

# Relay protection setting action time



## Overview

Time Setting Multiplier (TSM): Adjusts the relay's operating time by setting how quickly the relay contacts close. When studying electrical protective. Selective short-circuit protection can be achieved in different ways, such as: Time-graded protection Time- and current-graded protection A straightforward way of obtaining selective protection is to use time grading. This energy can be provided by battery sets (mostly) or by the monitored circuit itself. Accurate but very delicate mechanism. TSM - Time. The zone1 time delay (Z1PD & Z1GD) is generally set to zero, giving instantaneous operation. Zone1 is considered to be the main protection for the line to be protected, hence no intentional time delay is allowed. Direction: Forward Typically required zone 2 reach impedances = 100% line impedances.





To avoid relay mal-operation, set Slope 2 as high as possible. Normally, a high Slope 2 setting causes slow tripping for evolving faults (external-to-internal faults).



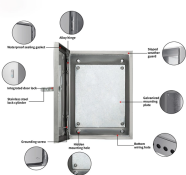
The selectivity diagram is a set of specific time/current curves which shows all the time/current curves, that is, the operating characteristics of the relays of the concerned chain of protection relays.



Time and current settings of IAC relays are made by selecting the proper current tap and adjusting the time dial to the number which corresponds to the characteristic required.



Plug Setting Multiplier actually refers to how dangerous the fault is and at what time it should be cleared. Changing the position of the plug changes the number of turns of the pickup coil.



By following the above steps and precautions, the action time of relay protection equipment can be effectively tested to ensure that its performance meets the requirements.

## Contact Us

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