

# **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





# EUS-2



# **TECHNICAL SPECIFICATIONS**

#### Type of protection:

according to ATEX 2014/34/EU:

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

#### Power supply:

230 V AC ±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 disconnector 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 disconnector socket for one coiled cable



with disconnector socket and "parking socket" recommended



with two disconnector sockets without "parking sockets" available

#### **OTHER ACCESSORIES**







Testing equipment



Plug hanger



Disconnector socket for installation on vapor recovery arm

\*For further information and additional accessories, visit us at **www.timm-technology.com** or contact us in person.