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## easYgen-800/-1800 IDMT / Ground Fault formulas

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### Formulas for Overcurrent / Ground Fault

- **IDMT Multiply of Overcurrent settings formula:**  
$$T = t / ((IA/IT)-1)^2$$

$T$  Overcurrent delay (seconds)

$t$  Timing multiplier ratio

$IA$  Current max. load current [L1/L2/L3]

$IT$  Overcurrent setting value

Example

$$t = 36$$

$$IA = 550A$$

$$IT = 500A$$

$$\text{Conclusion: } T = 3600 \text{ s}$$

- **Delay Multiplier for Ground Fault formula:**

ground current delay action calculation (0.1s) = delay multiplier \* 0.14 / (((ground current / ground current threshold)<sup>0.02</sup> - 1)