

SE-601 DC GROUND-FAULT PROTECTION

The SE-601 is a microprocessor-based ground-fault monitor for ungrounded dc systems. Ground-fault current is sensed by monitoring a voltage-reference point established with the SE-GRM.

When there is no ground fault, 12 mA of current will flow through the SE GRM. When a ground fault occurs, ground-fault current will flow through the ground to the SE 601, through internal 25-Ω resistance in the SE-601, to the S terminal, and through the SE GRM to the unfaulted line (refer to Fig. 2). The resistance of the SE-GRM will limit the ground-fault current to a maximum of 25 mA. The SE-601 has a digital-switch selectable ground-fault current trip range from 1 to 20 mA, and a digital-switch selectable trip delay time range of 50 ms to 2.5 s. The SE-601 will trip when the ground-fault current exceeds the selected settings.

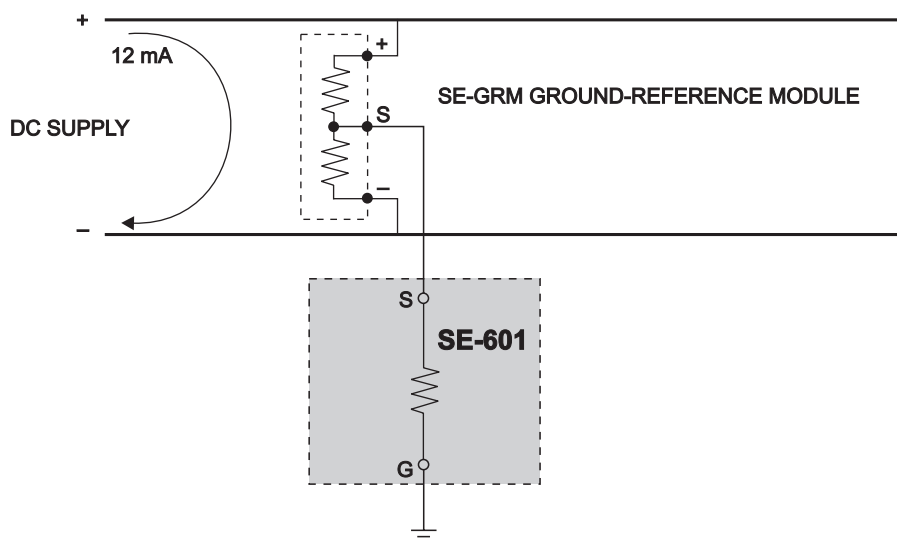


Figure 1: Unfaulted System

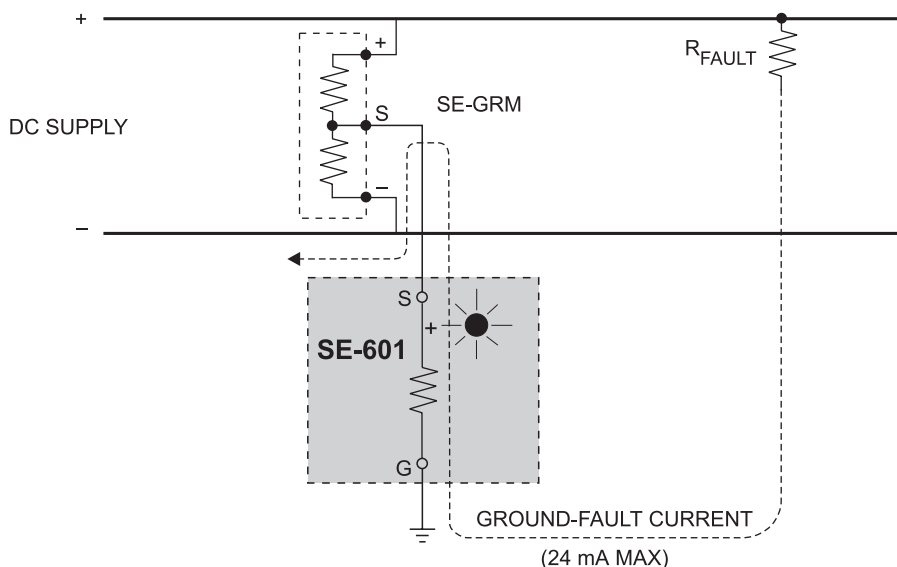


Figure 2: Faulted System

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SE-601 Trip Level (mA)	Fault Resistance (Ω)
1	60 k
2	29 k
3	18 k
4	13 k
5	10 k
6	7.9 k
8	5.3 k
10	3.7 k
15	1.6 k
20	600

Table 1: SE-601 Trip Levels and Fault Values