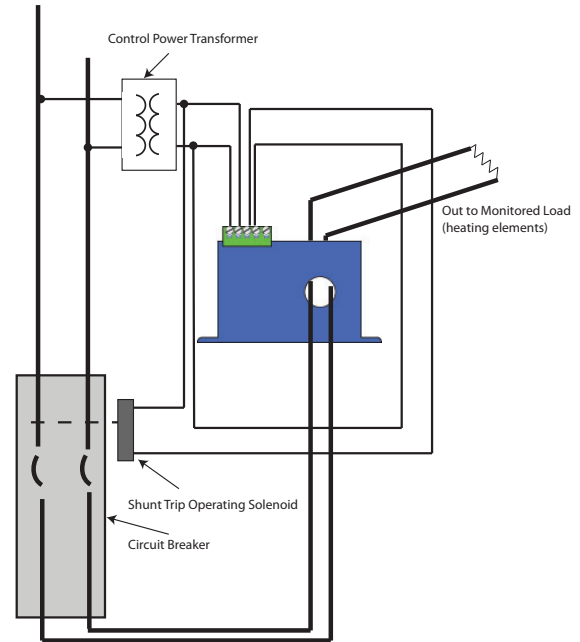


Detect Earth Leakage Easily with NK Technologies' Ground Fault Protection or Ground Fault Protection Solutions

The drawing to the right shows an NK ground fault sensor powered from the primary (load carrying) circuit through a control power transformer. The sensor can be powered by 120 VAC or 24 VAC or DC. The output of the sensor is a single pole, double throw relay, so when used to operate a shunt trip circuit breaker operating mechanism, the normally open contact of a normally de-energized model would be the best choice.

With the -DEN model contact action, the sensor operates the output relay only when fault over the set point occurs. When power is applied to the sensor, an indicating LED will light. Another LED will indicate when the sensor has tripped. The voltage of the primary circuit can be up to 600 volts AC and meet the requirements of UL. Remember that all current carrying conductors must pass through the sensing aperture, including the neutral if the load uses one.



Ground Fault Protection Solutions

NK Technologies manufactures ground fault sensors which can be used in a wide range of applications monitoring AC circuits, from operating a shunt trip circuit breaker to sending an alarm contact to a programmable logic controller. Most models are UL recognized as a component under UL1053, ground fault sensing and relaying equipment. The trip point of the sensor is factory adjusted, so you can be assured that it will work as designed, reliably and accurately.

Some models can be adjusted for a higher or lower trip point. This is commonly used where the protected load is inductive, such as a motor or transformer. Motors are made by winding small varnish insulated wire around laminated steel cores, and small bubbles or gaps in the insulation can allow minuscule amounts of electricity to pass to ground through the motor frame. While the generally accepted equipment protection fault protection level is 30mA, these small insulation imperfections can produce fault current of 30mA easily, so the installer can adjust to a higher level to overcome spurious tripping of the sensor.

