

CDI Precision Measurement Introduces NK Technologies Ground Fault Sensors

Description

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What exactly is a Ground Fault Sensor, and why could it be so important to the success of your operation?

Ground faults occur when current accidentally flows from an energized conductor to the ground, which caninadvertently energize other equipment and potentially cause harm if touched. This occurs when an energizedwire comes into contact with the ground part of a junction box or other appliance or device.

Electricity always finds a path to the ground, but in the case of a ground fault, the electricity flows through anunintended path such as a human, animal or equipment.

A ground fault is similar to a short circuit (phase to phase faults) in that large amounts of current are forcedthrough a fuse or circuit breaker which causes the fuse to blow or a circuit breaker to trip. Phase to phase faults happen when an electric flow strays outside its intended circuit, causing the circuit breaker to trip, stopping all current flow. This typical occurs when a hot wire comes loose and into contact with a neutral wire.

Ground faults are much more common than phase to phase (short circuit) faults. Click here to learn more.

How NK Technologies / Component Distributors, Inc. Ground Fault Sensors Can Help with Your Projects

As an industrial/commercial engineer, you may already be aware that per the current NEC code, three phase and/or high amperage electrically operated commercial kitchen equipment now requires ground fault protection.

3 Phase GFCI circuit breakers over 30 amps are not something readily available from most electrical suppliers for new installations or easily retrofitted into existing kitchens. Making a regulation is the easy part; making the solution can be more difficult and challenging.

If the circuit breaker feeding the equipment can be fitted with a shunt trip operating mechanism, the AG or AGL series sensors with auto reset contacts will detect the fault, and, in turn, will close the circuit to energize the shunt trip solenoid. If the equipment is operated with a magnetic contactor, the sensor used should be the latching output type. The NK Technologies' sensor contact will be connected to de-energize the contactor coil when a fault is detected.







Features

ELECTROMECHANICAL RELAY OUTPUT

Provides both normally open and normally closed contacts Compatible with most automation and control systems

EXTERNALLY POWERED

A choice of fail-safe or standard operation

SIMPLE FIELD SETPOINT ADJUSTMENT

Single turn potentiometer with setpoint shown on label Adjustable delay to mask out nuisance fault current

LARGE SOLID-CORE CASE

Large sensing window provides ample space for multiple conductors

DIN RAIL MOUNT

Simple snap onto DIN rail or attach with screws to a panel for secure mounting

Applications

Monitor Large Machines

• Detect leakage to earth before the problem can cause damage.

Water Delivery and Treatment

- Keep pumping systems safe and in operation.
- Sense faulting stator windings prior to failure.

Generators

• Shut down equipment when leakage current exceeds hazardous levels.

Downloads

Download the NK Technologies Technical Guide to Ground Fault Sensing Download the 2020 Product Catalog

Buy Now

About Component Distributors, Inc. (CDI)

Category

- 1. Ewave
- 2. NK Technologies
- 3. Precision Measurement

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