



NK Technologies

RGCS Series



The 'RGCS' Series from NK Technologies is a specific-duty sensor for use in applications requiring ultra-fast residual ground current sensing. Intended for use with approved circuit interruption devices as part of an overall system, the RGCS offers sensing and response time performance exceeding that required by UL 943. Available in compact, solid-core enclosure, the RGCS features an integral CT and terminal block wiring for easy installation.

MADE IN
USA

Fast-acting Ground Current Sensors

Features

- **15 mS Sensor Response Time**
Exceeds response times specified by UL 943, allows more time for the circuit breaker to meet required time-trip performance.
- **Factory Calibrated Trip Point**
Setpoint is factory adjusted from 6mA to 30mA, ensuring proper setpoint operation up to UL 943 Class A or B performance standards. Factory calibration eliminates potential for undesired field modifications.
- **Industrial Grade Performance**
0-100A input range offers application flexibility for use on industrial systems or larger installations. Sensors offer constant hysteresis and linear response characteristic for enhanced accuracy to setpoint. Integral "Zero-Sum" CT allows for quick and easy one-piece installation.
- **Industrial Grade Performance**
Constant hysteresis and linear response characteristic enhance accuracy to setpoint.

Applications

Circuit Breaker Input for Time-Trip Specific OEM Applications with Grounded Neutral

Continually senses for residual ground fault currents and provides solid-state SCR output for circuit breaker when fault current exceeds setpoint. When applied with appropriate circuit breaking devices, the RGCS serves as the sensing component of a GFCI system.

Theatrical, Carnival and Entertainment Industry

Applied on electrified equipment regularly in close proximity to personnel, such as those on stage and movie sets, RGCS senses leakage currents and signals when cumulative ground currents surpass safe levels. Can be coupled to alarm indicators or circuit interruption devices.

Portable Power Generation and Distribution

Enables end-users to detect or monitor leakage current in branch circuits, triggering a breaker to interrupt power in faulty branch without having to disconnect the main.

Industrial, Pool, Spa, and Fountain Applications

Monitors ground current for pool, spa, fountain and other industrial equipment located in the vicinity of water or damp conditions. Provides ground fault detection and output to circuit breaker for GFCI applications.

Ground Fault Sensors

RGCS Series

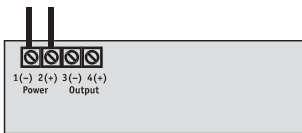
*Fast-acting ground fault circuit sensors...
for specialty industrial and factory automation applications.*

Specifications

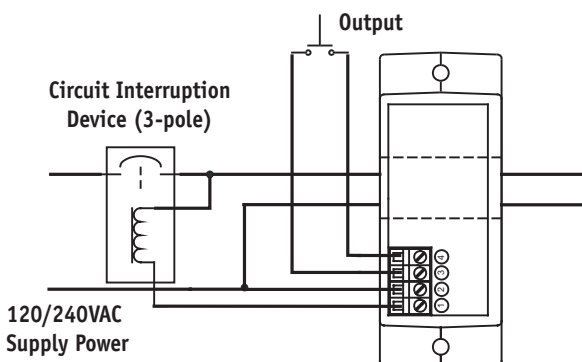
Power Supply	120VAC or 240VAC
Output	Solid State AC Switch; Isolated Dry Contact
Output Rating	1A@240VAC
Trip Point Range	6 - 30 mA, Factory Set
Response Time	15-25 ms
Tolerance	+/- 1%
Input Range	0-100A
Offstate Leakage	None
Hysteresis	5% (Constant)
Isolation Voltage	1,250 VAC
Frequency Range	60 Hz
Case	UL 94 V-0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C), 0-95% RH, non-condensing
Sensing Aperture	0.75" (19.1mm) diameter
Agency Approvals*	Must be submitted for UL 943 approval with appropriate customer-supplied circuit breaker. RGCS Sensors are intended to serve as a component of a GFCI system and, as such, are not UL approved. Please consult with factory.

Connections

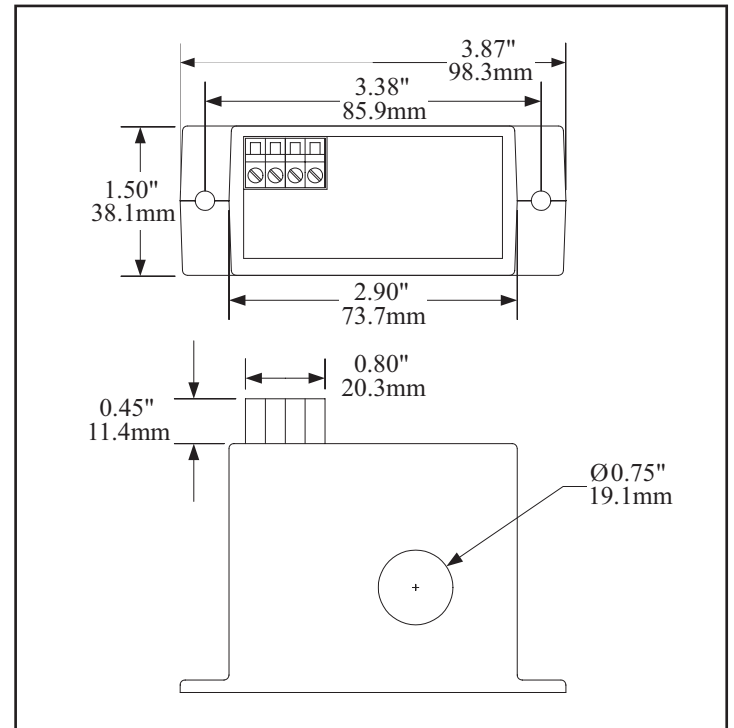
120 or 240VAC



Wiring Example



Dimensions



Ordering Information

Example: RGCS-NOR-120-FAT-010

Residual ground current sensor with 10mA setpoint, N.O. 1A@240VAC output, 120VAC supply, fast-acting trip response for use with circuit breaker, solid-core enclosure.

RGCS	—		—		—	FAT	—	
Range		Output Type		Power Supply		Trip Point		
0-100A		NOR N.O. 1A@240VAC		240 240VAC 120 120VAC		XXX 6-30mA		

Ground Fault Sensors

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