



[ナレッジベース](#) > [Power Management](#) > [easYgen-800](#) > [easYgen-800/-1800 IDMT / Ground Fault formulas](#)

easYgen-800/-1800 IDMT / Ground Fault formulas

Justin Schneider - 2026-07-27 - [easYgen-800](#)

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

$t = 36$

$IA = 550A$

$IT = 500A$

Conclusion: $T = 3600 s$

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

ground current delay action calculation (0.1s) = delay multiplier * 0.14 / (((ground current / ground current threshold)^{0.02}) - 1)