

# VAE CONTROLS GROUP

## Grounding Monitor Model EGT4

*for Tank Trucks, Railcars, IBC Containers, Drums, Big Bags etc.*



### Features

- Double relay output
- Intensive LED indication
- Exd protection
- Robust construction
- Resistant against incorrect usage
- Easy and quick installation
- No service needed
- 10 m cable + clamps + hanger inclusive as standard
- Available with labels in different languages
- Sea worthy packing

### Description

The equipment consists of aluminium flameproof box with intensive LED indicators, intrinsically safe sensing line with 10 m cable and clamps, and holder.

Optionally we can provide sensing cable with extended length upto 20 m, coiled cable, sensing cable on a cable reel or cable terminated by an insulator for firm installation.



**EGT 4** grounding monitors are designed for safe unloading and loading of liquids or gases in potentially explosive hazardous areas. The equipment measures whether a vehicle or a vessel is grounded properly to avoid risk of ignition of explosive atmosphere. Correct grounding is considered as interlock condition for loading/unloading.

High level of IP protection, extremely wide temperature working range and EC (ATEX) certification allow installation of the equipment worldwide. The equipment can be installed in loading terminals for monitoring of vehicles & vessels or on vehicles. Setting for specific application is made in factory but it can be changed later, too. Re-configuration of the equipment can be done by special software running on an Android-powered device via Bluetooth connection.

Main function of the equipment is checking of grounding status; **EGT 4** recognizes not only the three different states (1-Clamps are not connected (hanged), 2-Vehicle is grounded correctly, 3-Clamps are short-circuit to earth) but also their sequence which allows correct evaluation of proper grounding in different operating conditions.

Secondary function of **EGT 4** is discharging of static electricity from a vehicle/vessel via in-built 100 kΩ resistor.

**EGT 4** is usually equipped with flexible cable terminated by contact pliers. Optionally, the cable can be installed firmly being terminated by insulator type IPB 3,75/34o. In this case, the vehicle/vessel shall be connected to the insulator by its own flexible cable and pliers.

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### Functional Description

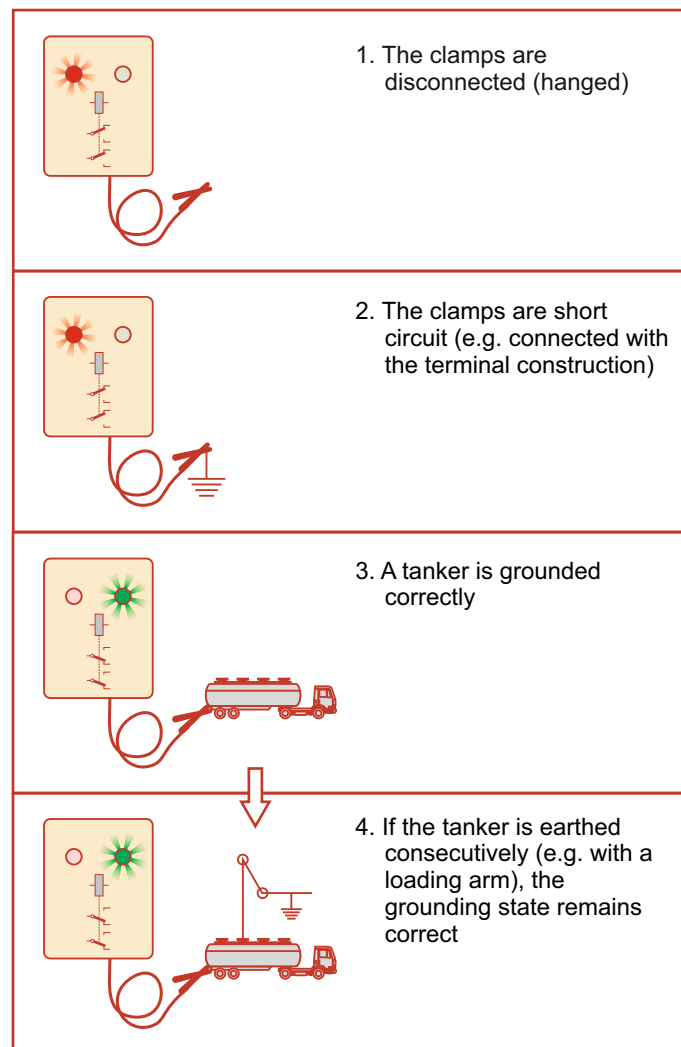
**EGT 4** indicates the grounding state by lights on front panel and by relay contacts. The contacts supposed to be connected with the electrical, automation, or ESD system which shall block the loading if grounding state is not correct.

The equipment uses a combined measuring principle to verify the grounding state, and is very resistant against the incorrect usage as shown on the second diagram. If the clamps are short-circuit to the ground, **EGT 4** recognizes this as wrong grounding. This pushes the operators to pay necessary attention to correct grounding of each tanker, and increases operating safety (this feature is available only by trucks - not by the railway cars).



Two of **EGT 4** with coiled sensing cables

The unit can reach following states:



### Specifications

Power Supply Voltage	20 VDC upto 230 VAC, 45 upto 65 Hz
Power Consumption	10 VA
Relay Output	2x switchover contact, 230 VAC/3 A or 230 VDC / 0,25 A
Ingress Protection Rating	IP 65
Ex Protection	II 2G Ex d ib [ib] IIB T4 Gb, II 2D Ex ib [ib] tb IIIC T130°C Db
Temperature Working Range	-55 to +60 °C
Storage Temperature	-55 to +60 °C
Dimensions (w x h x d)	272 x 326 x 124 mm
Mass without cable and clamps	12 kg
Cable Length	10 m (optionally upto 20m)
Clamps	Stainless steel

**EGT 4** with straight sensing cable



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