

Transformer Efficiency Calculator

Calculate transformer efficiency from measured, tested, or documented input and output power without selecting a transformer or certifying field performance.

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<https://www.elecatrrix.com/power-quality-transformers/transformer-efficiency-calculator/>

Inputs

Input	Value	Unit
Output power	98	kW
Input power	100	kW

Results

Result	Value	Unit
Efficiency	98	%
Power losses	2	kW
Output power used	98	kW
Input power used	100	kW

Calculation details

Detail	Value	Unit
Calculation basis	Efficiency equals output power divided by input power, expressed as a percentage.	
Selection boundary	Arithmetic efficiency estimate only; no transformer rating, temperature rise, load profile, harmonic factor, manufacturer guarantee, or code-compliance result is made.	

Formulas

$$\eta = \frac{P_{\text{output}}}{P_{\text{input}}} \times 100\%$$

$$P_{\text{loss}} = P_{\text{input}} - P_{\text{output}}$$

Warnings and limitations

Use input and output power values measured or documented on the same basis. This result is not a manufacturer guarantee, efficiency standard certification, or transformer selection.