APPLICATION OF SE-325 ON ALARM-ONLY SYSTEMS

The SE-325 measures current through the neutral-grounding resistor, transformer neutral-to-ground voltage, and continuity of the neutral-grounding resistor. A resistor fault will be detected if neutral-to-ground voltage exceeds the trip-level setting or if resistance of the neutral-grounding resistor exceeds the trip resistance; however, the SE-325 will not trip on neutral-to-ground voltage if neutral-grounding resistor current exceeds the trip-level setting.

The output contact in the SE-325 combines both ground-fault and resistor-fault functions. Alarm-only systems allow operation in the presence of a ground fault; however, to separate the ground-fault and resistor-fault outputs, the remote indication terminals on the SE-325 need to be connected in one of the two following arrangements:

1. The RK-13 Relay Interface Module (refer to RK-13 data sheet) has relay contacts rated for 100 mA at 120 V ac, and it has a 24-to-120 V ac and V dc, isolated-input voltage reset.
2. Solid-state relays can be used if higher output ratings are required. The Crydom D1210 or equivalent can be connected as shown in Figure 1. The D1210 dc input control models have the following input specifications:

Control Signal Range:	3 to 32 V dc
Must Operate Voltage:	3 V dc max.
Must Release Voltage:	1 V dc min.
Input Current:	4 mA max. @ 5 V dc

The SE-325 remote-indication output specifications are as follows:

Open-Circuit Voltage (+ to GI, + to RI):	12 V dc
Short-Circuit Current (+ to GI, + to RI):	21 mA dc

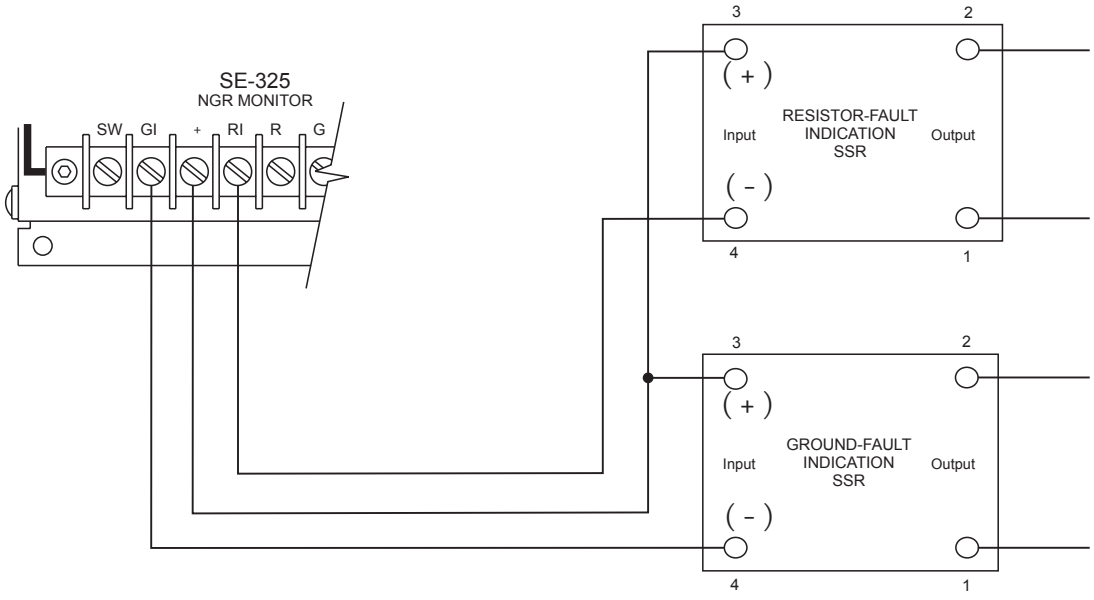


Figure 1

© 2019 Littelfuse