + S1. S3$$

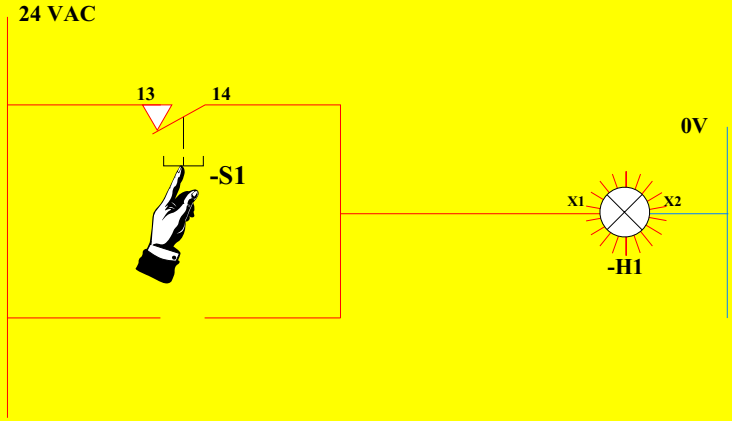
$S1.\overline{S2} + S1. S3$

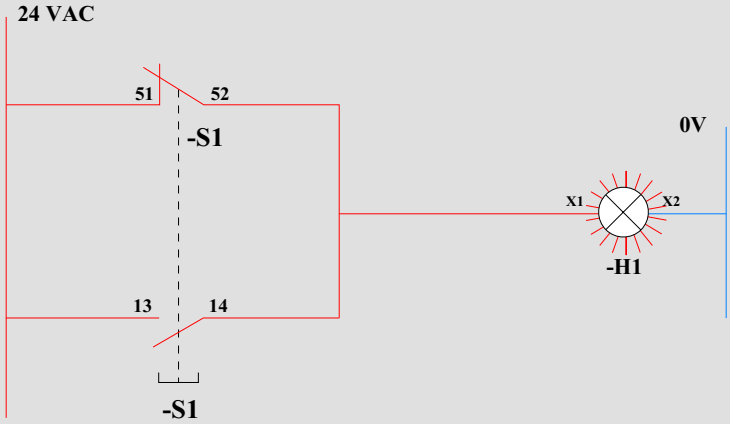


SOMME LOGIQUE

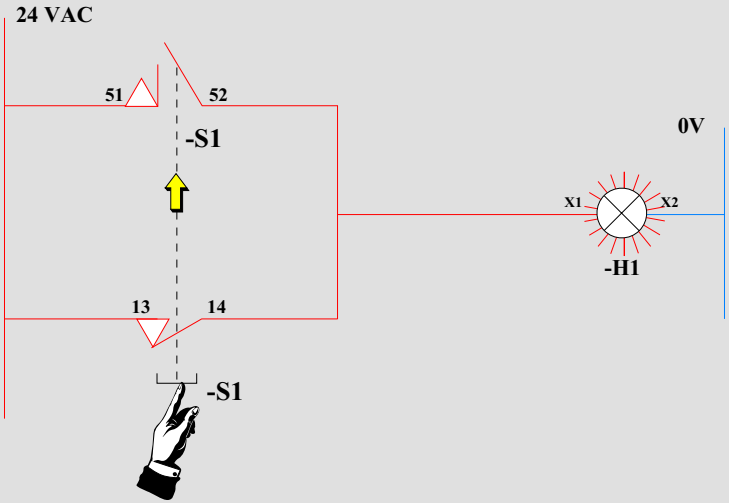


S1 ou 0 = S1 ou S1+0 =S1

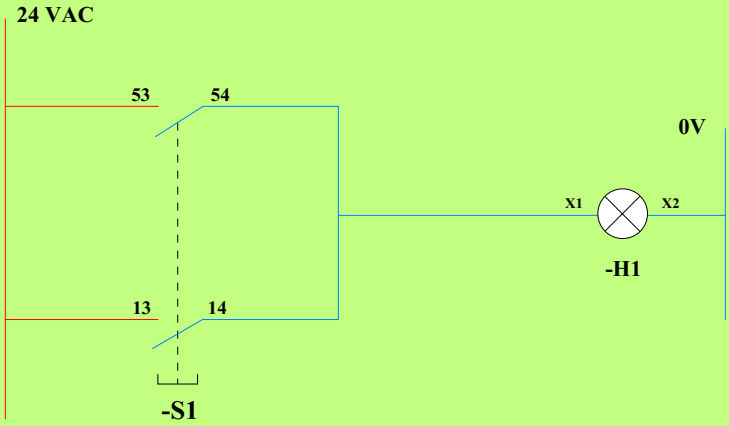




S1 ou $\overline{S1}$ =1

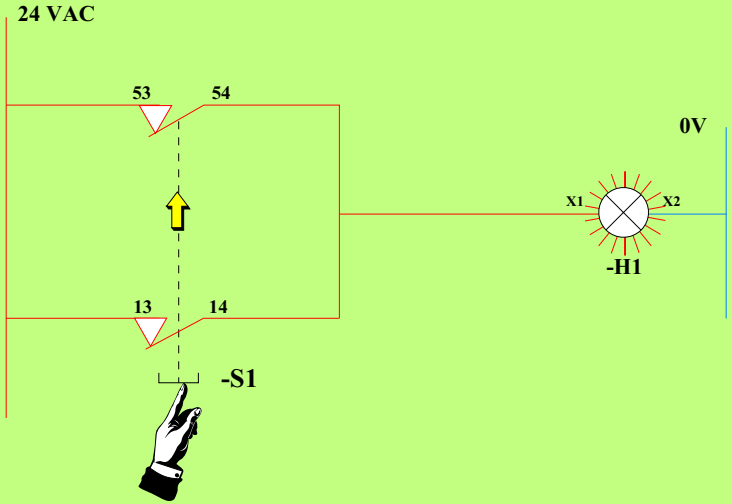


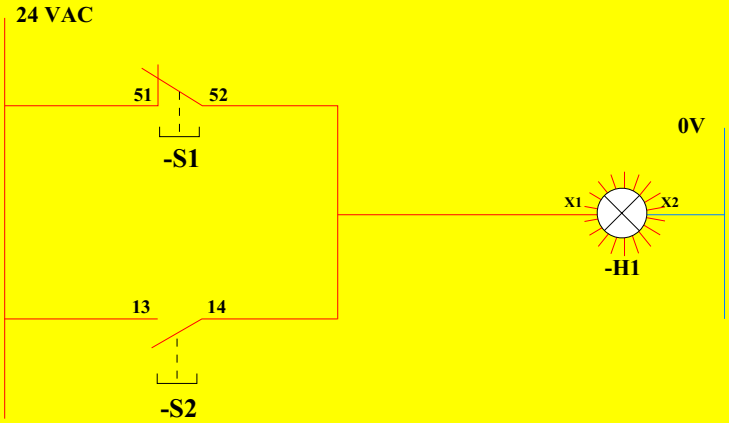
Complémentarité



Idempotence

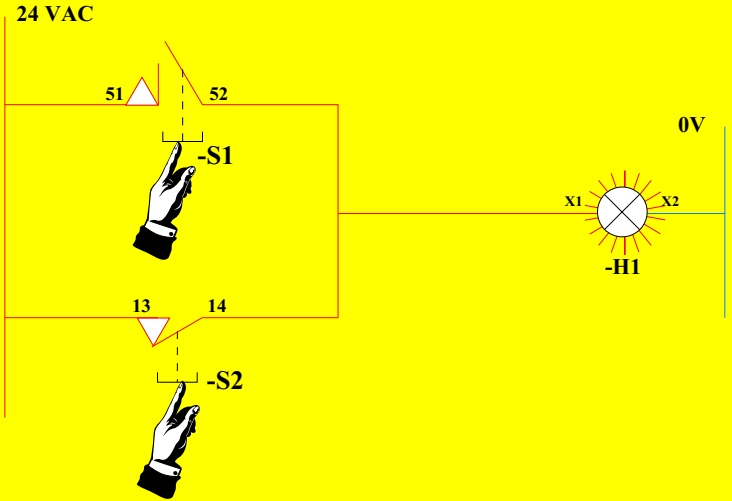
S1 + S1 = S1

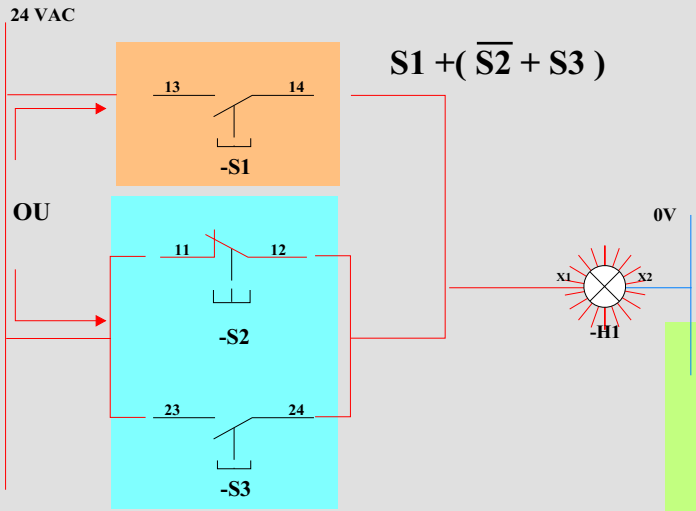




Commutativité

$$\overline{S1} + S2 = S2 + \overline{S1}$$

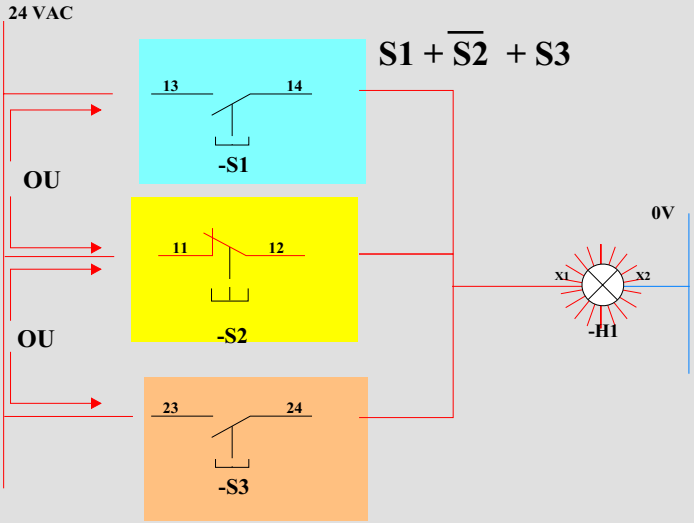


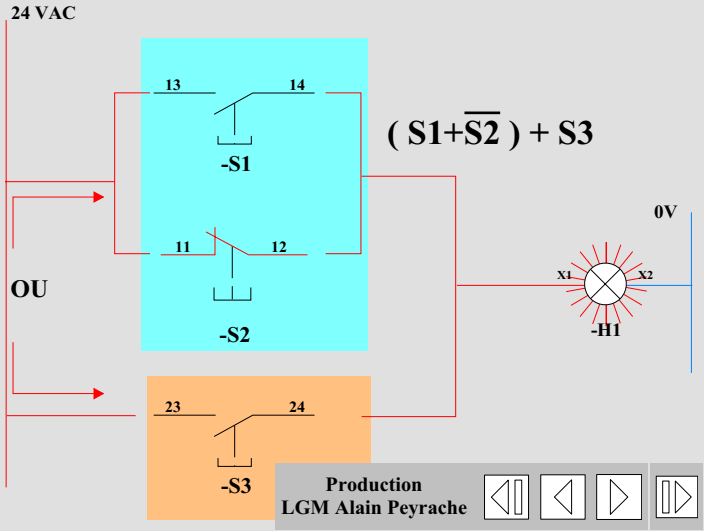


Associativité

De la somme par rapport au produit

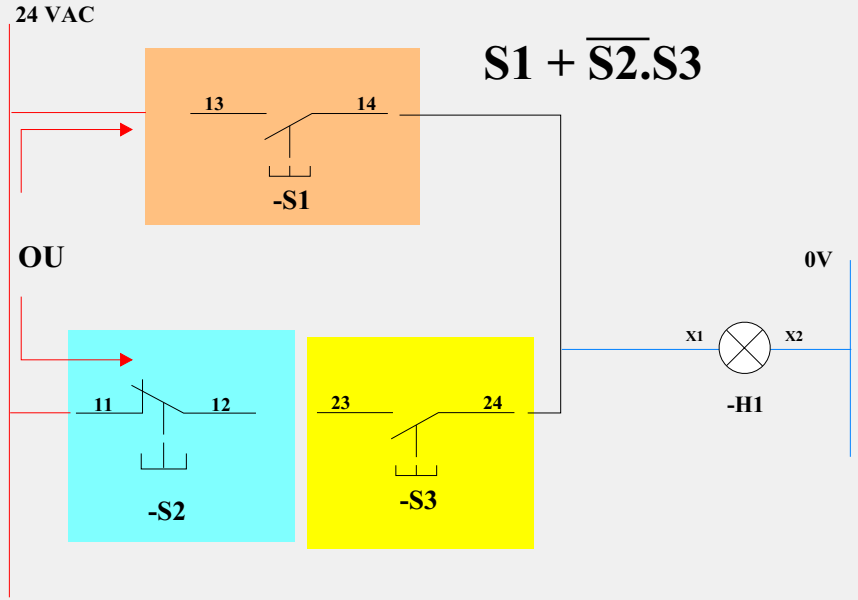
$$S1 + (\overline{S2} + S3) = (S1 + \overline{S2}) + S3 = S1 + \overline{S2} + S3$$





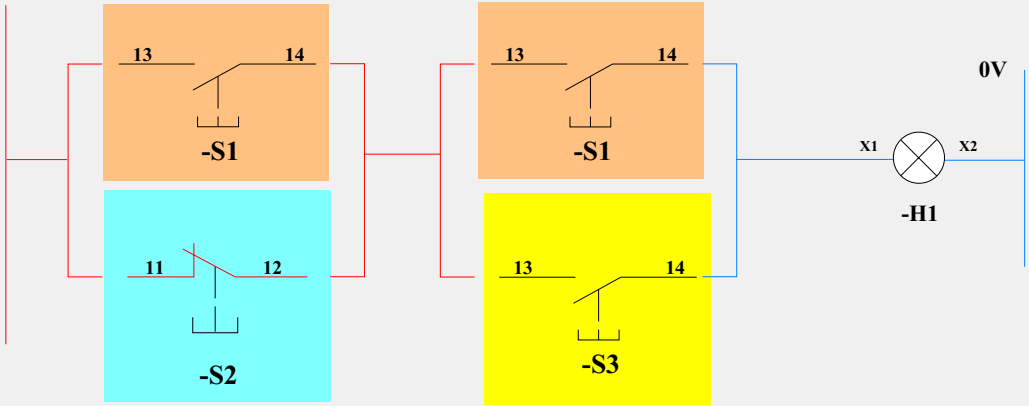
Distributivité

$S1 + \overline{S2}.S3$



$S1 + \overline{S2}.S3 = (S1+\overline{S2})\ (S1+S3)$

$(S1+\overline{S2})\ (S1+S3)$



FIN