

## STOPLIGHT



The Stoplight system uses a unique indicator light system to provide visual detection of a ground fault. A red signal indicates an active ground fault, an amber light indicates a ground fault has occurred and a green light signifies there are no active ground faults on the system.

Ensuring plant process continuity, Stoplight virtually eliminates equipment damage and safeguards personnel by controlling the fault to a minimal level.

Capable of detecting a ground fault as it is happening through the use of an innovative circuitry system, Stoplight ensures both personnel and equipment are protected from ground faults and provides fault indication by both indicator lights and audible annunciation.

- Ground faults cause havoc on plant production processes, shutting down power and equipment and critical loads.
- Ground faults disrupt the flow of products through manufacturing processes and cause data loss in computer centers leading to hours or even days of lost productivity.
- Ground faults pose potential health and safety risks to personnel, creating hazards such as equipment malfunctions, fire and electric shock.



Ground fault protection with visual indication in NEMA 3R enclosure

Optional pulsing system for easier fault location

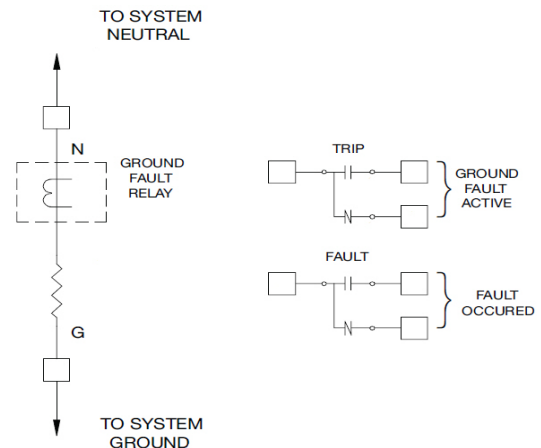
Unique 3 light system for easy visual indication of system condition

Available for 480V, 600V and 4160V distribution system

The Stoplight pulsing system contains four key integrated elements that limit damaging fault currents and provide process continuity. Also, the integral pulsing system facilitates the locating of the ground fault at a convenient time.



STOPLIGHT



## FEATURES & BENEFITS

High-Resistance Grounding Resistor	This resistor is connected to the wye point of the transformer or generator supplying the facility. Its function is to limit ground fault currents to non-damaging levels under a single line-to-ground fault condition. This provides the user an opportunity to retain process continuity and to detect and clear the fault.
Hand Held Pulse Tracing Sensor	This microprocessor based digital relay measures ground fault current using a 1:1 zero sequence current transformer. It maintains accuracy over a range of 45Hz to 65Hz and filters out harmonics to eliminate nuisance tripping.
Automatic Pulsing System (optional)	Once the pulsing feature on the Stoplight system is selected and activated, the system will cyclically limit the fault to 100%, 75% and 50% of the available ground fault current. The cyclical pulsing combined with the hand held pulse tracing sensor empowers the user to trace the fault circuit to the point of the fault in even complex distributions systems without de-energizing the load.
Ground Fault Sensing Transformer and Relay	This device, similar to a clamp-on ammeter, allows the user to follow the pulses from their source at the Stoplight unit through to the specific location of the line-to-ground fault. Once the fault is located, it can be isolated.

High-resistance grounding (HRG) is becoming more prevalent in industrial and commercial electrical power systems because it eliminates un-scheduled downtime due to ground faults, and improves personnel safety by

preventing ground faults from escalating into arc-flash incidents. Resistance grounding is highly recommended for generators, to protect them from damage due to excessive ground fault currents.