

## INDUSTRIAL ISOLOC® INSULATION MONITOR AND EARTH FAULT LIMITER

The Industrial ISOLOC<sup>®</sup> allows for continuous operation within an industrial plant by limiting any potential or occurring fault current found within the electrical system.





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GENERAL INDUSTRY • UTILITIES • MINING

**OPERATIONAL INFORMATION & SPECIFICATIONS** 

# **INDUSTRIAL ISOLOC®**

With advances in manufacturing techniques, the processes of manufacture become more and more a continuous line from one process to another. The continuity of the electrical supply to driving machinery is now of vital importance, since an unexpected failure of one of the supplies means a complete interruption of the whole process, often causing hours of down time before re-establishing the process once more.

Furthermore, it is advantageous to reduce the value of current of the earth fault to a few milli-amperes and in this way afford good protection against damage to equipment at the point of fault, reduce fire risk and avoid thermal stresses to bonding circuits.

The Isoloc system has been designed by Strike Technologies to avoid an automatic trip out on the occurrence of the first earth fault on an electrical system. Instead, reliable warning is given at an adjustable threshold of insulation failure. The plant is, however, able to continue to operate until a shut-down of the process can be planned and the fault rectified. The system also ensures that earth current is kept to a minimum.

However, should a second earth fault occur at the same time on another phase, the automatic trip-out of one or both faulty circuits is inevitable.

In the case of a Delta system the Industrial Isoloc is modified with a NEC (Neutral Earthing Compensator), thereby giving the same protection.

The Industrial Isoloc embeds the following functions:

Earthing of the supply system.

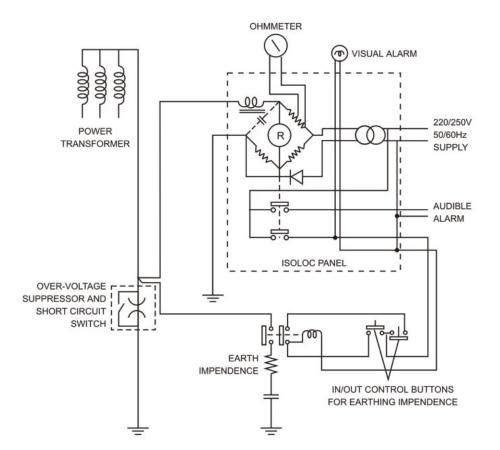
Protection of the electrical system against over-voltages.

Continuous monitoring of the earth insulation of the system.

Limiting the earth fault current on the first fault to let production continue with the indication of an alarm.

The Industrial Isoloc is used in industries to monitor LV control circuit supplies in control centers and in ships to monitor line insulation, shore to ship LV supplies.

## WHY BUY AN INDUSTRIAL ISOLOC®



The Industrial Isoloc is designed, manufactured and supported in South Africa to meet the needs of our harsh climate.

- The Industrial Isoloc has for more than two decades been the preferred product for line insulation and earth fault limiting in South Africa and all over the world.
  - The Industrial Isoloc assists in meeting strenuous production demands in various industries by facilitating continuous production.

The protection system in the Industrial Isoloc is unique to this product.

The earth fault current will be limited by the industrial Isoloc to a threshold where the secondary protection, ie. dedicated earth fault relays, do not have to react thereby increasing their lifespan.

#### **Key Features**

The Industrial Isoloc can be used in a single and three phase configuration.

- It allows for continuous operation within an industrial plant by limiting any potential or
  - occurring fault current found within the electrical resistance.
    - Automatic supervision of the system insulation.
      - Configurable in both delta and star electrical systems.
      - Available as free standing or panel mount.
        - System Voltage up to 600V AC.
          - Frequency: 50 and 60 Hz
            - Earthing impedance: 47,000 ohms inductive at 50 cycles.
              - Adjustable alarm threshold: 100 to 5,000 ohms.
                - Response time: 1 to 1.5 seconds.



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#### **CONTACT US**

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