ASHE CONTROLS PVT LTD
an ISO 9001:2015 certified company

SGR-250

SGR-Series Static Charge Grounding System



RoHS Compliant | MAKE IN INDIA | PESO CERTIFIED | Ex-d CERTIFIED | Ex-I CERTIFIED

Overview

The Static Grounding Systems Series SGR, provides safe and secure grounding of dangerous static charge from the Tanker body to earth in hazardous area installations, ensuring safety to plant and personnel.

The SGR-250 is a certified Intrinsically Safe product mounted in a certified explosion-proof enclosure, providing a high degree of protection against fires or explosions caused by sparking due to accumulation of static charge on the Tanker body. The instrument acts as an interlock during loading and unloading operations, allowing the loading/unloading process to resume only after satisfactory grounding of static charge on the Tanker body and Loading Arm.

The Earthing Relay's primary function is to determine whether the tank trucks at the loading terminals are properly earthed and thereafter, provide a visual indication and a control signal for process resumption. The Earthing Relay senses the static-charge potential of the tanker and provides a safe grounding path for this charge through a low impedance and intrinsically safe electronic module, which is itself housed in an explosion proof enclosure mounted near the loading terminal.

The Earthing Relay Series SGR are certified for Ex-i intrinsic safety and the enclosures for Ex-d explosion-proof operations by CIMFR. The instrument is housed in a certified cast Aluminum Alloy LM6 enclosure and offered with a pair of standard 5-meters Spiral Cable-Clamp assembly.

This product is backed by a full two-year warranty, covering all manufacturing defects and workmanship issues under normal operating conditions.

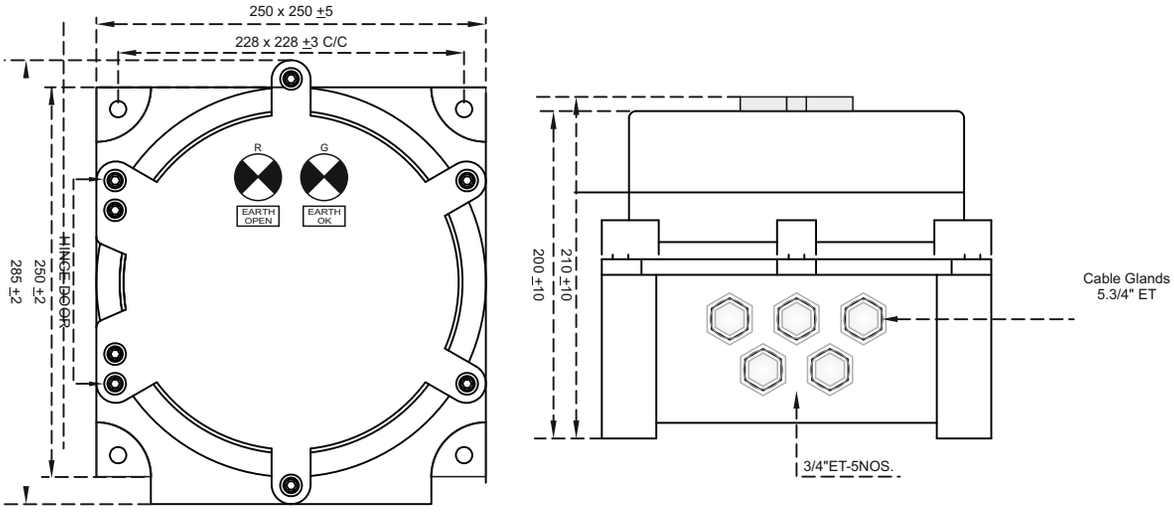
Specifications

Model	ASHE SGR-250.
Type	Micro-controller based Intrinsically Safe Resistance based Earthing Relay for Static Charge Grounding of vehicles during loading/unloading operations in hazardous area locations.
Input Signals	1. Physical Earth point at loading area (Earth Pit). 2. Probe #1 from Vehicle chassis (Body of Tanker)
Ground Impedance	0 to 16 Ohms (internally settable).
Outputs	Two / Five Control Relays.
Contacts	Potential free Relay change-over contacts.
Contact Rating	10 Amps @ 230 V AC (Resistive Load).
Control Logic	Relays will get energized when Vehicle chassis and Loading arm, both are successfully earthed.
Indications	1. Green Lamp indicating successful grounding (EARTH OK). 2. Red Lamp indicating Earth Failure (EARTH OPEN).
Power Supply	90 to 270 VAC, 50/60 Hz Universal AC Power Supply.
Short Circuit Protection	Fuses (Internal).
Cable-Clamp Assembly	Two 5 meter extended 4sq. mm Spiral Cable with crocodile clamps (Blue & Black).
Clamp MOC	Stainless Steel SS-316.
Enclosure	Explosion-proof, Ex-d certified.
Dimensions	285 x 250 x 210 mm [H x W x D].
Enclosure MOC	Aluminum Alloy BP-483 Cast enclosure suitable for use in Gas Group IIA/IIB (Optionally IIC).
Ingress Protection	IP65.
Certifications	CIMFR / PESO for Intrinsic Safety (Ex-i) and FLP (Ex-d).
Cable Entries	Five at the bottom of enclosure, 3/4" ET Glands.
Weight	Approximately 2.5 Kgs.
Operating Temperature	0 to 55^{0}C.

Features

- Microcontroller based design
- Intrinsically-Safe Ex-i certified
- Explosion-proof Ex-d certified
- Low cost, high functionality
- Resistance based control action
- Intelligent monitoring of critical parameters
- Dual / Five Relay change-over contacts
- Very low power consumption and heat dissipation
- Easily configurable
- Rugged, Die-cast Aluminum enclosure
- High noise immunity
- Hazardous-area installation in IP65 execution
- Two-year Performance Warranty
- Proven track record of successful site installations

Dimensional Diagram



TOP VIEW SIDE VIEW

How To Order

	STATIC CHARGE GROUNDING SYSTEM	**SGR-250**					
	Configuration and add-on options						
1	**INPUT SIGNAL**						
▸	Single Probe		S				
▸	Dual Probe		D				
2	**EXECUTION**						
▸	DIN Rail Mounting [75 x 100 x 110 mm] Spare Module			D			
▸	Field mounting in Flame/Explosion-proof execution			X			
▸	Field mounting in Flame/Explosion-proof execution			S			
3	**CONTROL RELAYS**						
▸	Two Relay				2		
▸	Five Relay				5		
3	**CABLE LENGTH**						
▸	5 Mtr, 4 Sq mm					A	
▸	10 Mtr, 4 Sq mm					B	
4	**ACCESSORIES (if required)**						
▸	Canopy						
▸	Flameproof Hooter						
▸	Mounting Plate						

Our Other Products


FLOW TOTALIZER


SIGNAL ISOLATORS & TRANSDUCERS


TEMPERATURE SCANNER


FLAMEPROOF INSTRUMENTS


STATIC POWER SWITCHES

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