## Safety is for life.™

#### PRODUCT INFORMATION



### FARADO® II/FARADO® II FIBC FOR USE WITH MOBILE TANKS AND TRUCKS

#### **Applications**

The self-monitoring FARADO® II grounding system was developed for grounding when filling or emptying mobile containers such as tank trucks, IBCs, FIBCs, drums, etc., and it is used in the chemical, food, pharmaceutical, cosmetics, oil and gas as well as wood industries.







SIL-equivalent SIL 2

#### **Mechanism**

Electrostatic charges can build up as a result of the friction when flammable liquids, gases or solids are being loaded. The resulting electrostatic discharges (sparks) can be a risky ignition source for explosive atmospheres under the appropriate conditions. The FARADO® II. continuously dissipates the electrostatic potentials to prevent these discharges.

The grounding clamp is connected up to the object that has to be grounded. When the FARADO® II detects the grounded tank, the pumps, valves or mechanical conveyors connected to the grounding relay will be activated for the filling process. The connection between the clamp and the object is permanently monitored. If a fault occurs or if the clamp's connection becomes disconnected, then the grounding relay will generate a corresponding signal and the filling process will be stopped.

The FARADO® II also monitors the capacitance of the connected object as well as the connection's resistance. No activation will be given if they do not exceed the preset limit values. Insufficient capacitance means that the grounding clamp is not connected to the specific object, but is possibly connected to a smaller or already grounded object.

This process ensures tamper-proof use of the grounding system.





#### PRODUCT INFORMATION

#### **Extended communication options**

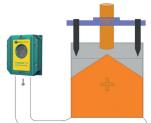
If an RS485 interface (ModBus protocol) is used, the data from previous grounding processes can be sent out and checked in order to identify incorrect system operation and to eliminate it through optimisation measures. Product-specific software is included in the package for this purpose.

#### Your advantages

- Easy on-site installation thanks to its compact design.
- The connected objects capacitance check ensures that the system is **tamper-proof.**
- Approved for use in explosive areas zones 1 and 21.
- Integrated signalling for reliable monitoring.
- Settings can be adjusted via an RFID chip.
- Remote maintenance and setting up options via a PC.

# Applications Tank grounding – Fitting it to the loading station – 230 V mode Tank grounding – Fitting it to the vehicle – 24 V mode Barrel grounding IBC grounding FIBC grounding





| Temperature               | -40°C up to +65°C   |
|---------------------------|---|
| Ambient temperature       | -40°C up to +55°C   |
| Process                   | Filling and emptying containers   |
| Туре                      | FARADO® II  |
| Dimensions (W x H x D)    | 200 x 220 x 60 mm   |
| Protection rating         | IP66  |
| Housing material          | Aluminium   |
| Weight                    | 5 kg  |
| Supply voltage            | AC Version: 115/230 V~ (-15 ÷ +10%) 50 - 60 Hz<br>DC Version: 10 ÷ 30 VDC |
| Power Consumption         | 3W  |
| Interfaces                | Potential-free contact, RS485   |
| ATEX category             | 2 (1) GD  |
|                           | Ex db [ia Ga] IIB T6 Gb   |
|                           | Ex tb [ia Da] IIIC T85°C Db   |
| Remote maintenance option | Yes   |







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