

# Protective Device Clearing Time Calculator

Compare measured or curve-derived protective-device clearing time with an entered limit and report margin, ratio, and review comparison.

Generated October 10, 2026

<https://www.elecatrix.com/testing-protection-grounding/protective-device-clearing-time-calculator/>

## Inputs

| Input                       | Value | Unit |
|-----------------------------|-------|------|
| Measured clearing time      | 0.08  | s    |
| Entered clearing-time limit | 0.1   | s    |

## Results

| Result               | Value | Unit |
|----------------------|-------|------|
| Clearing time margin | 0.02  | s    |
| Clearing time ratio  | 0.8   | x    |

## Status

| Status                   | Value                                              | Unit |
|--------------------------|----------------------------------------------------|------|
| Clearing-time comparison | Entered clearing time is within the entered limit. |      |

## Calculation details

| Detail            | Value                                                                                                            | Unit |
|-------------------|------------------------------------------------------------------------------------------------------------------|------|
| Calculation basis | Clearing-time screen compares an entered measured or curve-derived time with an entered limit.                   |      |
| Review boundary   | Curve arithmetic only; no protective-device coordination, device selection, arc-flash, or code approval is made. |      |

## Formulas

Clearing-time margin= $t_{\text{limit}} - t_{\text{measured}}$

Clearing-time ratio= $\frac{t_{\text{measured}}}{t_{\text{limit}}}$

## Warnings and limitations

Curve arithmetic only; this worksheet does not validate protective-device coordination, select devices, model current-limiting behavior, produce an arc-flash result, or approve code compliance.