



Series  
TR-7

# SAFE-T-GROUND

Explosion-proof, Intrinsically Safe, Ground and Continuity Control



TR-7L

**Model TR-7 Safe-T-Ground** provides continuous monitoring of a truck's ground connection throughout loading operations. Static electricity is often brought in by tank trucks entering the loading area. The Safe-T-Ground Model TR-7 instantly stops loading operations if a tank truck loses its ground. The simple but rugged Model TR-7 circuit continuously measures resistance through the truck by applying a small voltage to one terminal of the truck grounding contactor. The other terminal is connected to the loading rack ground. If the Safe-T-Ground detects a resistance of more than a few ohms across the contactor terminals, the relay opens, breaking the control circuit. The relay will not close until the grounding contactor is properly connected. To safeguard loading operations, the Safe-T-Ground circuit can be wired into your pump control - and to an audible alarm or signal light. The double wire TR-7 system provides an extra safeguard against explosion, compared to single wire grounding, which cannot measure the quality of the

electrical ground connection during loading. The transistorized TR-7 circuit generates little heat - an added safety feature.

The Model TR-7 Safe-T-Ground is simple and easy to install. Removal of the cover on the explosion-proof aluminum housing reveals the easily accessible terminal strip for relay and ground control wiring, and a complete schematic wiring diagram appears on a label next to the terminal strip for easy wiring. Coiled grounding cable/contactor-handle assembly is easily replaced via mil-spec connector on housing.

## SPECIFICATIONS

**Housing:** 356-T6 Cast aluminum alloy (copper-free), explosion-proof - Class I, Group D.

**Size:** 6-5/8" W x 10-3/8" H x 5-5/8" D.

**Power Requirements:** 105-125 VAC, 60 Hz. 7.75 watts - with light, 1.75 watts - without lights. Optional 220-240 VAC, 50/60 Hz - call factory.

**Electrical Rating, Relay:** DPDT, 10 amps, 125 VAC, 60 Hz. contact rating.

**Wiring Hookup:** On terminal strip.

**Conduit Connection:** 3/4" NPT

**Installation:** 7/16" mounting lugs, integrally cast.

**Contactor:** (Grounding clamp) molded polyethylene with beryllium copper contact clips. 16-2 type SO coiled cable; retracts to 3', extends to 16'.

**Grounding Studs:** 2 supplied. Order a pair for each truck.

**Shipping Weight:** 20 lb with contactor and cord.

**Options:** Integral pilot lights; 30' coiled cable; temporary contactor assemblies, clamp connectors, and other supply voltages.

**Model TR-7**

**Model TR-7-L (Integral Pilot Lights)**