

MODEL AT-9000

ACCUTECTOR

- Continuous online monitoring of rotor ground faults while rotating or standstill
- Indicates fault severity and relative location on field winding
- Seamless replacement for Accumetrics' large diameter Rotector Model AS9000
- Monitors for field current, voltage, field winding temperature (cage temperature)
- Suitable for Class I Division 2 locations
- USB connection for configuration and diagnostics

TYPICAL APPLICATIONS

- Detect trends and identify severity and location of insulation faults promptly
- Schedule repairs during low-demand periods, minimizing downtime
- Enable earlier initiation of starts based on real-time feedback

GROUND FAULT MONITORING SYSTEM

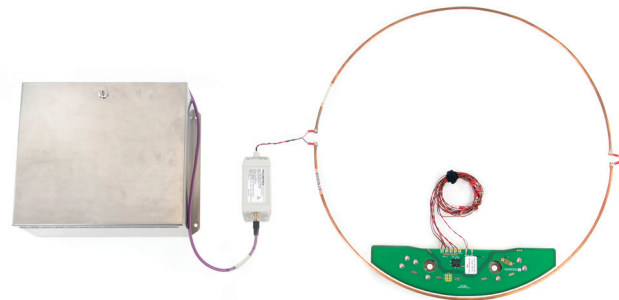
Accutector Ground Fault Monitoring System Model AT-9000 is the ideal tool for ensuring the safety of generators and large motors. The system detects field winding insulation faults by continuously measuring insulation resistance. Analyzing insulation resistance trends allows repairs to be scheduled during a time of low demand and greatly reduces the impact of required downtime. Thermocouple inputs enable earlier initiation of starts based on real-time temperature measurements. Location factor measurement, which indicates the location of single insulation faults as a relative distance from the negative terminal (0%) to the positive terminal (100%), aids in making repairs more quickly.

Designed to be easily installed on existing machines with little to no shaft modification, the Accutector is also a drop-in replacement for the large-diameter Rotector Model AS-9000. Users now have a straightforward path to replace the obsolete Rotector with a robust product with the same form and fit, plus upgraded function and durability.

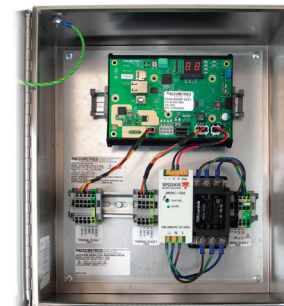
Upgraded self-diagnostics provide feedback about each subsystem to aid in identifying any issues with the Accutector itself. The USB port and supplied user interface software simplify configuration and allow a straightforward way to collect diagnostic data when hazardous conditions (ignitable concentrations) are not present.

SPECIFICATIONS	
Field Voltage	
Measurement Range	0 – 500 VDC
Maximum Transient without Damage	1000 Vrms for 60 seconds 2000 VDC or Vpeak for 1 second
Accuracy	± 0.1% of full-scale range nominal, ±0.2% max
Field Current	
Number of Inputs	3 (fewer can be used)
Current Sense Shunt Input Range	0 – 50 mV
Common Input Mode Range	Within ±2 V of Vfield negative terminal
Accuracy	± 0.1% of full-scale range nominal, ±0.2% max
Earth Fault Location Factor	
Range	0 to 100% representing ratio of potential at fault to total field voltage (0 at negative terminal and 100% at positive terminal)
Accuracy	±1% for a 10 kOhm fault. Computation of location factor of field voltage accuracy is specified for ≥ 25 V (single fault only)
Earth Fault Resistance	
Measurement Range	0 to ~70 MΩ
Accuracy	±500 Ω ± 2% of Reading 0 to 500 kΩ (exclusive of the effects of AC content and noise from the excitation system, averaging over ≥ 10 measurements)
Thermocouple Inputs	
Number of Thermocouple Inputs	2
Thermocouple Type	Type K
Temperature Measurement Range	0 to 600C standard range (extended range -100 to 1373C)
Accuracy	+/- 2.5 C exclusive of noise and sensor error in standard range
Receiver	
Supply Power	100 to 240 VAC 50/60Hz, 0.5 A
Digital Output Interface	ModbusTCP (both client and server) ModbusRTU Slave (in future firmware release)
Diagnostic/Configuration Port	USB B (Only to be used in safe locations)
Transmitter	
Weight	Approximately 4.4 lbs (2 kg)
Rotor Connections	Field Positive Terminal Field Negative Terminal Rotor Ground 3x Current Shunt Resistors 2x Thermocouples

SPECIFICATIONS (continued)	
Environment	
Ambient Temperature	-4 °F to +158 °F (-20 °C to +70 °C)
Hazardous Locations	Class I, Division 2 Groups A, B, C, and D, T3C
Optional Accessories	
Receiver Enclosure	
26' or 40' Interface to Receiver Interconnection Cable	
Interface Module Adapter Plate	



Accutector System



Accutector Receiver