

Humboldtstraße 29 D-21509 Glinde +49 (0) 40 248 35 63 - 0 info@timm-elektronik.de www.timm-elektronik.de

# **Grounding Control Device EKX-4**

SIL<sub>2</sub>



#### **Physical Effect**

During loading and unloading of **tank trucks**, **silo trucks**, **railway tank wagons** as well as containers and similar vessels with inflammable liquids or other goods **explosive gas and dust atmospheres** may arise. A single spark can be sufficient to initiate an explosion. To prevent this danger effectively, the occurring electrostatic charge must be **dissipated safely**.

## Hightest Level of Safety according to EN 61508 / SIL 2

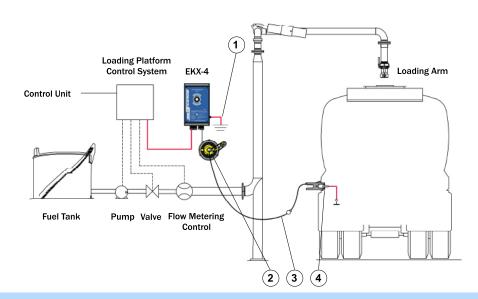
The Grounding Control Device EKX-4 is approved for use in gas and dust hazardous areas of zone 1 (device category II 2 G) and 21 (II 2 D). It ensures the static electricity is dissipated to the ground by a grounding cable and monitors the quality of this grounding continuously. A filling release is only signaled by clearly visible green LEDs, if the impedance of the tank truck is within the permitted range. This automatic object detection prevents manipulations. If there are any breaks in the grounding connection the LEDs change to red and the filling will be interrupted immediately.

## **Simple Operation & Configuration**

The EKX-4 can easily be configured for **different operating modes** (e.g. "tank trucks", "railway tank wagons") by internal switches. This configuration is possible during operation in hazardous areas (zone 1). An integrated **automatic diagnosis function** signals errors conditions via the multi-colour LEDs. Measured values can also be displayed on the internal LEDs. Because of the **cable compensation measurement** grounding cables with a length up to 30 meters can be attached.

## **Wide Range of Application**

The Grounding Control Device EKX-4 has been developed to the latest state of standards in accordance with the European ATEX Directive **2014/34/EU (ATEX)**. It is not only suitable for top loading used on tank farms and refineries, but also for **other types of filling** e.g. in the **chemical and food industries**. Please contact us for further information!





- 1. Grounding connection of the device
- 2. Cable reel (up to 10 m cable length)
- 3. Grounding cable with clamp
- 4. Grounding pin at tank truck