



Type 64 Structure Ground Relay High Resistance

The **SWARTZ Type 64 Ground Relay** provides dual functions for high resistance grounded DC switchgear. The relay is designed to protect equipment enclosures and alert personnel to "ground" and "hot" fault conditions in DC switchgear and rectifiers. These high resistance relays provide superior performance and operational reliability through solid state components, rugged construction and self-diagnostic features.

FEATURES

- ▶ Draw-out construction
- ▶ LED Meter - Accurate, easy to read
- ▶ Transient Surge Protection
- ▶ Detects AC or DC “hot structure” faults
- ▶ Internal Power Supply operates on and autocompensates for a wide range of DC inputs
- ▶ Internal Time Delays to prevent nuisance tripping

DESCRIPTION

The Swartz Type 64 High Resistance Structure Ground Relays alert personnel visually and through alarm output contacts when a DC switchgear structure or rectifier becomes grounded through a breach in the insulation. Annunciation occurs when the voltage sensing trip system has been bypassed by grounding or when the relay's self-diagnostic feature determines that an internal failure has occurred. The relay also alerts personnel when a leakage or fault occurs between the bus and structure (hot structure).

Normally, the output is connected to a lockout relay to automatically de-energize the entire station. The hot structure function detects both AC and DC leakages and faults. Setpoints for ground structure annunciation and hot structure trip are adjustable. Test buttons for both ground structure annunciation and hot structure trips are provided on the front panel. In the event of a fault and a lockout condition does not occur, the Structure Ground Relay will provide continuous operation if voltage does not exceed 800 VDC or 700 VDC with 600 VAC superimposed (rectifier faults).

SPECIFICATION

Input Power	Operates on 24-125 VDC or 120 VAC
Supply Current	40 mA at 125 VDC 200 mA at 24 VDC
Ambient Temperature	-20 C to +55 C
Design Test	SWS ANSI/IEEE C37 90
Structure Applied Voltage	25 VDC
Output Rating-Grid	Form C; 2A, 500V, 100VA
Output Rating - Hot	30-45 VDC
Trip Setting - Hot	30-45 VDC
Trip Setting - Ground	5 V - 20 VDC

