

## OVERFILL PREVENTION CONTROLLER EUS-2 HIGHEST SAFETY FOR BOTTOM LOADING TANK TRUCKS

**Bottom Loading** of road tank trucks at **oil terminals and refineries** is characterized by simultaneous loading of fuels into closed tanker compartments with high loading rates and no possibility of manual supervision. To **prevent hazardous spills**, the accumulation of **electrostatic charges** and the evaporation of emissions, an emergency shut-off system, monitored grounding, and vapor collection is mandatory by law and to ensure safe loading processes.

### FUNCTIONAL PRINCIPLE

The **Overfill Prevention Controller EUS-2** is the central part of the overfill prevention and grounding system according to European **VOC Directive 94/63/EC** and American **API RP 1004**. EUS-2 monitors the level sensors in the tanker compartments, the grounding connection from the tanker chassis to the loading gantry infrastructure and the vapor recovery connection. Only when **all conditions for safe loading** are met, EUS-2 releases the filling process. If a critical situation is detected, the filling will be interrupted immediately at the gantry.

### APPLICATION AREAS

EUS-2 is installed at the loading gantry and connected via its control outputs to the control system or loading computer. It is compatible with all trucks having optical or NTC thermistor high level sensors that are in compliance with **EN 13922**. The sensors are mounted firmly at the tank compartments of the truck and wired to a **standard interface socket**, to which the truck plug is connected. Products to load are for instance gasoline, diesel, jet fuel or ethanol (**gas group IIB**).

### PRODUCT BENEFITS

- **Automatic activation of operating mode** according to type of truck installation
- Automatic **ground type recognition**
- Supports up to **8 two-wire** and **12 five-wire sensors**
- **Text display in different languages**
- **'Parking position'** signal for the truck plug
- **Certified SIL 2 approval**
- **Self-monitored** control outputs, **configurable** outputs and a **data communication interface**
- Self-explaining **configuration via joystick** navigation
- **Continuous self-test** of all safety-related functions



**HIGHEST LEVEL OF SAFETY**  
in hazardous areas

**LEADING TECHNOLOGY**  
in monitoring, diagnostics, and configuration

**EASY TO OPERATE**  
by ability to open housing in hazardous areas





## TECHNICAL SPECIFICATIONS

### Type of protection:

according to ATEX 2014/34/EU:

Ex II 2 [1] G – Ex eb ib q [ia Ga] IIB T4 Gb

### Power supply:

230 V AC  $\pm 10\%$ , 50 - 60 Hz, approx. 25 VA

### Control outputs:

2 potential-free closing contacts

2 change-over contacts | 2 NAMUR-outputs

**Operating temperature:** - 40 °C up to + 60 °C

**Approvals:** ATEX, IECEx, PESO, SIL 2

**Tank Storage Award `17:** Most invaluable product

## ACCESSORIES\*

### COILED CABLES WITH PLUGS



for direct connection  
extendable up to 7.5 m



with disconnecter plug  
extendable up to 7.5 m



10-pole plug | 4 bolts  
acc. to EN 13922 and 2-wire



6(7)-pole plug | 3 bolts  
according to API RP 1004

### JUNCTION BOXES



for direct connection  
of two coiled cables



with disconnecter socket  
for one coiled cable



with disconnecter socket  
and "parking socket"  
**recommended**

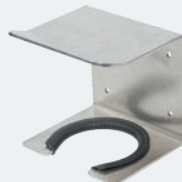


with two disconnecter sockets  
without "parking sockets" available

### OTHER ACCESSORIES



Testing equipment



Plug hanger



Disconnecter socket for installation  
on vapor recovery arm

\*For further information and additional accessories, visit us at [www.timm-technology.com](http://www.timm-technology.com) or contact us in person.



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