

Ampacity Calculator

Estimate adjusted ampacity from a reviewed base value and explicit adjustment and temperature factors. Conductor count is a review flag only; it does not automatically select an adjustment factor or code-table value.

Generated October 10, 2026

<https://www.elecatrrix.com/wire-raceway-ampacity/ampacity-calculator/>

Inputs

Input	Value	Unit
Base ampacity input (preliminary estimate) for conductor size, gauge, or area	100	A
Base ampacity source note	Example only; replace with verified project source.	
User-supplied adjustment factor	0.8	x
User-supplied temperature factor	0.9	x
Current-carrying conductor count	3	count

Results

Result	Value	Unit
Adjusted ampacity (preliminary estimate)	72	A
User-supplied combined factor	0.72	x
User-supplied combined factor percent	72	%

Calculation details

Detail	Value	Unit
Conductor count review role	Conductor count is a review flag only; it does not automatically select an adjustment factor.	
Final selection boundary	No conductor size or code-compliant final selection is made by this calculator.	

Formulas

$I_{\text{adjusted}} = I_{\text{base}} \times F_{\text{adjustment}} \times F_{\text{temperature}}$

$F_{\text{combined}} = F_{\text{adjustment}} \times F_{\text{temperature}}$

$\text{Total factor percent} = F_{\text{adjustment}} \times F_{\text{temperature}} \times 100\%$

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Warnings and limitations

This is a preliminary engineering screening estimate, not an NEC table lookup or code-compliance result. Verify the adopted NEC edition, AHJ interpretation, conductor and terminal ratings, installation conditions, and manufacturer data before final conductor selection.