

Formulaire d'Électrotechnique

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Cheatsheet

| Formules | Résistance | Capacité | Inductance |
|-----------|--|--|--|
| Grandeur | R [Ω] | C [F] | L [H] |
| Tension | $U = RI$ | $U = \int_0^T \frac{I}{C} dt$ | $U = L \frac{dI}{dt}$ |
| Courant | $I = \frac{U}{R}$ | $I = \frac{dQ}{dt} = C \frac{dU}{dt}$ | $I = \int_0^T \frac{U}{L} dt$ |
| Série | $R_{equ} = \sum_{i=1}^n R_i$ | $C_{equ} = \frac{1}{\sum_{i=1}^n \frac{1}{C_i}}$ | $L_{equ} = \sum_{i=1}^n L_i$ |
| Parallèle | $R_{equ} = \frac{1}{\sum_{i=1}^n \frac{1}{R_i}}$ | $C_{equ} = \sum_{i=1}^n C_i$ | $L_{equ} = \frac{1}{\sum_{i=1}^n \frac{1}{L_i}}$ |