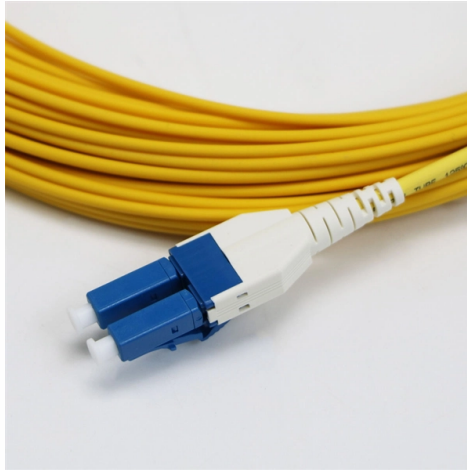


## How to calculate relay protection current value



### Overview

Use this Protection Relay Setting Calculator to calculate pickup current, time multiplier settings (TMS), operating time, coordination time interval (CTI), and plug setting multiplier (PSM) using fault current, CT ratio, and IEC 60255 curve parameters. Essential tool for relay technicians, protection engineers, and commissioning specialists. Proper relay settings provide fault detection, coordination, & system stability, which prevents equipment damage and reduces. Pick Up Current Definition: The current level at which the relay begins to operate, overcoming the controlling force. For overcurrent. This process ensures that the “Downstream” relay (closest to the fault) trips milliseconds before the “Upstream” relay (closer to the power source) even decides to act.



## Article Content

Pick Up Current | Current Setting | Plug Setting Multiplier and Time ...

From current setting we calculate the trick current of the relay. Say current setting of the relay is 150 % therefore pick up current of the relay is  $1 \times 150\% = 1.5 \text{ A}$ .

Overcurrent Relay Setting Calculator

This calculator determines the pickup current, Time Multiplier Setting (TMS), and suggests a curve type (SI, VI, EI) for overcurrent relays, adhering to IEC 60255 standards for protection coordination.

FEEDER PROTECTION CALCULATIONS & SETTINGS

TAP or PICKUP VALUE: • A value that defines the pickup current of the relay. Current values are expressed as multiples of this value in the time/current characteristic curves.

IDMT Relay Setting Calculator: Overcurrent Settings (IEC & IEEE)

That delicate balance is exactly why we built this IDMT Relay Setting Calculator. Inverse Definite Minimum Time (IDMT) relays solve the nuisance-trip problem by following a simple rule: The more ...

Over Current Relay Setting Calculator

Enter rated current, Plug Setting Multiplier (PSM), and Time Dial Setting (TDS) to calculate relay pickup current and operation duration in electrical systems for better protection and ...

Overload Relay Calculator - IEC: Accurate Motor ...

Calculate IEC-compliant overload relay settings quickly and accurately with our easy-to-use Overload Relay Calculator. Ensure motor protection today!

Protection Relay Setting Interactive Calculator | FIRGELLI

Use this Protection Relay Setting Calculator to calculate pickup current, time multiplier settings (TMS), operating time, coordination time interval (CTI), and plug setting multiplier (PSM) ...

Relay Testing Calculator | Free Testing Tool | EleCalculator

Professional protection relay testing calculator implementing IEEE C37.90 and NETA ATS standards. Calculate pickup values, timing curves, coordination time intervals (CTI), and test injection ...

How to Calculate Motor Protection Relay Settings Step by Step

Calculate thermal overload, overcurrent, ground fault, and differential relay settings with step-by-step examples. Covers CT ratios and common mistakes.

## Relay Coordination Calculator | IEC IDMT TCC Curve

To successfully use an IDMT relay curve calculator, you must master the two main adjustable parameters on any numerical relay: the Plug Setting (Pickup) and the Time Multiplier ...

### Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.mastercarpetsandflooring.co.za>

Email: [info@mastercarpetsandflooring.co.za](mailto:info@mastercarpetsandflooring.co.za)

Phone: +27 82 547 3961

Address: 21 Maxwell Drive, Woodmead, Sandton, 2191, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

