



NK Technologies



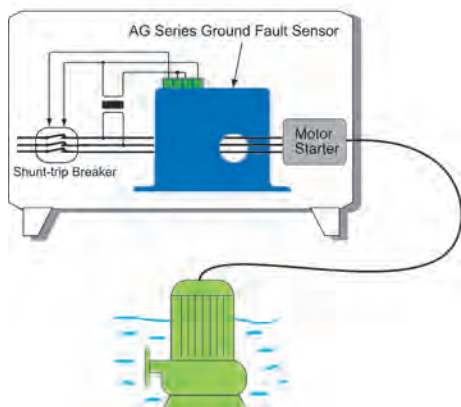
AGL Series, new from NK Technologies, is a large aperture ground fault sensor that offers one of the largest aperture diameters in the industry while maintaining a compact overall profile. Intended for sensing earth leakage in applications up to 400A, the AGL Series offers a choice of N.O. or N.C. latching relays or an SPDT Form C relay with auto-reset. Enclosure features integral DIN-rail mounting as standard and optional noise immunity coatings for applications in harsh EMI/RFI environments.

AGL SERIES Large Aperture Ground Fault Sensors

Applications

- Replace bulky two-piece sensor solutions which require separate CTs or relay modules.
- Use with shunt trip breakers to provide total ground fault protection to sensitive machine electronics.
- Detect ground faults in resistance/impedance heating, industrial automation and control, theatrical lighting, portable power distribution, and snow melt/heat trace applications.
- Sense progressive levels of ground fault in motors or heating systems to detect deterioration prior to catastrophic failure.

Moisture Ingress on a Submersible Pump Motor



Features

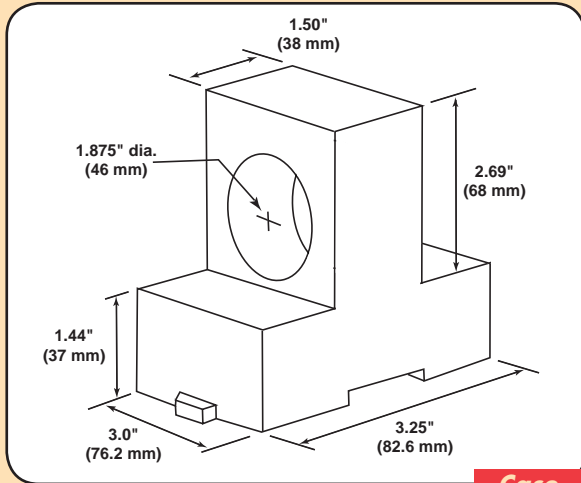
- **Integral DIN-rail Mount with Spring Loaded Mounting Clips***
- **Setpoint Options Include Factory Adjustable Setpoint from 5mA -100mA or "TR3 Tri-Set" Models with Field-selectable 5/10/30mA Settings**
- **Finger-safe Terminals for Worry-free Installation and Operation**
- **Aperture Orientation is Perpendicular to DIN-rail, Allowing for Clean and Efficient Wiring and Minimizing Space Between Multiple Components**
- **Choice of Dependable Latching SPST or SPDT (Form C) Electromechanical Relay Outputs**
- **Uses "Zero Sum" Operating Principle to Reliably Sense Imbalance in Magnetic Fields Associated with Current Leakage to Ground**
- **Typical Response Times from 15ms to 200ms**
- **Integral "Push-to-test" Button with LED Indication of Contact Status**

*See DIN Rail accessory data sheet for panel mounting kit.



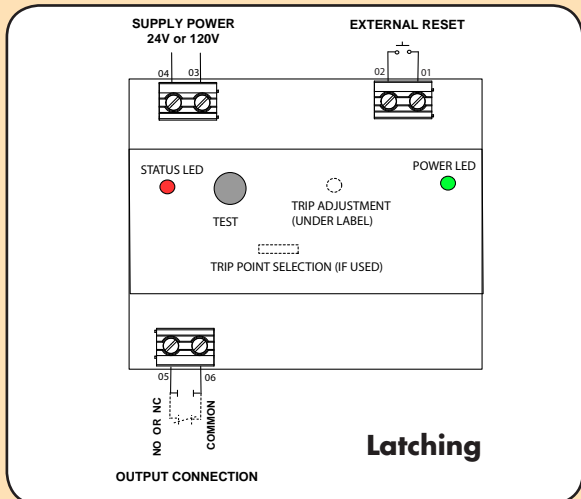
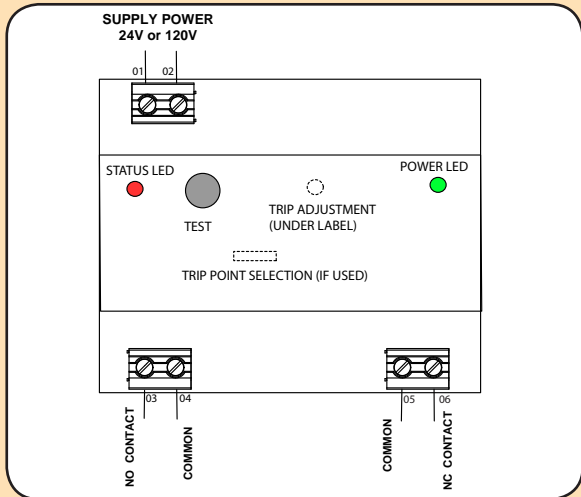
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Dimensions



Case

Connections



Specifications

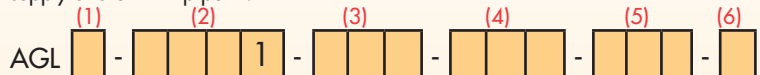
Setpoint Range	Factory calibrated models (specify when ordering):
	<ul style="list-style-type: none"> ● AGL1: 5–100mA (005–100) ● AGL2: 80–950mA (080–950)
	TR3 "Tri-set" models (field jumper select):
	<ul style="list-style-type: none"> ● AGL3: 5, 10, or 30mA
Output	<ul style="list-style-type: none"> ● Auto Reset: SPDT Relay 1A @ 125VAC, 2A @ 30VDC ● Latching: SPST Relay 1A @ 125VAC, 2A @ 30VDC
Response Time	<ul style="list-style-type: none"> ● 200ms @ 5% above trip point ● 60ms @ 50% above trip point ● 15ms @ 500% above trip point
Isolation Voltage	5000VAC (tested)
Frequency Range	50–60 Hz (monitored circuit)
Noise Immunity Option	<ul style="list-style-type: none"> ● EMI/RFI Shielding ● Power supply noise filtering
Power Supply	<ul style="list-style-type: none"> ● 120VAC (55-110% of nominal voltage) ● 24VAC/VDC (+/- 10% of nominal voltage) ● Green LED = Power On indication
Case	UL94 V0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C), 0-95% RH, non-condensing
Listings	UL 508 Industrial Control Equipment (USA & Canada)



Ordering Information*

Sample Model Number: AGL1-NOR-120-LA-005

Ground fault sensor with normally open SPST latching relay output, 120VAC power supply and 5mA trip point.



(1) Setpoint Range

1	5–100mA factory set
2	80–950mA factory set
3	5/10/30mA jumper set

(2) Output Type

NCR1	Normally Closed SPST Relay Form B (Available only with -LA option)
NOR1	Normally Open SPST Relay Form A (Available only with -LA option)
SDT1	SPDT Relay (Form C) with auto-reset (available only with -DEN and -ENE options)

(3) Power Supply

120	120VAC
24U	24VAC/VDC

(4) Options

ENE	Normally Energized, auto-reset (SDT1 output only)
DEN	Normally De-energized, auto-reset (SDT1 output only)
LA	Latching (NOR1 and NCR1)

(5) Setpoint

TR3	Tri-set
005 to 950	Factory set trip point in mA

(6) Noise Immunity

N	Noise Immunity
	None (blank)