# **OPERATING GUIDE**

# GU 7113 EN B SECURITERRE 640



В	12/12/2023	Modification	ITB	MC
Α	18/06/2019	Creation [EDV538]	DSM	SR
Issue	Date	Modifications	Written by	Approved by

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#### 1 INTRODUCTION

The model 640 Securiterre is a grounding system for loading gantries that offers improved safety during the transfer of flammable liquids or powders. It ensures that reliable grounding has been achieved before any product transfer takes place. It is an indispensable item for every loading facility of flammable non-conducting liquids and powders.

The Securiterre can be used for the grounding of trucks, trains or barrels.

Please note that the device can only be used in one predefined application. The device has been configured to your specific requirements in our factory.

Safe execution of the procedures described in this manual requires technical skill in the handling of tools and knowledge of safety regulations for working in hazardous areas.

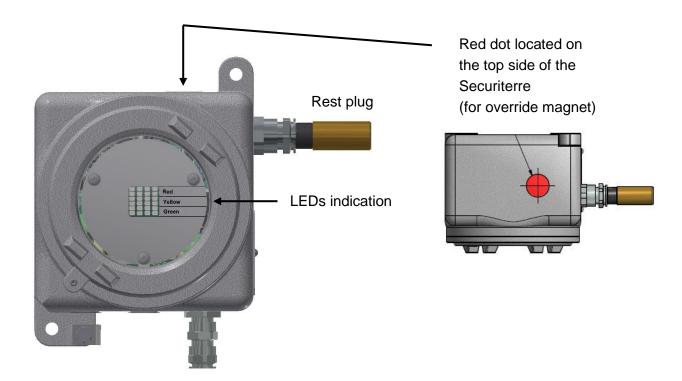


The grounding clamp, the cable glands and the cable are not supplied by ALMA with the Securiterre grounding system.

## **2 PRESENTATION**

Before any power is applied to the Securiterre 640 check the following:

- ⇒ Place clamp in rest position / rest plug
- Apply power and check whether the yellow LEDs light as should be. See the section that follows for more indication.



Note: The magnet is not supplied by ALMA with the Securiterre grounding system

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## 3 **LEDS INDICATION**

## 3.1 States of the Securiterre when on Truck, Train and Barrel mode

LEDs indication	State	Conditions for reaching the state
Yellow	Rest	The clamp is in rest position
Red	Idle	The clamp is removed from rest pin
Yellow	Detected	The calibration process is in progress
Yellow + Green	Prepare loading	The calibration process is finished
Green	Loading	Safe situation

### 3.2 In case of trouble shooting for Truck, Train and Barrel mode

LEDs indication	Meaning
Yellow + Red	Auto-test failure: The Securiterre may work but needs repair
Green + Red	Poor internal relay contact grounding: The Securiterre is unusable and needs repair
Red	Make sure the earth connection is clean and free from corrosion

#### 4 TRUCKS APPLICATION

### 4.1 Proposed procedure

- Place the earth clamp on the clamp holder to start calibration. The LEDs will light up yellow when the calibration process is finished
- Connect the earth clamp to the earth point of the truck, the LED indication should instantly turn to yellow and then to green indicating a safe situation. If the red LEDs remain activated check the clamp for good connection
- When the green LEDs indicate a safe situation other secondary connections, such as overfill alarms, filling attachments, etc., can be connected to the truck
- After loading first disconnect the secondary connections such as overfill alarms, filling attachments, etc.
- Then remove the earth clamp and place this back on the clamp holder
   Note: The Return point is a brass pin intended to calibrate the clamp. The user should place the clamp on this pin when the clamp is not connected to the truck.

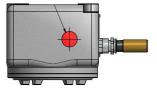
Note: To achieve correct grounding conditions the cable clamp must be properly connected. If there is no release after few seconds (red LEDs are on), check the earth connection which should be clean and free from corrosion.

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## 4.2 Magnetic override

Highly sensitive, the Securiterre device will detect even small changes in grounding properties as a result of weather conditions, loading equipment or any other grounding sources that do not impact safety and in rare cases prevent the system switching to green. If, after double checking the grounding, the release remains blocked, the magnetic override can be used to reset the alarm as following:

- Connect the earth clamp to the earth point of the truck, the LED indication in this
  case should remain red.
- Briefly place the override magnet on the red dot located on the top side of the Securiterre, see figure below. The instrument should now respond within a couple of seconds indicating successful grounding, do not remove the clamp during use of the override magnet. Remove the magnet after successful grounding.



- Secondary connections, such as overfill alarms, filling attachments, etc., can now be connected to the truck.
- After filling first disconnect the secondary connections such as overfill alarms, filling attachments, etc.
- Then remove the earth clamp and place this back on the clamp holder.

### 5 TRAINS APPLICATION

- ⇒ Connect the earth clamp to the earth point of the train, the LED indication should instantly turn to yellow and then to green indicating a safe situation. If the red LEDs remain activated check the clamp for good connection.
- ⇒ When the green LEDs indicate a safe situation other secondary connections, such as overfill alarms, filling attachments, etc., can be connected to the train.
- After filling first disconnect the secondary connections such as overfill alarms, filling attachments, etc.
- ⇒ Then remove the earth clamp and place this back on the clamp holder.

Note: To achieve correct grounding conditions the cable clamp must be properly connected. If there is no release after a few seconds (red LEDs are on), check the earth connection which should be clean and free from corrosion.

Use of override magnet is not possible.

#### **6 BARRELS APPLICATION**

- ⇒ Connect the earth clamp to the earth point of the barrel, the LED indication should instantly turn to yellow and then to green indicating a safe situation. If the red LEDs remain activated check the clamp for good connection.
- ⇒ When the green LEDs indicate a safe situation other secondary connections, such as filling attachments, etc., can be connected to the barrel.
- ⇒ After filling first disconnect the secondary connections such as filling attachments, etc.
- ⇒ Then remove the earth clamp and place this back on the clamp holder.

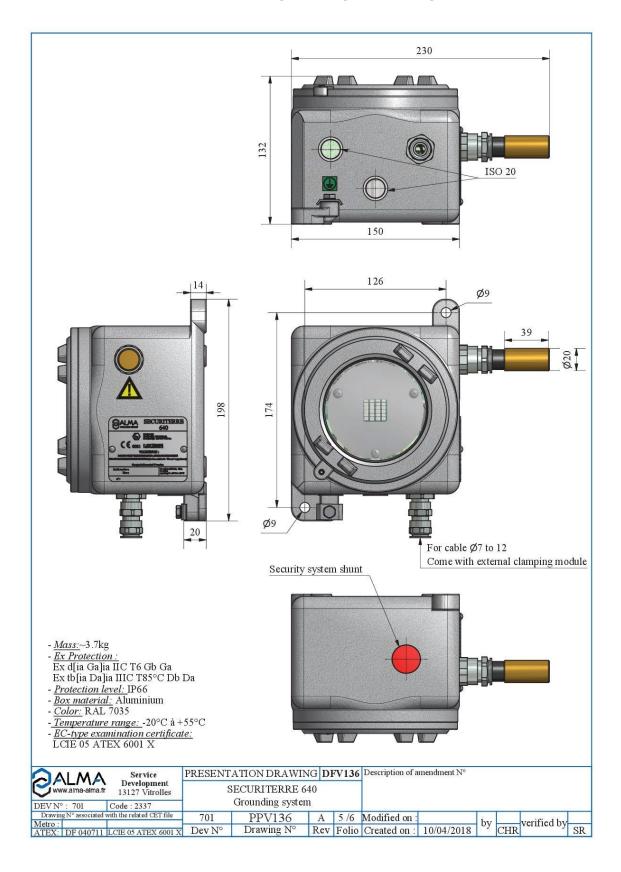
Note: To achieve correct grounding conditions the cable clamp must be properly connected. If there is no release after a few seconds (red LEDs are on), check the earth connection which should be clean and free from corrosion.

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Use of override magnet is not possible.



### **ANNEX: PRESENTATION DRAWING**



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