

# AGT SERIES

## Ground Fault Measurement

AGT Series Ground Fault Indicators combine a current transformer and a True RMS signal conditioner into a single package. The AGT Series is designed to produce an analog 4–20 mA signal proportional to earth or ground fault current, or any low consumption AC load. Available in a solid-core case. When connected to a controller or data logger, NEC requirements for alarm can be met.



### Ground Fault Protection Applications

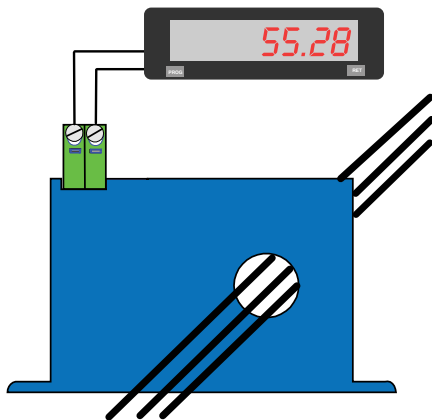
#### Current Leakage Detection

- Monitor heating or other loads to detect increasing leakage current.
- Pass all current carrying conductors through aperture to sense zero-sum current.

#### Very Light Loads

- Accurate measurement of very small but critical loads.
- Current measurement gives faster response than temperature measurement.

Ground Fault Currents



- For additional Application Examples, go to [www.nktechnologies.com/applications](http://www.nktechnologies.com/applications)

### Ground Fault Protection Features

#### True RMS Output

- True RMS technology is accurate on distorted waveforms like VFD or SCR outputs.

#### Single Range

- No chance of field range selection errors.
- Eliminates zero and span pots.

#### Isolation

- Output is magnetically isolated from the input for safety.
- Eliminates insertion loss (voltage drop).

#### UL/cUL Approved

- Accepted worldwide.

### Selecting the right ground fault detector:

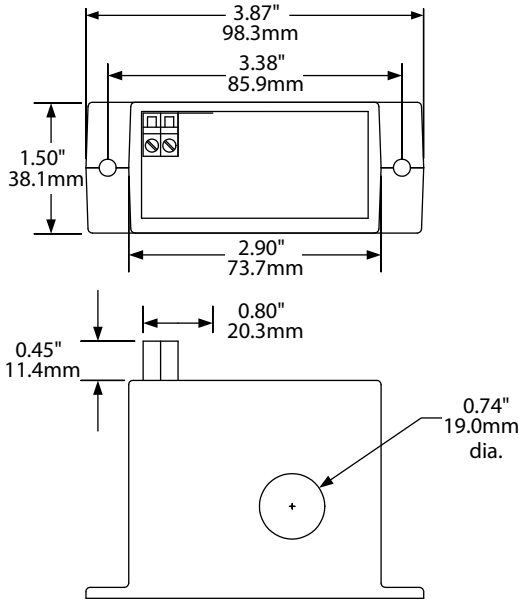
NEC Article 427-22 requires that fault currents be monitored on industrial equipment. However, where maintenance and supervision ensure that only qualified persons will service the equipment and continued circuit operation is necessary for safe operation and processes, alarm indication is also required. A fault current transducer can send a signal to a panel meter with alarm contacts or a controller. As an example, the alarm points can be configured so one alarm is initiated when fault current reaches 30 mA, and another when it rises above 70 mA. Ground fault protection is required in many applications, and NK Technologies has a sensor that can be coupled with your control system to provide this needed alarm or circuit disconnection.

**OEMs** Test & Evaluation Units for OEMs  
Free program expedites evaluation process. See page 3 for details.



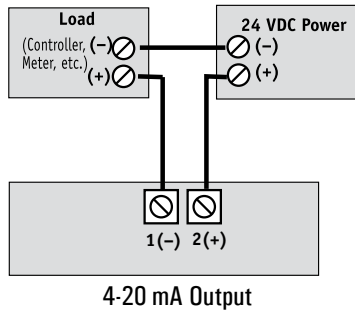
**Ground Fault Protection Dimensions**

FL Case



Ground Fault Protection

**Ground Fault Protection Connections**



Notes:  
 Finger safe captive screw terminals.  
 12–22 AWG solid or stranded.  
 Observe polarity.

**Ground Fault Protection Specifications**



<b>Power Supply</b>	24 VDC loop-powered (12–40 V)
<b>Power Consumption</b>	<2 VA
<b>Output</b>	4–20 mA, loop-powered, True RMS
<b>Output Limit</b>	23 mA
<b>Response Time</b>	600 ms (to 90% step change)
<b>Input Range</b>	Single range of 0–50 or 0–100 mA; custom ranges available; consult factory.
<b>Isolation Voltage</b>	UL listed to 1270 VAC, tested to 5 KV
<b>Frequency Range</b>	40–400 Hz
<b>Case</b>	UL94 V-0 Flammability Rated
<b>Environmental</b>	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
<b>Listings</b>	UL/cUL

**Ground Fault Protection Ordering Information**

Sample Model Number: AGT2-420-24L-FL  
 True RMS AC ground fault indicator, 100 mA ranges, 4–20 mA output, 24 VDC loop-powered in a solid-core case.



<b>(1) Full Scale Range</b>	
1	0–50 mA
2	0–100 mA
<b>(2) Output Signal</b>	
420	4–20 mA
<b>(3) Power Supply</b>	
24L	24 VDC loop-powered (4–20 mA output ONLY)
<b>(4) Case Style</b>	
FL	Solid-core, top terminal